Identifying and Responding to Competing Needs: A Case Study of a Dental School-Operated Community Dental Clinic


Abstract: Dental schools face challenges and competing needs when they seek to initiate or expand their community dental programs. This article uses a dental school community clinic as a case study to frame the tensions between competing needs of educational requirements, access to dental care, financial viability, and service to the community that clinics must learn to manage if they are to be successful. The identification of competing needs provides community-oriented dental school clinics the ability to examine factors that come into play as communities and their environments change. The outcome of this assessment process is strategies that can facilitate the provision of a higher level of services more efficiently, while at the same time taking into account future limitations in availability of resources. The concluding section of this article presents a model for a community-based dental clinic that is directed more toward patient care, involves dentists/specialists as primary providers, allows postdoctoral residents to take on more responsibility, and allows dental students to provide patient care on a more regular and longitudinal basis.

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Key words: dental education, health services accessibility, dental care, dental clinics, program development, patient-centered care

Submitted for publication 5/9/03; accepted 9/3/03

We are living in an era in which community experience for students is becoming a more essential component to the mission of dental education. Thirty-two of the forty-six dental schools responding to the survey of the American Dental Association in 1998 reported that they operated (owned or leased) a satellite dental clinic. The main locations for these community dental clinics were stand-alone office space (19.6 percent), hospital settings (15.7 percent), community health centers (13.7 percent), and as part of an academic health center satellite (11.8 percent). Increased awareness of existing disparities and changing populations make community dental programs a more complex issue that requires innovative methods of looking at the forces that could shape these programs. This article presents a case study of a dental school community clinic to illustrate the challenges and competing needs that dental schools face when initiating or expanding their community programs and discusses the challenges these clinics must learn to manage if they are to be successful.

Figure 1 presents relationships between the community clinic and various stakeholders. The dental school is responsible for academic and overall financial viability of the community clinic and must also respond to demands from the parent university. The community clinic is responsible for implementation of programs and direct financial management, with oversight from the dental school. However, the clinic must also interact and respond to local interest groups, including schools and other health organizations. The interest groups and community clinic are located in the community they serve, which consists of businesses, religious organizations, and residents.

In Images of Organization, Gareth Morgan described a model showing that tensions existing and developing in systems lead to “bifurcation points”
that then allow choices to be made between differing paths that in turn affect future directions. Positive and negative feedback loops within the path chosen interact in this system to produce further change patterns. Using this model, Figure 2 depicts the dynamics of the four needs that compete for resources among the stakeholders described above. The needs are: 1) educational requirements, 2) access to dental care, 3) financial viability, and 4) service to the community. Clinics need to achieve some balance or equilibrium among these elements, which are constantly in flux and often compete with one another for resources. One of the challenges facing community clinics is to effectively manage educational and financial goals set by the dental school, which, in turn, has to respond to the greater university’s interests and agendas. At the same time, service partners have expectations about providing timely access to dental care for their patients and serving other community oral health needs. Interest groups, including county and state agencies, financial contributors, and local schools, also have needs and expectations. To meet a dental school’s educational and community service goals, the challenge facing community-oriented clinics is to identify and seek to control the potential tensions between the competing needs of each group.

Using a case study approach, we will use a dental school-operated community clinic that has been in operation for over three decades to illustrate the dynamic interactions of the competing needs illustrated in Figure 2. We will also share our perspectives on how other schools can be more effective in meeting community needs while balancing student educational requirements and operational financial viability.

The Community Dental Clinic in Venice and Its Stakeholders’ Competing Interests

In July 1969, the UCLA School of Dentistry established a dental school-operated, community-oriented dental clinic in the Venice area of Los Angeles. Over time, the clinic has grown from a five-chair storefront facility to a twenty-chair, state-of-the-art clinic that handles more than 15,000 patient visits annually, providing comprehensive care to both adults and children. The Wilson-Jennings-
Bloomfield UCLA Venice Dental Center, the center provides dental care to an ethnically diverse lower income population from Venice and the surrounding areas.

Sixty-five percent of the center’s patients are referred from the Venice Family Clinic, a Federally Qualified Health Center located only two blocks away. The family clinic is the largest free clinic in the United States and provides a comprehensive range of integrated health and psychosocial services for more than 17,000 children and adults with 83,000 visits annually. The family clinic’s program is somewhat atypical in that it does not have its own dental component. Instead, the dental component is provided by the center, while the family clinic supplies patients and helps support the cost of care.

The center has a joint mission: to provide quality comprehensive dental care to the underserved community and to provide a unique learning experience for the school’s students and residents, along with dental hygiene students from local community colleges. Table 1 presents both the center’s current care program and a proposed program. The current program has third- and fourth-year students on week-long clinical rotations, providing general dental care to adults and children. Advanced Education in General Dentistry (AEGD) residents provide comprehensive and emergency treatment services for patients. The teaching and administrative staff is comprised of twenty-three general dentists and specialists (equivalent to 3.75 full-time employees), five full-time dental assistants, and three full-time front office staff.

The key stakeholders who have an interest in the center are: 1) university, school, and center administration, faculty, residents, students, and affiliated students from local community colleges and skills centers; 2) the local community; 3) the family clinic, a service partner; and 4) interest groups including financial contributors, county and state agencies, and local schools. Minimizing potential tensions among the competing needs of educational requirements, access to dental care, financial viability, and service to the community is a common goal.

**The Interests of Educational Requirements**

In a time of decreasing resources, the challenge of restructuring programs to more efficiently meet educational, budgetary, and community needs arises. Two methods of providing patient care and educating students in a dental clinic are procedure-based care and comprehensive care. Procedure-based care occurs when a student is responsible for completing only one procedure in a sequential treatment plan. Another student then sees that patient so no one student is responsible for the patient’s overall care. Comprehensive care involves having a patient’s accumulated needs addressed by a single provider. In comprehensive care, patients are assigned to students who are responsible for their overall dental care.

However, care provided by dental students at the center is currently procedure-based. The school sends ten third- or fourth-year predoctoral students at a time to the center for four one-week rotations.
This structure leads to inefficiencies, as each week students and faculty must reorient to each other and to the patients, limiting the ability of students to develop the patient/doctor relationship and to follow up on patient care. More complex treatment, requiring multiple visits, is referred to one of the center’s five AEGD residents. This splitting of services between predoctoral and postdoctoral students has inherent problems. Patients may feel disenfranchised, as they do not have one provider or a team of providers responsible for their care. In addition, a different student or resident treats the patient under the supervision of a different faculty member each day, and those supervisors may have different preferences in treatment planning and sequencing.

This type of care is efficient in teaching students specific procedures, has minimal impact on programs at the school, and satisfies educational needs, such as teaching restorative techniques. However, it neither addresses the patient’s needs nor promotes the student’s best care practices. It may promote “cherry picking” of patients solely for completion of school-mandated clinical requirements.

Comprehensive care would solve some of the procedure-based problems in that it would allow students to cultivate the patient/doctor relationship and view patients as individuals, not as procedures. Students would also gain an appreciation of the lifestyles of their patients and see more long-term results of their work. The development of an ongoing mentoring relationship with faculty would also allow teaching of cultural and community experiences that a patient brings as part of the care process. Faculty mentors would gain familiarity with students’ competency, allowing the assignment of patients based on student ability.

However, there are also limitations to providing comprehensive care at an off-site community clinic. First, there is the limited availability of specialty coverage. There may also be financial conflicts with the dental school, as students off-site would not be producing income for the dental school. A challenge for the clinic is to be able to generate sufficient income from student, resident, and faculty practice so that there is no financial impact on the school’s general income stream. Another limitation involves the dental school’s curriculum, which may also be impacted as students would be away from campus for an extended period of time. Comprehensive care also implies a commitment on the part of the community clinic administration to provide patients who are able to complete care. This may become a problem, as many patients served by community clinics do not have out-of-pocket resources to pay for their care. Secure sources of funding are needed to be able to continue to support a comprehensive care approach and to maintain access for the populations served by community dental clinics.

The Interests Concerning Access to Dental Care

Access to care is defined by the Institute of Medicine as “the timely use of personal health services to achieve the best possible health outcomes.” It can be quantified in terms of the dental facility itself, the type of care/range of services it provides, and patient program options. Factors such as number of days per week and hours per day the clinic is open play a role in allowing for patient access. Type of care provided can be subdivided into episodic and comprehensive care. Episodic care includes emergency visits in which patients enter care to have one procedure completed. In order to provide episodic care, time and resources must be redirected from treating comprehensive care patients. A broader range of services provided as part of a comprehensive care program also requires increased resources, which may lead to financial constraints.

Community stakeholders view access to emergency services as a high priority for patients. If resources are redirected to provide episodic care, comprehensive care suffers. To only patch emergent problems and not treat underlying factors, however, leads patients to return with future emergencies on the same teeth, ultimately leading to extraction. Both dental school and community clinics strive to rehabilitate patients comprehensively and engage them in the dental care process. Teaching patients to be proactive in preventive oral health and self-care procedures helps decrease the need for episodic care in the future. Actively recalling patients who have had episodic care in the past may engage them in the comprehensive care model and help maintain services that have been provided. Building a cadre of patients with funding who return on a regular basis also allows for evaluation of care provided.

Access to care is also affected by group plans accepted by the clinic. Community clinics are constantly responding to stakeholder desires to provide for timely access to care on behalf of their constituents. Given the constraints of the existing size and resources of facilities, providing increasing access
to one group will correspond to decreasing access for other groups. The ability to balance needs of politically visible groups, such as homeless individuals, persons living with HIV/AIDS, and Medicaid patients, is important, as a community clinic wants to distribute benefits equitably among vulnerable groups.

Accessibility to dental care, however, can be in tension with financial viability and service to the community. In 2002, the center received 40 percent of its payments for services from an institutional arrangement with the family clinic; 38 percent from patients paying with cash, checks, or credit card; 17 percent from the Medicaid program; and 5 percent from other sources. With anticipated decreases in future funding from the state and county, it will be important to increase funding from other sources, including self-paying patients and Medicaid. While this will help maintain the financial viability of the center, it may cause decreased access for groups such as the working poor who have no insurance and cannot afford to pay for treatment, even at a reduced fee.

Also, a shift toward more insurance and self-paying patients could place the center at odds with local dental practitioners. The ADA 1998 survey found that 70 percent of dental society representatives thought that private practitioners in their society’s jurisdiction perceived that dental school satellite clinics were in competition with them and that 77 percent perceived this competition to be unfair. Over 94 percent of dental society representatives thought that private practitioners in their society’s jurisdiction also perceived dental school-owned satellite clinics to be a source of competition for fee-for-service patients. Schools of dentistry face challenges in providing access to care while seeking to foster good relations with the community and local practitioners.

The Surgeon General’s Report on Oral Health in America4 emphasized the socioeconomic, financial, and nonfinancial factors that play key roles in determining when and how people access dental and medical care. Barriers to educational achievement, including inadequate English language skills, multigenerational poverty, cultural beliefs about medical and dental care, and dietary patterns all influence a person’s care-seeking behavior and oral health status. National studies on barriers to access to dental and medical care can also help frame problems and target areas for change.5-20 To narrow the gaps and improve the oral health status of the community requires an understanding of how these factors interact and how community-based educational programs can help remove these real barriers to care.

The Interests of Financial Viability

One of the major challenges facing the center is being a good partner with the community so that patients have access to affordable comprehensive health care. As indicated above, the family clinic is a source of 65 percent of patient referrals. However, these patients, many of whom are supported by poorly funded or government programs, account for only 40 percent of the center’s revenues. With the current economic climate and shrinking resources, reduced reliance on county funds can be anticipated in the future. The trend toward decreasing Medicaid reimbursement and an 8 percent budget reduction in state support from the 2001-02 level within the University of California system will also lead to a decrease in operational funding. There are pressures to cut costs by decreasing staffing and faculty coverage, which would not only negatively impact the ability to operate the program, but also would jeopardize clinical revenue. These pressures, coupled with a lack of private insurance patients and increasing numbers of patients with no money to pay for dental services, add to the challenge of financially sustaining current programs and building additional programs.

Approaches to address financial concerns include implementing strategies to maintain a sustainable financial base and to prevent significant cost overrun. Community clinics have several options including raising fees and/or cutting costs, increasing fundraising efforts, and pursuing grant opportunities. Raising fees, however, would limit access to care for patients who could not afford to pay for treatment and in turn would reduce a clinic’s ability to provide service to the community and education to students. Many patients are part of programs that reimburse at a fixed fee regardless of treatment provided. In these programs, the ability to reimburse at the cost of care can be problematic. For example, one program pays the center $28 per patient visit regardless of the amount of treatment provided. This is less than half of the estimated $60 per visit operational cost of the program. Program integrity and patient service must be maintained, but an ethical issue arises in that to maximize revenue in this situation, providers might be tempted to provide the minimum service per patient per visit, thus increasing patient visits. It could also lead to the favoring of
other patients who could support the cost of care, affecting service to the patient population served by this program. Furthermore, patient treatment would be extended over a longer period of time, leading to patient dissatisfaction, as care would not be completed in a timely fashion. Teaching would be affected in that students would not be taught how to provide care efficiently but rather would learn how to manipulate the system based on revenue generation rather than treatment needs of the patient. In primary medical care, it is easier to charge a per-visit rate as most routine patient encounters involve examination and ordering of specific tests. In contrast, dental visits cost varying amounts due to the nature of the work, time required for procedures, use of dental materials, and involvement of a dental laboratory. Thus it is harder to assign a fixed cost to a dental visit, as dentistry is a procedure-based profession.

An option for programmatic reimbursement instead of charging a fixed fee for dental visits is allocation of a set amount of funds to be paid on a fee-for-service basis until exhausted. When funding runs out, patients in the program are responsible for the cost of care. This type of program is beneficial from the standpoint of the clinic as it is equivalent to fee-for-service. The problem arises in determining who qualifies to be a part of the program and how to allocate services to provide the greatest good for the greatest number of patients.

Community clinics can also increase funding by promoting development efforts to increase donations from private individuals and foundations. When pursuing potential donors, schools should be conscious of potential tensions and competing agendas that could develop between them and their affiliated community clinics if there is competition for the same donor pool. Grants are another avenue schools can pursue to raise revenue in addition to potentially increasing service, access, and education. Relationships with community partners are extremely important to be able to jointly respond to funding opportunities.

The Interests of Service

Mission statements of schools of dentistry typically include service to the community as well as teaching and research. The service mission is met through provision of direct patient care services and also involves teaching and research. From the perspective of the institution, teaching and research can impact service to the community. From a teaching perspective, for example, training of residents is usually not geared to a community setting but rather is based in a hospital or school. Predoctoral students have exposure to community programs but also have requirements and competencies in their curriculum that need to be addressed in the clinical program. For instance, students at the school do not have adequate numbers of patients necessary to develop patient care competencies, so the center is providing the clinical experiences not otherwise available. This puts pressure on the center to continue to provide procedure-based care, which results in dental treatment not always progressing in a timely and efficient manner.

In terms of research, the university also has an expectation that dental schools will be leaders in research while at the same time maintaining a community focus or identity. Academic promotion disproportionately rewards research. The pursuit of research grants drains a significant amount of energy away from other activities, which can create tension with community partners and special interest groups. These groups have a service mission to provide care for their targeted constituencies. It is often difficult to develop research in a community setting, as community partners are often skeptical of research. In order for a dental school to conduct research in the community, it is important that it first establish its trustworthiness in treating partners with dignity and respect.

A Proposed Model for Community-Based Dental Education

The relationships between key stakeholders and the dynamics that frame these relationships have been presented in this case study to illustrate the challenges community clinics face. Strategies have also been presented to help promote survival in a time when support from universities is waning, public funding is in jeopardy, and due to the poor economy, foundations and private sources are decreasing donations. At the same time, the demand side is increasing as people are losing their jobs and thus their dental insurance.

In addition to the current program, Table 1 describes a proposed program designed to decrease tensions by addressing the issues discussed in this ar-
The proposed program follows a model of medical education, allowing fourth-year predoctoral students to treat patients one day a week for an extended period of time in a hierarchical team model. This model has teams comprised of a faculty dentist, a dental resident, eight predoctoral students, and supporting faculty and staff. The team faculty member assigns patients to a student provider who is responsible for their overall care. More complex cases are referred to the AEGD or General Practice Residents on-site for treatment; the team faculty member would also be a provider of care. In this model, students would interact with the same faculty members each week, helping to ensure continuity of care for patients and continuity of learning for students. Additional faculty and specialists can also be incorporated into the clinical care setting. In this model, students provide comprehensive care and thus a broader range of services to patients than they would on a short clinical rotation. Students can also maintain patient care at the dental school, as they would only be off-site one day per week as opposed to a week at a time. This model of community-based education promotes a patient-centered system, with dentists actively engaged in care, supervising a small number of students and residents at the same time.

This approach puts pressure on the educational system to prepare students to provide care in a less supervised environment. Rather than a site where students learn basic dental procedures, community clinics would become a place where students already competent in a set of skills would apply them directly to patient care. These changes would require the collaborative efforts of the clinical departments within a dental school to extend the faculty support and provide internal programmatic changes to provide for a comprehensive care approach. Specialty referral to the dental school would be incorporated into the model as needed. Episodic care would continue for patients with emergent needs only, but they would be encouraged to become part of the continuous care stream. Incentives for students could also be built into the program. For example, if a student met certain preset goals, he or she could get a voucher good for purchases at the student store or for airfare to help cover the cost of plane tickets for graduate program interviews. Increased student productivity and efficiency would be the result.

This type of program would also benefit the community in that students would begin to appreciate the lifestyles of the patients they treated and better relate and engage patients in the care process. The range of services provided by students would increase to include crowns, bridges, root canals, extractions, and dentures. This would help meet students’ educational requirements and at the same time increase access by decreasing the backlog of patients seeking those services.

Changes based on the issues discussed in this article are currently being implemented and tested at the center. The center now has its own AEGD program with five residents providing comprehensive care. A Senior Select program is in the second year of pilot testing with two groups of ten fourth-

| Table 1. Current program and proposed program at the Wilson-Jennings-Bloomfield UCLA Venice Dental Center |
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| **Current** | **Proposed** |
| Students | Ten third-years or ten fourth-years assigned to clinic for four-day, one-week rotation twice a year. |
| | Eight fourth-years assigned to clinic one day per week for a six-month rotation. |
| Assistants | Three assigned to students. |
| | No change. |
| AEGD Residents | Five not integrated with predoctoral students. |
| | Five integrated with predoctoral students in a hierarchical team model comprised of one faculty dentist (team leader, provider of care, and instructor to residents and students), one AEGD resident (provider of care and mentor to students), eight students, and supplemental faculty to support teaching operation. |
| Comprehensive Care | Students provide one visit treatment. Residents provide comprehensive care. Faculty not incorporated as providers. |
| | Students provide comprehensive care. Residents: no change. Faculty provide comprehensive care. |
| Teaching | AEGD residents have no teaching responsibility. Faculty provides teaching. |
| | AEGD residents teach students. Faculty: no change. |
year predoctoral dental students providing comprehensive care to patients one day per week for six months with the same faculty instructor. It is our intention that this program will be the foundation for development in the next few years of the hierarchical team approach to dental care described previously. Urgent care services have been limited to those patients able to pay for care or covered by paying programs. Other urgent care patients are being referred to free dental centers. The center is also the pilot site for a new electronic record system, which will allow for more active recall of existing patients. Utilization of current programs is being evaluated, and programs with excess funding are being expanded. Funding for programs with a fixed dollar amount for the year is being allocated in a manner that will serve urgent care and comprehensive care needs and meet community partner needs. This is the start of a process addressing the issues and tradeoffs among access, education, financial, and service issues in our community clinic.

**Conclusion**

Although communities may have developed the structure for a community-based family health, mental health, and oral health delivery system, there is a need to build both capacity and coalitions by linking community dental clinics with community organizations and schools to enhance existing resources. Broadening and deepening relationships with community service partners are also increasingly important in the face of anticipated shrinking resources. Change at the clinical level will involve a dynamic shift from an approach to care focusing on students to one focusing on patients that feeds back in a positive manner to students and residents. An “orders of change”22 approach can serve to sort out the multiple actors embedded within the clinic-community nexus.

The first order of change involves the patients for whom the service is being provided, and the outcomes of modifications to patient care services could be measured by changes in patient status. The second order of change is at the student and resident level, which involves incorporating students as positive providers of community-based care who take an active role in the community. The third order of change is at the level of the community itself. Under this model, the dental clinic would become a source for institution-building, not only as a provider of comprehensive family-based care, education, and community development, but also as a stimulus for economic and educational growth. Networking with community partners could link a dental clinic, a service provider with “walls,” to other forms of services “without walls” in the community, such as homeless and school-based services.

The experience of a university-operated community dental clinic illustrates the challenges community-oriented dental school clinics must learn to manage if they are to be successful. While each community clinic is unique, identifying current and future challenges, minimizing tensions, and networking with community partners create new, positive paths of development.

**REFERENCES**


