

Pipeline

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For the past seven years whenever I heard mention of the “Pipeline” in dental circles, I was never quite clear on the concept. I knew it had something to do with access to care but I was fuzzy on the particulars. When the topic came up, I would listen and nod hoping to infer what the “Pipeline” was before my own ignorance could be revealed. Thanks to the recently published American Dental Education Association evaluation and the overview published in the *Journal of the American Dental Association*, I now understand the importance of the Pipeline program.^{1,2}

It has been nine years since the publication of the U.S. Surgeon General’s report on “Oral Health in America.” The 2000 report was groundbreaking. It described the status of our oral health as a nation. It emphasized that oral health is an essential part of overall health and provided a framework for action in addressing the oral health disparities and needs of the population of the United States.

One of the report’s “frameworks for action” concerned the link between oral health and underrepresented minority dentists. There is a lack of racial and ethnic diversity in the oral health workforce. Efforts to recruit members of minority groups to positions in health education, research, and practice in numbers that at least match their representation in the general population not only would enrich the talent pool, but also might result in a more equitable geographic distribution of care providers. The effect of that change could well enhance access and utilization of oral health care by racial and ethnic minorities.³

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Pipeline program had three primary goals:

1. Increase the number of underrepresented minority students recruited, matriculated, and graduated from the participating schools.
2. Increase the number of hours dental students spend in extramural rotations in community sites providing care to the underserved. (The target was 60 hours).
3. Improve cultural competency of dental students through changes in the curriculum.

Of the 15 schools in the program, one-third were located in California. With funding from the Robert Wood Johnson Foundation and the California Endowment, all five of California’s (then-existing) dental schools were part of the Pipeline program. The California schools formed a local collaborative to work together on the methods to be used to bring about the desired results. Many obstacles had to be addressed. There were time and curriculum issues. Dugoni had to work within its three-year program. USC had to incorporate cultural competency into its problem-based learning system.

Each of the schools had to deal with the fact that more student hours outside the school’s clinic meant fewer hours producing revenue for the school. There was also the underlying question of whether access to care should be part of the schools’ mission.

California’s involvement in increasing

underrepresented minority student enrollment began before the Pipeline program was established in 2002. In 1999, UCSF began a postbaccalaureate program to help underrepresented minority students who had applied but had not been accepted into dental school. The idea was to beef up the applicant’s academic experience and prepare them for the rigors of dental school.

This postbaccalaureate program became a model for the California Collaborative. Each school initiated its own set of programs in an effort to achieve the goals of increased community clinic time, underrepresented minority student enrollment, and cultural competency. The Pipeline program successfully increased the number of underrepresented minority enrollees in the target schools and the number of hours spent in community clinic rotations.² The metrics used to analyze the success of the program are somewhat tortured. Each school had its own history, mission, and environment, and these elements interacted to complicate comparisons.

The number of underrepresented minority enrollments and clinic hours could be quantified but the achievements in cultural competency and changes in attitude were more subjective and relied on self-assessment. As part of the Pipeline evaluation states, “One cannot assume that providing dentistry in a community practice makes one culturally competent; nonetheless, having no exposure to vul-

nerable patients in the community setting may graduate dentists unaware of access to care issues.”¹

The big questions the Pipeline program tried to address are yet to be answered. Will the increased numbers of underrepresented minority dentists mean a more equitable geographic distribution of providers? Will these new underrepresented minority dentists practice in a manner that enhances access and utilization of oral health care by racial and ethnic minorities? Will cultural competency training and the increased experience in community clinics serving the underserved, translate into more mainstream dentists enhancing access and utilization of oral health care by minorities? Efforts are under way to measure some of these impacts by documenting practice locations of Pipeline graduates.⁴

The evaluations make clear that where the Pipeline program had a champion (a dean or faculty member), the program was highly successful and brought added value to the education of all the students in the school. As in other fields, accommodations made ostensibly for one group can end up eliminating obstacles and improving the experience for everyone.

The Pipeline program is not limited to dentistry. There exist versions of the program in both medicine and law. All the programs were designed to increase the recruitment of a diverse student population. The costs of initiating the program in dentistry were underwritten by the granting agencies. CDA also recognized the importance of the program for organized dentistry and contributed more than \$60,000 to the California Collaborative to help with the postbaccalaureate piece of the program.

The number of underrepresented minority students doubled during the first five years of the program but since 2007, the number has remained unchanged. During this same period, the competition for admission to dental schools has increased to record levels. Once in place,

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the curriculum piece of the program should be able to continue without significant financial underwriting. Efforts are under way to share with the schools, the income generated by the students at the extramural locations. However, representatives of each of the California schools voiced their concerns about the sustainability of the recruitment portion of the Pipeline program given the current economic climate.

The most exciting aspect of the Pipeline program springs from the coalitions it engendered. Parties unaccustomed to working together found common ground where they could creatively address ancillary issues. The second phase of the Pipeline has produced a number of creative programs as a result of these collaborations. There now exists a network of clinic directors that meets three times a year with representatives of the dental schools. This new association facilitates communication and adoption of successful practices and strategies. A training manual and program to aid clinic directors in incorporating dental students into their clinic operations have been developed, and clinic directors are formulating ways to encourage members of their communities to pursue careers in dentistry and oral health. Some clinic directors have reported it is now easier to hire dentists to work as regular staff members in community clinics.

Tackling complex social problems requires health care providers and community groups to work together in new ways. The Pipeline has fostered experiments

with “remote dentistry” in an attempt to facilitate access to care in rural environments. With the help of the CDA Foundation, the Pipeline Policy Summit is held annually. The summit provides a forum for the proposal of policy that may effect change on a larger scale. The Pipeline has matured into a whole array of projects, associations, and collaborations.

Now, when I hear “Pipeline,” a clear image comes to mind. I don’t think of the controversial construction project that conducted oil over 800 miles of Alaskan permafrost. I don’t think of an instrumental made popular by the Ventures. I think of an amazing program organized around increasing cultural diversity in our profession and encouraging cultural exploration in order to bring our professional skills to a diverse population. (Then I think of the Ventures). ■■■■

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