Partnering with Academic Institutions and Residency Programs to Develop Service Learning Programs

Strategies for Health Centers

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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>2</td>
</tr>
<tr>
<td>Benefits of Partnership</td>
<td>3</td>
</tr>
<tr>
<td>Educational Models</td>
<td>6</td>
</tr>
<tr>
<td>Planning Considerations</td>
<td>9</td>
</tr>
<tr>
<td>Successful Partnerships</td>
<td>12</td>
</tr>
<tr>
<td>Challenges</td>
<td>13</td>
</tr>
<tr>
<td>Recommendations</td>
<td>14</td>
</tr>
<tr>
<td>Conclusion</td>
<td>16</td>
</tr>
<tr>
<td>Credits</td>
<td>17</td>
</tr>
</tbody>
</table>

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Introduction

Health Centers are public or private not-for-profit organizations that provide preventive and primary health services to populations with limited access to health care. The Health Center designation is available only to programs that meet certain federal requirements and that receive federal grant funds under Section 330 of the Public Health Service Act.

In 2012, there were 1,198 Health Centers receiving Section 330 funding nationwide. Of these, an estimated 891 Health Centers (74 percent) offered on-site oral health services, providing oral health care to over 4 million patients and medical care to about 18 million patients. In that same year, Health Centers employed 3326.01 full-time-equivalent (FTE) dentists and 1435.58 FTE dental hygienists.

Many Health Center oral health programs identify recruiting oral health professionals as a top priority. While Health Centers’ oral health infrastructure and capacity have expanded significantly over the past decade, their ability to attract oral health professionals is expected to remain an issue for years to come, especially for centers in rural locations. Many Health Centers serve communities that are designated as health professional shortage areas (HPSAs). As of December 31, 2013, there were 4,813 HPSAs in the United States, with 56 percent of these located in non-metropolitan regions. At that time, the estimated total number of dentists needed in all these underserved areas to enable the elimination of the HPSA designation in all areas was 7,106.

Finding effective ways to recruit oral health professionals to Health Centers presents both a challenge and an opportunity. Health Centers currently employ only about 1.7 percent of the nation’s dentists. Often, oral health professionals do not know that practicing at Health Centers is a career option. One way to encourage dental students, dental hygiene students, dental assisting students, and dental residents to consider Health Center careers is to expose them to Health Centers while they are in school, which is often referred to as service learning.

This paper provides background on how Health Centers can partner with academic institutions or residency programs to offer service learning programs at Health Centers and thereby foster interest in Health Center careers among the next generation of oral health professionals. The paper explores different collaboration models and provides suggestions about issues for Health Centers to consider when deciding whether to launch such a program.

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iv As of November 2012, there were 195,941 professionally active dentists in the United States. ([http://kff.org/other/state-indicator/total-dentists](http://kff.org/other/state-indicator/total-dentists)). The 2012 HRSA Uniform Data Set indicates that there were 3,326 FTE dentists employed in Health Centers in 2012, which constitutes 1.7 percent.
Over the past several decades, the notion that service learning must be an integral part of dental education has gained wider acceptance. In the 1980s, Health Centers began to initiate service learning partnerships with medical schools, dental schools, dental hygiene schools, and residency programs. These early partnerships included short rotations of medical and dental students and primary care residents in Health Centers and primary care residency training programs.

Today, a number of Health Centers sponsor their own primary care residency training programs, and most serve as training or externship rotation sites for some type of health professional and/or allied health professional educational or training programs, including programs for dental allied health professionals such as dental hygienists and dental assistants.

In 1995, the Institute of Medicine released the report *Dental Education at the Crossroads: Challenges and Change*. This report fueled the trend toward including service learning as part of dental education. One recommendation included in the report was that service learning experiences be part of dental school curricula. The American Dental Education Association (ADEA), the organization that represents dental educators, adopted the following policy in 2008:

> [ADEA] strongly supports and encourages community-based dental education partnerships. These collaborations allow academic dental institutions not only to participate with other health care providers to contribute to the safety-net for underserved rural and urban communities, but also to enrich students’ educational experiences.

An important catalyst for incorporating community service learning programs into dental education was the California Dental Pipeline Program ([http://www.dentalpipeline.org](http://www.dentalpipeline.org)), funded by the Robert Wood Johnson Foundation (RWJF) from 2001 through 2010. One of the program’s primary goals was to increase access to oral health care for underserved populations by providing upper-level dental students and dental residents with experience working in community-based programs serving individuals from underserved communities.

The program enabled a cadre of dental schools to partner with safety net programs to train students extramurally. According to ADEA surveys, of all the different types of community sites where students performed their pipeline program service learning, Health Centers now comprise the largest percentage (29 percent).

The program led to increased student productivity, increased students’ exposure to culturally diverse environments, and raised students’ awareness of new career pathways. By the conclusion of the program, almost half of all U.S. dental schools had participated. The program played a significant role in raising awareness within the academic oral health community about the value of community-based dental education. The October 2010 supplemental to the *Journal of Dental Education* ([http://www.jdentaled.org/content/74/10_suppl.toc](http://www.jdentaled.org/content/74/10_suppl.toc)) is devoted to describing successful outcomes of the program.

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The California Dental Pipeline Program is an example of how implementing a service learning rotation at a Health Center oral health program can increase the Health Center’s visibility among students in medical schools, dental schools, dental hygiene schools, and residency programs and can serve as a recruitment opportunity. In spite of the increased interest in service learning as a result of the pipeline program, however, not all Health Center oral health programs participate in service learning, even if they are well equipped to do so. Those that do not participate are missing an opportunity to attract students who may be interested in working in the Health Center environment when they have completed their education.

Benefits of Partnership

Benefits to Health Centers

When appropriately planned, service learning partnerships can be extraordinarily effective vehicles for recruiting future oral health professionals to Health Centers. Working with students and dental residents allows Health Center staff to become familiar with the students’ and residents’ strengths and weaknesses before deciding whether to offer employment and enables students and residents to gain experience that may open alternative career pathways and opportunities.

“One of the benefits we have received for student rotation is being able to ‘give back’ to our new colleagues in the profession. As individuals, we had mentors or were given “pearls” by other dentists early in our careers and now we have the opportunity to do the same.

Out of nine student providers since fall 2006, we made employment offers to three and have recruited two fine dentists from two graduating classes. The experience has been beneficial to the students, our staff, and our patients and we plan to continue this favorable partnership.”

John Betz, D.D.S., Dental Director, Mariposa Community Health Center

While in some cases the academic institution or residency program provides its own faculty to oversee students or residents in a Health Center, most often, the academic institution or residency program trains Health Center oral health professionals to serve as supervising faculty. This creates exciting professional development opportunities for oral health professionals employed at Health Centers.

Health Center oral health professionals who agree to serve as supervising faculty are credentialed as faculty of the academic institution or residency program by going through the same credentialing process that the institution or program has for its own faculty. The Health Center professionals are then considered adjunct faculty and can move up in rank like faculty based at the academic institution or residency program, depending on number of years as faculty, clinical experience, and other academic credentials.

To serve as supervising faculty, Health Center oral health professionals must go through a faculty development process, which can take place in person at the Health Center or at the academic institution or residency program or remotely via webinars and online courses. Acquired skills include teaching and mentoring techniques and evaluating and assessing student or resident performance.
As supervising faculty, Health Center oral health professionals benefit from additional continuing education opportunities. They may be invited to annual faculty development conferences at the academic institution or residency program; such programs may include discussions of new trends, techniques, and materials and sometimes also offer hands-on workshops. Some Health Centers hold on-site, hands-on courses where academic institution or residency program faculty come to the Health Center and give lectures and live patient education for supervising faculty and other oral health professionals. Health Center supervising faculty also receive the discounted faculty rate on all continuing education courses offered at the academic institution or residency program.

Health Center oral health professionals enjoy the opportunity to teach and mentor students and residents. The benefits of service learning partnerships can make their professional lives more fulfilling, resulting in increased job satisfaction. These benefits can also act as recruitment tools to attract new oral health professionals to Health Center jobs and as retention strategies to help ensure that oral health professionals already working at Health Centers remain there.

Partnerships between Health Centers and academic institutions and residency programs also have the potential to increase access to oral health care for Health Center patients, because students and residents can provide oral health care. Under the right conditions, care provided by students and residents can also increase oral health program revenue.

In addition, such partnerships can give Health Center oral health programs access to a broad spectrum of dental specialists and specialty services not normally available in community settings or private dental offices. These specialty services can be made available to Health Center patients, for example, through expedited referral to the academic institution or residency program with which the Health Center is partnering or via tele-dentistry consults with faculty at the institution. These partnerships can also give Health Center dental programs access to groups and organizations affiliated with the academic education programs, such as Area Health Education Centers (AHECs) and alumni networks that can help support additional Health Center activities.

Benefits to Students and Residents

Service learning experiences in Health Centers benefit students and residents by providing them with valuable clinical and socio-health experiences. In Health Centers, students are exposed to individuals from culturally, linguistically, and economically diverse populations, including those with special health care needs and those with complex medical issues. In addition to enhancing students’ and residents’ clinical knowledge and cultural competence, such experiences help them learn about the societal and cultural factors that affect the health of individuals with low incomes or from underserved communities. Students’ and residents’ resulting heightened cultural sensitivity will likely increase their openness to and comfort level with treating a diverse mix of individuals throughout their professional careers.

Also, in Health Centers, students and residents practice in an integrated interdisciplinary environment. Since most Health Center oral health programs are located in the same site as primary care clinics and other services such as behavioral health, pharmacy, optometry, or podiatry, students and residents can observe the practical aspects of interprofessional collaboration.
Additionally, at Health Centers, students and residents gain competence at performing a wide range of clinical procedures under the guidance of seasoned oral health professionals and obtain experience working with populations that access oral health care at lower rates than the general population, such as infants and children from birth through age 5 and pregnant women. These experiences give students and residents confidence in their ability to provide oral health care to a wide variety of patient populations, and this confidence can be carried into their future professional practice. Students and residents also learn about the day-to-day operations of an oral health program and enhance their practice-management experience by observing the clinical, health-information-technology, and administrative systems that have been developed to maintain Health Center oral health program function.

Benefits to Academic Institutions and Residency Programs

In 2013, the Commission on Dental Accreditation (CODA) implemented revised accreditation standards related to service learning:

“Dental education programs must make available opportunities and encourage students to engage in service learning experiences and/or community-based learning experiences.

Intent:
Service learning experiences and/or community-based learning experiences are essential to the development of a culturally competent oral health care workforce. The interaction and treatment of diverse populations in a community-based clinical environment adds a special dimension to clinical learning experience and engenders a life-long appreciation for the value of community service.”

Dental schools must now provide service learning opportunities to all students, and many are seeking partners to help them fulfill this requirement. Health Centers and other safety net programs are logical candidates for such partnerships.

Service learning partnerships with Health Centers provide academic institutions and residency programs with the opportunity to offer students and residents a diverse clinical experience. Academic institutions and residency programs can also pilot a variety of models and approaches for developing community-based dental education curricula, clinical programs, and methodologies for testing and evaluating programs and student competencies, in collaboration with Health Centers.

As the cost of providing clinical dental experience continues to rise, some new dental schools are choosing not to construct direct patient care clinics or are planning small clinics that will accommodate only a small number of students. This results in cost savings in facilities, faculty, and infrastructure associated with providing direct patient care in traditional academic institution clinics, thus allowing for greater flexibility in allocating resources to other educational areas. These academic institutions’ strategic plans can incorporate off-site service learning experiences as integral aspects of their programs, thereby allowing them to save money while still fulfilling the service learning requirement and providing students with a rich and varied education.

Service learning partnerships also offer academic institutions and residency programs opportunities to use Health Center patients as study groups for research. Health center patients are typically from populations that have higher rates of oral disease than the general population and that are under-represented in research.

Education Models

Pre doctoral Student Rotations

Perhaps the most common service learning model is one in which dental schools partner with Health Centers or other safety net programs to rotate students extramurally. These rotations may range in duration from a week to several months and usually take place during students' last years of dental school.

If dental students are properly prepared before beginning a Health Center rotation, and if they are given adequate space to work and enough support from allied oral health professionals, they can provide service and treatment to a sufficient number of patients to offset any potential decrease in productivity caused by chair utilization, longer procedure times (owing to students’ inexperience), and supervisory requirements. Health center dentists need enough flexibility to effectively supervise students.

Arizona’s A. T. Still School of Dentistry & Oral Health places students in community clinics for significant periods during their education. The school reports that over 88 percent of their placement sites see students as valued by their health professionals, administrators, and other staff as well as by the community. The students contribute to meeting clinic missions and goals, add to overall clinical operation, and are seen as potential sources of care. Eighty-three percent of the placement sites said that students are viewed as a positive retention tool for health professionals working at the clinics. Eighty-nine percent stated that the fiscal impact of having students in their clinics was either positive or neutral.¹

¹ Data provided by Wayne W. Cottam, D.D.S., Associate Dean of Community Partnerships, Arizona School of Dentistry & Oral Health.

Post-Doctoral Residency Training

Advanced Education in General Dentistry (AEGD) programs are the most common type of post-doctoral program that partner with Health Centers. Post-doctoral residents are expected to spend 1 to 2 years based at the community site, depending on the program. Residents are expected to be more productive than dental students and usually require less supervision, evaluation, and monitoring.

Some Health Centers host both dental students and residents within one training site. This scenario allows for cross-fertilization, mentoring, and opportunities for interdisciplinary education. These Health Centers have the best possible framework for recruitment and retention; ideally, after initial exposure to a Health Center’s oral health program during a student rotation, interested students will return to the same Health Center for a post-doctoral residency and later for permanent employment. These same oral health professionals might then become on-site Health Center faculty members with their former academic institution and become mentors for subsequent rotations of students and residents at the Health Center, creating a cycle of lifelong learning and service.
Lutheran Medical Center/Lutheran Family Health Center Network (LMC) was the first academic learning institution in the country to develop and sponsor a CODA-accredited general practice residency over 42 years ago. Today, LMC sponsors seven CODA-accredited residency programs (general practice, advanced education in general dentistry, pediatric dentistry, endodontics, dental anesthesiology, periodontics, and orofacial pain) and is the largest program in the country, with over 340 residents. This innovative and unique model places residents in Health Centers and other safety net entities in 25 states, Puerto Rico, the U.S. Virgin Islands, and internationally. Residents spend 1 or 2 years in a Health Center full time and share a distance-learning curriculum that ensures educational equity through live interactive video teleconferencing and an online learning system.

Survey data from the LMC program reveal that residents provide an average of 1,500 visits per year. In addition, LMC performed a long-term assessment of where residents practice and found that approximately one-third continued to work in Health Centers or to care for populations who are underserved after their residencies ended.

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Dental Hygiene Program Collaborations

Developing service learning partnerships with dental hygiene programs is also important, and many Health Centers engage in such partnerships. Compared to the general population, Health Center patients tend to suffer from higher levels of periodontal disease, and sources of additional

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Roanoke Chowan Community Health Center (RCCHC) and the East Carolina University School of Dental Medicine (ECU) are joined together at the new Ahoskie Comprehensive Care Center on Health Center Drive in Ahoskie, NC.

RCCHC constructed a 40,000 square foot Health Center facility, funded by a $6.2 million federal grant that was part of the Affordable Care Act. The two-story community Health Center facility is the home of RCCHC-Ahoskie’s medical and corporate offices and includes 48 exam rooms, laboratories, and an in-house pharmacy.

ECU’s School of Dental Medicine constructed an approximately 8,000-square-foot service learning center adjoining RCCHC’s Health Center facility, with partial support from a Health Resources and Services Administration grant (Grant #T12HP19337). The stand-alone center includes 16 dental chairs; is staffed full time by ECU faculty dentists, residents, and students; and employs local residents as staff members.

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Health Center–Academic Institution Clinic Collaboration

Under an innovative new model, academic dental education programs partner with Health Centers that do not currently offer oral health care. The Health Center and the academic institution share the capital costs of implementing an oral health program at the Health Center site, and students rotate through the Health Center’s oral health program to complete their service learning experience. This mutually beneficial arrangement gives patients access to previously unavailable oral health care at the Health Center while also enabling the academic institution to provide students with the required service learning experience.
dental hygienists, who can treat this condition, are generally welcomed. Dental hygiene student rotations also provide pathways for recruiting future employees for Health Center oral health programs.

Ideally, dental hygiene student rotations should be set up so that students have some continuity with patients and faculty supervisors. Especially for patients undergoing multiple periodontal treatments, clinical continuity is key to ensuring that treatment is well coordinated and to establishing a rapport that could help increase the patient’s likelihood of making behavioral changes and meeting personal self-management goals to improve his or her oral health.

Health Centers interested in partnering with dental hygiene programs should learn about state dental practice act variations related to practice supervision requirements for dental hygiene students.

As with dental students, a Health Center must be prepared to provide dental hygiene students adequate support so that they can treat a sufficient number of patients to offset any decrease in productivity caused by chair utilization and supervisory requirements. Health Centers should keep in mind that patients treated by dental hygiene students may require more visits to complete treatment than if a professional dental hygienist provides treatment, especially for more complex periodontal cases.

La Clinica de la Raza, a large Health Center in Oakland, CA, with seven dental sites, has concurrently hosted students from up to three dental hygiene programs. Initially, La Clinica served as an extramural site for students from one local dental hygiene program wishing to gain additional clinical experience for its students by allowing them to enroll in an optional summer session. Because the rotation provided such a successful learning experience, faculty decided to convert the optional rotation into a required part of the curriculum.

Dental hygienists have historically been in short supply at La Clinica, and rotations have ensured access for patients while also exposing dental hygiene students to Health Center practice. Rotations can serve as working interviews—a chance for clinic staff to get to know a student’s work ethic and skills before deciding whether to offer employment. A vast majority of the dental hygienists hired by La Clinica in the last 5 years are former students that rotated through the Health Center.

Allied Dental Professional Program Collaborations

Developing service learning partnerships with dental assistant programs is important, as well. Dental assistant programs that partner with Health Centers provide centers with additional support staff at little or no cost to the center. They also provide a pathway for recruiting future employees for Health Center oral health programs. Proper use of student dental assistants can improve clinic flow. For example, student dental assistants can assist with sterilization and room turnover to maintain smooth patient flow.
Health Centers need to consider many factors to determine whether their facility is suitable for a service learning experience for dental students, residents, dental hygiene students, or student dental assistants. Following are general areas that Health Centers can assess to help determine whether such an arrangement would be advantageous for all three entities concerned—the Health Center, the academic institution or residency program, and students and residents.

**Operatory Space**

Sufficient operatory space is a primary requirement for hosting students and residents. Oral health professionals who work at the Health Center must remain productive, and students and residents need enough operatory space to treat patients. At minimum, a site needs three operatories per oral health professional so that a student or resident can treat patients in one operatory while the supervising faculty uses the other two and oversees the student’s or resident’s work. A practice model where residents and students practice adjacent to their Health Center supervising faculty member is desirable. The configuration of operatories in a Health Center may not be suitable for hosting students and residents and may make it difficult or impossible to satisfy academic dental education programs’ supervision requirements. Health Centers are encouraged to understand all supervision requirements and to evaluate these along with the configuration and availability of operatory space as part of the decision-making process associated with adding a service learning component to their Health Center.

**Allied Dental Health Professional Support**

Dental students generally do not have the opportunity to work with dental assistants. But, like oral health professionals, dental students are more efficient and productive if provided with appropriate support.

Health Centers with service learning programs that invest in a full-time dental assistant for each dental student in the program improve student productivity and benefit both the program and the student, who not only will be more productive but also will learn valuable skills related to working effectively with the support of a dental assistant.

**Numbers of Patients and Types of Procedures**

Students and residents need to be kept busy to ensure that their service learning experience is a positive one. They should also have the opportunity to provide patients with a wide variety of clinical procedures. Therefore, to offer students and residents a good experience, Health Centers need enough patients, with allowances made for no-shows and cancellations. Students and residents should have their own daily schedule of patients. Some Health Centers allow students to work off the schedule of an oral health professional who works at the Health Center, but this is usually less effective.

One strategy that can work well is to assign patients with a wide variety of oral health needs to the student or resident to assess the student’s or resident’s skills. If repeat visits are needed, the Health Center can invite these patients back for scheduled visits with the student or resident to complete their care or can assign the student or resident other remedial clinical experiences as needed after his or her skills have been evaluated.
Residency Program Requirements

Dental residents have specific clinical procedure requirements that they must meet during the residency, and Health Centers should ensure that residents will be able to fulfill these requirements through the service learning program. For example, Health Center AEGD sites can usually provide all the required clinical experiences on site; however, AEGD programs may have curriculum and/or clinical experience requirements, such as placing implants or learning sedation techniques, that some Health Centers may be unable to offer. As one strategy to address this, Health Centers can look into making arrangements with local specialists for external rotations that can satisfy program requirements.

Residents also must achieve and demonstrate required program competencies. Health Centers should have systems in place to assess residents' competence, identify deficient areas, and arrange for remediation experience, if needed. Health Centers must be prepared to work with residents to continuously monitor progress toward program requirements.

Pediatric dentistry residencies have more complex program requirements that involve hospital-based experience. Health Centers may serve as training sites for pediatric residency programs, and in some areas multiple Health Centers can be affiliated with a program, with residents rotating through each Health Center site. Health Centers considering hosting pediatric dental residents should be prepared to spend sufficient time and resources to plan and implement the residencies.

Engaged Staff

Students and residents want to learn as much as they can during the service learning component of their training. Moreover, when they feel like integral members of an oral health and interdisciplinary team, they will be more open to working at a Health Center in the future. Health Centers that provide constructive, timely, and appropriate feedback create a positive experience for students and residents and ultimately benefit the center itself, as well. Health Center staff's level of interest in serving as supervising faculty needs to be assessed as part of the decision about whether to launch a service learning program.

Choice of Academic Partner

To increase the probability that the partnership will be successful, a Health Center should seek an academic partner with a mission similar to its own that has a track record of successfully partnering with community organizations.

A positive working relationship with the partnering academic institution or residency program is critical to the success of any program hosting students or residents. The academic partner must give the Health Center a thorough orientation that provides an understanding of the credentialing, faculty appointment, training, evaluation, and supervisory requirements. Students and residents who have positive experiences report back to their classmates and are a Health Center's
best marketing tool. Health Centers that provide students and residents with good educational experiences may be able to attract a consistent stream of students and residents and thus gain the ability to plan more effectively about how to use them in the future.

Faculty Development

Faculty development for Health Center oral health professionals serving as supervising faculty is an essential element of successful service learning partnerships. Faculty development is the responsibility of the academic institution or residency program. Health Center oral health professionals are typically not educators and need opportunities to learn teaching and mentoring techniques and how to evaluate and assess student and resident performance in a standardized manner. Supervising faculty also need information about clinical competencies, compliance with CODA standards, and the goals and objectives of the academic institution or residency program. When seeking a service learning partner, Health Centers should look into what type of faculty support system the academic institution or residency program has in place.

Commitment to Hosting Students and Residents

Health Centers that are strongly committed to making their students’ and residents’ experiences as positive as possible can benefit most from the relationship. At a basic level, students may require housing or assistance with transportation. The Health Center and the academic institution or residency program must have a clear understanding about who is responsible for meeting these needs. Local agencies such as Area Health Education Centers may be able to help with housing. Students and residents placed with a Health Center for an extended period of time appreciate having their own desk or workspace. Such investments can enhance the students’ and residents’ experience and offer long-term benefits in terms of recruitment and retention.

Financial Considerations

In deciding whether to host a service learning program, Health Centers need to first determine whether the program will be, at minimum, revenue neutral. Variables in this determination include current levels of productivity, anticipated student and supervising faculty productivity levels, number of chairs, availability of support staff, and additional costs. To estimate the effects of a service learning program on productivity and revenues, a Health Center oral health program must already be collecting productivity and revenue data.

The primary question is whether current productivity and revenues can, at minimum, be maintained. It is to be expected that productivity of the individual servicing as supervising facility will decrease owing to loss of operatory space to the student or resident and to time spent in supervisory duties and that revenues will thus decrease, as well. On the other hand, these decreases will be offset by revenues and productivity by the student or resident. Other factors that could influence projections are additional support staff or supply costs.

There are many different types of financial arrangements between Health Centers and academic institutions and residency programs. Health Centers need to negotiate a mutually agreeable arrangement.

ix Information on Area Health Education Centers can be found at http://www.nationalahec.org
Examples of financial arrangements include: (1) The academic institution or residency program covers the salary and fringe benefits of post-doctoral residents, and the Health Center retains the revenue generated from services the resident provides. (2) The academic partner places its own faculty in the Health Center instead of training Health Center professionals to act as supervising faculty. The Health Center purchases faculty time from the academic partner and retains the revenues generated by students. (3) The Health Center negotiates to pay the academic institution or residency program a percentage of the revenues earned as a result of student or resident productivity.

Many other types of financial arrangement can be made; the important thing is that the one chosen is acceptable to both parties.

Successful Partnerships

Flexibility

Successful service learning partnerships between Health Centers and academic institutions and residency programs occur when the service learning program has a flexible design that allows for changing needs of students, the Health Center, and the community.

Champions

The presence of effective champions in both the Health Center and the academic institution or residency program, to convey the importance of community-based oral health education, is another critical characteristic of successful partnerships. For example, engaging in community partnerships may require the academic institution or residency program to redirect resources for coordinating and scheduling with Health Centers. The champion needs to be able to address the issue of potential loss of student or resident clinical revenues. An individual whom the administration respects and whom the institutional community trusts is best able to effect the necessary policy and operational changes that will lead to a successful partnership. At the Health Center, a respected staff member, usually part of the management team, is the best choice to advocate for making the changes needed to ensure the program’s success.

Communication

Perhaps the most important factor in developing, implementing, and sustaining successful partnerships is continuous communication between the partners. Regular interaction allows for prompt attention to issues that arise so that they can be quickly resolved instead of allowed to worsen. Health Centers should have good relationships with service learning program coordinators and should be able to discuss steps to take if a student is not meeting program expectations.
CODA Requirements for Students, Residencies, and Specialty Education Programs

CODA requirements for dental students and residencies are clearly defined. These requirements include treatments and procedures that a student or resident must competently perform. If some of these required procedures are not within the scope of a Health Center oral health program, it can be difficult for Health Centers to comply with the requirements without expanding their scope of services or making alternative arrangements. Developing innovative strategies for complying with dental school or residency requirements can help Health Centers prepare to host post-graduate students in their service learning programs.

Revenue Sharing

Over the last three decades, academic dental institutions have faced intense budgetary constraints, high fixed costs, and a steady decrease in federal and state funding. As a consequence, many have significant concerns about moving students out of campus clinics during their senior year and during their residency training—the time when they are most productive and therefore of greatest financial value to the institution. Many academic dental clinics operate at a deficit and need to recover the costs incurred from shifting students to community-based settings.

Some academic dental institutions have approached Health Centers about sharing surplus net revenues received when students and residents provide patient care in Health Centers. To assess the revenue impact of hosting students and residents, Health Centers must collect accurate data on productivity before initiating partnerships and after program implementation. As stated previously, negotiated financial arrangements must be acceptable to both parties.

Changes in Productivity

Hosting dental students or residents can result in decreased productivity. Dental students and residents need more time than professionals to complete procedures, and oral health professions working at the Health Center must spend time supervising and assessing student and resident performance.

As mentioned previously, Health Centers should carefully evaluate whether they anticipate that hosting students or residents will improve Health Center productivity, or at minimum, maintain current productivity levels. This is especially important in light of the fact that hosting students or residents may result in additional costs to the Health Center. However, under the right conditions, hosting dental students and residents can actually increase Health Center productivity. (See the Planning Considerations section for suggestions on how to maximize productivity while hosting dental students and residents.)

Health Centers should also ensure that the faculty supervisor’s workload is sufficiently reduced to allow him or her to effectively mentor dental students or residents. The more one-on-one attention a student or resident receives, the more positive that individual is likely to feel about the rotation and, in turn, the more likely he or she is to consider working at a Health Center in the future.
Health Centers considering partnering with an academic institution or residency program to develop a service learning program on their site can benefit from doing the following:

**Step 1: Assess Organizational Readiness**

The first step is for the Health Center to assess its level of readiness and interest in engaging in a service learning partnership. Preliminary variables to consider include:

- **Health Center incentives.** Clearly defining expectations will avoid misunderstandings later in the implementation process. Has the Health Center identified what it hopes to gain from a service learning partnership?
- **Health Center leadership commitment to academic partnership.** Developing a successful partnership will involve multiple Health Center departments. Is leadership willing to devote the required resources to the partnership?
- **Level of interest and enthusiasm for acting as supervising faculty for students.** Are oral health professionals who work at the Health Center willing to go through the faculty development and credentialing process and serve as engaged and enthusiastic teachers and mentors?

**Step 2: Contact Other Health Centers**

If the answers to these preliminary questions is “yes,” the second step is contacting other Health Centers that have been involved in such partnerships to learn about their experiences.

**Step 3: Contact an Academic Institution or Residency Program**

The third step is reaching out to an academic institution or residency program. Health Centers with local proximity to teaching institutions, whether dental or dental hygiene schools or dental assisting programs, are fortunate. Many of these institutions are actively seeking placement sites for their students.

To find U.S. dental schools by state:

- The American Dental Education Association (ADEA) has a list of Predoctoral Dental Education Programs (ADEA Members): [http://www.adea.org/ADEA/Content_Conversion/about_adea/who_we_are/adeainstitutionalmembers/Predoctoral_Dental_Education_Programs_ADEA_Members.html](http://www.adea.org/ADEA/Content_Conversion/about_adea/who_we_are/adeainstitutionalmembers/Predoctoral_Dental_Education_Programs_ADEA_Members.html)
- The American Dental Association (ADA) has a list of dental programs nationwide: [http://www.ada.org/267.aspx](http://www.ada.org/267.aspx)

To find U.S. dental hygiene and dental assisting programs by state:

- ADA has a list of dental hygiene and dental assisting programs nationwide: [http://www.ada.org/5500.aspx](http://www.ada.org/5500.aspx)
- The ADHA has a list of dental hygiene programs nationwide: [http://www.adha.org/dental-hygiene-programs](http://www.adha.org/dental-hygiene-programs)
During communication with the academic institution or residency program, the Health Center should analyze how the academic institution’s or residency program’s needs and requirements compare with the Health Center’s capacities in, at minimum, the following areas:

- **Alignment with the academic institution or residency program.** Health Centers should seek an academic partner with a mission similar to its own that has a track record of successfully partnering with community organizations. Will a thorough orientation that provides an understanding of the credentialing, faculty appointment, training, evaluation, and supervisory requirements be offered? How much administrative and technical support can the Health Center expect from the academic institution or residency program?

- **Commitment to hosting students and/or residents.** Students may require housing or transportation assistance. The Health Center and the academic institution or residency program must clearly communicate about who is responsible for providing housing and transportation assistance.

- **Academic program requirements.** Each academic institution or residency program has specific clinical procedure requirements that must be completed during the service learning experience. Can the Health Center provide or arrange for the full breadth of required clinical experience? Students must also achieve and demonstrate required program competencies. Does the Health Center have systems in place to assess competence, identify deficient areas, and arrange for remediation experience, if needed?

- **Adequate numbers of patients and procedures.** Beyond fulfilling program requirements, both students or residents and the Health Center benefit if the student or resident has a full schedule encompassing a wide variety of clinical procedures. Can the Health Center provide students or residents with a steady flow of patients requiring procedures commensurate with students’ or residents’ abilities?

- **Ample operatory space.** Health Centers need to ensure that oral health professionals who work at the oral health program can remain productive while also providing students or residents with the operatory space necessary to treat a sufficient number of patients. Does the number and configuration of operatories satisfy supervision requirements of different academic dental education programs while allowing oral health professionals who work at the Health Center to remain productive?

- **Allied dental health professional support for students or residents.** Dental students generally do not have the opportunity to work with dental assistants. But, like oral health professionals, dental students are more efficient and productive if provided with appropriate support. Does the Health Center invest in a dental assistant to work with students or residents?

- **Supervising faculty arrangement.** Options for faculty coverage include having academic institution or residency program faculty placed at the Health Center or developing and credentialing Health Center oral health professionals as adjunct faculty of the academic institution or residency program. Are the Health Center and
the academic institution or residency program in agreement on the method for faculty coverage?

- **Faculty development.** Health Center oral health professionals are typically not educators and need opportunities to learn teaching and mentoring techniques and how to evaluate and assess student and resident performance in a standardized manner. Will a thorough orientation that provides an understanding of the credentialing, faculty appointment, training, evaluation and supervisory requirements be offered?

- **Financial considerations.** There are many different financial arrangements between Health Centers and academic institutions, and settling on the right one is part of the negotiation process that takes place between the two parties in determining whether a partnership is feasible. The Health Center must be aware of its current financial status and be clear about its financial goals for the partnership to determine whether the academic institution’s or residency program’s offer is acceptable. Does the Health Center have a strong grasp of its financial situation and its financial goals, and is the academic institution’s or residency program’s offer acceptable?

Service learning partnerships can provide benefits to Health Centers, including the opportunity to recruit and retain students and residents as future employees, improved retention rates of oral health professionals, increased access to oral health services for patients, and improved job satisfaction for all staff.

Given the right conditions, dental students, dental hygiene students, dental assisting students, and residents from post-doctoral primary care dental residency programs such as general practice residency, AEGD, and pediatric residency programs, can serve as valuable complements to traditional oral health professional staff, contribute to the sustainability and clinical operation of a Health Center, generate revenue, and provide other benefits.

Academic institutions and residency programs offer a valuable public service by including senior students, pediatric residents, general dentistry residents, and allied dental professionals in community-based dental education programs. Many academic institutions and residency programs have confronted the challenges inherent in developing and maintaining such programs, and there is general agreement that community-based programs provide vital non-financial advantages for both academic institutions and residency programs and community stakeholders.

Academic institutions and residency programs and Health Centers, working together, can create successful service learning programs that benefit not only the institutions or programs and the Health Centers but also the communities the Health Centers serve and the students and residents themselves. By continuing to collaborate in this manner, academic institutions and residency programs can provide valuable experiences for students and help to reduce the shortage of qualified oral health professionals interested in pursuing careers in the Health Center environment.
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The National Network for Oral Health Access (NNOHA) is a nationwide network of Health Center dental providers. These providers understand that oral disease can affect a person’s speech, appearance, health, and quality of life and that inadequate access to oral health services is a significant problem for low-income individuals. The members of NNOHA are committed to improving the overall health of the country’s underserved individuals through increased access to oral health services.

The mission of NNOHA is to improve the oral health of underserved populations and contribute to overall health through leadership, advocacy, and support to oral health providers in safety-net systems.

For more information on NNOHA, visit www.nnoha.org, send an email to info@nnoha.org, or call 303-957-0635.