Oral health Care Access Scholars

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Project Background and Focus

On September 6, 2001, representatives of the American Dental Trade Association (ADTA) and Santa Fe Group (SFG) met in the College of Dentistry Dean's office at New York University to explore a joint undertaking. Shortly before, the ADTA had launched a multi-faceted program focusing organizational and member attention on the Nation's oral health care access problems. The program specifically sought to expand dental care access through improvements in dental productivity. During the September meeting, the two groups formulated a mechanism whereby SFG could promote the ADTA initiative and help ADTA gain broad impact on the access problem.

The "Oral Health Care Access Scholars" program was conceived as a research and development project in which a select group of up to ten scholars from around the Nation would be identified and awarded modest research or development grants to focus on particular problems related to health care access. Santa Fe Group was awarded funds to manage the program; ADTA chose to cover certain costs associated with program meetings and other events, and the ADTA Foundation agreed to award specific project grants to scholars identified by SFG with input from ADTA.

In the ensuing months a number of joint meetings, conference calls, and other communications took place and, through them, various procedures for soliciting and identifying prospective scholars were worked out. After taking into account a spectrum of oral health care delivery concerns, the ADTA phrase, "improvements in dental productivity," was determined to encompass five general areas of potential inquiry:

- 1. An examination of current and potential roles for expanded, hybrid, and mid-level para-professional practitioners;
- 2. The development of effective culturally and linguistically targeted dental awareness and "care-seeking" consumer aids;
- 3. The design of a multi-disciplinary public awareness program drawing public attention to the relationships between dental health and diabetes, heart disease, dietary options, and/or (oral) cancer, among other "systemic" diseases;

- 4. The development of measures for identifying the "best" management practices employed in a variety of dental practice settings; and
- 5. A comparative "outcomes assessment" of selected dental practice curricula, with an eye toward developing improved instructional materials for dental students and practitioners.

The combination of these project areas, it was felt, had the potential for opening up access and stimulating oral health awareness and demand, as well as having a more obvious and direct impact on what is traditionally seen as dental "productivity."

In the summer and early fall of 2002, proposals were solicited via announcements placed in the ADA news, in ADTA communications, and in direct mailings to dental school deans and others in the oral health care research arena. These announcements outlined the scope and goals of the program and indicated the availability of several \$5,000-8,000 grants. Some two dozen proposals were received and reviewed by SFG members. Those proposals deemed worthy of secondary review were subsequently forwarded to various ADTA staff and officers. Ultimately, ten projects were determined to be eligible for funding based on the quality of the research design, on the likelihood that the project could be completed in a 12-18 month period, and on the relevance of the project to ADTA's overall strategic goal. Recipients of the grants were termed "ADTA-SFG Oral Health Care Access Scholars."

Once ADTA Foundation funding was in place, prospective Scholars were notified and instructed to obtain administrative clearance from their home institutions and to make other necessary arrangements for receiving and manage the awards. In some cases, SFG members recommended project re-design or modification. Thus, depending on each Scholar's particular circumstances, project funding was contingent on modifications in project design, institutional management, including approval of human subjects' protection measures, and third-party data release. Monetary awards were not granted until all necessary arrangements were in place. Each scholar and their host institution moved at a different pace, with the result that some funds were not awarded until several months after initial project approval had been granted. As a consequence, some projects have been completed as of the writing of this report and others will not be completed until later in 2004.

One project initially approved was subsequently cancelled (prior to funds being awarded) due to the investigators' inability to acquire insurance program data that had previously been promised to them. The remaining nine projects, their accomplishments, and their present status are described below. (The amount awarded each project is included with the project title and investigator's name.)

Oral Health Care Access Scholar Projects

"The Anderson School Project: Partnering with the Medical Profession to Deliver Dental Care," Amos Deinard, M.D. (University of Minnesota) \$8,000

Recognizing the potential for expanding the dental care roles of other health professionals, this project launched an effort grounded in pediatric and obstetric offices to educate mothers and to provide a defined range of early childhood dental services. Medical providers were trained in the application of fluoride varnish to children, with the long term goal of making fluoride varnish application as routine in medical offices as immunizations are today. In addition to technical skill training, project staff developed educational materials designed to familiarize medical personnel with oral development, anatomy, and pathology. Further, an assessment-type questionnaire has been developed for prenatal patients. Finally, a web site (http://mededl.ahc.umn.edu/fluoridevarnish/) which covers the basic instructional program has been launched for health professionals and a CD-ROM offering the same material is also available. This program promises a number of long term impacts, including the establishment of bridges between the medical and dental care communities, the initiation of dental check-ups and parental awareness earlier in the child's life, and the potential reduction of early childhood caries.

To date over 200 medical personnel or clinics have accessed or expressed an interest in receiving these materials. A presentation was delivered in Milwaukee at the National Oral Health Conference in 2003 and the project director also presented to the American Public Health Association's annual meeting. Noteworthy, too, is the fact that funds invested in this project also generated an estimated \$50,000 in support for the investigator's work through the Ruben-Bentson Chair in Pediatric Community Health at the University of Minnesota.

"A Pilot Study to Determine Barriers to Implementing Productivity Enhancement Strategies in Dental Practices," Larry Domer and Richard Call (University of Colorado) \$9.500

More than three decades of research have demonstrated that productivity of dentists can be improved by using expanded function auxiliaries, expanding practice hours, adopting group practice models, developing alternative financing models, and adopting computer-based technologies and new dental materials. Little is known, however, about why dentists generally seem slow to adopt and implement these productivity enhancement strategies. This project explored the factors which serve to inhibit productivity improvement in the dental office. Literature reviews, interviews with dentists and students, and survey research were combined to help clarify this situation. The ultimate goal of this work is to develop a series of policy recommendations that focus on the educational, regulatory, and fiscal avenues that might serve to expand productivity. Data analysis is expected to be concluded by summer, 2004.

"An Examination of Current and Potential Roles for Expanded, hybrid, and mid-level, para-professional practitioners," Steven Duffin (Capitol Dental Care, Salem, Oregon) \$5,000

This project is grounded in the belief that a comprehensive analysis of the need for dental services in under-served and at-risk population groups suggests that more

attention should be paid to expanding opportunities for dental para-professionals. With dental practice acts varying widely from state to state, policy makers are often confused and uncertain about the direction to move and about the best way to reform licensure and credentialing protocols. A national data base of regulatory acts and related information has been initiated to assist policy makers in understanding the scope and nature of dental care "tasks." Information has also been collected from professional associations and state agencies to examine recommended processes for licensing and credentialing reform, and a handbook for change is under development to assist organizations and individuals working in this area. An article has been prepared for publication and a manual or guidebook summarizing appropriate regulatory laws and opportunities is being compiled.

"The Dental Literacy Action Project," Michelle Henshaw (Boston University) \$7,158

With one of the Nation's largest Somali communities, Boston health care workers are well-aware of the need for more effective and culturally appropriate communications with minority communities. Project staff personnel attended a health literacy conference in Oregon and benefited greatly from cooperation with other groups working on similar projects. They also participated in two other health literacy events. With that supportive background, they proceeded to work closely with Somali community leaders and health care workers. Their first goal was to identify relevant cultural beliefs and practices and, taking that information into account, to design a cluster of culturally relevant educational materials focused on oral health. These materials have been reviewed with focus groups consisting of Somali residents and representatives from appropriate community. Somali communities in both Massachusetts and Maine participated in the development of these materials and the project team intends to make the materials available nationally following evaluation. The project is expected to serve as a model for designing culturally relevant consumer aids to improve health literacy. Project staff members have applied for additional monies through the Samuel Harris Fund for Children's Dental health to develop materials specifically related to sealants. They have also linked their program with on-going activities of Boston University's Center for Research to Evaluate and Eliminate Dental Disparities.

"Developing an 'Outcomes Assessment' Model for Evaluating Dental Practice Curricula," Millie McClain (University of Nevada) \$8,000

This project has the long range goal of permitting comparative analyses of dental practice management across dental schools with an eye toward improving instructional materials and teaching methods. Using the University of Nevada curriculum as a benchmark, the investigator worked with faculty there and at selected other institutions to determine the goals and objectives of practice management curricula in dental schools. She then prepared a survey instrument to solicit information on the intended curricular outcomes. Data reports from forty-eight dental schools around the country were very slow in coming in, and thus analysis was pushed back several months. The investigator found that only about one-fourth of the responding dental schools devoted more than 30 hours to practice management instruction. Many schools incorporate the notion that dentists, as professionals, must interact with their broader communities, although this

message tends to receive less emphasis in the latter years of dental training. The general intent of this research is to identify student skills and competencies (in practice management) as they approach graduation and to "benchmark" graduates prior to tracking them in the early stages of their careers. As noted, results of this study will likely be of use to other dental educators and should help improve management of the Nation's dental practices. Assistance for this project was provided by the University of Nevada-Las Vegas School of Dental Medicine, particularly the research committee, and by American Dental Education Association's Section on Practice Administration.

"The Role of Promotores in Accessing Existing Oral Health Services – A Bi-National Model," Shirley Miranda and Lourdes Tellez (El Paso Community Voices) \$8,000

"Community Voices" is a community-based health organization which works on both sides of the Texas border to improve medical and dental health of residents in and around El Paso. Training and then utilizing *promotores* (culturally-grounded health workers), this project established a mechanism to assist underserved persons to access oral health care through outreach services and education. The project worked with dental students and dental hygienists to provide some services and to develop materials and training programs. Forty-seven *promotores* participated in the training program, representing 12 of 14 *promotora* agencies in El Paso County. Training covered not only basic oral health issues, but those relating oral health with smoking and diabetes as well. Field evaluation was not incorporated into this project, but anecdotal information suggests the expanded role for *promotores* to be welcomed and useful. As noted below, the project attracted a great deal of attention and resulted in the training of health workers from Central America as well as from the immediate project area. Long-term, the project seeks to develop policy recommendations suitable for improving dental care access among underserved and minority populations.

The Pan American Health Organization committed funds for expanded training in conjunction with a US-Mexico Border Diabetes Prevention and Control Project. The Centers for Disease Control also expressed a desire to participate in expanding the impact of this project.

"Medical Care as a Model for Primary Prevention of Dental Disease in Massachusetts' Public Schools," Richard Niederman (The Forsyth Dental Institute) \$7,750

This project involved a planning effort to design (and subsequently implement) a pilot study in several eastern Massachusetts elementary schools. Implementation will not result from funding under the ADTA-SFG arrangement, but monies are being sought to address that challenge. The program itself is a school-based primary caries prevention program with linkage to dental practices for restorative work. Initially, organizations, schools, and agencies who would be involved in the program were solicited for their input and commitment to the project. Additionally, culturally appropriate educational

materials are being developed to engage the parents, children, and other concerned citizens. Community reaction to the program has been enthusiastic. To date, two school systems have agreed to participate and supplemental funding approximating \$650,000 has been committed by Delta Dental and the Massachusetts Access Program. Federal funds will be sought as well. Roughly 600 children in two schools have been "enrolled" in the program; data collected during the pilot project is being used to support the federal application for funding implementation on a larger scale.

As noted, long range goals include implementing and evaluating a new model for teaching and practicing primary prevention techniques in the public schools. The area targeted for testing is one having many high-risk, high need children.

"Cultural Materials: Media Campaign for the Prevention and Early Detection of Oral Cancer Among Minority Populations," Ella Oong (Montefiore Medical Center/Albert Einstein College of Medicine and Harvard University School of Medicine) \$8,000

The purpose of this project is to develop a media campaign for the prevention and early detection of oral cancer for minority populations. Social marketing techniques will be applied to the field of health promotion and disease prevention as a new means of leveraging change in communities burdened with undiagnosed and untreated oral cancer. Ultimately, the investigator proposes to evaluate this campaign in terms of its effectiveness in reaching on the target population and on the impact of the campaign on various media outlets and distributors. Still "in process," the project was delayed by a shift of institutional affiliation early in the project period and by various other set-backs. It appears to be moving ahead at this time. A number of corporate and academic links have been identified and several outside consultants have and are continuing to assist in the development of materials and the campaign itself. These collaborative arrangements include the Boston Housing Authority, Boston Public Health Commission, Boston Elderly Commission, Columbia University's Community Dentcare Network, the Harvard School of Dental Medicine, the Multicultural Healthcare Marketing Group, and the New York State Department of Health. Direct funding to assist in supporting the project director has been provided by a Geriatric Fellowship at the Harvard Medical School.

"A Feasibility Study on The Effect of a New Product on Access to Dental Services," Edward Rossomando (University of Connecticut) \$8,000

Depending on the specific characteristics of an innovation, the adoption of new technologies by both the profession and the public has much potential for increasing demand for services, for improving productivity, and for reducing disease via prevention. Initially, this project sought to focus on the impact of a media campaign on screening for oral cancer and on the impact the campaign has on practices, over the long term. The campaign would have been focus on a specific geographic area and new patients responding to the campaign would be tracked. Plans were to compile data on actual lesions discovered and on the results of biopsies. A four month follow-up was planned to determine if patients were remaining with the practices and if recommended treatment and other oral health care was being pursued.

Close examination of the initial proposal revealed a number of design and feasibility concerns. After consultation between the investigator and a team of ADTA and SFG mentors, the project was re-designed following the October meeting. The current project is thought to be much more realistic while maintaining and serving the investigator's interests. There are three pilot studies involved: a brush biopsy evaluation, community education and outreach activities, and a health disparity study. After encountering unanticipated complications with his home institution, the investigator has since obtained IRB (use of human subjects) approval and his University has committed to providing a variety of support services which will greatly expand the impact of the original ADTA-SFG funding. He is exploring the potential impact of HIPPA regulations on the project. OralCdx has contributed \$6,000 worth of test kits and testing services to this effort and several dental practices have indicated an interest in participating in the project. Baseline data on these practices is being compiled to permit monitoring new patients once the campaign has been launched. As an indirect impact, this project has been incorporated into an application for dental school curriculum development, especially in the area of oral cancer education and prevention.

Summary

For the American Dental Trade Association Foundation, the Oral Health Care Access Scholars Program represented a new venture into the arena of oral health related research. While all members of the Santa Fe Group had prior experience conducting, mentoring, evaluating, and managing research programs, this was the first time the organization, as such, had provided simultaneous management services for a multitude of projects. Despite the fact that both organizations were moving into new arenas, the program was clearly a success. Project outcomes have moved the ADTA initiative of improving oral health care access forward on a number of fronts. In fact, the diversity of the projects, ranging from using physicians to help deliver oral health care to a critical analysis of dental school practice management curricula, is quite impressive. One should also note the number and range of organizations which chose to affiliate themselves with these ADTA projects, organizations ranging from universities and research centers to the Pan American Health Organization, dental insurance programs, and the Centers for Disease Control and Prevention.

Importantly, it can be seen that for an investment of less than \$200,000 in the Oral Health Access Scholars program, scholarly research was supported for periods of 12-18 months. While exact figures are impossible to determine, it's clear that this investment generated matching funds and "in-kind" research support services well in excess of \$1,000,000. Through the program, literally hundreds, and perhaps thousands, of individuals have already been affected through activities in oral health education, preventive services, and innovative delivery programs. The program has had multiple impacts, some immediate and short-term, and others, contributions which may not be known for several years. One of the Oral Health Care Access Scholars recently published an article which looked at the general question of how organizations and systems respond to challenges with innovative changes. To illustrate his point, he

focused on the Nation's health care crisis and the ADTA program as an example of such an innovative response. Published in *Compendium* (April, 2004), "The National Crisis in Access to oral health Care: A Dental Industry Association Responds," lauds the foresight of ADTA's leadership and cites the program as an exemplar of proactive industry actions which will contribute to improved health for the American public.