



# Journal *of the* American College *of* Dentists

Schools' Role  
in ACCESS

WINTER 2008  
VOLUME 75  
NUMBER 4



# Journal of the American College of Dentists

A publication advancing  
excellence, ethics, professionalism,  
and leadership in dentistry

The *Journal of the American College of Dentists* (ISSN 0002-7979) is published quarterly by the American College of Dentists, Inc., 839J Quince Orchard Boulevard, Gaithersburg, MD 20878-1614. Periodicals postage paid at Gaithersburg, MD. Copyright 2008 by the American College of Dentists.

Postmaster—Send address changes to:  
Managing Editor

*Journal of the American College of Dentists*  
839J Quince Orchard Boulevard  
Gaithersburg, MD 20878-1614

The 2008 subscription rate for members of the American College of Dentists is \$30, and is included in the annual membership dues. The 2008 subscription rate for non-members in the United States, Canada, and Mexico is \$40. All other countries are \$60. Foreign optional airmail service is an additional \$10. Single-copy orders are \$10.

All claims for undelivered/not received issues must be made within 90 days. If claim is made after this time period, it will not be honored.

While every effort is made by the publishers and the Editorial Board to see that no inaccurate or misleading opinions or statements appear in the *Journal*, they wish to make it clear that the opinions expressed in the articles, correspondence, etc. herein are the responsibility of the contributor. Accordingly, the publishers and the Editorial Board and their respective employees and officers accept no liability whatsoever for the consequences of any such inaccurate or misleading opinions or statements.

For bibliographic references, the *Journal* is abbreviated *J Am Col Dent* and should be followed by the year, volume, number and page. The reference for this issue is: *J Am Col Dent* 2008; 75(4): 1-68



Publication Member of  
the American Association  
of Dental Editors

## Mission

The *Journal of the American College of Dentists* shall identify and place before the Fellows, the profession, and other parties of interest those issues that affect dentistry and oral health. All readers should be challenged by the *Journal* to remain informed, inquire actively, and participate in the formulation of public policy and personal leadership to advance the purposes and objectives of the College. The *Journal* is not a political vehicle and does not intentionally promote specific views at the expense of others. The views and opinions expressed herein do not necessarily represent those of the American College of Dentists or its Fellows.

## OBJECTIVES OF THE AMERICAN COLLEGE OF DENTISTS

THE AMERICAN COLLEGE OF DENTISTS, in order to promote the highest ideals in health care, advance the standards and efficiency of dentistry, develop good human relations and understanding, and extend the benefits of dental health to the greatest number, declares and adopts the following principles and ideals as ways and means for the attainment of these goals.

- A. To urge the extension and improvement of measures for the control and prevention of oral disorders;
- B. To encourage qualified persons to consider a career in dentistry so that dental health services will be available to all, and to urge broad preparation for such a career at all educational levels;
- C. To encourage graduate studies and continuing educational efforts by dentists and auxiliaries;
- D. To encourage, stimulate, and promote research;
- E. To improve the public understanding and appreciation of oral health service and its importance to the optimum health of the patient;
- F. To encourage the free exchange of ideas and experiences in the interest of better service to the patient;
- G. To cooperate with other groups for the advancement of interprofessional relationships in the interest of the public;
- H. To make visible to professional persons the extent of their responsibilities to the community as well as to the field of health service and to urge the acceptance of them;
- I. To encourage individuals to further these objectives, and to recognize meritorious achievements and the potential for contributions to dental science, art, education, literature, human relations, or other areas which contribute to human welfare—by conferring Fellowship in the College on those persons properly selected for such honor.

## Editor

David W. Chambers, EdM, MBA, PhD

## MANAGING Editor

Stephen A. Ralls, DDS, EdD, MSD

## EDITORIAL BOARD

Bruce J. Baum, DDS, PhD

Norman Becker, DMD

Fred Bremner, DMD

D. Gregory Chadwick, DDS

Eric K. Curtis, DDS

Kent W. Fletcher

Steven A. Gold, DDS

Theresa S. Gonzales, DMD, MS, MSS

Bruce S. Graham, DDS

Donna Hurowitz, DDS

Frank J. Miranda, DDS, MEd, MBA

Laura Neumann, DDS

Ian Paisley, DDS

Don Patthoff, DDS

Marcia Pyle, DDS

Cherlyn Sheets, DDS

## DESIGN & PRODUCTION

Annette Krammer, Forty-two Pacific, Inc.

Correspondence relating to the *Journal* should be addressed to:

Managing Editor

Journal of the American College of Dentists

839J Quince Orchard Boulevard

Gaithersburg, MD 20878-1614

Business office of the *Journal of the American College of Dentists*:

Tel. (301) 977-3223

Fax. (301) 977-3330

## OFFICERS

Max M. Martin, Jr., President

Thomas Wickliffe, President-elect

Thomas F. Winkler III, Vice President

W. Scott Waugh, Treasurer

John M. Scarola, Past President

## REGENTS

Herb H. Borsuk, Regency 1

Robert A. Shekitka, Regency 2

T. Carroll Player, Regency 3

Dennis A. Burns, Regency 4

Bert W. Oettmeier, Regency 5

Patricia L. Blanton, Regency 6

Paul M. Johnson, Regency 7

R. Terry Grubb, Regency 8

Kenneth L. Kalkwarf, At Large

Jerome B. Miller, At Large

Linda C. Niessen, At Large

Eugene Sekiguchi, At Large

Lawrence P. Garetto, ASDE Liaison

# 2008 ACD ANNUAL MEETING

---

## 4 An Ethics War

ACD President-elect's Address

*Max M. Martin, Jr., DDS, FACD*

## 8 Responding to a Culture-Based Health Need

Convocation Address

*Francisco G. Cigarroa, MD*

## 11 2008 ACD Awards

## 15 2008 Fellowship Class

# SCHOOLS' ROLE IN ACCESS

---

## 20 Dental Schools and Access Disparities: What Roles Can Schools Play?

*Howard Bailit, DMD, PhD, FACD*

## 24 Dental Pipeline Program: A National Program Linking Dental Schools with the Issue of Access to Care

*Allan J. Formicola, DDS, MS, FACD*

## 29 California Pipeline Program: Phase II

*Paul Glassman, DDS, MA, MBA, FACD*

## 35 East Carolina University School of Dentistry: Impact on Access Disparities

*D. Gregory Chadwick, DDS, MS, FACD and James R. Hupp, DMD, DDS, JD, MBA, FACD*

## 42 The Role of Dental Schools in the Issues of Access to Care

*Caswell A. Evans, DDS, MPH, FACD*

# ISSUES IN DENTAL ETHICS

---

## 47 The Intersection of Dental Ethics and Law

*David J. Owsiany, JD*

# DEPARTMENTS

---

## 2 From the Editor

Loose Talk

## 55 Leadership

Practice

## 64 2008 Manuscript Review Process

## 65 2008 Article Index



This issue is supported by the American College of Dentists Foundation.

**Cover Photograph:** As practitioners, it is important that we help patients approach their oral health one step at a time. Addressing their neglected oral health can seem intimidating.

© 2009 Nikada Photography/iStockphoto.com

## FROM THE EDITOR

---

### LOOSE TALK

Advertisements are examples of loose talk; they are “drive-by” claims that refuse to engage in conversation.

Loose talk creates distance between people. When we hear something that does not seem to square with our views, it is human nature to build in a bit of safety space. We want to know why a dentist is critical of a colleague’s work, why that blog is still getting hits, and the foundation for the rumors that are circulating about a candidate for office in the state association. We reserve that space for an explanation, and when explanations are not forthcoming this distance creates looseness in the professional community.

I think of loose talk as statements that do not come with reasons. They are attempts to tell me what to believe without giving me the little kit that explains how this new claim is supposed to be hooked up to my current understanding. Advertisements are examples of loose talk; they are “drive-by” claims that refuse to engage in conversation. So is the snide, third-person insinuation at the committee meeting that “there are many questions this proposal leaves unanswered”—leaving unanswered what those questions might be or who is raising them. Manuscripts have been turned down for publication based on suspicions that “they might be biased” with no hint about what that bias could be.

In a rational community, members are expected to take responsibility for what they say. The bioethicist Edmund

Pellegrino observed that it is unethical to say something just because you want it to be true without actually believing it to be so. This is not a First Amendment issue. Just because one has a right to say something does not mean that it is right to say it. This thought came to mind last year when Columbia University invited Mahmoud Ahmadinejad to address the school community. President Lee Bollinger publicly insulted his guest; the president of Iraq returned the favor, and the whole business was passed off as an exercise in free speech.

What is necessary to participate in the rational community (to avoid loose talk) is a willingness to discuss reasons for the claims one puts forward. Informed consent is a code of honoring requests for reasons.

It would be tedious to accompany every statement with a reason, and we only have to be prepared to bring forth our reasons when asked. If the dentist says, “Agent X is the only acceptable deep pocket irrigant,” that is a pretty loose way of talking. The challenge might come, “I have been wondering about that. Why do you say Agent X is the only alternative?” “It is approved by the FDA” and “I only use it on patients where it is indicated” fill in the picture in different ways: the first response is wimpy; the second is highly idiosyncratic.

As an editor, I occasionally get comments that something in the journal should not have been said. I respond (per the ACD/AADE Code for Editors) that space is provided for reasonable alternative positions in the format of letters to the editor. Often this leads to

useful exchanges; sometimes the topic is dropped, leaving me to wonder what the real reasons are.

What I find unacceptable is refusal to provide reasons when they are requested, or assuming a stance that implies that reasons should not be expected. Here are a few of the common unreasonable postures.

The put down: "You would not understand; This is beyond the scope of our discussion; This is technical." The message here is, "I do not want to be challenged: you should accept what I have to say based on my status as an authority: you are not a member of my group."

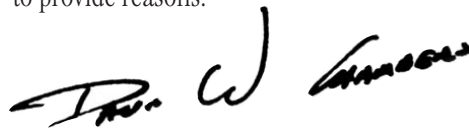
Insider status move: "I am not allowed to tell you where I heard this; I have it on good authority; Didn't you know (everyone else seems to)?" This is a grab for recognition as having access to important people, of being "in the know". It is trafficking in information as power, and it is what fuels rumor mills. When no reasons are requested or when the speaker gets away with the "it's confidential" move, some pretty loose talk is generated.

Passionate idealism: "It would be just like them to...; Let me give you a bunch of reasons consistent with my view; Their motive must have been..." It is human nature to fill in the gaps with details that make our picture of reality consistent. Hiding the reasons for loose talk can become a strategy used to protect a picture of the world from critical analysis. Some people have pretty unconventional pictures.

Me too: "I agree with the last speaker and offer this example; I can top that; As long as we're talking about some of the problems with dental education..." Here the loose talk serves the purpose of marking the speaker as a member of the group. The group has no interest in asking for reasons, it is recruiting.

Opportunism: "I know of no better product; This will meet all your needs; Obvious superiority..." We wink at self-serving claims. They are understood to be puffery and thus exaggerated, and so we accept claims that are intended to be clear whoppers while at the same time we demand proof for claims that are meant to be accurate. One year I assigned students in my Critical Thinking course to phone or e-mail companies that mentioned in their dental ads that "data are on file." I stopped the project because no company had any data on file.

Private opinions can live long and happy lives disconnected from reasons. But when they go out in public, they have to get dressed up in an acceptable fashion. Making a claim in a professional community is more than expressing an opinion. It involves engaging others, and so there must be some common ground for that engagement. In rational communities that means being prepared to provide reasons.



Private opinions can live long and happy lives disconnected from reasons. But when they go out in public, they have to get dressed up in an acceptable fashion.

## AN ETHICS WAR

---

Max M. Martin, Jr., DDS, FACD

ACD PRESIDENT-ELECT'S ADDRESS

OCTOBER 16, 2008

SAN ANTONIO, TEXAS

**G**ood morning and welcome. I especially want to welcome and congratulate all of the candidates in the room. I have not had the privilege of meeting each of you individually, but I do know that you have contributed much to our profession, and for that I want to personally thank you from the bottom of my heart. My name is Max Martin, Jr., and I am the President-elect of the American College of Dentists. I am both honored and humbled at the challenge of leading this wonderful organization.

### WHO ARE WE?

As many of you know, and as you “soon-to-be” Fellows will discover, our College would not run as efficiently as it does without our excellent staff. I want to formally thank Dr. Steve Ralls, our Executive Director, for his outstanding leadership. Our movement into action on many national fronts such as our online ethical dilemmas and online leadership courses and dental history CD, our four Ethics Summits, and our Professional Ethics Initiative are direct results of Dr. Ralls's ideas, dedication, and hard work. Karen Matthiesen, our Office Manager and Assistant to the Executive Director, is the glue that holds everything together in the central office. Her job description is too long to cover, but if you see her, give her a big “thank you” for all she does for the College. Believe me, she bleeds lilac and

American rose. Paul Dobson is our Comptroller and Director of Meetings. He keeps our finances in order and is responsible for all the logistics at our annual meeting. While we get to “sit back and enjoy” such a wonderful meeting as this, Paul gets to worry about all the details. And then there is the rest of the staff, Sarah, Erica, Monique, and Claudia, who do so much (behind the scenes) to make us look good!

### WHO AM I?

I think it is important for the coming year that you know a little about the person standing in front of you today. It is important because I want you to know that, as your President, I will do everything in my power to make this outstanding organization an even better organization and I will do everything to help your Section in any way that I am able.

I am a general dentist practicing in Lincoln, Nebraska. I grew up in a small town in southeast Nebraska and graduated from the University of Nebraska. I married a native Nebraskan, Mary, my wife of 39 years. She has been my best friend and supporter throughout my dental career. We have been blessed with two wonderful children. Our daughter,



Dr. Martin maintains a general dental practice in Lincoln, NE; mmmartinjr@hotmail.com

Kara, graduated from the University of Minnesota and now resides in Rochester, Minnesota, with her husband and two of our three grandchildren. Our son, Judson, graduated from Texas Christian University and lives down the road in Houston, Texas, with his wife and our grandson. Nebraska to Minnesota to Texas was no big deal until the grandkids arrived. Now we wish that we all lived in closer proximity.

I would not be here today if it were not for several dentists who took the time to mentor me. Dr. Charles Anderson has been a colleague and partner of mine since 1971. He took a very green, young dentist and taught me the “right way” to treat patients ethically and professionally. He encouraged my involvement in organized dentistry and was always there as a sounding board whenever I needed assistance. Dr. Ray Steinacher was my predoctoral advisor and professor. He has encouraged me in many areas of my professional career and nominated me for Fellowship in 1987. I am forever in his debt. Dr. Richard Bradley, Past President of the College, was dean of the University of Nebraska College of Dentistry when I was a student. He and his wife, Doris, have been very supportive of both Mary and me as I have become involved in the College. Dick has been a very positive influence on me throughout my career. Lastly, I want to thank Dr. John Haynes, former Regent and President of the College. It is with his encouragement that I ran for and was elected Regent and, as they say, “the rest is history.” So, as

you can see, I owe a lot to these friends.

Finally, I would be remiss if I failed to mention my parents, Max and Elizabeth Martin, and the influence they had on me in my formative years. Even though they have both passed on, the core values that I have today are a direct result of the Christian upbringing that they instilled in me and my two younger brothers. My mother was perhaps the most positive person I have ever known. One of her favorite sayings was, “You know, Max, you can be whatever you want to be and do whatever you want to do in this world.” And then there was my dad. He taught me the values of honesty, dependability, and good, hard work. The Bible passage by which he lived his life is Micah 6:8: “What does the Lord require of you but to do justice, to love kindness, and to walk humbly with your God.” I have indeed been blessed with a great foundation.

That being said, I know that we all are here because someone, somewhere, sometime had faith in us and helped us along. Our nominating process is representative of that alone. You “soon-to-be” Fellows have achieved a great deal. Congratulations! The College’s expectations for you are high and I am sure each of you is capable of exceeding these expectations.

The question arises:  
can we afford to be moral,  
even if the cost of  
compliance is high? The  
answer is a resounding  
yes. After all, the cost of  
failure is catastrophic!

Now, after seven years on the Board of Regents, I say, "The really important work gets done at the Section level."

### WHAT DO WE STAND FOR?

I have entitled my "formal" remarks this morning "An Ethics War." It sounded like a catchy title and, as I look around at this world we live in, it is obvious that we need to advance ethical behavior and actions more than ever. When I graduated from the University of Nebraska College of Dentistry in 1970, the dental profession was rated number two on the list of most trusted professions. Today, we are ranked around seventh to ninth, depending on which survey you believe. For that I apologize because it was my generation of dentists that contributed to the decline. We need to reverse this trend and we need to do it now.

The College's cornerstone has always been the advancement of ethics. What is meant by that statement? Some might say it is the ethics we, the College, espouse or are asking you to pass on. I would suggest, however, that the more important question is: "What is the ethic by which we live?"

Several months ago, I was watching a TV program and one of the guests made the comment, "I'm not sure I (meaning his company) can afford to be moral." I was astounded. He went on to argue that all of the extra costs to comply with government rules and regulations would negatively impact the bottom line. I expect that we too could quantify the cost of compliance externally imposed on us by our own personal standards, but do we really want to put a number on the "price" of ethical action? Following the Enron scandal, we witnessed one of the most spectacular business collapses of all time because of a huge moral failure, an ethical debacle, if you will.

And so, the question arises: can we afford to be moral, even if the cost of compliance is high? The answer is a resounding yes. After all, the cost of failure is catastrophic! As I asked earlier, What is the ethic by which we live?

So what are we, as a profession, facing today? I already alluded to our free fall from number two to seven, eight, or nine. There have been numerous instances of cheating in our dental schools that have been publicized. It is easy to point fingers at our educators and say, "See, it's your fault that the public looks on us with disfavor." But wait; let us look at the private practitioner. What have we done to enhance the image of our great profession? We have yellow pages filled with advertisements that make all sorts of questionable claims. We list "quasi degrees" and numerous letters after our names to make us look better than our competitor down the street. Note that I said competitor, not colleague. That has been a dramatic change in the last 38 years. When I started attending our local society meetings, there was a feeling of congeniality and helpfulness, a real desire to assist the "new kid on the block" and help him or her succeed. Now, our membership numbers are up and our attendance numbers are down because nobody seems to want to take the time unless it benefits the big "me." What a different perspective! No wonder our profession is facing so many challenges. So, do we throw our arms up in the air and play the blame game, or do we try to make our profession and our community a better place?

### HOW CAN WE ACCOMPLISH IT?

I have always liked the following quote from Vince Lombardi: "The quality of a person's life is in direct proportion to their commitment to excellence, regardless of their chosen field of endeavor."

This speaks to me and I hope to you too. If we would devote our efforts to



excellence and helping our colleagues along, we can make a difference. The College has always stood on sound principles, principles that, over time, have never varied, as illustrated in the following excerpt from College documents that describes the early standards set forth by our founders. And I quote, "Some of the aims of the College are to cultivate and encourage the development of a higher type of professional spirit and a keener sense of social responsibility throughout the profession; by precept and example to inculcate higher ideals among the younger element of the profession, and hold forth its Fellowship as a reward to those who faithfully follow such ideals."

We can all be proud of that aspiration, but we cannot rest on our laurels. We must put in the time and the effort to improve ourselves and to encourage our fellow dentists, especially our younger, newer dentists. We need to look upon them as colleagues and not competitors. I was mentored. I am currently mentoring. I believe strongly in mentoring because it does work! The young men and women that are entering our profession need our help and guidance. I challenge you to make a personal commitment to go back to your community after this meeting and to contact a new dentist in your community or area. Extend an invitation to lunch or to the next local meeting. Show an interest in him or her and offer to be a helping hand, if one is needed. Each of you will have your own unique way to meet this challenge.

As Teddy Roosevelt said, "Do what you can, with what you have, where you are." It is that simple. Go for it.

I used to say that the really important work gets done at the Section level. Now, after seven years on the Board of Regents, I say, "The really important work gets done at the Section level." However, we can only influence change at the Section

level when we get involved! I would urge each of you new Fellows to go home, attend your Section meetings, and encourage the members to take on a new project that will help expand the College's emphasis on excellence, ethics, professionalism, and leadership in dentistry. And to you "more mature" Fellows, I first want to thank you for taking the time and making the effort to nominate these fine individuals. But I want to encourage you to make certain these newest Fellows attend your next Section meeting. Visit with them about what new project your Section could undertake and then make it happen. If we all make these commitments as we return to our respective Sections, what a positive difference we will make! For my part, I am looking forward to being invited, and will try to be available, to attend your Section meetings and assist you in any way that I can. I would appreciate as much advance notice as possible so my schedule can be arranged.

In closing, I would like to quote a famous Nebraskan, William Jennings Bryan, when he said: "Destiny is not written by chance. It's a matter of choice." Let's make the right choices for the right reasons and elevate our profession to the level it deserves. With everyone doing his or her part, we will be successful!

I look forward to leading this exceptional organization during the next year. Thank you for giving me this opportunity. I plan to do the best I can, with what I have, where I am. I wish each of you a successful and meaningful meeting. Enjoy the moment. Many thanks. ■

I challenge you to make a personal commitment to go back to your community after this meeting and to contact a new dentist in your community or area.

## RESPONDING TO A CULTURE-BASED HEALTH NEED

Francisco G. Cigarroa, MD

### CONVOCATION ADDRESS

OCTOBER 16, 2008

SAN ANTONIO, TEXAS

I would also like to extend my congratulations to the Fellows who will be inducted into this prestigious organization. The American College of Dentists is a highly regarded and well-respected professional society, and I am both honored and humbled to stand here among the finest dentists in the world.

Thank you for allowing me the privilege of sharing with you the current conditions and outlook for underrepresented minorities in the academic medicine and health care fields and what we are doing to improve these conditions. I recognize that I am speaking with a distinguished and most knowledgeable group of health care experts and leaders. I hope my insights will add value to your perspectives.

Let me begin by stating that a strong education for all citizens is fundamental to a vibrant nation and a high performance healthcare system. The disciplines—art, science, philosophy, literature, mathematics—required for an integration of true learning and innovation in all fields, including health care, are no longer the fabric of many American students' academic backgrounds. Our educational system is not where it needs to be and, in fact, is more strained than ever before.

Listen to these disturbing statistics: in the United States, only 71% of entering ninth graders graduate from high school, only 39% enter college, only 27% enroll for a second year in college, and only 18% graduate within a six-year time frame. Only 18 out of 100 ninth graders,

in other words, graduate from college within six years. This problem only worsens for students who are raised, through no fault of their own, in low socioeconomic environments, many of whom are underrepresented minorities such as Hispanic and African American students. And this is the population which is to grow exponentially over the coming decades. According to the U.S. Census Bureau, minority students will compose the majority of students, increasing to 54% by 2050.

Given my background, having been educated through public schools in one of the poorest cities in the United States, with my training as a pediatric and transplantation surgeon at Massachusetts General Hospital and at John Hopkins Hospital, and now, as the first Hispanic president of a major academic health science center in the United States, every step of my collective educational and life experiences has provided me with the attributes helpful in leading an academic health center and acquiring the trust of faculty, students, and staff alike. My upbringing as a Hispanic, educated in a poor public school system in Laredo, Texas, and my subsequent education and training has provided me with a unique insight so that I can carry out the mission of the University of Texas Health Science Center at San Antonio and oversee a medical, dental, nursing,



Dr. Cigarroa is president and professor of pediatric and transplantation surgery, the University of Texas Health Science Center, San Antonio, TX.

health professions, and graduate school of biomedical sciences with more than 3,000 students and 5,000 faculty and staff members.

As president of the Health Science Center, I have made it a priority to implement programs that nurture and encourage minorities in the health professions. Health services research has shown that minority health professionals are more likely to serve minority and medically underserved populations; yet there is a severe underrepresentation of minorities in the health professions. Presently African Americans, Hispanic Americans, and American Indians account for less than 9% of nurses, only 6% of physicians and 5% of dentists, according to a report of the Sullivan Commission entitled *Missing persons: Minorities in the health professions*. The numbers are far worse in academic medicine, as underrepresented minorities account for only 4.2% of medical school faculties in the United States, less than 10% of the baccalaureate and graduate nursing school faculties, and 8.6% of dental faculties.

The gap between healthcare providers and the diverse populations they serve will only increase if changes are not quickly instituted. The University of Texas Health Science Center, for example, serves South Texas, whose demography includes a population which is 80% Hispanic. It is a severely medically underserved region. Let me paint for you the landscape. Nationally, there exists an average of 266 physicians per 100,000 people. In South Texas, it is

much less than half of that, with only 113 physicians per 100,000 people. Nationally there are 61 dentists per 100,000 people, and along the Texas-Mexico border region there are 19 dentists per 100,000 people.

Compounding the issue of a shortage of providers are other severe problems. Large numbers of persons in South Texas lack health insurance. Thirty-one percent of the population falls below the federal poverty level. Moreover, the challenges regarding health care resources led the Health Resources and Services Administration of the federal Department of Health and Human Services to designate this area of our nation as a medically underserved region.

To address this problem, the University of Texas Health Science Center established a Regional Academic Health Center along the Texas-Mexico border in the communities of Harlingen and Edinburg with both a health professional education and medical research division. Working with the Texas Legislature, we have acquired \$100 million in capital funding, and we are partnering with major hospital systems as well as recruiting the Veterans Health Care Administration in order to provide additional clinical venues for the education of our students. We have acquired \$10 million in annual recurrent funding to recruit clinical faculty for medical education for both undergraduate students, residents, and the recruitment

Our educational system is not where it needs to be and, in fact, is more strained than ever before.

Let us ensure that incredible choices and junctures are open for future generations of health care providers through the choices we are making.

of scientists to begin biomedical research on diseases that particularly affect the population along the Texas–Mexico border region, such as: diabetes, mental health disease, multi-drug resistant tuberculosis, hepatitis C, and cancer. Fifteen percent of our medical students are completing their third- and fourth-year clinical rotations in these regional campuses. Thus far, we have educated more than 600 medical students who have done their third and fourth years of medical school at the Regional Academic Health Center. Sixty percent of physicians completing their residencies in our border campuses are staying there to practice, and many also are responding to the needs of the uninsured by choosing to practice in federally qualified health clinics.

Our campus in Laredo is also creating a new model of dental health care. The U.S. Department of Health and Human Services notes that the dentist-to-population ratio for the Laredo area is 75% below the state and national averages. We conducted a survey along the Texas–Mexico border region last year and found that two-thirds of those screened had not visited a dentist in the previous year. From those screened, more than half of the adults and more than a third of children had untreated dental decay, which left untreated can lead to other, more serious, health issues. Laredo is one of the fastest growing communities in the United States and the shortage of dental professionals is expected to worsen significantly unless considerable measures are taken, not only here but throughout the nation.

To help address this concern, the University of Texas Health Science Center is working to develop a Border Regional Academic Health Center focused on dentistry. We aim to establish additional dental student training programs through this initiative. We have created a partnership with the City of Laredo and the Laredo Health

Department to provide clinical training sites for students, residents, and faculty. We estimate that between 4,000 and 5,000 children will be treated by the pediatric residency training program and approximately 3,500 to 4,500 adults will be treated by the general dentistry residency training program annually at the newly expanded and renovated Laredo Health Department Dental Clinic. Our goal is to establish this dental regional education program and create, for Laredo, one that will become a national model.

I strongly believe that this paradigm in establishing regional academic health centers will be an important means of addressing access to health care, serving as a catalyst to increase opportunities for students of all backgrounds to pursue health professional education, especially those who might have otherwise felt that their dream to become a healthcare professional was impossible.

Let us ensure that incredible choices and junctures are open for future generations of healthcare providers through the choices we are making. We must ensure that the student pipeline to health professional education remains wonderfully competitive, diverse, open, and bountiful; that our students from kindergarten through college pursue knowledge through a deep love of learning which can cross disciplines in creativity and flashes of brilliance; and ensure that our academic health centers become conduits for serving the underprivileged and the vulnerable in our changing America.

This moment in history demands such a collective effort. Let us choose to seize the moment and follow inspired decisions to their realization. This will make a world of difference for the next generation of healthcare providers. ■

## 2008 ACD AWARDS



### ETHICS AND PROFESSIONALISM AWARD

The Ethics and Professionalism Award recognizes exceptional contributions by individuals or organizations for effectively promoting ethics and professionalism in dentistry through leadership, education, training, journalism, or research. It is the highest honor given by the College in this area. The American College of Dentists recognizes the American Society for Dental Ethics as the recipient of the 2008 Ethics and Professionalism Award. Accepting the award on behalf the Society is Dr. Larry Garetto, Past President.

The American Society for Dental Ethics (ASDE) was founded in 1987 as the Professional Ethics in Dentistry Network (PEDNET). It is an international, nonprofit organization of dental educators, practicing dentists, dental organization officers, dental hygiene faculty, organization officers, ethicists, and others involved in oral health care. The society exists to support ethics as an integral value for the oral healthcare professions. ASDE is dedicated to contributing to and enhancing the growing dialogue about ethical issues in oral health care and fostering more effective ethics education in the dental and dental allied health professions. Members of ASDE have for many years contributed to

the national dialogue in dental ethics through publication, research, and presentation of seminars, workshops, forums and other educational programs locally, nationally, and internationally. Activities and accomplishments of ASDE in the area of ethics and professionalism are summarized below:

- Presentation of faculty development workshops, section programs, special interest group programs, symposia, and lunch and learn sessions at the annual meeting of, as well as other meetings sponsored by the American Dental Education Association
- Presentation of intensive workshops for dental educators at meetings of the International Dental Ethics and Law Society
- Presentation of programs at local and state dental society meetings and at national meetings of the American Dental Association
- Presentation of programs as co-sponsors at meetings of the American College of Dentists
- Presentations on ethics and professionalism for the dental affinity group of the American Society for Bioethics and Humanities
- Presentations on ethics and professionalism in association with the Academy of General Dentistry and the American Association of Dental Examiners
- Participation in national committees and task forces related to ethics and ethics education sponsored by ACD, ADA, and ADEA

- Development, administration, and analysis of a national survey, "Teaching and Learning Professional Ethics in U.S. Dental Schools"
- Publication of papers related to ethics and professionalism in numerous peer-reviewed journals including the *Journal of the American College of Dentists*, and the *Journal of Dental Education*, as well as in the journals of many state dental societies

*This award is made possible through the generosity of the Jerome B. Miller Family Foundation.*

### WILLIAM JOHN GIES AWARD

The highest honor the College can bestow upon a Fellow is the William John Gies Award. This award recognizes Fellows who have made broad, exceptional, and distinguished contributions to the profession and society while upholding a level of leadership and professionalism that exemplifies Fellowship. The impact and magnitude of such contributions must be extraordinary.



#### DR. HARRY ROSEN

Dr. Rosen is recognized for his contributions to organized dentistry, dental education, research, prosthodontics, the American College of Dentists, and his community. He has been an extremely valued resource to dentistry and his country (Canada), and

his record of accomplishment is broad-based and meaningful. Dr. Rosen is held in highest regard, not only by his colleagues, but also by his friends and associates. Dr. Rosen's record can be summarized as follows:

- BSc, McGill University
- Gold Medalist, DDS, McGill University, Faculty of Dentistry
- Certificate in Prosthodontics, Royal College of Dental Surgeons of Ontario
- Certificate in Prosthodontics, National Dental Examining Board, Royal College of Dentists
- Member, Royal College of Dentists in Prosthodontics
- Professor Emeritus, McGill University, Faculty of Dentistry
- Inaugurated the first Canadian graduate program in prosthodontics in 1970, enabling graduate students to qualify in both operative dentistry and crown and bridge prosthodontics
- Provided major input into the implant dentistry program at McGill University
- Member, Ordre des Dentistes du Québec
- Co-founder, Halder Study Club for Restorative Excellence
- Charter member and first President, Canadian Academy of Restorative Dentistry
- Montreal Dental Club Gold Medal
- President, Mount Royal Dental Society
- Maimonides Award, first honoree of Mount Royal Dental Society and Alpha Omega Fraternity
- Honorary Member, Canadian Academy of Restorative Dentistry and Prosthodontics
- Honorary Member, Montreal Dental Society
- Distinguished Service Award, Canadian Dental Association
- W. W. Wood Award of the Association of Canadian Faculties of Dentistry
- Fellowship, L'Academie Dentaire du Québec
- President-elect, L'Academie Dentaire du Québec
- Award of Excellence, American Academy of Operative Dentistry
- Dental volunteer for tubercular Inuit children
- Accomplished artist, featured in documentaries including Canadian Broadcasting Corporation

## HONORARY FELLOWSHIP

Honorary Fellowship is a means to bestow Fellowship on deserving non-dentists. This status is awarded to individuals who would otherwise be candidates for Fellowship by virtue of demonstrated leadership and achievements in dentistry or the community, except that they are not dentists.

Honorary Fellows have all the rights and privileges of Fellowship except they cannot vote or hold elected office. This year there are four recipients of Honorary Fellowship.



**Ms. Michelle V. Curtin**

Ms. Curtin has been the convention planner for the Yankee Dental Congress for 30 years and

Assistant Executive Director of the Massachusetts Dental Society for 24 years. Her dedication, resourcefulness, and zeal are noteworthy and have strongly contributed to the positive experience of the many dentists interacting with her Society. Key accomplishments and credentials of Ms. Curtin include:

- BA, Connecticut College, Phi Beta Kappa and Cum Laude
- Yankee Dental Congress convention planner

- Assistant Executive Director, Massachusetts Dental Society
- Interim Executive Director, Massachusetts Dental Society
- President, Meeting Planners International, New England Chapter
- Board of Directors, Meeting Planners International, New England
- Board of Directors, American Society of Association Executives, New England
- American Dental Association, Consultant, Council on Annual Sessions
- Vice President and Board of Managers, Junior League of Boston
- Trainer in facilitation, and management skills, American Management Association
- Outstanding Service Award, American College of Dentists, New England Section
- Distinguished Service Award, International College of Dentists, District One
- Outstanding Contribution to Dentistry Award, Pierre Fauchard Academy
- New England Meeting Planner of the Year
- Spirit of Achievement Award, Greater Boston Convention and Visitors Bureau



**Mr. Stephen A. Hardyman**

Mr. Hardyman has served organized dentistry with the Ohio Dental Association, American Dental Association, Illinois State Dental Society, and Florida Dental Association. He currently serves as the Executive Director of the Washington State Dental Association, demonstrating innovation and foresight in his service to the profession. His record is summarized below:

- Executive Director, Washington State Dental Association (WSDA)
- Worked diligently to establish firm financial grounding for the association through the WSDA's for-profit subsidiary, Washington Dentists' Insurance Agency
- Integral in the March 2007 partnership between the WSDA and the ODS Companies of Oregon to purchase Northwest Dentists Insurance Company, Washington's leading professional and general liability insurance company for dentists
- Focused on raising the profile and improving the public image of dentistry, working to develop a comprehensive public affairs strategy with the ADA and promoting the good deeds of dentists through the Washington Oral Health Foundation, the charitable arm of the WSDA
- Helped secure a \$21 million per annum increase in the Medicaid budget for children's dental care
- Played an integral role in moving the WSDA's relationship with the University of Washington School of Dentistry from one of minimal existence to one of high regard, support, and respect
- Brought two student delegates into the WSDA's House of Delegates
- Established a mentorship program that pairs incoming dental students with a member of the WSDA
- Helped develop a truly unique mentor program, called the Rural Internship in Private Practice program, which provides students with the experience of living and working in a rural community by partnering them with rural dentists for a two-week summer internship
- Honorary Member, American Dental Association
- Honorary Fellow, International College of Dentists
- Honorary Fellow, Pierre Fauchard Academy



#### MR. DAVID S. HORVAT

Mr. Horvat is Executive Director of the Tennessee Dental Association, and he has an exemplary

record of leadership and achievement in organized dentistry. His efforts have resulted in numerous positive changes to the association and have greatly contributed to the advancement of dentistry and oral healthcare delivery. Key events and accomplishments in the career of Mr. Horvat include:

- MS, Communications, Ohio University
- Executive Director, Tennessee Dental Association
- Managing Editor, *Tennessee Dental Association Newsletter*
- Member, TennCare Dental Program Advisory Committee
- Member, State of Tennessee Adult Emergency Oral Health Care Strategic Planning Committee
- Past Assistant Executive Director, Ohio Dental Association
- Past Executive Director, Dr. John Harris Dental Museum Foundation
- Past President, American Society of Constituent Dental Executives
- Past Treasurer and Past Editor, Tennessee Society of Association Executives
- Oversaw completion of new \$4 million Tennessee Dental Association Headquarters Building
- Member, Kappa Tau Alpha, national journalism honorary society
- Honorary Fellow, International College of Dentists
- Honorary Member, Academy of General Dentistry
- Honorary Member, American Dental Association



#### MS. MARTHA S. PHILLIPS

Ms. Phillips is the Executive Director of the Georgia Dental Association (GDA) and Chief Operating

Officer for two for-profit subsidiaries: Georgia Dental Insurance Services, Inc. and Professional Debt Recovery Services, Inc. She has been with the GDA for 31 years, as its Executive Director for 22 years. Ms. Phillips is known in Georgia as dentistry's consummate advocate for oral health. Key accomplishments in her career are summarized below:

- Executive Director, Georgia Dental Association
- Chief Operating Officer, Georgia Dental Insurance Services, Inc.
- Chief Operating Officer, Professional Debt Recovery Services, Inc.
- Award of Merit, American College of Dentists
- Honorary Fellowship, International College of Dentists
- Honorary Member, Omicron Kappa Upsilon
- Honorary Member, American Dental Association
- Honorary Member, Georgia Dental Association
- Presidential Commendation, Georgia Dental Association
- Member, ADA Sesquicentennial Planning Committee
- Board of Directors, Georgia Chamber of Commerce
- Governmental Affairs Committee, Georgia Chamber of Commerce
- Member, Governor's Coalition on Healthcare Policy
- President, American Society of Constituent Dental Executives
- American Dental Association Executive Director's Advisory Committee

- Award of Appreciation, Medical College of Georgia School of Dentistry
- Volunteer of the Year, Georgia Secretary of State
- Editor, Georgia Society of Association Executives

## AWARD OF MERIT

The Award of Merit is awarded to non-dentists for specific, outstanding achievements that significantly contribute to the betterment of dentistry, the dental profession, or dental public health.



**DR. HENRIETTA L. LOGAN**

Dr. Logan has served as a Professor of Community Dentistry and Behavioral

Science at the University of Florida, College of Dentistry, since 1999. She has an extraordinary record of accomplishment as a faculty member at both the University of Iowa and the University of Florida. Her career has been devoted to dental education, service, and research. She is passionate about incorporating the topics of ethics and professionalism in the curriculum, and she was a key leader behind the joint initiative to expand the curriculum content in ethics and professionalism in collaboration with the Florida Section of the American College of Dentists. Each year, members of the Florida Section spend a day with the clinical dental students using an innovative

teaching model that includes case-based discussions. The students have been very receptive to learning from practicing dentists and discussing ethical dilemmas that they are likely to encounter when entering practice. Dr. Logan also organizes a learning experience for senior students in which the student writes and reflects upon an ethical dilemma that they have faced while in school. ACD Fellows read these reflections, discuss them with the students, and use these essays to select the recipient of the ACD-sponsored senior student award. Dr. Logan is recognized for helping create the Ethics Workshops at the University of Florida College of Dentistry and for her exceptional efforts in helping make the program an overwhelming success. Her passion for the program continues to motivate and inspire students.

## SECTION ACHIEVEMENT AWARD

The Section Achievement Award recognizes ACD Sections for effective projects and activities in areas such as professional education, public education, or community service. This year there are two recipients of the Section Achievement Award.

The **Mississippi Section** is the first recipient of the 2008 Section Achievement Award. The Mississippi Section is honored for its comprehensive ethics program for all dental students, encompassing an ethics ceremony (freshmen), a White Coat Ceremony (sophomores), a professionalism and ethics program (juniors), and an ethics seminar (seniors).

**All New York Sections**—Hudson-Mohawk Section, New York Section, and Western New York Section—collectively serve as the second recipient for working to pass legislature requiring a three-hour course in ethics as part of New York continuing education requirements.

## SECTION NEWSLETTER AWARD

Effective communication is a prerequisite for a healthy Section. The Section Newsletter Award is presented to an ACD Section in recognition of outstanding achievement in the publication of a Section newsletter. The award is based on overall quality, design, content, and technical excellence of the newsletter. This year's recipient is the **Ontario Section**.

## 2008 LIFETIME ACHIEVEMENT AWARDEES

William E. Brown  
Joseph B. Chetwin  
Russell D. Coleman  
Richard D. Kornis  
Bruno W. Kwapis  
Franklin H. Locke, Jr.  
Benjamin L. Lynch (deceased)  
H. Cameron Metz, Jr.  
Melvin A. Noonan  
C. E. Rudolph, Jr. (deceased)  
Walter C. Sandusky, Jr.  
Harold R. Schreiber  
Ray H. Steinacher  
Henry M. Tanner (deceased)



## 2008 Fellowship Class

---

The Fellows of the American College of Dentists represent the creative force of today and the promise of tomorrow. They are leaders in both their profession and their communities. Welcome to the 2008 Class of Fellows.

Stephen N. Abel  
*Fort Lauderdale, FL*

Marc B. Ackerman  
*Jacksonville, FL*

James W. Adams  
*Gettysburg, PA*

Paul S. Albicocco  
*Staten Island, NY*

Eugene T. Altieri  
*Duluth, MN*

Gary I. Altschuler  
*Gainesville, FL*

Steve F. Anderson  
*Grand Island, NE*

Steven B. Aragon  
*Englewood, CO*

Jeffery A. Arigo  
*Fairport, NY*

Carl O. Atkins, Jr.  
*Richmond, VA*

Ralph C. Attanasi  
*Delray Beach, FL*

Mary A. Aubertin  
*Memphis, TN*

James E. Austin  
*Bloomfield Hills, MI*

Estela V. Avendano  
*Covina, CA*

L' Tanya J. Bailey  
*High Point, NC*

C. Bruce Baird  
*Sewanee, TN*

J. Newsom Baker  
*Maryville, TN*

David A. Banach  
*Jamestown, NY*

Donna J. Barefield  
*Duncanville, TX*

Bruce J. Barrette  
*Marinette, WI*

Rebecca A. Barton  
*Eads, TN*

Cynthia S. Beeman  
*Lexington, KY*

Gary P. Benson  
*Denver, CO*

Robert F. Berger  
*Columbia, SC*

John F. Bickford  
*Dallas, GA*

Nathan S. Birnbaum  
*Wellesley, MA*

Marielle Blake  
*Dublin, Ireland*

Steven Bloom  
*St. Petersburg, FL*

Philip W. Bonds  
*Florence, SC*

George I. Bridges  
*Lawton, OK*

Bloyce H. Britton III  
*San Antonio, TX*

John G. Buchanan  
*Lexington, NC*

Michael F. Buckley  
*Sandwich, MA*

Usa Bunnag  
*Kensington, MD*

Edward P. Burvant  
*Covington, LA*

Donald G. Butler  
*St. John's, NF*

Michael Cadra  
*Modesto, CA*

Mario J. Canal  
*Cherry Hill, NJ*

Michael J. Carl  
*Cincinnati, OH*

Bruce E. Carter  
*Lawrenceville, GA*

Scott R. Cayouette  
*Charleston, SC*

John A. Cerrato  
*Garden City, NY*

Lawrence R. Chewning, Jr.  
*Florence, SC*

Christopher D. Childs  
*Gainesville, GA*

Miranda M. Childs Bebee  
*Arkadelphia, AR*

Tom J. Clark  
*Crestwood, KY*

Russell D. Clemmons  
*Savannah, GA*

Joseph R. Cohen  
*Phoenix, AZ*

Jeff T. Cohlmi  
*Oklahoma City, OK*

Jeffrey M. Cole  
*Wilmington, DE*

James A. Coll  
*York, PA*

H. Byron Colley, III <i>Savannah, GA</i>	Jonathan S. Dubin <i>Atlanta, GA</i>	Chester J. Gary <i>Depew, NY</i>
Christopher M. Connell <i>Lyndhurst, OH</i>	Dwight D. Duckworth <i>Springdale, AR</i>	Lynne Gerlach <i>Plano, TX</i>
Kevin J. Corry <i>Union, NJ</i>	Joseph V. Dufresne <i>Mineral Bluff, GA</i>	Francis T. Giacona <i>Metairie, LA</i>
Colleen Cournot New York, NY	Michael G. Durbin <i>Des Plaines, IL</i>	Gregg H. Gilbert <i>Birmingham, AL</i>
Kirk A. Coury <i>Amarillo, TX</i>	Timothy B. Durtsche <i>La Crosse, WI</i>	Henry G. Goble <i>Gainesville, GA</i>
David R. Cox <i>Weatherford, TX</i>	Mark W. Dusek <i>Savannah, GA</i>	Ashton G. Gouldin <i>Falls Church, VA</i>
Karen A. Cox Haymaker <i>Hennessey, OK</i>	Jillian A. Easton <i>Baltimore, MD</i>	Edward G. Grace <i>Timonium, MD</i>
Michael J. Cristy <i>Chesapeake, VA</i>	Ellyn M. English <i>Winona, MN</i>	N. Robert Greenbaum <i>Toronto, ON</i>
Robert M. Crooks, Jr. <i>Columbia, SC</i>	Thomas N. Ewing <i>Houston, TX</i>	Edward N. Griggs III <i>Midlothian, VA</i>
James W. Curtiss, Jr. <i>Maryville, TN</i>	David K. Fagundes <i>La Grange, GA</i>	Marion L. Grubbs <i>Jackson, MS</i>
Charles S. Czerepak <i>Evanston, IL</i>	Charles B. Felts III <i>Chattanooga, TN</i>	Robert S. Hall, Jr. <i>Farmington, CT</i>
John S. Davis <i>Olympia, WA</i>	Harold S. Fergus <i>Memphis, TN</i>	Leslie B. Hardy, Jr. <i>Oklahoma City, OK</i>
Joseph R. Deatherage <i>Birmingham, AL</i>	Anderson D. Ferguson <i>West Point, GA</i>	Barrie E. Harnett <i>Ancaster, ON</i>
William R. Dennis <i>Shrewsbury, MA</i>	Christopher G. Fielding <i>Frederick, MD</i>	John F. Harrington, Jr. <i>Milledgeville, GA</i>
Amber A. Determan <i>Mitchell, SD</i>	Thomas H. Finken <i>Averill Park, NY</i>	Jennifer A. Hathaway <i>Bryan, TX</i>
Fred J. Diedrichsen <i>Holdrege, NE</i>	Patrick J. Foy <i>Minneapolis, MN</i>	Todd Haworth <i>Port Angeles, WA</i>
Harold A. Doerr <i>Rapid City, SD</i>	Charles D. Frank <i>Tecumseh, ON</i>	Joseph F. Heidelman <i>Indianapolis, IN</i>
Bernard Dolansky <i>Ottawa, ON</i>	Donald J. Fuchs <i>Cuba, MO</i>	Kevin A. Henner <i>Deer Park, NY</i>
Michael J. Donato, Jr. <i>Staten Island, NY</i>	Tonya K. Fuqua <i>Southlake, TX</i>	Bernard J. Hennessy <i>Nolanville, TX</i>
	Steven I. Ganzberg <i>Columbus, OH</i>	John L. Henson <i>Jackson, MS</i>
	Mitchell J. Gardiner <i>Fair Haven, NJ</i>	

Robbie W. Henwood <i>San Antonio, TX</i>	Jon J. Johnston <i>Punxsutawney, PA</i>	Tristram C. Kruger <i>Potomac, MD</i>	Patrick J. Louis <i>Birmingham, AL</i>
Aidee N. Herman <i>Canton, MA</i>	Robert L. Jolly <i>North Little Rock, AR</i>	Terry L. Kunkle II <i>Moncks Corner, SC</i>	Wilson E.B. Loveys <i>Corner Brook, NF</i>
William K. Hettenhausen <i>Thunder Bay, ON</i>	Jeffrey R. Jones <i>Eau Claire, WI</i>	Andrew J. Kwasny <i>Erie, PA</i>	Donald M. Lunn <i>Nashville, TN</i>
Joseph M. Hildebrand <i>Birmingham, MI</i>	Judith A. Jones <i>Billerica, MA</i>	Tommie Harold Lancaster <i>Kinston, NC</i>	Christopher L. Maestrello <i>Richmond, VA</i>
W. Dulany Hill <i>Ellicott City, MD</i>	David M. Jordan <i>Columbia, SC</i>	Frederick S. Landy <i>Glastonbury, CT</i>	Ashraf M. Maher <i>Kalamazoo, MI</i>
Myron S. Hilton <i>Oklahoma City, OK</i>	Anil Joshi <i>Moncton, NB</i>	Jonathan H. Lang <i>Montreal, QC</i>	Carolyn J. Malon <i>Farmington, CT</i>
Charles W. Hipp <i>Charleston, SC</i>	Milan J. Jugan <i>San Diego, CA</i>	Ray A. Langston <i>Manning, SC</i>	Paul Markowitz <i>Bohemia, NY</i>
Harry F. Hoediono <i>Kitchener, ON</i>	David M. Kalish <i>Macon, GA</i>	Lilia Larin <i>National City, CA</i>	Stephen J. Maroda <i>Germantown, TN</i>
Hanna Hoesli <i>Hollywood, CA</i>	William H. Karp <i>Fayetteville, NY</i>	Maureen E. Lawton <i>St. John's, NF</i>	Bryan T. Marshall <i>Weeki Wachee, FL</i>
Charles E. Holt, Jr. <i>Chattanooga, TN</i>	Kelly W. Keith <i>Austin, TX</i>	Paul R. Leary <i>Smithtown, NY</i>	Rosa Martinez-Rosenberg <i>Valhalla, NY</i>
Kenny A. Hooper <i>Baltimore, MD</i>	Carole J. Kelley <i>Hilliard, OH</i>	Ronald Lee <i>Colleyville, TX</i>	David G. Martyn <i>Mequon, WI</i>
Bradford B. Hoopes <i>Muskogee, OK</i>	Thomas S. Kelly <i>Beachwood, OH</i>	William G. Leffler <i>Massillon, OH</i>	Michael Mashni <i>Fullerton, CA</i>
Howard W. Horsman <i>Riverview, NB</i>	John K. Kelp <i>Austin, TX</i>	Peter G. Lemieux <i>Winter Park, FL</i>	Rollin M. Matsui <i>Richmond Hill, ON</i>
J. Barry Howell <i>Urbana, IL</i>	Lonnie W. Kennel <i>Geneva, NE</i>	Ralph H. Leonard, Jr. <i>Chapel Hill, NC</i>	James A. Maxwell, Jr. <i>Springfield, OH</i>
Jed J. Jacobson <i>Okemos, MI</i>	Allen W. Kessler <i>Fairfield, AL</i>	Neal R. Levitt <i>Webster, NY</i>	Jandra M. Mayer-Ward <i>Vinta, OK</i>
Fred J. Jaeger <i>Madison, WI</i>	Sharukh S. Khajotia <i>Oklahoma City, OK</i>	Richard J. Lewenson <i>New York, NY</i>	Michael A. McBride <i>Memphis, TN</i>
John H. Jameson <i>Davis, OK</i>	Martha V. Kirkland <i>Alpharetta, GA</i>	William L. Lewis <i>Greenville, NC</i>	Thomas J. McCarter <i>St. Paul, MN</i>
Benjamin K. Jamison <i>Murfreesboro, TN</i>	Ronald W. Kosinski <i>New Hyde Park, NY</i>	John J. Liang <i>Utica, NY</i>	Michael S. McCracken <i>Birmingham, AL</i>
Gerald A. Jelacic <i>Milwaukee, WI</i>	Maharukh Kravich <i>Chicago, IL</i>	Lee M. Lichtenstein <i>Holmdel, NJ</i>	
Ben Jernigan, Jr. <i>Decatur, GA</i>		Cary J. Limberakis <i>Jenkintown, PA</i>	
Glenn J. Jividen, Jr. <i>Dayton, OH</i>		Kimberly A. Lindquist <i>Duluth, MN</i>	

C. Christopher McFarland <i>Duluth, GA</i>	Carol Anne Murdoch-Kinch <i>Ann Arbor, MI</i>	Norman A. Petti <i>White Plains, NY</i>	Paula L. Russo <i>Washington, DC</i>
Gregory D. McGann <i>Mount Laurel, NJ</i>	Rhett L. Murray <i>Aurora, CO</i>	Jacqueline M. Plemons <i>Dallas, TX</i>	Charles D. Samaras <i>Pinehurst, NC</i>
Andrew S. Melinger <i>New York, NY</i>	David A. Narramore <i>Whitesburg, KY</i>	Thomas D. Pollard <i>Portland, OR</i>	Mark A. Saxen <i>Indianapolis, IN</i>
Andrew J. Mesaros, Jr. <i>Beavercreek, OH</i>	Richard A. Newman <i>West Orange, NJ</i>	Scott A. Preisler <i>Fargo, ND</i>	Arthur Roddy Scarbrough <i>Richton, MS</i>
Raymond G. Miller <i>Buffalo, NY</i>	Peter Ngan <i>Morgantown, WV</i>	Jill M. Price <i>Portland, OR</i>	Werner W. Schneider <i>Little Rock, AR</i>
Jacqueline M. Miller <i>Washington, MO</i>	Tina Nichols <i>Little Rock, AR</i>	Henry F. Pruett, Jr. <i>Pensacola, FL</i>	Martin L. Schroeder <i>Biglerville, PA</i>
Louis C. Miller <i>Colleyville, TX</i>	Ned L. Nix <i>San Jose, CA</i>	Jose E. Rabell <i>San Sebastian, PR</i>	Mark J. Schulte <i>Louisville, KY</i>
Bhagwati J. Mistry <i>Tarrytown, NY</i>	Kevin H. O'Boyle <i>Dublin, Ireland</i>	Louvenia A. Rainge <i>Augusta, GA</i>	Stuart L. Segelnick <i>Brooklyn, NY</i>
Julian R.D. Moiseiwitsch <i>Washington, DC</i>	Robert J. O'Donnell, <i>Alpharetta, GA</i>	Vincent U. Rapini <i>Webster Groves, MO</i>	Jeffrey Seiver <i>East Islip, NY</i>
Steven J. Mondre <i>New York, NY</i>	Terry O'Shea <i>Acworth, GA</i>	Harold H. Reed <i>Morgantown, WV</i>	Jeffrey S. Senzer <i>New York, NY</i>
Philip C. Mooberry <i>Tucson, AZ</i>	Gregory K. Oelfke <i>Houston, TX</i>	Richard F. Roadcap <i>Colonial Heights, VA</i>	James J. Severs <i>Vancouver, BC</i>
T. Delton Moore <i>Woodville, MS</i>	Gregory Y. Ogata <i>Sammamish, WA</i>	Scott A. Roberson <i>Independence, MO</i>	Samuel M. Shames <i>Wayland, MA</i>
Steven R. Moore <i>West Chester, OH</i>	Gregory M. Pafford <i>Phoenix, AZ</i>	David L. Roberts <i>Dallas, TX</i>	Jonathan D. Shenkin <i>Bangor, ME</i>
Gene P. Moore <i>San Diego, CA</i>	Ethan A. Pansick <i>Delray Beach, FL</i>	James D. Robinson <i>Buffalo Grove, IL</i>	Charles Shuler <i>Vancouver, BC</i>
Jack T. Morrison <i>Elk City, OK</i>	Kim G. Parlett <i>Bracebridge, ON</i>	John T. Robinson <i>Eugene, OR</i>	Richard J. Simonsen <i>Scottsdale, AZ</i>
Robert B. Moss, Jr. <i>Albany, GA</i>	Mary Norma Partida <i>San Antonio, TX</i>	Jeffrey W. Rodden <i>Keene, NH</i>	Donald C. Simpson <i>Sierra Vista, AZ</i>
Richard C. Mullens <i>Jacksonville, FL</i>	Sanjay Patel <i>Pittsburg, CA</i>	James A. Roos <i>Smyrna, GA</i>	Paramjit Singh <i>New Delhi, India</i>
	Robert W. Payne <i>Mariana, FL</i>	William F. Rose, Jr. <i>Schertz, TX</i>	Jonathan I. Skuba <i>Edmonton, AB</i>
	David W. Perry <i>Augusta, GA</i>	Kenton A. Ross <i>Fayetteville, AR</i>	Steven D. Slott <i>Burlington, NC</i>
		Thomas A. Routledge <i>Coquitlam, BC</i>	
		Salvatore L. Ruggiero <i>Lake Success, NY</i>	

Ronald C. Smiley <i>Savannah, GA</i>	James W. Tom <i>Los Angeles, CA</i>	Edward E. White <i>Elizabethtown, PA</i>
J. Douglas Snowden <i>Florence, SC</i>	Douglas Torbush <i>Conyers, GA</i>	Edward M. Wilby <i>Richmond, BC</i>
Steven I. Snyder <i>Holbrook, NY</i>	Wade H. Townsend III <i>Gainesville, FL</i>	James M. Williams <i>Blytheville, AR</i>
Jay A. Solnit <i>Beverly Hills, CA</i>	Scott A. Trapp <i>Detroit Lake, MN</i>	Edward J. Williams <i>St. John's, NF</i>
Eric S. Solomon <i>Dallas, TX</i>	Ronald Trotman <i>Portland, OR</i>	Galen R. Williams <i>Angola, IN</i>
Robert A. Sorrentino <i>Staten Island, NY</i>	Ronda Trotman <i>Tualatin, OR</i>	James G. Wilson <i>Tampa, FL</i>
Gregory K. Spackman <i>San Antonio, TX</i>	Alex Tsui <i>New York, NY</i>	Heidi E. Winquist <i>Boulder, CO</i>
Thomas M. Spivey <i>Paris, AR</i>	Gary T. Umeda <i>Honolulu, HI</i>	William J. Winspear <i>Sydney, Australia</i>
Mitchell A. Stark <i>Rockville, MD</i>	Byron M. Wade <i>Niceville, FL</i>	Theresa T.L. Wong <i>Burnaby, BC</i>
John W. Starr, Jr. <i>Columbus, MS</i>	Mark V. Walker <i>Kent, WA</i>	Charles S. Wood, Jr. <i>West Memphis, AR</i>
James M. Startzell <i>Boerne, TX</i>	Bryan E. Walls <i>Essex, ON</i>	Marjorie A. Woods <i>Memphis, TN</i>
Robert D. Stevenson <i>Highland, CA</i>	Thomas H. Ward <i>Miami, FL</i>	Mary E. Wynn <i>Cincinnati, OH</i>
Robert Stuchell <i>Morgantown, WV</i>	Walter S. Warpeha, Jr. <i>Minneapolis, MN</i>	K. Robert Zaiman <i>Omaha, NE</i>
Kris K. Swanson <i>Bellevue, WA</i>	Michael H. Wasserman <i>Pittsfield, MA</i>	David A. Zelby <i>Atlanta, GA</i>
Peter E. Swartberg <i>Cannes, France</i>	Ian D. Watson <i>Mississauga, ON</i>	
Larry P. Tadlock <i>Keller, TX</i>	Eric L. Weinstock <i>Canton, MA</i>	
Wayne K. Tanaka <i>Loma Linda, CA</i>	Eric C. Weiss <i>Livingston, NJ</i>	
John H. Taylor <i>Marietta, GA</i>	Curtis M. Werking <i>Rockville, MD</i>	
Christine S. Tempas <i>Sheboygan Falls, WI</i>	Scott P. Werner <i>Memphis, TN</i>	
Timothy Temple <i>Orlando, FL</i>		
Robert B. Tilkin <i>Kensington, MD</i>		

## DENTAL SCHOOLS AND ACCESS DISPARITIES

### WHAT ROLES CAN SCHOOLS PLAY?

Howard Bailit, DMD, PhD, FACD

#### ABSTRACT

Dental schools can address access disparities in several ways: the direct delivery of dental care to underserved population; the recruitment of students more likely to provide care to underserved population; clinical experiences that will influence student and resident career decisions, and basic and clinical research. Currently, schools are having a modest impact on the access problem, and there are several promising new efforts underway. These include establishment of dental school clinics in underserved areas that are run as real delivery systems rather than as teaching laboratories; the recruitment of more underrepresented minority and low-income students; the assignment of senior students and residents to community clinics; and basic and clinical research.

Disparities in access to health care have received a great deal of national attention and are clearly a major political issue. With respect to dentistry, family income, education, race, and geographic location are all major determinants of dental care utilization and oral health status. As is well-known, the poor receive less care and have more untreated disease. Of special concern, disparities in access to dental care are larger than for other medical services. For example, 22.9% of low-income versus 56.5% of upper-income Americans visit dentists annually. In comparison, 78.9% versus 87.8% of low- and upper-income people, respectively, visit physicians each year.

The reasons for these disparities are also well-known. The two national strategies for providing low-income populations access to care—Medicaid dental insurance and the dental safety net system—have significant limitations. Medicaid dental programs do not cover adults in most states, have low fees, and often have cumbersome administrative processes. As a result, relatively few dentists nationally (26%) treat Medicaid patients.

The second basic strategy to address access disparities includes dental clinics operated by the public and voluntary sectors as safety nets. The size of the dental safety net is not precisely known, but a recent paper suggests that it has

the capacity to treat about eight million people per year. Thus, the dental safety net can care for about 10% percent of the approximately 85 million Americans who have low incomes and dental utilization rates.

Dental schools are a component of the dental safety net, and the purpose of this paper is to provide a general framework for considering the role of dental schools in caring for underserved patients. The paper is divided into two sections: (a) the current role of dental schools and (b) new initiatives to reduce access disparities.

#### CURRENT ROLE of DENTAL SCHOOLS

As background information, there are 56 dental schools in the United States, graduating about 4,700 students per year. These schools also train some 3,306 residents and graduate students (the term resident is used to describe all students enrolled in postgraduate clinical training programs) and are staffed by 4,636 full-time equivalent clinical faculty members. Junior and senior dental students, residents, and faculty all provide dental care to patients—a total workforce of approximately 17,342 people. In the next several years, another seven to ten new dental schools



Dr. Bailit is Professor Emeritus, School of Medicine, University of Connecticut; [bailit@nso1.uchc.edu](mailto:bailit@nso1.uchc.edu)

are expected to open, producing another 500 to 1,000 graduates per year.

In terms of the safety net, dental schools have three important roles: (a) direct delivery of care; (b) education of students and residents; and (c) dental research.

#### DELIVERY OF CARE

As an upper boundary estimate, the average dental school with 85 students per class and 59 residents cares for about 30,000 patients per year or a total of 1.7 million patients across all 56 dental schools. Patients treated by faculty members are not counted, because most are middle class or higher and pay full fees. Although only 10% of dental school patients treated by students and residents are enrolled in the Medicaid program, the majority of patients have relatively low family incomes and can be considered underserved. Thus, dental schools care for about 2% of the low-income population.

#### EDUCATION OF STUDENTS AND RESIDENTS

Dental schools also impact access disparities by their influence on the career decisions of students and residents. This includes graduates working in community health centers and caring for low-income patients in their private practices. The schools' major levers to influence career decisions are student selection and clinical training experiences. Students who are underrepresented minorities, from low-income families,

and from rural areas are more likely to practice in underserved areas and care for low-income patients. Currently, 12.5% of dental students are underrepresented minorities (Hispanic, African American, and Native American) and 25% are from families earning \$50,000 or less per year. The percentage of students from rural communities is unknown.

The percentage of underrepresented minority students enrolled in dental school has declined from a high point in 1989. One reason for the decline is rapidly rising tuition and fees, making it difficult for students from lower-income families to afford a dental education. Another reason is the elimination of federal support for programs to recruit underrepresented minority students. On the positive side, several private foundations have provided funds for minority dental student recruitment programs and scholarships. This is one factor that explains the modest increase in underrepresented minority student enrollment in the last few years.

There is also evidence that senior students who spend time in community clinics caring for diverse, low-income, and medically disabled patients are more likely to seek employment in community clinics and to report that they intend to treat low-income and disabled patients in their practices. Several dental schools report that a small, but significant,

The two national strategies for providing low-income populations access to care—Medicaid dental insurance and the dental safety net—have significant limitations.

It turns out that many students are more productive when they return from their community assignments. Evidently, their skill levels and self-confidence improve significantly during their time in community clinics.

number of senior students who participated in externships seek employment in community clinics after graduation. Likewise, community clinic dental directors report that student externship programs provide them a source of new dentists.

#### DENTAL RESEARCH

The majority of dental schools are based in research-intensive universities, where tenure-track, full-time faculty members are expected to generate new knowledge through research. Both basic science and clinical research studies have the potential to reduce disparities in oral health. For example, over the past 30 years there has been a dramatic decline in tooth decay and missing teeth in low-income children, reducing oral health disparities. The primary reason for the reduction is community-level prevention programs, such as water fluoridation, the use of topical fluorides and sealants, and oral health education programs. These preventive technologies all come from years of dental school research, and impact the entire population, especially the poor.

#### NEW INITIATIVES

Although dental schools cannot solve the access problem, they have a critical role to play, and they are moving in the right direction. Among the promising new programs for addressing issues of access to oral health through schools are (a) new delivery systems, (b) education and recruitment, and (c) further research.

#### DELIVERY OF CARE

In the big picture, dental schools provide relatively little care to patients. This is because their clinics are primarily organized as teaching laboratories for students and residents rather than patient-centered practices that are designed to provide care to large numbers of patients. Under the traditional dental education model, students seldom see more than two patients per day, clinics are closed many days for student and faculty vacations, and few hygienists and assistants are employed. Also, unlike other health professions (e.g., medicine, pharmacy, or nursing) faculty do not practice as they teach. Because of this clinical education system, dental school clinics run large deficits and require substantial subsidies.

In the past 20 years, state and federal support for dental education has declined, and most schools face serious financial problems. One strategy for dealing with these financial problems is to change the basic model of clinical dental education. Indeed, a few schools are building group practices in low-income neighborhoods and rural communities and are running these practices as real delivery systems rather than as teaching laboratories. In this new model, faculty members practice as they supervise a small group of residents and senior students, and all clinicians make full use of trained support staff. These practices have the capacity to treat many more patients than traditional dental school clinics and are expected to significantly reduce access disparities. An example of this new clinical educational model is the new dental school at East Carolina University.

#### EDUCATION OF STUDENTS AND RESIDENTS

The recruitment of more underrepresented minority and low-income students is a mixed picture. The majority



of dental schools are making little progress for the reasons previously noted, but there are a few bright spots. One interesting development is the formation of recruitment collaboratives, where several schools in the same state or region work cooperatively to recruit more underrepresented minority students. There are many advantages of cooperation such as significant economies of scale in running one large summer enrichment or post-baccalaureate program for a region rather than many small programs. All California dental schools formed a recruitment collaborative and doubled (5% to 11%) the percentage of underrepresented minority students in their freshman classes in just four years (2003-2007).

Another encouraging development is the participation of dental schools in established medical school summer enrichment programs for minority college students. The Robert Wood Johnson Foundation (RWJF) has sponsored a very successful summer enrichment program for medical students for over 20 years. Now nine dental schools participate in a joint RWJF supported summer program with medical schools, and about 180 college students interested in dentistry are enrolled in this eight-week summer program. The expectation is that 50% or more of participating students will eventually enroll in dental school.

A third significant development is the establishment of several new dental schools associated with Osteopathic Medicine. One such school (A. T. Stills in Arizona) makes a special effort to recruit students from rural areas who are interested in community service. As part of the formal curriculum, students spend much of their senior year providing care to low-income patients in community

clinics located in their home towns. The school also has special arrangements with Federally Qualified Health Centers to place graduates in these facilities. The long-term impact of this strategy on reducing access disparities is unknown, but it has promise.

Both for financial and educational reasons, many dental schools are increasing the time that senior students and residents spend in community clinics providing care to underserved patients. Financially, this allows schools to increase their class sizes and generate more tuition dollars without building more facilities. For some schools, the space previously occupied by dental students is used for other purposes (e.g., research, administration) that do not require subsidies, and it even generates additional revenues.

At the same time students and residents assigned to community clinics for several weeks have the opportunity to work with dental assistants and experienced administrative staff that are not available in dental schools. In this setting, students often see five to eight patients per day and gain a great deal of clinical experience and self-confidence. Importantly, this results in a large increase in the number of underserved patients receiving care. Interestingly, most schools are not experiencing a loss of student-generated patient revenues, because of the time spent in community clinics. It turns out that many students are more productive when they return from their community assignments. Evidently, their skill levels and self-confidence improve significantly during their time in community clinics.

Private foundations have encouraged this new direction for dental education and have provided funds to several dental schools to build and expand their community-based education programs.

## DENTAL RESEARCH

In the long run research has the greatest potential for reducing oral health disparities. In time, new and more effective preventive methods at the community and patient levels will become available to reduce the incidence of the major oral diseases. Research may have less impact on reducing access disparities, but the National Institute for Craniofacial and Dental Research has funded several dental schools to undertake community-based demonstration programs to reduce access and oral health disparities in low-income communities. The goal of this multimillion-dollar program "is to broadly encourage developmental, exploratory, or pilot clinical research to: (a) document oral conditions and risk factors for oral and craniofacial diseases and disorders; (b) investigate new methods of diagnosing oral disease; (c) address behavioral and health promotion topics relevant to oral health, dental care, or oral health promotion; and (d) identify promising culturally appropriate approaches to prevent and reduce oral health disparities." It is still too early to assess the impact of this effort, but it is hoped that new and more effective approaches to providing care to low-income populations will reduce access and oral health disparities. ■

## DENTAL PIPELINE PROGRAM

### A NATIONAL PROGRAM LINKING DENTAL SCHOOLS WITH THE ISSUE OF ACCESS TO CARE

Allan J. Formicola, DDS, MS, FACD

#### ABSTRACT

The Dental Pipeline Program grew out of work at the Columbia University College of Dental Medicine in the 1990s designed to address access to oral healthcare needs in New York City. Since then the Robert Wood Johnson Foundation, the W. K. Kellogg Foundation, and The California Endowment have combined to fund the largest dental education program in history. The Dental Pipeline Program has involved 23 dental schools in two phases. The goal of the program is to address issues of access (a) by providing dental care with volunteers in communities in need, (b) by seeking either full- or part-time positions in community health facilities, and (c) by preparing dentists to be advocates for the needs of the underserved. This is a preliminary report of the types of curricular changes that have been introduced and some promising results in terms of oral health care provided, minority enrollments in dental schools, and expressed intentions to practice in underserved areas.

The dental profession is currently realigning itself with the needs of society. As documented in the 2000 publication of the Surgeon General's Report on the oral health of the nation, the disparity in oral health between low-income and high-income individuals and between racial/ethnic minorities and the majority population has reached epic proportions. The Surgeon General called this a "silent" epidemic of oral disease!

Recently, two stories that reached the national media underscore the access to dental care problem in the United States. The death of a 12-year-old boy in Prince Georges County, Maryland, from untreated abscessed maxillary incisors was widely reported in the news as an inability of low-income individuals to obtain dental care. This tragic death prompted both a media response and the attention of federal and state legislators. In the second story, a front-page article in the *New York Times* reported that the Alaskan Native Health Council has employed dental health aide therapists to provide dental treatment (under the supervision of dentists) for their remote population groups who suffer some of the worst oral health conditions of all Americans.

These two stories bring to the forefront the facts that there is (a) a major access problem that has come to the attention of the public and (b) the underserved will find a way to solve their access problem if other solutions are not forthcoming. It is clear that

dramatically improving access to care in this country will require government working in harmony with the profession. As a key component of the profession, dental schools have a prime role to play in the issue of access to care through their education mission. This must be adjusted in order for the schools to educate a new generation of practitioners fully capable of understanding issues of access to care, the biggest issues facing the profession, and for schools to use their vaulted position in higher education in service to the people.

To be sure, the manner in which we, the profession, respond to the issue of access to care has the capacity to either strengthen or weaken the public trust in dentistry. Through the Pipeline, Profession & Practice: Community-Based Dental Education (Dental Pipeline) program (Bailit et al, 2005), the largest foundations in this country placed great confidence in dental schools to become active participants in solving access problems. This article will describe the Robert Wood Johnson Foundation's initiative to work with dental schools on the problem of access to care.



**Dr. Formicola** is Professor of Dentistry at the College of Dental Medicine, Columbia University and co-director of the Pipeline, Profession & Practice: Community-Based Dental Education program; [www.dentalpipeline.org](http://www.dentalpipeline.org).

*Acknowledgments: The author expresses appreciation to Stephen Marshall, Dennis Mitchell, and David Albert who first implemented the model at CDM.*

### **PIPELINE, PROFESSION & PRACTICE: COMMUNITY-BASED DENTAL EDUCATION**

The Robert Wood Johnson Foundation (RWJF), stimulated in part by the 2000 Surgeon General's Report on the oral health of the nation, decided to intervene in the dental access problem. After searching for ways to do so, the senior project officer at RWJF focused in on working with dental schools. The Community DentCare project (Formicola et al, 1999) at the Columbia University College of Dental Medicine (CDM) came to the attention of the RWJF and they wished to model their effort on that initiative.

Community DentCare was conceived in the early 1990s and was a response to the fact that in spite of the safety net clinics operated by the CDM and the Harlem Hospital Dental Service, there were thousands of individuals in the Harlem and Washington Heights neighborhoods, two low-income minority communities, that could not get access to care. The dental college recognized this need by expanding its patient care mission to include active service programs in the community and by strengthening its collaboration with the Harlem Hospital Center to improve the recruitment of underrepresented minority students.

With the assistance of the W. K. Kellogg Foundation, by the year 2000, the Community DentCare network was already well established in upper Manhattan. The network consists of dental programs in seven public schools, a mobile van to reach Head Start

Children, and five dental clinics in community health facilities in the various neighborhoods to serve 400,000 people. Community DentCare provides 43,000 patient visits per year, in addition to the care provided in CDM's main clinics and the care provided by the Harlem Hospital Dental Service. Community DentCare sites were designed to get directly into the neighborhoods to make care more easily accessible by those in need.

The RWJF saw the wisdom of replicating this model in some fashion in dental schools throughout the nation. Further, they were impressed by a Macy Foundation study (Formicola et al, 1999) that demonstrated the educational benefit of student rotations to clinics in underserved communities. Another motivation underlying the Macy Foundation effort was to increase the enrollment of underrepresented minorities in the dental schools, because the Surgeon General's report linked their lack of representation in the profession with the worsened oral health of people of color. With these thoughts in mind, the Pipeline, Profession & Practice: Community-Based Dental Education program was launched in 2002.

The RWJF initiative caught the attention of two other foundations, The California Endowment and the W. K. Kellogg Foundation. The three foundations collaborated on the

It is clear that dramatically improving access to care in this country will require government working in harmony with the profession.

The Pipeline Program has shown that dental schools can educate students to have a keener understanding, improved skills, and better attitude toward the problems of the underserved.

program, with the RWJF providing \$19 million, The California Endowment \$6.3 million, and the Kellogg Foundation \$1.1 million. This is the largest foundation effort ever undertaken in the nation in the field of dentistry.

### **THE DENTAL PIPELINE PROGRAM IN ACTION**

Twenty-three of the nation's 56 dental schools are participating or have participated in the Dental Pipeline Program. This is almost half of the U.S. dental schools! The program began in 2002 and the first phase concluded in 2007. Currently, there is a second phase underway. In the first phase, 15 dental schools were selected from an initial group of 42 dental school applicants to implement the Dental Pipeline Program. In phase two, eight dental schools selected from 21 applicants are participating in an RWJF funded project. The five California dental schools have been involved in both phases.

In Phase 1 (2002-2007), the RWJF supported the schools at the following universities with five-year grants averaging \$1.3 million: Boston, Connecticut, Temple, Howard, West Virginia, North Carolina, Meharry, Illinois (Chicago), Ohio, Washington, and UCSF. The California Endowment supported Pacific, UCLA, Loma Linda, and USC. In Phase 2 (2007-2010), RWJF supports schools at the following universities with 27-month grants of \$200,000: Arizona, Baylor, Creighton, Virginia Commonwealth, Florida, New Jersey, Georgia, and Maryland. The California Endowment is supporting all five California schools.

There are three overlapping goals that participating schools are working to achieve. These are: (a) providing students with an enriched didactic education to better understand and

deal with access issues as practitioners, (b) sending senior students and some residents (in California) to work in clinics located in underserved communities, and (c) recruiting and enrolling more underrepresented minority students. These goals provide both long- and short-term solutions to the access issue. In the long term, they aim to educate future practitioners with more knowledge, skills, and greater sensitivity about access problems. In the short term, they aim to get additional treatment to underserved populations. It has been shown that students put into practice what they learn in dental school (Ko et al, 2005; Smith et al, 2006).

An enriched education in public health and cultural issues will provide dental graduates with more confidence to deal with access issues (a) by providing care as volunteers in communities in need, (b) by seeking either full- or part-time positions in community health facilities, and (c) by preparing them to be advocates for the needs of the underserved. Students participate in rotations to community sites and learn more about the oral health and general needs of the underserved while they hone clinical skills.

The schools have students undertake public health projects and write essays on critical incidents that deepen their knowledge of the problems of the underserved. While on rotation, the students provide more care to patients in often understaffed clinics, getting an immediate benefit of more care to patients in need. Finally, increasing the number of underrepresented minorities in the field (African Americans, Hispanics, and Native Americans) means that there will be more practitioners who will devote their attention to improving the oral health of racial and ethnic minorities, where there is a disparity in oral health.

How does the program work? Each of the participating schools has made affiliation contracts with dental facilities

in mainly underserved communities. Frequently they are affiliating with Federally Qualified Healthcare Centers or FQHCs that are located in federally designated practitioner shortage areas. On average, schools are affiliating with about 23 such facilities in urban and rural areas, some of which are nearby and others that are thousands of miles away.

Students are spending up to 12 weeks in the senior year working in these facilities. In California, both senior students and residents (general practice and pediatric dentistry residents) are rotated to the facilities. Prior to these rotations, students are prepared with enriched curriculum content in such areas as epidemiology and cultural competency. The latter subject matter provides students with appropriate background information on the relationship between provider biases and the patient's culture, race, and ethnicity in the practice setting.

The clinicians at these sites are enjoying having students there and report patients readily accept them. The students are very productive in this environment because normally only one or two students rotate at any one time to a facility and therefore there is an excellent mentor relationship with the dentists. They are also usually assigned dental assistants, which allow them to be more efficient providers (Bean et al, 2007). It has been reported that after an initial orientation period, the students can see up to seven patients a day, giving the facility more manpower to help whittle down long waiting lists. Students are enthusiastic about the programs and come back to the dental school with renewed confidence. Most receive credit towards graduation requirements for work performed at extramural sites. All of the schools have pre- and post-

rotation seminars with the students to discuss what they have learned. In some schools, students present a case report or prepare an essay on what they have learned.

### **THE DENTAL PIPELINE PROGRAM IS A MEANS TO AN END**

The outcomes of the Dental Pipeline Program clearly demonstrate that dental schools can realign their curricula to include more content in the problems of oral healthcare access. Some of the 15 schools participating in the first phase of the program had no off-site education at the beginning of the project, and several of the schools had no underrepresented minority students enrolled. According to the data collected by the national program office for the project, by the end of the first five years (Bean et al, 2007), substantial change had occurred. The majority of participating schools' first-year enrollment of underrepresented minority students grew from 5% of the entering class to 10%, and the average time spent in community-based settings in the senior year grew from approximately two weeks to ten weeks. All of the schools upgraded their curricula with cultural content. Comprehensive reports on the evaluation and outcomes of the project are to be published elsewhere.

The Dental Pipeline Program has shown that dental schools can teach students to have a keener understanding of and improved skills and better attitude toward treating the problems of the underserved. Getting students away from the dental school building and into the practical world provides them with an enriched education and a better appreciation for the problems of the underserved.

The educational program has to be organized as a service learning program, including appropriate didactic preparation, pre- and post-rotation seminars, and service learning reflective assignments (Strauss et al, 2003). Just

sending out students who lack an understanding of principles of service learning will not change students' attitudes toward the underserved. When done properly, students respond accordingly. For example, students at the University of North Carolina have taken a pledge to devote four hours a month to treating the underserved throughout their professional careers. If one considers the number of graduates from North Carolina (approximately 80), that is the equivalent of almost two full-time practitioners devoting their energies to the problems of the underserved!

The 2006 American Dental Education Association Senior Survey showed there is still a great need to sensitize students about the problems of the underserved (Chmar et al, 2007). That survey showed that almost 20% of graduates did not agree that there is an access problem in the United States and approximately 15% did not agree that all elements of society have a right to basic dental care. Prior to the Dental Pipeline Program (2001-2002), the national data on the time devoted to community dentistry and public health issues and principles of behavioral sciences in dental schools was minor at best—157 and 43 hours of instruction respectively out of almost 4,900 total hours of instruction. Also, most schools did not provide a significant extramural program as only a mean of 251 hours (5.7%) of extramural patient care out of the over 2,000 hours of patient care provided (American Dental Association, 2002).

Dental education is fortunate to attract bright and talented students, and they need to be exposed to the problems facing all Americans if dentistry expects

A just society makes sure that it takes care of those in need as well as those who have the means to obtain treatment.

to maintain its contract with society. Further, the schools are the only place that can rectify the imbalance of practitioners of color. The U.S. population is dramatically shifting towards a greater percentage of minorities, but the profession still has a long way to go in catching up with that change. The schools in the Pipeline Program have shown that the dental curriculum can support a substantial service-based learning component and that schools can recruit and enroll more underrepresented minority students. Community-based dental education is as important an educational movement as was the comprehensive care movement that began in the 1970s or competency-based education in the 1990s.

Finally, by enriching the learning environment, the Dental Pipeline Program will create a core of practitioners who will be more inclined to be advocates for the needs of those in society who are the most at risk. These include the uninsured, low-income individuals, the elderly, and the handicapped. The profession must be on the front line of advocating locally, statewide, and federally if we are to maintain public trust. Graduates with community-based education are better equipped to advocate for those in need. A just society makes sure that it takes care of those in need as well as those who have the means to obtain treatment. ■

## REFERENCES

- American Dental Association (2002). 2001/02 Survey of Predoctoral Dental Education. *Curriculum: Volume 4*. Chicago, IL: The Association.
- Bailit, H. L., Formicola, A. J., Herbert, K. D., Stavisky, J. S., & Zomora, G. (2005). The origins and design of the Dental Pipeline Program. *Journal of Dental Education, 69* (2), 232-238.
- Bean, C., Rowland, M., Soller, H., Casamassimo, P., Sickle, R., Levings, K., & Agunga, R. (2007). Comparing fourth year dental student productivity and experiences in a dental school with community-based clinical education. *Journal of Dental Education, 71* (8), 1020-1026.
- Chmar, J., Harlow, A., Weaver, R., & Valachovic, R. (2007). Annual ADEA survey of dental school seniors. *Journal of Dental Education, 71* (9), 1228-1253.
- Formicola, A., McIntosh, J., Marshall, S., Albert, D., Mitchell-Lewis, D., Zabos, G., & Garfield, R. (1999). Population-based primary care and dental education: A new role for dental schools. *Journal of Dental Education, 63* (4), 331-338.
- Ko, M., Edelstein, R. A., Heslin, K. C., Rajagopalan, S., Wilkerson, L., Colburn, L., & Grumbach, K. (2005). Impact of the University of California, Los Angeles/ Charles R. Drew University Medical Education program on medical students' intentions to practice in underserved areas. *Academic Medicine, 80* (9), 803-808.
- Smith, C., Ester T. V., & Inglehart, M. R. (2006). Dental education and care for underserved patients: An analysis of students' intentions and alumni behavior. *Journal of Dental Education, 70* (4), 398-408.
- Strauss, R., Mofidi, M., Snadler, E., Williamson, R., McMurtry, B., Carl, L., & Neal, E. (2003). Reflective learning in community-based dental education. *Journal of Dental Education, 67* (11), 1234-1242.
- U. S. Department of Health and Human Services (2000). *Oral health in America: Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health.

## CALIFORNIA PIPELINE PROGRAM: PHASE II

Paul Glassman, DDS, MA, MBA, FACD

### ABSTRACT

The California schools' accomplishments in the national Dental Pipeline Program led to funding by The California Endowment of a California Pipeline Phase II program. There are a number of unique aspects of this program that provide great promise for the future of dental education and oral health for underserved populations. First, they include the collaboration of the five and soon to be six California dental schools in multiple areas. The schools have been able to demonstrate their ability to accomplish things together that could not have been done individually. Second, collaboration has been established among the California dental schools and other Dental Pipeline Program partners, including the California Dental Association, the California Primary Care Association, the Hispanic Dental Association, the National Dental Association, and other community partners. This has created a major force in California that has the ability to influence strategy, policy, funding, care, and education in a way that has not been previously possible. Lessons learned from this program will have broad implications for health and educational strategy.

Dental education has a long history of being practiced in the community. In fact, dental education started as a profession that one would enter through an apprenticeship. The first dental school was founded in the United States in 1840. However, dentists continued for years to be trained in community-based apprenticeships, and now there is renewed interest in his aspect of training. As schools came to be based in universities, as curricula became more scientifically rigorous, and as research and clinical practice developed, predoctoral dental education became primarily located in the school as opposed to the community (Field, 1995). Since the 1960s when many schools had Departments of Community Dentistry, these departments have been renamed and the focus of many schools has turned away from community experiences.

The historic report of the Surgeon General on oral health in America in 2000 raised the nation's awareness that profound oral health disparities still exist and are linked to race, socioeconomic status, and disabilities. It has also become apparent that the oral health safety net for many underserved populations is experiencing considerable stress. One of the numerous reasons is the difficulty faced by many community health centers in recruiting and hiring dentists (Monts, 2001). These circumstances provide an important opportunity for dental schools to refocus efforts in the community and to partner with and educate students in community health centers (CHCs) (Bailit, 2008).

In 2001, The Robert Wood Johnson Foundation (RWJF) approved a grant for the Pipeline, Profession, and Practice: Community-Based Dental Education program to address disparities in access to dental care. The W. K. Kellogg Foundation contributed financial aid to students recruited under the Dental Pipeline Program (Bailit et al, 2005). A year later, The California Endowment (TCE) joined this effort and provided funds to support the four additional California dental schools not originally included in the RWJF funding. This created a unique situation in California, a state with five dental schools at the time, where all the state's dental schools were participating in this program. Because of this situation, the California schools were able to form statewide partnerships and collaborations in ways that were not available to other states.



Dr. Glassman is Professor and Director of Community Oral Health, University of the Pacific Arthur A. Dugoni School of Dentistry in San Francisco; [pglassman@pacific.edu](mailto:pglassman@pacific.edu).

*Acknowledgements: The California Pipeline Project, Phases I and II, were funded with help from Ignatius Bau and George Zamora of The California Endowment. Help has also been provided by the National Program Office of the RWJF National Dental Pipeline Program, Dr. Howard Bailit, co-director.*

The RWJF funding for Phase I of the Dental Pipeline Program ended in 2007. The California Endowment, however, continued funding for the California schools for a Phase II Pipeline program which began in 2007 and continues today. This paper will outline the unique aspects of the California Pipeline in Phase I and the objectives of the Phase II of the program.

### THE PHASE I CALIFORNIA PIPELINE PROGRAM

The general goals of the California Pipeline Phase I program were the same as those of the other schools funded by RWJF. These were:

- Have senior students spend an average of 60 days in community clinics and practices treating underserved patients
- Provide students with didactic courses and clinical experiences to prepare them for treating disadvantaged patients in community sites
- Increase the number of underrepresented minority and low-income students enrolled in Pipeline dental schools

There were also a number of aspects of the California Pipeline Program Phase I that were unique to California. In addition to senior students, TCE accepted experiences of general and pediatric dentistry residents to meet the average of 60 days in community-based facilities treating underserved patients. Also, TCE required the California schools to cooperate in the development of a

regional recruitment program for underrepresented and low-income students and a coordinated and comprehensive state and federal health policy agenda. The purpose of the policy effort was to sustain recruitment of community-based education and disadvantaged students after the Pipeline Program ends and, more broadly, to reduce disparities in oral health.

While the national Dental Pipeline Program was very successful in general, there were a number of accomplishments that were unique to California. The average percent of underrepresented minority (URM) students enrolled in Pipeline dental schools increased during the program period but remained fairly static among non-Pipeline schools (Andersen et al, 2007). The percent of URM students enrolled in the California dental schools nearly doubled between 2000 and 2005 (Price et al, 2007). This was a remarkable achievement given that the state schools in California are hampered by state Proposition 209. This 1996 ballot initiative amended the state constitution to prohibit public institutions from considering race, sex, or ethnicity in admissions decisions (as explained in a Hastings Law Library posting: <http://library.uchastings.edu/cgi-bin/starfinder/9466/calprop.txt>).

The California schools decided early in the Pipeline Program that they would not use their efforts to try to capture individually a greater share of the available URM applicants. Rather they would use their collective resources to increase the size of that pool. To that end, they developed collaborative marketing programs. They created brochures about dentistry as a career that listed all the schools as resources for further information. They realized that they could not

all spend the time they would like in all of the potential feeder schools for URM students. They chose to cooperate on visits to feeder schools. When representatives from any of the dental schools make a presentation at a feeder school, they talk about dentistry as a career and about all the schools being great places to become a dentist. Other areas of the country have now adopted this methodology and formed regional recruitment programs (Price et al, 2007). In addition to collaborating on recruitment of URM students, the California schools also cooperated on regional post-baccalaureate programs that formally strengthen potential applicants' qualifications to apply for admission to dental school. There is now one program in the north of the state and one in the south.

Phase I was also successful in increasing the number of days that students spent in rotations to community clinics. In 2006, U.S. dental schools overall had senior students averaging two days in community rotations while the Pipeline schools averaged about 40 days and the California schools over 50 days. (As indicated earlier, the California schools used a mixture of students and residents in these community experiences, so the systems are not completely comparable between California and other Pipeline schools.)

The other major area of activity in Phase I was cultural competency education. The California schools engaged in similar strategies to the other Pipeline schools by reforming the curriculum to better prepare students to work with diverse populations. These curriculum reforms included adding new educational materials, rearranging courses, and devoting more time to some existing courses. In some schools, reflective seminars were added to help students integrate their experiences in the community with other educational experiences. It is notable that a study of



graduating dental students' practice plans published in 2007 revealed that graduating from a California dental school was one of three variables that was predictive of students' plans to care for underserved minority patients upon graduation. Attendance at other dental schools did not have this predictive value (Davidson et al, 2007).

Finally, an important step in developing health policy reform in California was achieved with a major study of the dental safety net in California. A survey conducted by the University of the Pacific School of Dentistry of all California community health centers with dental facilities revealed a system stretched beyond capacity and struggling to meet the mission of providing basic care to underserved populations in California. The results of this survey are available on the school's Web site ([http://dental.pacific.edu/Community\\_Involvement/Dental\\_Pipeline\\_Program.html](http://dental.pacific.edu/Community_Involvement/Dental_Pipeline_Program.html)) as an interactive database of CHCs.

### **THE PHASE II CALIFORNIA PIPELINE PROGRAM**

Because of the accomplishments of the California schools in Phase I, TCE provided funding for a Phase II of this program. The second phase is being administered through a California Pipeline Program Office at the University of the Pacific School of Dentistry. Partners in the Phase II program include the five existing California dental schools, the new California dental school being developed through Western University in Southern California, the California Dental Association, the California Primary Care Association, the California chapters of the Hispanic Dental Association, and the

National Dental Association, and other community representatives.

The overall goal remains the same as in Phase I and centers on developing and testing strategies to reduce disparities in access to dental care. As in Phase I, this goal is based on the fact that large numbers of California children and adults have limited access to dental care and suffer greatly from preventable and treatable dental diseases. Most California residents are not enrolled in private dental insurance plans and the state's public dental insurance plan, Denti-Cal, has many restrictions that make it difficult for eligible people to find dentists to treat them. Further, the California dental safety net system has relatively limited capacity to treat underserved populations. In California as in other states, only half as many lower-income adults and children visit dentists annually as do middle- and upper-income families. At the same time, most untreated oral diseases are seen in lower socioeconomic groups.

The California Phase II Pipeline Program focuses on three strategies to reduce dental access disparities: (a) partnerships between each California dental school and Community Health Center (CHC) dental programs to increase the amount and quality of dental care provided to underserved patients; (b) cultural competency programs in dental school and community clinics, and (c) continued efforts to increase the number of underrepresented minority and low-income (URM/LI) students recruited into California dental schools.

Collaborative committees have been established in the areas described above. Each group includes membership from all the schools as well as community partners. These program components are described in the following sections.

A survey revealed a system stretched beyond capacity and struggling to meet the mission of providing basic care to underserved populations in California.

### COMMUNITY-BASED EDUCATION

The primary goal of the community education activities in the Phase II Pipeline Program is to increase collaboration between dental schools and CHCs in an effort to educate oral health providers and provide dental services to underserved populations. Each dental school is establishing relationships with two to three CHCs for this aspect of the program.

Previous school-CHC partnerships involved an exchange between the school and the CHC. The CHCs received a workforce to help meet their mission in an era when it is hard for many of them to hire dentists. The schools got a place to educate students in the community. The Phase II partnerships continue this exchange, but they add several additional components:

- CHCs participate financially in the student and resident rotations by sharing new revenue produced by students and residents minus marginal expenses for supporting those student and resident providers. This may be in the form of direct payments to the schools, support of student housing or transportation, or other financial arrangements.
- Schools provide targeted educational experiences for CHC dentists and staff. The schools are currently collaborating on the development of distance education and regional in-person programs specifically targeted to CHCs.
- Schools assist with specialty consultation services for CHCs. Models are being developed that

involve the use of tele-dentistry services. In addition, schools will recruit alumni members who practice near CHCs to spend some time “teaching” at the CHC. While these community specialists are not likely to want to “practice” in the CHC, experience has demonstrated the ability to recruit specialists to teach there. This teaching role provides specialty consultation for the CHC and its patients.

- Schools provide operations management consultation and training for CHCs. The California schools are engaging practice management expertise and developing a collaborative system for making this expertise available to partner clinics.

The California Primary Care Association (CPCA) is an important partner in the Phase II program. CPCA is assisting in several areas related to community-based education:

- The CPCA is responsible for facilitating communications between the schools and CHCs in the state. To this end, the CPCA is hosting special oral health forums at its annual meetings, convening dental director workshops, and providing access to its online technology and collaboration network and tools.
- The CPCA is facilitating the development of operations consultations systems. An important part of this aspect of the program will be the dissemination of data about the effectiveness of these activities and development of strategies to extend these operations across the state.

### CULTURAL COMPETENCY

Phase I of the National Dental Pipeline Program emphasized educating students about issues related to diversity and

treatment of diverse populations. The California Phase II program is emphasizing the cultural competence of the schools themselves and their partner clinics as institutions and healthcare delivery systems. These are areas that can be approached collaboratively and are likely to achieve greater gains in service and education than concentrating on dental student education alone.

Several activities are already under way:

- A basic, one-hour introduction to using language interpreters has been developed and disseminated to all the schools. Participants will be able to recognize a proper interpretation session and take corrective action when an interpretation session is not being properly conducted. All the California dental schools have committed to having every student, staff member, and faculty member go through at least a one-hour interpreter training introduction using this curriculum.
- A survey of the California dental schools was developed to assess multiple areas of institutional cultural competence. These areas include administration, the educational program, clinical services, and community rotations. The results of this survey now constitute a baseline for comparison as the competence of schools develops in this area.
- A survey of the impact of language barriers on dental school clinic operations was developed and distributed. Preliminary results point out a number of areas for further work and confirm the expectation that language issues do impact the delivery of care, slow down clinic operations, and can lead to misunderstandings and complaints.
- The dental schools are collaborating on the development of resources to create signage in multiple languages in school clinics. The schools

will agree on common signs and contract centrally with translation services and production facilities. The goal is that each school will be able to order signs they need without having the burden of all of the developmental work.

- Strategies are being developed to assess the cultural competence of dental students. A number of useful tools have been collected and made available. The California schools will work with these instruments in an effort to develop common tools.

#### RECRUITMENT

The successful collaborative efforts in the Phase I program to increase the number of URM enrollees and dental students from disadvantaged backgrounds will continue. Several additional strategies are being developed and tested as well.

The regional post-baccalaureate programs to prepare applicants for dental school have been strengthened in northern and southern California. In northern California, the University of California at San Francisco and the University of the Pacific dental schools jointly support a post-baccalaureate program run by San Francisco State University. The schools contribute financially to the program, assign mentors to the students, host simulation sessions, and participate in presentation sessions by the students. In southern California the post-baccalaureate students from the University of California in Los Angeles, the University of Southern California, and Loma Linda University all attend a unified, six-week summer program and come together again during the year for joint educational programming.

A mentoring program has been designed to involve community dentists as mentors for potential URM applicants. The Hispanic and National Dental

Associations have agreed to support this program. Pilot sites may be established in conjunction with a similar program being developed by the national Pipeline office and funded by RWJF.

#### HEALTH POLICY

The California Pipeline Phase II health policy effort is focused on the long-term goal of establishing a state subsidy for community-based dental education. The California Dental Association is the lead partner in this effort. The CDA arranged the first of three Health Policy Summit meetings in the spring of 2008. That initial summit brought together state officials and Pipeline partners to begin this process. Future work will build on this summit in the following areas:

- Develop the case for state support of community-based dental education. The basic argument is that the problem of access to dental care is getting worse and more visible, and that the collaboration between dental education institutions and community partners is one of the few viable strategies for addressing this problem in a meaningful way. In addition, it is likely to be a less costly strategy than other alternatives.
- Develop the coalition of organizations and individuals to advocate for this strategy.
- Develop a long-term plan for implementation of this strategy.

While it is recognized that California, like a number of other states, is not in the position now to invest in a new oral health strategy, it will be at some time in the future. It is critical that the groundwork be laid now to take advantage of a different fiscal and political climate when it arises.

Strategies are being developed to assess the cultural competence of dental students. A number of useful tools have been collected and made available.

The collaboration of the five California dental schools has been a key component of the past and current program. In multiple areas, the schools have been able to demonstrate their ability to accomplish things together that could not have been done individually.

## CONCLUSIONS

The success of the California Pipeline Phase I Program has led to funding by TCE of Phase II. The components, goals, and activities of Phase II have been described. There are a number of unique aspects of this program that provide great promise for the future of dental education and oral health for underserved populations. They are:

- The collaboration of the five and soon to be six California dental schools has been a key component of the past and current program. In multiple areas, the schools have been able to demonstrate their ability to accomplish things together that could not have been done individually.
- The collaboration between the California dental schools and other Pipeline partners has taken the schools' collaborative efforts to another level. Adding professional associations and other community partners has created a major force in California that has the ability to influence strategy, policy, funding, care, and education in a way that has not been previously possible.

The California Pipeline Phase II program represents a unique opportunity for dental education to become a full and important partner in the effort to improve the oral health of underserved populations in our country. Lessons learned from this program will have broad implications for health and educational strategy. ■

## REFERENCES

- Andersen, R. M., Carreon, D. C., Friedman, J. A., Baumeister, S. E., Afifi, A. A., Nakazono, T. T. & Davidson, P. L. (2007). What enhances underrepresented minority recruitment to dental schools? *Journal of Dental Education*, 71 (8), 994-1008.
- Bailit, H. L. (2008). Models for funding clinical dental education: What's likely and what's not. *Journal of Dental Education*, 72 (2), 21-24.
- Bailit, H. L., Formicola, A. J., Herbert, K. D., Stavisky, J. S., & Zomora, G. (2005). The origins and design of the Dental Pipeline Program. *Journal of Dental Education*, 69 (2), 232-238.
- Davidson, P. L., Carreon, D. C., Baumeister, S. E., Nakazono, T. T., Gutierrez, J. J., Afifi, A. A., & Andersen, R. M. (2007). Influence of contextual environment and community-based dental education on practice plans of graduating seniors. *Journal of Dental Education*, 71 (3), 403-418.
- Field, M. J. (Ed.) (1995). *Dental education at the crossroads: Challenges and change*. Washington, DC: Committee on the Future of Dental Education, Division of Health Care Services, Institute of Medicine.
- Monts, R. (2001). Dental care: Clinics facing crisis. *Community Health Forum*, 14-18.
- Price, S. S., Brunson, W. D., Mitchell, D. A., Alexander, C. J., & Jackson, D. L. (2007). Increasing the enrollment of underrepresented minority dental students: Experiences from the Dental Pipeline Program. *Journal of Dental Education*, 71 (3), 339-347.
- U.S. Department of Health and Human Services (2000). *Oral health in America: A report of the Surgeon General*. Rockville, MD: National Institute of Dental and Craniofacial Research, National Institutes of Health.

# EAST CAROLINA UNIVERSITY SCHOOL OF DENTISTRY

## IMPACT ON ACCESS DISPARITIES

D. Gregory Chadwick, DDS, MS, FACD  
and James R. Hupp, DMD, DDS, JD,  
MBA, FACD

### ABSTRACT

Under the "Plan for Dentistry in North Carolina," the existing dental school will increase its class size and enhance its research efforts and a new dental school will be opened on the campus of East Carolina University. These initiatives are designed to address a growing gap between oral health needs and capacity to meet that need in the state, especially in rural areas. The new school will focus on educating well-qualified primary care dentists who desire to address the challenges of providing care in the rural and underserved areas of the state. This paper describes the objectives, quality, research, patient care model, economic model, recruitment and financial considerations for students, and community benefits of the program. A key feature of the ECU program will be the fourth-year experience in Service Learning Centers located in rural communities.

North Carolina, like many states, is facing growing challenges to access to oral health care. Historically, in times of need the state has looked to its excellent statewide educational resources for solutions. Chief among those resources is the University of North Carolina, a sixteen-campus public university. As the state faces both a shortage and a maldistribution of its dental workforce, the university and the General Assembly (the state legislature) are working together to address the problem. Recently the General Assembly approved capital funding to develop a School of Dentistry at East Carolina University (ECU), located in Greenville, North Carolina. ECU will use this opportunity to expand dental education's role as a safety net provider by moving many senior-year dental education experiences into efficient community-based practices in areas of the state experiencing significant access disparities. This strategy will be unique in American dental education.

The new school will focus on educating well-qualified primary care dentists who desire to address the challenges of providing care in the rural and underserved areas of the state. In addition to graduating more dentists to serve these areas, during the course of the educational process students, residents, and faculty will provide significant care and enhance their clinical skills in dental school practices located in chronically underserved areas of the

state. The intent of this paper is to highlight some of the features planned for the school that will address the state's growing access disparities.

### THE NORTH CAROLINA ENVIRONMENT

The majority of North Carolinians enjoy excellent oral health and benefit from an outstanding dental workforce that has been dedicated over the years to providing excellent care and has been successful in improving oral health. However, a significant proportion of the population has historically experienced difficulty in accessing adequate care. A growing number of factors present challenges to providing adequate care in the future to all populations, but especially to the rural and low-income populations.

North Carolina ranks forty-seventh out of 50 states in the ratio of dentists to the population. In October 2005, North Carolina had 3,772 dentists actively practicing in 96 of the state's 100 counties. The state's ratio of 44 dentists per 100,000 population falls well below the national average of 60 dentists per 100,000 population (Cecil G. Sheps Center for Health Services Research, 2007).



Dr. Chadwick is Associate Dean for Planning and Extramural Affairs and Dr. Hupp is Dean, East Carolina University, School of Dentistry; chadwickg@ecu.edu.

The distribution of dentists in North Carolina is an increasing concern as one looks to the future. While the supply of dentists in the metropolitan areas has recently increased to 49 dentists per 100,000 population, the nonmetropolitan counties have remained relatively constant at around 31 dentists per 100,000 population for the past 25 years. Twenty-six percent of the counties have 20 or fewer dentists per 100,000 populations (Sheps Center, 2007).

North Carolina's population growth is projected to be the fifth largest in the country, according to U.S. Census Bureau data, resulting in a 52% growth rate over the first 30 years of this century. As a result, the state will be the seventh largest by 2030. The supply of dentists has not kept pace with this growth as illustrated by the decline in the dentist per population ratio in 33 counties over the period 1996 through 2005. Nonmetropolitan counties accounted for 26 of the counties experiencing a decline (Sheps Center, 2007).

The aging of the dentist workforce, especially in the nonmetropolitan areas of the state, is also a growing concern as dentists retire. Dentists in nonmetropolitan counties are, on average, three years older than their metropolitan counterparts. In 38 counties, the average age of the dentists is 50 years of age or older and 31 of these are nonmetropolitan counties. The challenges of an aging dental workforce in nonmetropolitan counties will accentuate the shortages of providers in these areas (Sheps Center, 2007).

With an aging dental workforce, an unfavorable dentist-to-population ratio in rural areas, and an unfavorable distribution of dentists in a rapidly growing state, it is clear that if the challenges are not addressed the workforce shortage and maldistribution will only get worse.

Private practitioners deliver the vast majority of dental services provided in North Carolina each year. Of the care provided in 2005, private practitioners provided over 80% of the care for children under 21 years of age, approximately 94% of the care for the non-elderly adult population, and 98% for the elderly population (North Carolina Institute of Medicine, 2005). The remaining dental services were provided by safety net dental providers which consist primarily of local and county health departments, community health centers, dental education facilities, and free clinics. Some of these have permanent staff, fixed locations, and regular hours of operation while others are operated on a voluntary basis, and still others are mobile or portable dental programs. A recent estimate is that there are approximately 105 safety net providers in 76 of the state's 100 counties ([http://www.communityhealth.dhhs.state.nc.us/dental/safety\\_net\\_clinics.htm](http://www.communityhealth.dhhs.state.nc.us/dental/safety_net_clinics.htm)). There is a need for increased access to dental services in the population that does not have access to a dentist on a regular basis. This provides an opportunity for dental education to play an increased role in delivering care to this population while educating dentists in these areas.

### THE PLAN FOR DENTISTRY IN NORTH CAROLINA

Working together under the leadership of the sixteen-campus University of North Carolina System, the University of North Carolina at Chapel Hill (UNC-CH) and East Carolina University (ECU) crafted an approach to leverage the strengths of both institutions in addressing dental education's impact on the future oral health workforce of the state. This collaboration became known as the "Plan for Dentistry in North Carolina." Under the plan, the UNC-CH School of Dentistry will modernize and expand its research and teaching facilities and increase its predoctoral class size up to

100 students per year. ECU will start a new school of dentistry with a class size of up to 50 predoctoral students per year starting in 2011. ECU will focus on addressing the oral health needs of the rural and underserved areas of the state while offering innovative options to some of the challenges facing dental education.

Although the two North Carolina schools will have different but complementary missions, there will be many opportunities for collaboration. Some possibilities include using distance education technology for selected instruction, collaborating on specialty rotations or patient-care experiences in community-based sites, exploring ways to share faculty resources or leverage faculty resources through joint appointments, and developing research partnerships capitalizing on the respective strengths of each institution.

Traditionally, dental schools influence access to dental services primarily by increasing the number of dentists who provide care. Unless special efforts are made to recruit applicants from underrepresented and underserved populations and mentor students and provide them community-based extramural experiences, most dental school graduates practice in middle- and upper-income urban or suburban areas. Simply graduating more dentists has limited impact on increasing access to dental care in low-income and rural areas.

Generally, dental schools provide relatively modest amounts of care in their student clinics. In the 2003-2004 academic year, the median revenue generated by senior dental students in American schools was \$13,602 or \$15.59 per hour. General Practice Residency (GPR) and Advanced Education in General Dentistry Residency (AEGD) residency programs reported \$66,474

and \$63,860 per resident, respectively. It is difficult to make assumptions about the role dental school clinics play as safety-net providers. Nevertheless, the percentage of revenue schools derive from Medicaid and the percentage of uncompensated care can give us a clue as to the amount of care provided to low-income patients. Dental schools reported that Medicaid accounted for about 12.8% of dental school clinical revenues and uncompensated care for the junior and senior years averaged about 15% (Weaver, 2006).

### ECU School of DENTISTRY

What will the ECU dental program look like and how will it differ from traditional dental education models?

#### OBJECTIVES

The primary objectives of the ECU School of Dentistry will be providing a quality clinical education and graduating skilled primary care dentists who will positively affect the availability of care in rural and underserved areas of North Carolina. During the educational process, students, residents, and faculty will provide significant patient care in the school's eight to ten community-based Service Learning Centers (SLCs) located in chronically underserved areas of the state. A focus will be made on recruiting students who are truly interested in the mission of the school and show evidence of serving the underserved. The SLCs will have a significant positive effect on the economies of their local communities and play a role in building the local healthcare infrastructure.

#### QUALITY DENTAL EDUCATION

East Carolina University's School of Dentistry is located on the Academic Health Sciences Campus in Greenville, North Carolina, alongside the ECU School of Medicine, College of Nursing, and College of Allied Health. The academic health center at ECU has a history of

emphasizing primary care and a successful record of improving the health of the people of the state, especially in rural areas. The dental school will have 50 students per class. In addition, the school will have three residency programs; a General Practice Residency, an Advanced Education in General Dentistry Residency and a Pediatric Dentistry Residency. The dental school's emphasis on general dentistry and pediatric dentistry complements ECU's primary-care mission.

Consistent with its focus on primary care and general dentistry, general dentists will outnumber specialists on the dental faculty. Most specialty areas will be represented by two specialists. Since pediatric dentistry will be the only specialty residency program, it will have a larger faculty. The use of clinical practice groups or teams headed by general dentists during years two and three will serve to improve efficiencies and reinforce the primary care approach and use general dentists as role models.

#### CURRICULUM

Graduates of the school will require strong diagnostic, clinical, critical thinking, and practice management skills in order to be successful. ECU has the unique opportunity to create a curriculum that will enhance and support the mission of the school, preparing students for their senior-year, community-based experience. The school will depend on the extensive use of technology as an educational bridge supporting an educational environment with students, residents, and faculty in multiple locations across the state. Electronic technology will be as important as a dental chair in meeting the education and delivery of care mission of the school in this environment.

Unless special efforts are made to recruit applicants from underrepresented and underserved populations and mentor students and provide them community-based extramural experiences, most dental school graduates practice in middle- and upper-income urban or suburban areas.

The curriculum is being designed to integrate the basic and dental sciences throughout all four years and to ensure that the fourth year is a rich and well-structured experience, involving both basic science and clinical faculty and highlighting the most important concepts and knowledge through focused seminars. These seminars, designed to connect didactic instruction, case correlation, critical thinking, and current literature with actual patient experiences, will be developed over all four years but will culminate in the SLC experiences.

#### RESEARCH

Research and the creation of new knowledge are important aspects of a dental school which are being developed within a university that values research and has a vision of doubling its research productivity in the next five years. The dental school has several opportunities to contribute to this momentum during its formative years. The first area of research interest will be in the area of epidemiological and health services research using the SLCs as a practice research network to study oral health disparities in rural and underserved areas. Practice-based clinical research in the SLCs, collaborating with researchers in Greenville or at other institutions, will occur as the school develops its network of centers.

#### PATIENT CARE

In addition to its educational mission, a significant feature of the school will be providing high quality, patient-centered care in rural and underserved areas of the

state. Most of this care will be delivered in up to ten SLCs located in areas of significant need where opportunities exist to collaborate with the practicing community and enhance safety net dental services. Many or perhaps all of these SLCs will be operated and managed by ECU. They will be conducted as efficient group practices, based on sound business principles, using a professional practice management team. Educationally, they will be operated as an integral part of the dental school and provide significant amounts of care in areas of the state where it is most needed.

The SLCs will focus on primary care using a clinical medical education model with faculty, residents, and students all providing high quality care. A key feature of the ECU model is that the general dental faculty will practice while supervising small groups of residents and senior students, thus significantly increasing the care delivered and contributing to the bottom line of the practices. Residents also will participate in the supervision of senior dental students under the leadership of a general dentist. This is a model routinely used in medical education and commonly used in dental specialty programs such as pediatric dentistry and oral-maxillofacial surgery.

Senior students will have the opportunity to spend approximately 24 weeks (three, eight-week rotations) in the school's SLCs, gaining valuable experience practicing in a real delivery system that functions like an efficient private practice. For the remainder of the time, the fourth-year students will take part in specialty rotations and more traditional extramural rotations.

The faculty members leading the teams in the SLCs will provide care, in addition to teaching and mentoring. Compared to a full-time practitioner, the faculty will likely provide a somewhat reduced amount of care due to educational responsibilities. It is anticipated

that the faculty will provide care in the range of 70% of their colleagues in private practice, having access to up to four operatories, two dental assistants, and a dental hygienist. The effective use of auxiliary personnel and state-of-the-art technology will allow students and residents to see many more patients than in a traditional dental school program and gain increased clinical experience and confidence in situations that approach what they might expect to see in private practice. It is anticipated that the residents will provide care in the range of 50% to 60% of what their private practice colleagues are providing while having access to two operatories, a dental assistant, and a shared dental hygienist. The dental students will have access to one operatory and a dental assistant, and, assuming they see at least six to seven patients a day, they will more than double the level of services that they would provide in a dental school building clinical environment.

The SLC experience, in addition to developing clinical, diagnostic, and critical thinking skills, will give students an opportunity to establish a close mentoring relationship with faculty. They will also experience the rewards of providing care in geographic areas where it is most needed. Students will have the opportunity to provide patient-centered care and gain significantly more experience and a broader range of experiences than under traditional models. It is anticipated that students will gain from this experience and be influenced to choose to incorporate service to similar populations, in whole or in part, in their practice careers.

The SLCs will be an integral part of the dental school. They will retain the features of more traditional models where students receive most of their



education within the dental school main facility and have access to all faculty, records, and management systems. ECU's goal is to combine the advantages of being in a dental school main facility environment with additional advantages of the enhanced educational experiences and delivery of care at extramural sites. The use of electronic technology, a common records management system, a comprehensive curriculum focused on care delivery in rural settings, and a committed faculty are all necessary elements to assure that the SLCs are an integral part of the dental school's program.

The faculty at the SLCs will be full-fledged faculty, accomplished in all aspects of general dentistry. They will be well-versed in the curriculum provided students during the first three years and what the students will be expected to experience and learn during their senior year. Because the SLCs are part of the dental school, equipment, instrumentation, and routines will be standardized, thus making the transition easier from the main dental school facility to the extramural delivery system environment. In addition, student and financial management systems will be the same at all facilities.

#### ECONOMIC MODEL

The SLCs will be operated by a professional management team and be expected to be financially sustainable. Even if they are operated close to their break-even point, they will reduce the overall cost of the fourth year of dental school while providing a cost-efficient approach to educating senior dental students and residents. ECU will leverage the use of public funds, including Medicaid, Graduate Medical Education (GME) funding, and state supported faculty base salaries, along with non-public funding sources such as a sliding-fee schedules and a "dental

school fee structure" as sources of revenue for the extramural practices. The staffing and operating expenses of the practices will be carefully monitored and sized, similar to efficient and professionally managed private group practices.

Medicaid patients will be the primary insured population. The characteristics of the Medicaid program in North Carolina, in combination with the ability to place educational group practices in areas where there are few dentists and high demand for dental services create opportunities for the SLCs. The North Carolina Dental Medicaid Program covers many diagnostic and preventive services, as well as a number of restorative and surgical procedures for both children and adults. In addition, North Carolina allows dental schools, as public institutions, a cost settlement option to recover some expenses attributed to providing Medicaid services where reimbursement rates are below the state match.

The North Carolina Dental Medicaid budget for the current fiscal year is in excess of \$260 million, and the program has modestly raised reimbursement rates recently for approximately 75 covered services. Although policy restrictions exclude a number of procedures, many others are covered, although at relatively low reimbursement rates. Reduced fees will be charged for services for many patients that are not covered by Medicaid and are unable to afford usual and customary fees. This will allow for the care of a broader range of patients, and for the ability to provide services and procedures that give students the depth and breadth of experience and confidence they need to become successful practitioners.

Simply graduating more dentists has little impact on increasing access to dental care in low-income and rural areas.

Access to oral health care is a multifaceted challenge and dental education's leadership role is only one strategy. Additional necessary strategies include financial incentives, loan repayment programs, scholarships, increased Medicaid coverage, and community involvement.

#### UNDERSTANDING BUSINESS PRINCIPLES

As mentioned earlier, the SLCs will be operated on sound business principles. It will be necessary for graduates, in addition to their clinical skills, to have a good understanding of the business and operations side of managing a dental practice if they are to be successful in rural and underserved areas of the state. Since the SLCs will be operationally similar to private practices, the students and residents will be expected to become familiar with the business side of the SLCs and to acquire an understanding of the financial, personnel, and regulatory aspects of the practice of dentistry. Although each SLC will be unique, depending on location and collaborative opportunities in each community, the business operating principles will be the same, and the opportunity to learn in real-life practice settings will give the students and residents an excellent foundation.

#### RECRUITING STUDENTS

As part of its mission, the ECU School of Dentistry will seek to identify and recruit individuals from rural and underrepresented populations to encourage them to pursue dental careers and practice in underserved areas. The recruiting process must begin early to attract candidates interested in eventually serving underserved populations. Simply accepting applications will not be enough. It will take a concerted effort to identify potential students early in the educational pipeline by collaborating with community organizations and college guidance counselors to assure that these individuals will have the background and knowledge to be successful in dental school. This will also necessitate ensuring that recruiting efforts include

attracting candidates from underrepresented groups. The importance of recruiting individuals that best fit the dental school's mission and providing the student with educational experiences in rural and underserved areas cannot be overstated.

#### STUDENT FINANCES

The current pattern of increasing tuition and rising levels of student debt across the country will have an impact on the applicant pool for dental schools and the career choices of those graduating from dental school. As the costs of dental education rise, it is safe to assume that increased financial burdens will make it difficult for students from rural and underrepresented populations to choose to go to dental school, and even more difficult to locate in practice situations that provide care for those populations. As a state-supported school, ECU will need to hold down the portion of the educational costs borne by students in the form of tuition and fees, thus allowing students to graduate with less debt. In addition to lower student debt, help will be needed in the form of scholarships, loan repayment programs, and community assistance programs to further enable graduates to enjoy careers providing care where it is most needed.

#### COMMUNITY BENEFITS

There will be significant economic benefits to the chronically underserved areas in which SLCs will be located. This will be in addition to improving the local healthcare infrastructure and the oral health in communities where SLCs are established. There will be a direct economic impact via the jobs in the SLCs, and the goods and services consumed by SLC employees. This lasting economic impact will extend into the communities surrounding the centers.

Another important aspect of locating the SLCs in the rural areas will be in supplementing community resources to educate the public about the importance of good oral health and prevention. The faculty, staff, and students will have the opportunity to work within the community and surrounding areas to develop and deliver a message about the importance of good oral health as part of good overall health.

### CURRENT STATUS OF THE SCHOOL

The ECU School of Dentistry is currently under development. The capital funding has been obligated and is being provided by the state. The majority of the initial operating funds are projected to be provided by the General Assembly and will eventually be supplemented with tuition, clinical revenue, research, and philanthropic funds. After the architectural design phase is completed, construction will begin by 2009 on the 112,500-square foot main school facility and the first SLCs. The initial faculty, administrators, and staff are being recruited and hired. When the school is fully operational, it will have approximately 68 faculty members and administrators (including ten general dentists in the SLCs), plus staff. The school is expected to accept its first predoctoral class in 2011, and initiate AEGD and Pediatric Dentistry residency programs that same year, perhaps sooner.

### CONCLUSIONS

The ECU School of Dentistry is committed to educating well-qualified primary care dentists, improving oral health and playing a leadership role in reducing access disparities in the rural and other underserved areas of North Carolina. By moving senior-year dental education experiences into the school's SLCs, faculty, students, and residents will provide significant care in areas across the state where it is most needed. ECU's effectiveness will be measured by the

quality of its graduates, the number of dentists seeking to improve access to care in chronically underserved areas of the state, and the economic success of the SLCs, as well as the care they provide and the impact of school's research focus.

Access to oral health care is a multi-faceted challenge and dental education's leadership role is only one strategy. Additional necessary strategies including financial incentives, loan repayment programs, scholarships, increased Medicaid coverage, and community involvement. The dental profession and the dental education community need to be at the table and need to provide solutions, but it will take the commitment of the public and our policymakers to reach comprehensive long-term solutions. ■

### REFERENCES

- Cecil G. Sheps Center for Health Services Research (2007). *Trends in the supply of dentists in North Carolina*. 1996-2005. Chapel Hill, NC: The Center.
- North Carolina Institute of Medicine (2005). *2005 North Carolina oral health summit on access to dental care: Summit proceedings and action plan*. Durham, NC: The Institute.
- Weaver, R. G. (2006). ADEA survey of clinic fees and revenue: 2003-04 academic year. *Journal of Dental Education*, 70 (4), 448-462.

The dental profession and the dental education community need to be at the table and need to provide solutions, but it will take the commitment of the public and our policy makers to reach comprehensive long-term solutions.

## THE ROLE OF DENTAL SCHOOLS IN THE ISSUES OF ACCESS TO CARE

---

Caswell A. Evans, DDS, MPH, FACD

### ABSTRACT

Some individuals emphasize dentistry as the provision of services; others concentrate on achieving specified levels of oral health. One's vision of dentistry affects how the issue of access is viewed. The University of Illinois at Chicago College of Dentistry has been the recipient of a Profession and Practice: Community-Based Dental Education project (the Pipeline) grant to promote oral health in underserved communities and to train students to function effectively in such settings. The School's Extramural Clinical Experience is described. This involves 60 days of providing care in seventeen sites for students in their fourth year of training. Students must qualify for these rotations based on clinical competency and they must document their experiences. The positive effects observed so far in this program are described.

There is variation in the range of academic attention to the issues of access to care among dental schools. The role of dental schools regarding access to care may depend upon often unstated, but operationally evident, educational philosophies. Some school curricula focus more on the technical skills essential to the provision of clinical care, to the near exclusion of surrounding issues such as access to care, health disparities, organization and financing of dental care, and understanding the health services sector. Some schools make a dedicated effort to weave these subject themes into their curricula in a manner intended to at least inform students that such issues exist and will confront them during their careers.

### Vision of DENTISTRY

This range of difference may be caused, in part, by differing academic perceptions of what dentistry is and what dentists do. On one side of the spectrum, dentistry can be viewed as the provision of dental services for individual patients, with the emphasis placed on repair and protection of teeth and related tissues. Students and graduates of such schools may refer to their role as "working on patients to improve the form and function of teeth." In this view, issues of access to care may only be related to a patient's willingness to accept treatment plans with extensive procedures and the restoration of the complete dentition.

Dental education can also be approached from the perspective of oral health, inextricably linked to general health and well-being. In this view, dental care may be provided in the context of its contribution to achieving improved oral and general health. Students and graduates of these schools may refer to their role as "providing healthcare services to improve oral health." Because the issues of access to care affect the oral health status of people and populations, this academic subject is probably more likely to be incorporated in the curricula of schools whose educational philosophies place them at this end of the spectrum. In general, dental schools offer discounted fees for patients to compensate for students providing care. These discounted fees allow a wide variety of patients to access oral health care services that may not be financially able to seek care from private practitioners in the area.

Issues of access to care seem to be important for dental school curricula for several reasons. Access to care is currently a significant issue in Congress. Access to care issues also underpin the disparities in oral health status witnessed in the population, they drive concerns for equity and social justice, and place



Dr. Evans is Associate Dean for Prevention and Public Health Sciences, University of Illinois at Chicago College of Dentistry; casevans@uic.edu.

before us basic questions regarding the purpose and value of the dental profession to society.

While access to care may have inherent societal value and be considered to be “good to have,” the issue is also driven by health disparities and the apparent need for care demonstrated among those population groups that have insufficient access. In turn, concern for the resolution of health disparities is driven by concepts of social justice and equity of opportunity. Dentists who are more sensitive to such values would be more inclined to contribute as best they can to correct health status imbalances among population groups. Others not so affected by these concerns would probably pay less attention to these types of problem.

Data from numerous sources demonstrate substantial oral health disparities among age cohorts and populations that are influenced by issues of access to care. The elderly demonstrate a variety of oral health disparities and these disparities are more pronounced for institutionalized and debilitated elderly. It is important to note that Medicare does not cover dental care. At the same time, those who are 65 years and older represent the fastest growing age cohort in the United States.

People residing in rural and remote areas, and many inner-city areas as well, face challenges of distance and provider supply and availability, resulting in difficulty gaining access to care. The number of designated Health Professional Shortage Areas has increased in recent years due to issues of access to

care. Once a shortage area designation is made, federal funds can be obtained to attract health providers, including dentists, to the area. Even so, a large number of the slots in shortage areas go unfilled.

Racial and ethnic imbalances are evident when the demographics of the overall population are compared to the dentist workforce. These imbalances also appear to contribute to problems of access to care. While the general population is approximately 13% black and 15% Hispanic, black and Hispanic dentists each constitute only 3% of the dentist workforce. Nationally, black students currently represent about 5% of entering dental classes, and Hispanic students represent approximately 6%. Studies have shown that race and ethnic concordance of patient and provider is a determinant of healthcare utilization and consequently affects access to care.

From a didactic perspective, the Surgeon General's Report (Oral health in America: A report of the Surgeon General, 2000) focused these concerns in a manner that drew wide-spread attention, well beyond the typical dental or oral health spheres of interest. Information and data from this report was incorporated in dental school curricula. In addition, some dental schools have had a long history of placing students in community-based, service-learning settings as part of their formal programs; other dental schools

Dental education can also be approached from the perspective of oral health, inextricably linked to general health and well-being.

Concern for the resolution of health disparities is driven by concepts of social justice and equity of opportunity.

have included such experiences on a volunteer basis, or with experiences scheduled over holiday or vacation periods. This type of learning is fundamental to the concept and operation of the recently opened Arizona School of Dentistry and Oral Health. Other new dental schools are currently being developed using variations of this educational concept.

The Pipeline, Profession and Practice: Community-Based Dental Education Program, funded by the Robert Wood Johnson Foundation, The California Endowment, and the W. K. Kellogg Foundation, enabled 15 dental schools to develop and expand their academic programs addressing issues of access to care and health disparities, including an objective to have senior dental students placed in community-based clinical locations for 60 days. The intent is to afford these students an opportunity to experience these issues directly and learn from their exposure. The Pipeline Program also includes an objective to recruit and retain underrepresented students and faculty in the participating dental schools. A second but smaller round of funding under this initiative has enabled additional dental schools to pursue these directions as well. The full evaluation of the first round of projects will be released soon. In the meantime, anecdotal information has proved interesting and compelling.

#### **EXTRAMURAL CLINICAL EXPERIENCE AT UIC**

The University of Illinois at Chicago College of Dentistry was awarded Pipeline Program funding and proceeded to change its curriculum significantly.

The curriculum was enhanced in its content related to cultural awareness and diversity, health and oral health disparities, and issues of access to care. A major achievement was the development of a new required for-credit course for fourth-year dental students (D4s) known as the Extramural Clinical Experience (ECE). This course contains several didactic elements presented in classroom format, as well as a clinical component of 60 days of community-based service-learning for each D4 student. The 60 days are arranged in clinic assignment rotations of three to four weeks each. There are six such rotation periods fixed in the college's academic calendar. The overall curriculum is competency-based and the clinical faculty determines the point at which students are prepared to enter into the ECE course. However, the clinical faculty is also challenged with the specific objective to fully prepare students for the course and its community-based service learning element. This objective also drives the third-year (D3) clinical curriculum as the essential precursor of education, training, and skill development that provides a basic foundation for the D4 year and the ECE course.

At the community level, 17 sites have been identified to serve as clinic locations for the ECE rotations. At the most formal level of collaboration, the executive administration of each site enters into an affiliation agreement with the University of Illinois. One or more dentists at each site must be successfully credentialed as adjunct faculty of the college. The processes for completing the affiliation agreement take eight or nine months to complete; and the credentialing process for adjunct faculty may require several months. Community sites are selected based on a list of criteria, including: willingness and interest in collaborating in this way with the college and university, sufficient dental

operatories so that the presence of students does not preclude the site staff and adjunct faculty from providing care, physical quality of the site, dental assistants for the students, and protocols for quality assurance and safety, to name only a few. An objective has been to have access to sites that offered a wide range of distinctive health systems and oral health service delivery models. In this way, students could anticipate experiences that offer exposure to different practice models and approaches to increasing access to care for underserved populations.

Sixteen of the rotation sites are located in Illinois and are distributed among rural, suburban, and urban settings. The other is located in rural Guatemala. The Guatemala rotation is quite special and highly sought after by students. The in-state sites include the following types of clinics and corresponding service models: free-standing Federally Qualified Health Centers (FQHCs) and an FQHC situated within a local health department structure, faith-based clinic and health system, philanthropically supported clinics, Veterans Administration hospital and two other hospital clinic settings located in underserved communities, a clinic for developmentally disabled patients, mobile clinic services, and a dental service within a closed-panel union-operated health center.

Quality assurance measures are verified as a component of a site assessment process. The intent is to ensure that quality standards are acceptable at all rotation sites, but there is no attempt to standardize sites to the exact specification of dental school procedures and methods. In fact, the range of difference that the sites afford in terms of practice settings, procedures, organization of the

service system, and population served are among the strengths of these rotation experiences.

Students can also request placement at other sites they may have identified for their rotation experiences. If the site proves to satisfy course requirements, a substitution can be accommodated. For example, students have completed rotations in the country of Tanzania, the state of Minnesota at the White Earth Indian Reservation, and in Los Angeles at the Union Rescue Mission.

As part of the didactic element of the course students complete a "photo voice" project in which they take pictures of any scenes, excluding patients and patient care, and provide a brief personal interpretation of the scenes as they relate to their rotation experience. One student pictured the long flight of stairs ascending to the Chicago loop elevated train. This view was interpreted to represent the problems of access to needed services and care, particularly for those with disabilities. The photo voice pictures and statement are posted on the walls of the student lounge area for all students and faculty to see. Students also complete a reflective essay regarding their experiences. In the essay they are asked to respond to any, or all, of the following questions:

- How did you change as a result of these experiences?
- What did you learn about: other people, cultures, value systems, communities, social customs, or beliefs relating to health (in effect, the sociocultural dimension of health)?
- What did you learn about the health sector?
- What did you learn about oral health's intersection with general health and well-being?

This current academic year the UIC College of Dentistry, with assistance of grant funding from the Illinois

Children's Healthcare Foundation, initiated a pilot project involving 12 carefully selected D4 students who are gaining approximately half of their clinical experience in community-based service-learning sites. The 12 students are organized into six teams of two students each. Two teams are assigned to each of three community sites chosen by the college for the pilot. Teams alternate, spending two weeks in the dental college and two weeks at the site. In that regard, each site has the benefit of continuity of student providers during the academic year. The student teams change sites every four months so that each student has the opportunity for in-depth experience with three distinct dental care delivery systems and modes of practice.

One site is a closed-panel, union-sponsored medical and dental clinic for members of a Chicago food workers union. Another site is an FQHC. The third site is philanthropically funded and has a long and distinguished history of health and social services. Part of the didactic requirement for this project is to write a report reviewing the history, administration, fiscal structure, policy issues, and clinical service model of these sites. In that way the students will have an opportunity to better understand various health service systems.

From a training and education perspective, there are many other benefits that have been noted as a result of the ECE course and the experiences derived from the community-based service-learning rotations. As examples, students

The number of designated Health Professional Shortage Areas has increased in recent years due to issues of access to care.

are eager and excited about the rotations. Dental students upon graduation have been recruited or otherwise found entry level service positions within the health systems through which they have rotated during the ECE course. Students gain heightened confidence as a result of being student doctors in these community settings and providing care outside the college. Upon returning to the school from rotations, D4 students are more productive in terms of levels of services provided. The ECE course also provides unique motivation for student development. Clinical faculty members determine students' preparedness for the ECE course as the knowledge and skills of the students develops and matures. As a result, the initial students reaching this level of competency are the first to enter the course and to participate in the rotations. The next group follows and so on. The accomplishment and status of being determined ready for the course is a distinction among students and there is clear drive among them, now perceptible as early as the D2 year, to be in the first group or at least early the rotations.

Despite the best efforts of dental schools there is a disturbing and perhaps unavoidable problem that many schools encounter that compromises their ability to model ideal practices relating to access to care in their daily operations. These schools may be located in urban or other settings where they serve as major safety net providers due to the lack of availability of care elsewhere in

the community. In such settings, not all patients can be accommodated, despite dedicated efforts to do so. All dental schools face the challenge of people seeking care whose oral health conditions do not fit well with the teaching objectives for students. In such instances, dental schools may need to point out their own frailties regarding access to care to avoid representing an unintended paradox.

Dental schools are teaching and offering experiences that address access to care issues. In part this is in response to the growing problem and the need for dentists to be more aware of these issues and their options to contribute to their amelioration. There is no expectation that any single dentist would be in a position to resolve these issues; but it is not unreasonable to think that sufficient numbers of dentists, each addressing some piece of the problem, could profoundly improve opportunities for access to oral health care and services.





# ISSUES IN DENTAL ETHICS

American Society  
for Dental Ethics

## ASSOCIATE EDITORS

James T. Rule, DDS, MS  
David T. Ozar, PhD

## EDITORIAL BOARD

Muriel J. Bebeau, PhD  
Phyllis L. Beemsterboer, RDH, EdD  
Larry Jenson, DDS  
Anne Koerber, DDS, PhD  
Donald E. Patthoff, Jr., DDS  
Bruce N. Peltier, PhD, MBA  
Jos V. M. Welie, MMedS, JD, PhD  
Gary H. Westerman, DDS, MS  
Gerald R. Winslow, PhD  
Pamela Zarkowski, RDH, JD

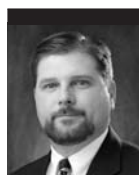
Correspondence relating to the  
Issues in Dental Ethics section of the  
*Journal of the American College of  
Dentists* should be addressed to:  
James Rule  
8842 High Banks Drive  
Easton, MD 21601  
jrule0870@verizon.net

## THE INTERSECTION OF DENTAL ETHICS AND LAW

David J. Owsiany, JD

### ABSTRACT

Dentists are regularly confronted with situations that involve interrelated ethical, risk management, and legal and regulatory compliance issues. This article discusses six of the most common such situations where dentists must sort out various ethical and legal issues. Sometimes taking steps to minimize exposure to liability or comply with legal and regulatory mandates is also consistent with applicable ethical standards. At other times, however, in order to meet the highest ethical standards, dentists must go beyond mere legal compliance and risk management. By acting in accordance with the highest ethical standards, dentists ensure they are protecting not just their own interests but their patients' interests as well.



Mr. Owsiany has been the Executive Director of the Ohio Dental Association since 2002 and served as the ODA's director of legal and legislative services from 1994 to 1999; david@oda.org.

*This article is intended to be informational only and should not be construed as legal advice. Dentists should always seek the advice of their own attorneys regarding specific circumstances.*

The Ohio Dental Association (ODA) has a hot line its member dentists call to discuss dental practice issues with ODA staff members who have expertise in, among other areas, law and dental ethics. Currently, the ODA's staff includes two full-time attorneys and a full-time dental services director. Together, they have nearly 40 years of experience in dealing with dental practice issues. In addition, the staff works closely with ODA council and committee members who provide regular guidance in specific cases. When necessary, the ODA staff also consults faculty members at The Ohio State University College of Dentistry and the Case School of Dental Medicine. The ODA's most recent membership survey shows that members rate the provision of dental practice information as one of the ODA's most valuable services.

Member dentists' questions often involve ethical considerations, risk management, and regulatory and legal compliance. Many times, the issues dentists wrestle with include interrelated ethical and legal considerations. The "right" answer from an ethical perspective is often also the prudent approach to minimize exposure to liability or to ensure compliance with applicable state and federal laws. At other times, however, a dentist's ethical duty requires more than just minimizing legal risk or merely complying with the law.

Following the law or minimizing legal risks may help protect the dentist from civil liability or administrative discipline by a state dental licensing board. By going further and following the highest ethical standards, the dentist will do more than just protect his or her own interests. In most cases, the dentist's commitment to following ethical standards will also ensure the patient's interests are protected and, in the process, may enhance the dental profession's reputation and image.

This paper is based upon representative issues raised by callers on the ODA hot line and the experiences of the ODA staff in responding to them. Where possible, examples from our callers are used, as are "real life" answers from ODA staff. Below is a discussion of six of the issues about which ODA members regularly inquire.

## OBLIGATION TO TREAT PATIENTS

### THE ISSUE

Oftentimes, dentists call to inquire about accepting new patients and especially about their obligations to continue to treat patients who are already in their practices. Dentists describe scenarios where the patient is in the middle of a somewhat complex multi-appointment treatment plan, but difficulties have arisen because of the patient's behavior. In some cases, the patient is behind in payment, regularly misses appointments, or refuses to follow the dentist's recommended oral care instructions between appointments. Dentists want to know what their legal and ethical obligations are to these patients.

## ETHICAL CONSIDERATIONS

Dentists must avoid acting in a discriminatory manner when selecting patients for their practices. Dentists should avoid "abandoning" patients when terminating the dentist-patient relationship by providing the patient adequate notice and an opportunity to secure the services of another dentist.

### DISCUSSION

There is a difference between refusing to treat new patients and terminating an existing patient relationship. Generally, dentists are free to accept new patients into their practices as they see fit.

However, there are exceptions to this general rule. The "Obligation to Treat Patients" section of the American College of Dentists *ACD Ethics Handbook for Dentists* states that dentists should "avoid actions that could be interpreted as discriminatory" and advises that dentists "must be aware of laws and regulations that govern discrimination" (*ACD Ethics Handbook*). Similarly, the American Dental Association *Principles of Ethics* and *Code of Professional Conduct* mandates that dentists avoid refusing to treat a patient based solely on his or her race, creed, color, sex, or national origin (*ADA Code*, Sec. 4.A.). Of course, state and federal laws provide heightened protection for people in these protected classes as well. (See *Ohio Revised Code*, Sec. 4112.02.)

Similarly, pursuant to the Americans with Disabilities Act, a dentist should not refuse to treat a patient because he or she has a disability (*42 United States Code*, Sec. 12101). For example, a dentist should not refuse to treat a patient solely because the patient is HIV positive or has been diagnosed with AIDS (*Bragdon v. Abbott*, 524 U.S. 624, 1998). In general, when accepting new patients, dentists

must be aware of the laws and ethical guidelines that govern discrimination and must avoid acting in violation of those laws and guidelines.

Once a dentist-patient relationship is established, however, the dentist's obligations change, and a duty may exist beyond the traditionally protected classifications based on race, creed, color, sex, and national origin. In terminating an existing relationship with a patient, the dentist must avoid "abandoning" the patient. In defining "patient abandonment," the *ADA Code* states, "Once a dentist has undertaken a course of treatment, the dentist should not discontinue that treatment without giving the patient adequate notice and the opportunity to obtain the services of another dentist" (*ADA Code*, Sec. 2.F.). The concept of "abandonment" may also be the basis of a civil lawsuit if the dentist does not exercise care in terminating the dentist-patient relationship. Liability for patient abandonment can arise when the dentist does not give adequate notice of termination and the refusal to treat causes injury to the patient.

The best way to avoid a claim of abandonment is to avoid terminating the dentist-patient relationship during the course of treatment. If the relationship must be terminated prior to the completion of treatment, the dentist should discuss the problem with the patient, offer to assist in finding the patient a new dentist, and obtain the patient's consent to end the relationship, if possible. Even if the patient is behind in payment or otherwise uncooperative, the dentist must make every attempt to ensure the patient's oral health is in a stable condition before terminating the dentist-patient relationship. It may be necessary to see the treatment plan through to its completion in order to fully satisfy the dentist's ethical obligations to the patient before terminating the dentist-patient relationship.

If the dentist does act to end the relationship, he or she should document each step in writing. The best practice may be to send the termination letter via certified mail so that the dentist can document termination and the date notice was provided. Because both dental ethics and the law generally favor the patient having adequate notice and opportunity to secure a new dentist, a dentist's duty to the patient does not necessarily end with the sending of the termination letter. If a dental emergency arises before the patient has a reasonable time to establish a relationship with a new dentist, the terminating dentist may have an obligation to provide emergency care.

## PATIENT RECORDS

### THE ISSUE

Dentists are often confused about how to handle issues related to patient records. Dentists seem to understand that patient records are confidential but do not always take the steps necessary to ensure such confidentiality. Many dentists believe that the records belong to them and do not fully appreciate their obligation to make relevant records available to patients or patient representatives. On occasion, dentists will inquire if they can make the provision of records conditional upon the patient paying an unpaid bill.

### ETHICAL CONSIDERATIONS

Dentists should protect the confidentiality of patient records. Upon request of the patient, a dentist should provide copies of dental records to the patient or another dentist designated by the patient, in accordance with applicable laws.

### DISCUSSION

Both the "Patient Records" section of the *ADA Code of Ethics* and the "Confidentiality" section of the *ACD*

*Ethics Handbook* recognize the importance of safeguarding the confidentiality of patient records (*ADA Code*, Sec. 1.B.; *ACD Ethics Handbook*). In addition, most states have laws providing that communications between a dentist and a patient are privileged (i.e., confidential). (See *Ohio Revised Code*, Sec. 2317.02.) Privileged communications may include, among other things, dental records, charts, diagnosis, and lab results. Dentists should take steps to limit accessibility to the health information included in patient records. For example, dentists should have specific policies prohibiting staff discussion of a patient's oral health issues in front of other patients. And dentists should avoid placing patients' health status information on the outside of the physical patient record where other patients might see it.

Dentists, who use electronic transactions, including electronic claims submissions to third-party payers, may also have a duty to protect patients' health information under the Health Insurance Portability and Accountability Act (HIPAA) Privacy and Security Regulations (*45 Code of Federal Regulations*, Parts 160, 162, & 164).

The confidentiality of the patient's record is a privilege that belongs to the patient and may only be waived by express consent of the patient. Generally, a dentist should not provide patient records to a third party absent a signed written release from the patient, the patient's legal representative, a court order, or other mandate under law. Patient releases or court orders to testify or release documents should be included in the patient's file in order to protect the dentist from future claims of breach of confidentiality.

While dentists enjoy the same legal rights of free speech as others, they also have the ethical obligation to maintain professionalism in their communications with patients.

In many jurisdictions, court rules or codes of professional conduct for lawyers prohibit contingency fee arrangements for expert testimony...such arrangements create undue financial incentives for biased testimony in favor of the hiring party.

Generally, a patient waives the dentist-patient privilege when he or she directs a claim to be submitted to Medicaid, an insurance company, or other third-party payer. Accordingly, the dentist may provide copies of patient records to third-party payers regarding services submitted for coverage.

In many states, while a dentist may technically “own” the original patient records, the patient still has an absolute right to a copy of his or her records. When possible, depending on applicable state laws, dentists should provide copies of the record and retain the originals because original records are generally the best defense in the event of a malpractice lawsuit or state dental board disciplinary action. In most states, the dentist may charge a reasonable, cost-based fee for copying records. Some states specifically define in statute or rule how much health care providers may charge for copies (See *Ohio Revised Code*, Sec. 3701.741).

In general, both the courts and dental ethics favor patients having access to the information included in their health care records. Even if the dentist-patient relationship has broken down, the dentist must still make the records available so the patient can get subsequent dental treatment. An advisory opinion related to the “Patient Records” section of the *ADA Code of Ethics* provides that the fact that a patient has not paid for services performed by the dentist is not sufficient reason for withholding a copy of the records. (*ADA Code*, Sec. 1.B.1.) Accordingly, a dentist must not hold patient records hostage as a means of attempting to secure payment for an unpaid bill.

## DUTY TO REPORT CHILD ABUSE

### THE ISSUE

Occasionally, dentists report stories about minor patients who have suspicious bruises or other injuries around the face, head, or neck. Parents or guardians sometimes offer reasons for the injuries that raise suspicions of abuse. While they are genuinely concerned about the safety of their minor patients, some dentists may be reluctant to “get involved” because they feel their suspicions of abuse might prove to be unfounded.

### ETHICAL CONSIDERATIONS

Dentists should understand how to detect child abuse. Dentists should report good faith suspicions or actual knowledge of abuse of a minor patient to the appropriate authorities.

### DISCUSSION

A significant percentage of child abuse injuries involve the head, neck, and mouth areas. Accordingly, dentists are sometimes confronted with the situation where they suspect that one of their minor patients is being abused. The “Abuse and Neglect” section of the *ADA Code of Ethics* and the “Child Abuse” section of the *ACD Ethics Handbook* recognize that dentists are in a position to detect abuse and have an ethical obligation to be familiar with the signs of abuse and report suspicions of abuse to appropriate authorities (*ADA Code*, Sec. 3.E.; *ACD Ethics Handbook*).

Furthermore, many states have laws that place an obligation on dentists and other health care providers, who are working in their professional capacity and come to know or suspect a child has been abused, to immediately file a report with the appropriate government agency. (See *Ohio Revised Code*, Sec. 2151.421.)

In most cases, confirmed knowledge of abuse is not required before filing a

report. A dentist's duty to report arises when he or she has a reasonable suspicion that abuse has occurred. The intent of these laws is to encourage health care professionals, including dentists, to report suspicious signs of child abuse. In many states, a dentist who makes a good faith report of suspected child abuse is immune from civil or criminal liability which might otherwise arise as a result of filing the report. (See *Ohio Revised Code*, Sec. 2151.421.) Accordingly, dentists should not be reluctant to make a report for fear of liability should their suspicions eventually fail to be confirmed. Ultimately, state laws and dental ethics recognize dentists are in position to detect abuse and place a corresponding obligation on dentists to act on any suspicion of abuse they gain through their treatment of minor patients.

Dentists have a respected and valued position in society because of their compassion and commitment to their patients. By educating themselves on how to recognize signs of abuse and understand what to do when such signs are present, dentists are not only fulfilling their legal and ethical obligations, they are also protecting those in our society who can least protect themselves.

### UNJUST CRITICISM AND EXPERT TESTIMONY

#### THE ISSUE

Dentists often inquire as to what they should do when patients come to their practices with concerns about prior dental treatment. Specifically, they want to know what they can say to patients about the treatment provided by previous dentists. Additionally, a growing number of dentists report being asked to testify as expert witnesses in civil or administrative actions. Many want to testify but are unsure what their obligations are with respect to providing such testimony.

#### ETHICAL CONSIDERATIONS

Dentists should inform new patients of their current oral health status without unjustified disparaging comments about prior services. When providing expert testimony, dentists should provide their honest, objective opinions, free from any financial influences that could lead to bias.

#### DISCUSSION

While dentists enjoy the same legal rights of free speech as others, they also have the ethical obligation to maintain professionalism in their communications with patients. Accordingly, dentists ought to exercise care when discussing prior treatment with their patients. The *ADA Code of Ethics* provides that "Patients should be informed of their present oral health status without disparaging comment about prior services" (*ADA Code*, Sec. 4.C).

The advisory opinion related to the "Justifiable Criticism" section of the *ADA Code of Ethics* states that "Patients are dependent on the expertise of dentists to know their oral health status" (*ADA Code*, Sec. 4.C.1). Because dentists are in this position of trust, they should exercise care to ensure their comments are "truthful, informed, and justifiable" (*ADA Code*, Sec. 4.C.1). In some instances, it may be appropriate for a dentist to consult with the prior dentist to determine the circumstances and conditions surrounding the previous treatment.

For example, a dentist in Ohio had concerns about whether a new patient's prior treatment plan was appropriate and decided to call the patient's former dentist. During their conversation, he learned that the previous dentist had recommended a treatment plan that the patient rejected. Ultimately, the patient chose to pursue a different, less optimal, treatment plan. The previous dentist explained the pros and cons of each approach and secured a signed informed consent document before treatment

commenced. By making a call to the previous dentist in addition to reviewing the patient's records, the dentist was able gain a complete understanding of the patient's situation, including the fact that he chose a plan different from the one recommended for him.

In the situation where the patient and the dentist have significant concerns about prior dental treatment, the dentist may suggest that the patient contact the state or local dental society's peer review process, which is designed to resolve dentist-patient treatment issues outside of the traditional court system. The ADA advisory opinion makes clear, however, that a "difference of opinion as to preferred treatment should not be communicated to the patient in a manner which would unjustly imply mistreatment" (*ADA Code*, Sec. 4.C.1.)

In the end, the dentist's main goal should be to explain to the patient his or her current oral health status and develop a treatment plan to get the patient on a path to improved oral health. Unjustified criticism of prior treatment does nothing to advance the patient's oral health.

Occasionally, a patient's dissatisfaction with treatment may lead to litigation or the filing of a complaint with the state dental licensing board. Dentists often have the opportunity to testify as expert witnesses in such civil lawsuits or dental board disciplinary proceedings. In fact, the *ADA Code of Ethics* contemplates dentists testifying "when that testimony is essential to a just and fair disposition of a judicial or administrative action" (*ADA Code*, Sec. 4.D).

However, it is considered unethical for a dentist to provide expert testimony where his or her fee is contingent upon the favorable outcome of the litigation

or administrative proceeding (*ADA Code*, Sec. 4.D.1). In fact, in many jurisdictions, court rules or codes of professional conduct for lawyers prohibit contingency fee arrangements for expert testimony. (See *Ohio Supreme Court Rules of Professional Conduct*, Rule 3.4). The main objection is that such contingency arrangements create undue financial incentives for biased testimony in favor of the hiring party.

When giving expert testimony, dentists should provide their opinions in an honest, objective manner, based on the information before them. They should also be willing to acknowledge any limitations on their ability to speak definitively regarding the issues under scrutiny.

The role of the expert is to assist the fact-finding body—whether a jury, judge, or administrative agency—by providing objective, scientific testimony. Doing anything other than that when providing expert testimony is not only unfair to the parties but is detrimental to the administration of justice.

## ADVERTISING

### THE ISSUE

The amount of advertising by dentists has grown dramatically in recent years. Many dentists are unsure what they can or cannot say when advertising their services and credentials. Others feel their colleagues go too far in their advertisements.

### ETHICAL CONSIDERATIONS

Dentists who choose to advertise should develop a full understanding of the advertising regulations in their state. Dentists must avoid placing advertisements that are false and misleading,

## DISCUSSION

In today's competitive marketplace, there has been a marked increase in the number of dentists who advertise via print, broadcast, and electronic means. Ensuring such advertisements are consistent with legal mandates and professional ethics can present significant challenges.

The regulation of advertising related to the announcement of available services and professional dental credentials varies greatly from state to state. For example, many states expressly allow announcement of credentials in specialty areas recognized by the ADA. (See *Ohio Administrative Code*, Sec. 4715-5-04 & Sec. 4715-13-05.) Some states require a state-issued specialty license in order to advertise as a specialist. (See *South Carolina Code of Laws*, Sec. 40-15-220). When announcing available services, some states require general dentists to disclose that they are general dentists in their advertisements. (See *Texas Administrative Code*, Title 22, Part 5, Section 108.54.) Additionally, when announcing credentials in an area not recognized as a specialty by the ADA, some states require dentists to specifically disclose that the practice area announced is not a specialty recognized by the ADA. (See *Texas Administrative Code*, Title 22, Part 5, Sec. 108.55.) The *ADA Code of Ethics* states that "Dentists who choose to announce specialization should use 'specialist in' or 'practice limited to' and shall limit their practice exclusively to the announced special area(s) of dental practice, provided at the time of the announcement such dentists have met in each approved specialty for which they announce the existing education requirements and standards" set forth by the ADA (*ADA Code*, Sec. 5.H).

Dentists are generally entitled to announce the services they provide and, in fact, such information may be useful for patients in finding a dentist right for them. Accordingly, for example, it may

be entirely appropriate for a general dentist to advertise that he or she provides "cosmetic dental services." Advertising oneself as a "certified cosmetic dentist," however, may be problematic if patients might reasonably interpret such a claim to indicate specialization.

Because of the wide variety of regulations related to the advertising of credentials and specialty status, it is important that dentists are fully aware of their own state's specific advertising regulations as well as the guidelines contained in the *ADA Code of Ethics*.

Underlying the specialty advertising rules is the principle that professional advertising should be truthful and should help members of the public make informed decisions related to the care they seek. Accordingly, the *ADA Code of Ethics*, *ACD Ethics Handbook*, and many states forbid any dental advertising that is false or misleading. Establishing what is false and misleading, however, can be tricky. Both the *ADA Code of Ethics* and the "Advertising" section of the *ACD Ethics Handbook* provide specific examples of things to avoid in order to protect against false and misleading advertisements. For example, dentists should avoid advertisements that: (a) contain material misrepresentations of facts, (b) create deception by only partially disclosing relevant facts, (c) create unjustified expectations of favorable results, (d) represent or imply that the services of a practitioner are superior to those of other dentists unless such representations can be reasonably verified by the public, or (e) misrepresent fees for dental services (*ADA Code*, Sec. 5.F.2. and Sec. 5.B.; *ACD Ethics Handbook*).

Dentists, like all professionals, have protected commercial speech rights when it comes to advertising. Courts, however, also recognize that states and professional associations have the ability,

and some would argue the responsibility, to protect the public from false and misleading advertising, especially considering the disparity of information and knowledge related to dentistry between dentists and the public.

Some commentators believe that the prevalence of dental advertising may have a negative impact on the public's perception of dentists. They suggest that ads implying that some dentists are superior necessarily imply that other dentists are inferior. Ads that focus on cosmetic and elective services may lead the public to view dentists as "oral cosmetologists," thereby undermining their long-standing reputation as dedicated healthcare professionals committed to promoting patients' oral health care. And the burgeoning number of ads may give the overall impression that dentists are more concerned with the commercial aspects of dentistry than delivering quality oral health care services.

Invariably, the regulation of professional advertising involves subjective determinations as to what rises to the level of false and misleading. Because such subjective decisions can be difficult and tend to raise significant legal questions, enforcement of advertising laws, rules, and professional guidelines vary from state to state. Regardless of the level of enforcement activity, however, the dental profession's long-term reputation depends on each dentist's willingness to act ethically and professionally when developing and placing advertisements. The "Advertising" section of the *ACD Ethics Handbook* reminds dentists that the "best advertising is always word-of-mouth recommendations by satisfied patients" (*ACD Ethics Handbook*).

## DELEGABLE DUTIES AND SUPERVISION OF STAFF

### THE ISSUE

State laws and regulations are changing with rapidity regarding permissible delegable duties and supervision of staff. Many of these changes create flexibility in the office by permitting additional delegation that results in greater office efficiency or may even permit, under certain circumstances, a dental hygienist to work on a patient when the dentist is not physically present in the office. Dentists often have questions regarding staffing when they learn of changes in the law or regulations in this area. They may be considering adding a dental assistant to take advantage of additional delegation of duties or a dental hygienist in order to keep the office open longer for hygiene services even when the dentist is away.

### ETHICAL CONSIDERATIONS

Dentists should know, and comply with, the laws in their own states regarding delegation of duties to, and supervision of, dental assistants, hygienists, and other staff members. A dentist should consider the impact on the quality of patient care when determining whether to delegate a task to, or permit relaxed supervision of, a dental staff member, regardless of what the law permits.

### DISCUSSION

While dental staff members play an important role in assisting in providing care to patients, the delegation of duties in the dental office is another area that presents interrelated issues of law and ethics. Both the "Use of Auxiliary Personnel" section of the *ADA Code of Ethics* and "Delegation of Duties" section of the *ACD Ethics Handbook* provide that dentists may only delegate duties to dental hygienists, dental assistants, and

Ads that focus on cosmetic and elective services may lead the public to view dentists as "oral cosmetologists," thereby undermining their long-standing reputation as professionals committed to promoting patients' oral health care.

Talking to an attorney, however, may not be enough. Dentists should also take steps to understand their ethical obligations in such situations.

others that are consistent with applicable laws and regulations, which vary from state to state (*ADA Code*, Sec. 2.C.; *ACD Ethics Handbook*). The *ADA Code of Ethics* also mandates that “Dentists shall be further obliged to prescribe and supervise the patient care provided by all auxiliary personnel working under their direction” (*ADA Code*, Sec. 2.C). Accordingly, it is important for a dentist to know his or her own state’s laws and regulations on the delegation of specific duties (coronal polishing, administration of nitrous oxide and local anesthesia, scaling, etc.) and the corresponding required level of dentist supervision for specific dental staff members.

Dentists should also remember that in the context of delegable duties and supervision, there is an ethical responsibility to maintain the quality of patient care. The *ACD Ethics Handbook* notes that in addition to determining the legality of delegating a specific task to a particular staff member, the dentist should ask him or herself whether the quality of care for the patient will be maintained (*ACD Ethics Handbook*). Just because the law permits delegation of a duty or relaxation of supervision does not relieve the dentist of his or her ethical duty to ensure the provision of quality dental care.

### Conclusion

The issues discussed in this essay demonstrate the interconnectivity of dental ethics and legal issues. In many cases, complying with the law and taking steps to limit exposure to liability will also be consistent with the dental profession’s principles of ethics. For example, acting to protect the confidentiality of patient records, taking steps to avoid patient abandonment, and reporting child abuse are all actions that are consistent with the ethical tenants of the dental profession. As shown above, such

actions are also consistent with legal mandates and may help to limit dentists’ exposure to civil liability.

In other cases, however, merely complying with the law or acting to limit potential liability is not enough. Being an ethical professional sometimes requires a dentist to accept additional obligations beyond what is required by the law. As discussed above, despite a dentist’s right to engage in free speech like anyone else in society, professional ethics requires dentists to respect their patients, colleagues, and the dental profession generally, by avoiding making unjust criticism of prior treatment. Similarly, regardless of the likelihood of legal jeopardy, dentists should avoid placing advertisements that may mislead the public or potentially depict the dental profession in a negative light. Finally, dentists should not delegate duties to staff members merely because the law permits them to do so. Dentists also have the ethical obligation to ensure that the delegation of a specific duty to a particular staff person can be done in a manner that does not jeopardize the quality of patient care.

The issues discussed above are just a few examples of the many situations where dentists must confront their ethical and legal obligations together. In such cases, it is important for dentists to consult legal counsel to get advice related to their specific situations and gain a full understanding of the underlying legal issues. Talking to an attorney, however, may not be enough. Dentists should also take steps to understand their ethical obligations in such situations. Following the law and limiting exposure to liability are important considerations. The ethical practice of dentistry, however, sometimes requires more. ■



## PRACTICE

---

David W. Chambers, EdM, MBA,  
PhD, FACD

### ABSTRACT

Practice refers to a characteristic way professionals use common standards to customize solutions to a range of problems. Practice includes (a) standards for outcomes and processes that are shared with one's colleagues, (b) a rich repertoire of skills grounded in diagnostic acumen, (c) an ability to see the actual and the ideal and work back and forth between them, (d) functional artistry, and (e) learning by doing that transcends scientific rationality. Communities of practice, such as dental offices, are small groups that work together in interlocking roles to achieve these ends.

**P**ractice has the unfortunate connotation of boring drill required because one is not good enough yet. There are some lame jokes about dentists practicing all their lives because they have not quite mastered their skills and offices that are called practices because they run repetitive routines. This essay presents an alternative view, arguing that practice is a distinguishing characteristic of dentistry when done at its very best. Saying that a dentist is a practitioner is saying something defining and special.

The term practice can be used to describe either a group working together in a certain way or to the work itself. So hygienists and assistants practice as part of a dental practice. A practice in either sense is a specific pattern of work, usually centered on professional expertise and often performed by a small group working in close collaboration. It is not the only way to get things done, but it is one of the most common and effective, and there is a good deal known about what makes practices good.

Practice has these three characteristics:

**Small, Interdependent Groups** Practices involve a few people performing coordinated roles on a sustained basis. Almost all dental offices are practices; so are law offices, police departments in small towns, and rock bands. Members of a practice know each other personally, and they make adjustments for individual styles. The group as a whole has a collective wisdom, a core of tacit knowledge that exceeds what can be told or what is known by the members individually.

Individuals in a practice may come and go, and that usually does affect the tone of the practice because the practice supersedes its specific members. The U.S. Supreme Court is an example of a practice with continuity despite changing membership. The ADA and dental schools are too big to be practices, although they contain many work groups that are.

**Customized Problem Solving** Practice involves a balance between the routine and the unique. Assembly-line workers are not usually regarded as practicing because they do the same thing over and over again. Artists and pure research scientists are also not good examples of practitioners because their work is so individualized and creative. Dentistry exemplifies the required balance of customizing standard procedures to the needs of individual patients. Although there are common features in some crowns, each seems to present unique challenges. There are office rules about patient flow; but there are also some patients who require special handling. Practices are characterized by mastery of a repertoire of skills, applied through judgment to solve general types of customized problems.

**Personal and Professional** Practices are intensely personal and at the same time they conform to industry or professional standards. Practices make up many of their own rules; that is what gives them their individual character. NASCAR pit

crews have their own language, dress, work habits, unforgivable sins, and favorite foods. This is part of the customizing to both the individuality of the members and the circumstances in which they work. The members and the work patterns in a cosmetically-oriented Beverley Hills dental practice, a small-town family practice in Oxford, Mississippi, and a community clinic in Miami could not be effectively interchanged.

But despite these differences, there is a core way of doing things that can be recognized in all practices. In dentistry there are internalized ideals for quality restorative results, infection control, ethical treatment of patients, insurance billing practices, and so forth that transcend local circumstances. For the most part, these ideals are informal and voluntary. OSHA and reimbursement guidelines exist, but their interpretation is somewhat flexible. Whole practices attend local, state, and district meetings to compare notes on inter-practice standards.

There are two species of standards that appear to play a unique role in harmonizing practices—especially in the case of dentistry. There are important standards having to do with ethics and with beauty. Practice acts and reimbursement contracts define minimal performance requirements across practices. But they are inadequate to explain the degree of uniformity in the way dentistry is performed from practice to practice. Across a wide range of situations, dentists and members of their teams make very similar individual choices about what is best for their patients. This ethic of care can only be explained by assuming that part of what it means to practice is to internalize a common professionalism. Such standards

are not universal or uniform, but they do exist and they are significant enough to be part of the definition of professional practice.

It is obvious that there are knowledge and skill standards, as well as procedural routines that are exchanged across practices. But when I listen to dentists and staff members, I also hear language that could only be described as artistic. Dentists admire the beauty of each others' work; and front desk staff are likely to describe an effective scheduling or recall system as "elegant." Perhaps, we should understand EBD to mean ethics-based dentistry or esthetics-based dentistry.

### PRACTITIONERS

Here is a description of an imaginary dental office. See if you can pick out the characteristics that constitute practice and those that do not.

Dr. Kingsmiller's office is in suburban Maryland and has been providing family care since the dentist graduated from dental school two decades ago. The practice is stable, with many loyal patients. There are two hygienists, an office manager, a chairside assistant, and a part-time general assistant. The profile of procedures is traditional, and the office is well supported by nearby specialty practices. The office is open four days per week.

Francis, the office manager has been with Dr. Kingsmiller for fifteen years. She is tireless, dedicated, thorough, and "the most organized individual in the world." Dr. Kingsmiller jokes that "Francis showed up at the perfect time in my career. When first out of school, I was preoccupied with getting my speed up and making my loan payments. Francis took charge of the office and I haven't had to give it a second thought since." Within six months Francis had developed an office manual, detailing every aspect of the office routine. Through constant revision, the manual is now more than 300 pages in length,

with rules for every patient phone conversation (just turn to the correct page), instrument management, billing, recall, and personnel policy. There are plenty of flow charts, some of them terminating in a master node labeled "Ask Doctor." Because of Dr. Kingsmiller's bragging on it, Francis's office manual has been shared with many colleagues; and although much admired, it has never been incorporated, even in part, in any other office.

The hygienists, Anne and Pamela, are a study in contrasts. Both are technically proficient, efficient, long-term employees. The office has a slight preference for Pamela, appreciating her business-like demeanor, incredible exactness on appointment times, and perfect chart notes. Anne is the favorite of the patients. She treats everyone as an individual. Her motto is "01110 is an insurance billing code, not the name of a health service." Some of Anne's appointments are long on engaging the patient in self-diagnosis, some are rigorous calculus search-and-destroy missions, sometimes there is a lot of joking, some run over time.

Dr. Kingsmiller prides himself on his professional standards. He is careful to avoid questionable techniques. "I want to be in complete control of the dentistry I offer my patients." Many of these patients have been in the practice for years and the dentist knows which are interested in function and which orient toward esthetic considerations. The use of composite is largely influenced by patient preferences. His treatment plans are comprehensive and thoughtfully presented. He has served several tours on the competent society peer review panel and has seen enough questionable dentistry to make him concerned over the future of the profession.

Dr. Kingsmiller is also a technical wizard. He is happy about the speed he

developed in the formative years of his practice. He has mastered his craft so well that he usually skips intermediate steps such as study models. “I do essential dental procedures better than most dentists and I avoid the experimental ones. The basics have not changes in dentistry, and every dentist owes it to his patients to have these perfectly under control. I know exactly how things are going to turn out before I begin, or I don’t pick up the handpiece.”

Dr. Kingsmiller also prides himself on knowing the scientific foundation of dentistry. He usually has twice the number of CE hours required for relicensure and is a regular reader of the literature. Recently he took a course on evidence-based dentistry, and he is suspicious of dentists who place credence in their own experience. For the most part, he has stayed away from expensive equipment that would require a change in office routine, such as digital radiography or implants. But he can be a bit annoying to his colleagues when he quotes the shear strength in MagaPascals of the various bonding materials he uses and does not use. His friends kid him, saying that he knows as much about the technical properties of dental materials as the industry reps, or even as much as faculty members in dental schools. Dr. Kingsmiller is fond of chiding his colleagues in return that dentistry is unambiguous, precise, and lawful.

Being realistic, this is a mixed case. There are examples in Dr. Kingsmiller’s office of exemplary practice and there are instances that run counter to practice. Some parts of the case can be profitably debated to bring out a clearer idea of the concept of practice. None of this should be taken as detracting from the effectiveness of the dentist or the office. Everything that dentists do well is not necessarily an example of practice, but dentistry loses something when it is not deeply grounded in practice.

There are dangers in idiosyncratic standards, seeing every case as either routine or unique, restricting one’s skill set unnecessarily, or undervaluing the artistic ideal and learning by doing.

#### PROFESSIONAL STANDARDS

The outstanding example of practice in this case is Dr. Kingsmiller’s reliance on professional standards. He has a value-driven practice, and his colleagues would embrace most of his ideals. Many of the problems he faces each day may be unique, but the overarching goal is not in question. Contrast that with the dentist who lets the conflicting interests of making money or making a name creep into practice decisions; the time-serving associate or salaried dentist in a “mill”; or even the unavoidably conflicted motives of dental students.

Arguably, the single greatest determinant of quality dental care is ethical standards. Technical skill and knowledge are necessary, and they are usually ensured through education. Consider two dentists: one has high standards and low skill and knowledge levels; the other has high skill and knowledge levels but low ethical standards. Both are a danger to patients and an embarrassment to the profession. But the dentist who knows he or she could do better will eventually correct the shortcomings. There are ample CE courses, conscientious self-improvement opportunities, and helpful colleagues to make this happen. The dentist with low standards will never exceed them, will make excuses for poor work, and may even use his or her natural talents to more effectively and profitably cut corners. There are some critical things

Arguably, the single greatest determinant of quality of dental care is ethical standards.

## PRINCIPAL CHARACTERISTICS of COMMUNITIES of PRACTICE, SUCH AS DENTAL OFFICES

- Sustained mutual relationships
- Shared ways of engaging in doing things together
- Rapid flow of information and propagation of innovation
- Absence of introductory preambles (as if conversations were merely continuation of ongoing process)
- Very quick setup of problems for discussion
- Substantial overlap in participants' descriptions of who belongs
- Knowing what others know, what they can do, and how they contribute
- Mutually defining identities
- Ability to assess appropriateness of actions and outcomes
- Specific tools, representations, and other artifacts
- Local lore, shared stories, inside jokes, knowing laughter
- Jargon and shortcuts to communication
- Certain style for recognizing and displaying membership
- Shared reflective discourse

in dentistry that are learnable through practice but not teachable—at least not in journals and CE courses.

As a rule, practitioners are uncomfortable regarding advertising. In the first place, the office of the Secretary of the United Nations; the Mormon Tabernacle Choir; and the best of architects, physicians, lawyers, and dentists—all examples of practices—do not do it. Large commercial interests and policy causes—which are not practices—do it. Those dentists who do advertise are likely to outsource the details of this function. Dentists who are the customers of advertising firms purchase ads rather than create them.

There are two corrosive effects of advertising in dentistry. One is the competitive tension it creates within the profession. Friedman and others showed in a *Journal of Dental Practice Administration* article in 1988 that dental advertising seldom increases the number of individuals seeking oral health care: mostly it transfers patients from one practitioner to another and in the process undermines the ideal of continuous, comprehensive care.

But there is another, and perhaps potentially more powerful, effect of dental advertising. Consider the possibility that much of the advertising message might actually be aimed at other dentists instead of at patients. A quick look will be sufficient to confirm that much of the advertising is cosponsored by industry or by institutes, academies, and others advancing a particular flavor of dentistry. These advertisements can be seen as arguments for the credibility of certain kinds of practice, usually ones that involves financial investment in equipment or specialized procedures. Such ads place value on high-margin

billable procedures instead of patient needs for long-term care. Much of dental advertising can be seen as lobbying the profession for legitimacy of procedure-based practice.

### Skill REPERTOIRE

It is admirable that Dr. Kingsmiller is a technical wiz, but his patients are probably unfazed by the fact that he can cut a crown prep ten minutes faster than his colleagues or cure a composite ten seconds faster. The essence of practice is having a larger and more appropriate repertoire of skills to draw on as needed rather than being good and fast at a small range of procedures. Standardizing on procedures rather than on patient outcomes is what makes mass-produced assembly line productivity in off-shore countries so wonderful. By contrast, practice raises diagnosis to a higher level than procedures, and the mark of a better practitioner is one who can diagnose more problems and has the range of repertoire to solve them.

Dentists deal with ambiguity, instability, and divergent aspirations—not the “unambiguous, precise, and lawful” patterns Dr. Kingsmiller seems to find at work. Patients bring this sort of thing to the office every day; so do the staff. The last truly ideal preparation done under absolutely standardized circumstances most dentists have seen was in the preclinical restorative dentistry lab in dental school. Now they see malposed teeth, compromising adjacent teeth, polypharmacy, reluctant or confused patients, a schedule that has not yet seated the 11:00 a.m. patient by 11:45 a.m., and a staff member who has unwittingly encouraged the patient's unrealistic expectations. Dentists long for and strive for control and predictability. But this is not because that is the ultimate nature of practice; it is a sign that unconscious progress is being made in addressing the customized diversity inherent in practice. In the same way,

feeling hungry is a good sign when one is on a weight-loss program.

There are two ways in which practitioners might function to help people with intrinsically complex problems. One is to grow the range of diagnostic and technical repertoire appropriate to the challenges that arise in practice; the other is to limit the practice to a comfortable range of services. The debate between these approaches has become central to the identity of the dental profession today.

The very much increased complexity of dentistry today is a function of tremendous advances in product engineering, increased consumerism, and the intrusion of multiple decision makers (payers). (When the biological revolution hits offices the way the engineering revolution of the past half century has, a whole new level of complexity will emerge.) There simply are more choices now than there were in the dental office of 50 years ago. Some of the responses the profession has made are encouraging. Continuing education is up, group practices and referrals are increasing, and dental education has responded with a heavier emphasis on diagnosis and clinical problem solving. There are, however, responses that are more questionable. Some consulting gurus have advocated that dentists cherry-pick high-end procedures and high-income patients. The reason access has become an issue may be as a consequence of successful market segmentation in the profession. When a fixed supply of service is increasingly concentrated on one portion of the patient pool, the other segments will suffer.

At the level of the individual practice, it matters how comprehensive the practitioner chooses to be. Dr. Kingsmiller's

policy of getting better and better at fewer and fewer procedures is an understandable response to the growing diversity of oral healthcare needs and potential responses to them. It would certainly be irresponsible for an individual dentist or the profession as a whole to place its reputation on the line through dabbling in unproven procedures or ones the dentist has not mastered. And dentists, generally, have responded by extensively and continuously retraining themselves. The question is, can dentistry continue as a practice or is it in danger of fragmentation along technique lines?

Consistency of outcomes (despite diversity of circumstances) is a good criterion for expertise. Speed is not. Some years ago, a colleague and I videotaped individuals performing a Class II preparation on Ivorine teeth in a mannequin. Some of the operators were students at the end of their preclinical training, some were students just approaching graduation, and some were faculty members. Students performed a three-step procedure: outline form, parallel walls and flat cavosurface, and then refinement. Practitioners (faculty members) performed a two-step procedure to accomplish the same end: cut and refine. My wife reviewed the tapes and almost perfectly identified each of the operators by their skill level, despite the fact that she could not even see which tooth was being prepared. Patients are pretty good at this sort of thing.

Now for the surprises. By stopwatch, there was almost no difference among the three groups of operators in the amount of time the bur was on the tooth. Novices took much longer overall, but only in general management of the case and not in the performance of the procedure. Practitioners get more efficient but not faster. Then, unbeknownst to me, my colleague collected and coded the teeth and had the staff in the

preclinical restorative dentistry course at the school grade them. All preparations were clinically acceptable and there were no differences in quality across the three groups.

One of the faculty members who participated in this study is my personal dentist. I do not go to him because he cuts crowns faster or better than another of the many other fine dentists in San Francisco. I go to him because he understands everything going on in my mouth, takes the long view regarding my oral health, and comes up with multiple approaches for the 65-year history of strange things that have happened to me, and he talks with me about them. Size matters: and I will always go with the practitioner who has the biggest skill repertoire over the one with a small repertoire who is looking for patients to fit it.

#### CONVERSATIONS WITH THE IDEAL

There are two interpretations of "the ideal," and that can cause confusion. In Olympic diving, circumstances are standardized and judges only need to determine which diver best performs the routine. In soccer, circumstances such as the opposing team's personnel and strategy or even the weather vary considerably—but within a predictable range. Excellence is determined by correctly identifying the relevant factors and choosing and executing from among one's repertoire of procedures those that are most appropriate, including making adjustments as one goes. Dental students are taught procedures that are ideal in school; practitioners learn patient care that is ideal in practice.

Consider Francis—the gem of an office manager. Dr. Kingsmiller is probably justified in his praise of her, and in a curious way, she may make it easier for other members of the office (especially the dentist) to practice; but she is not a good example of a practitioner herself. She is a rule-monger. Her goal in professional life is to drive all variability and judgment out of dentistry. If a situation arises that is not covered in the office manual, she will invent a new rule. That shows that she is not in charge: she is reacting in hopes of getting control and becoming in charge. We can guess that her trump rule, “Ask Doctor,” is seldom invoked, unless she has a codependent boss.

If you have ever played basketball, you know that a shooter never looks at the ball: he or she looks directly at the basket and is simultaneously aware of anything unusual on the court generally. It matters what one pays attention to.

Practitioners engage in a conversation with reality, including recognizing both the particular and the general, both the given and the ideal. Patients do not like to be treated as examples of rules. No one ever built loyalty to the practice by saying, “Because it’s policy.” Of course, it would be chaos if everything was considered without precedent and as totally unique (as might have been the case when Dr. Kingsmiller first hired Francis). But the distinction to be drawn is between pushing individual cases into rule boxes or pulling them toward ideal types. Francis might consider informed consent to be a matter of getting signatures on the right forms; a practitioner

would be concerned with making sure that patients make knowledgeable decisions they will not regret in the future. (This is actually the dentist’s responsibility.) Francis probably gets a sense of satisfaction out of a short and businesslike phone conversation with new patients, where she checks off her list of vital facts. By contrast, a practitioner would try to discover whether there is anything special about each patient.

There is also something troubling in Dr. Kingsmiller’s boast that he does not use study models and has chopped out intermediate steps in some procedures. We can take him at his word without being impressed. This probably means that as a dentist he has constricted the range of procedures offered to a small number of routine and standardized cases. If he knows exactly how things will turn out before beginning a piece of work, he is only doing simple cases and has cut himself off from learning. Practitioners use a rich collection of professional vocabulary (that pictures various steps and outcomes), models, chart notes, and other aids as both images of the ideal and aids to check and guide intermediate progress. Practitioners adapt.

Practitioners are also open to some give and take with reality. They tend to value effectiveness over efficiency. On pressure days and when fatigued, they may be willing to accept their first, best effort and then argue about poor outcomes later. But at the top of their games, practitioners engage in back-and-forth approximations to the ideal. Crowns need try-ins, treatment plans include alternatives, resistant Perio pockets are exposed to several treatments. And Francis would probably be well-served to offer patients several choices for the next appointment rather than a single date and time.

Practitioners are also skilled at verifying the outcomes of their efforts

and responsive to needed adjustments. They approach the ideal outcome rather than take their best shot at what might work generally. Recall the experiment with students and faculty members preparing Class II preps mentioned above. Another difference between the beginners and the experts concerned the role of evaluation. Experienced practitioners spend a larger proportion of their time evaluating their work—they began evaluating earlier, and they smoothly incorporated evaluation with cutting.

#### FUNCTIONAL ARTISTRY

Who is the artist and who is the manufacturer: Anne or Pamela? It is not quite accurate to say that artists are folks who come up with things no one could have imagined before. Artists create within norms. Even more, they draw out the potential in their media rather than randomly generating novelty. They can see the ideal in the actual, and they work back and forth to get as close to the idea as possible.

I have a feeling that we would get different answers from Anne and Pamela if we asked them to describe the same patients. Pamela’s descriptions would tend to be brief and uniform, with some variation related to the difficulty certain patients presented for getting the procedure accomplished—“lots of calculus” or “tends to come late.” By contrast, Anne’s descriptions would likely be fuller and more customized—“really concerned about anterior aesthetics,” “never pays attention to anything I say,” or “she is the sweetest lady.” As a practitioner, Anne will also more likely see the potential in each of her patients. She will set different goals for each and take different approaches. She is capable of seeing the potential in the actual, and resolving each discrepancy

is what will drive her work. She need not start from scratch with each patient, and she will use her experience as a practitioner to group patients into typical groups. She will also attempt to engage her patients in visualizing potential ideal outcomes.

#### LEARNING by DOING

The ADA is putting dues money to work on evidence-based dentistry; so is the insurance industry. Critical thinking courses are the new PBL in dental education. Industry is disguising its ads to look like journal articles. Dr. Kingsmiller is proud of his efforts to place scientific foundations under his practice. All of this is to the good, but it is not part of practice.

I personally know the scientific literature of dentistry pretty well and I have taught critical thinking for a decade: but that does not make me a very good dentist. The leading researcher on professional learning, Donald Schön, puts it this way: “Universities have assumed that academic research yields useful professional knowledge and that the professional knowledge taught in the schools prepares students for the demands of real-world practice. Both assumptions are coming increasingly into question.” The problem is that a technical-rational approach to dentistry is about the theory of dentistry and not about its practice.

The best practitioners know the scientific generalizations (averages under controlled conditions) and principles (general properties of materials, tissue response, and economics), but they also make careful judgments as to which

rules apply in particular cases and how these must be modified to best match unique patient needs. They practice by being consistent with the rules of science but not by the rules of science. Practitioners read more patients than journal articles. Often their recourse to the literature is motivated by a curiosity about whether the procedures or materials are acceptable when they have already been chosen because of convenience, cost, patient characteristics, or other reasons.

Dentists learn by doing. This applies two ways. First, dentists learn from experiences what they should add to the repertoires of skills and where these are effective. They come to understand which patterns of practice match the cases they confront. Second, learning by doing describes the way practitioners execute procedures. It also applies to the execution of procedures in process. Dentists monitor their performance and modify work-in-progress to best approximate the ideal. They reflect both *on* practice and *in* practice, and to the extent that they are true practitioners, they make adjustments to approach the ideal rather than persist with approaches others say might work.

Donald Schön defines learning in practice, as distinct from learning in research, in these terms: “It is this ensemble of problem framing, on-the-spot experimentation, detection of consequences and implications, ‘back talk’ [feedback] and response to back talk, that constitutes a reflective conversation with the materials of a situation—the design-like artistry of professional practice.”

Four times in the past 25 years, the University of the Pacific has surveyed its recent graduates, those who are becoming practitioners. Over 150 dental procedures and professional activities

Practitioners read more patients than journal articles.

such as engagement in organized dentistry and volunteer service have been rated for how often they are performed and where the skills were learned (as well as why some are avoided and delegated). Especially for fundamental procedures such as root canal therapy and radiographic diagnosis, the number one source of learning is dental school. Tied for last place are expert sources such as consultants, former faculty members, and the ADA. These sources of learning are just a bit less popular than are the literature and CE programs. The second-leading source of changing practice patterns, especially for newly emerging skills, is trial-and-error. This learning by doing is involved in some way in choosing and improving performance in over half of the activities dentists use.

Understanding through performance incorporates a blended set of skills that are normally separated for scientific study. The practitioner combines diagnosis (including collateral factors), the materials and moves of the procedure, and the fine-tuning of these in a smooth and often nearly unique whole. The trick is that virtuoso practitioners have a rich repertoire of approaches, the ability to see the ideal in the present reality, and professional standards used to judge which outcomes are most desirable. All of this is under the control of monitored outcomes rather than general evidence. Dentists understand good dentistry by producing it.

If you ask a dentist what caused the patient's gingiva to heal or a veneer to match so perfectly, their response may very well be "I did it." It would be more surprising for them to say the curette did

it or such-and-such scientific principle was responsible. When practitioners evaluate their work, at intermediate steps or overall, they are checking to determine the validity of the moves they have made, not the validity of the underlying science.

### **PRACTICE AS PROFESSIONAL IDENTITY**

Practice is more than what one does; it is also bound up with who one is. Insurance consultants, dental educators, association executives, and others who never don gloves can still call themselves dentists and usually do so. A great incentive for successful recovery from substance abuse is the fear of losing one's license. Identity matters to practitioners.

Part of that identity comes from the act of practice itself, and this has been explored in the preceding pages. Part of it comes from belonging to a community of practice: a small group that regularly works in interlocking patterns, such as dental offices. Practice communities provide the work environments that allow for specialized practice, emotional and professional recognition and support, and a sense of meaning that surrounds the work. Many dentists have experienced the difference it makes in their own practice satisfaction when improvements are made in other parts of the office.

Practitioners learn and grow: so do communities of practice. Reflect for a moment on your practice now compared to ten years ago. Very likely you will be able to identify a handful of high-impact experiences that constitute a shared history that give meaning to your community of practice. One would hope there has also been a growth in the capacity of the whole office to manage new and challenging situations. The office learns by doing just as the individual practitioner does. Healthy offices develop deeper bonds of community as new members are recognized as

belonging. Finally, communities of practice establish unique identities by practicing together. Even without the T-shirts and the talk about "our team," a solid office can be recognized by patients and even by alert individuals outside the dental office.

Etienne Wenger's book in the Recommended Readings list should be of particular interest to dentists. He presents a 40-page account of an insurance claims operation as a case study in a community of practice. What may come as a surprise is the extent to which claims processors use judgment and negotiation between policy writers and service providers. An especially interesting part of the case involves the collective efforts of the processors to bring consistency to their practice where policies are ambiguous.

Sometimes we learn to appreciate strong communities of practice by comparing them with groups that are poor examples of practice. I have been on several committees and more than one project team that I would not be proud to mention. Their dysfunctional nature existed despite most of the members being likeable and talented people. We simply never had the opportunity to blend our individual strengths and experience the collective success needed to become a community. On many occasions, we spent too much time on the task and not enough on understanding what it meant.

Practitioners become who they are because of what they do. Specifically, they learn by doing, continually expand their repertoires of skills as functional artists in conversations with the ideal, while embracing standards shared with their colleagues. ■



## RECOMMENDED READING



*Summaries are available for the three recommended readings with asterisks. Each is about ten pages long and conveys both the tone and content of the original source through extensive quotations. These summaries are designed for busy readers who want the essence of these references in 20 minutes rather than five hours. Summaries are available from the ACD Executive Offices in Gaithersburg. A donation to the ACD Foundation of \$15 is suggested for the set of summaries on practice; a donation of \$50 will bring you summaries for all the 2008 leadership topics.*

Chambers, D. W. (2001).  
***Outcomes-Based Practice.***  
*Dental Economics.*

A series of 12 short articles, one each month for the year, explaining simple techniques practitioners can use in their offices to focus on quality outcomes and thus guide learning by doing. These are techniques practitioners can use to verify that their practices work, whether developed through trial-and-error or borrowed from the literature.

Chambers, D. W., & Geissberger, M. (1997).  
***Toward a competency analysis of operative dentistry technique skills.***  
*Journal of Dental Education, 61,*  
795-803.

This is a detailed study of differences in performance between beginning and competent students and faculty-member experts in performing a Class II cavity preparation. Experienced practitioners were more efficient (but not faster), performed several steps simultaneously, and evaluated their work earlier and more continuously than did beginners. There were, however, no differences in the amount of time the bur was in contact with the tooth or in the quality of the preparations across the experience level of the operators.

Schön, Donald A. (1987).  
***Educating the reflective practitioner: Toward a new design for teaching and learning in the professions.\****

San Francisco, CA: Jossey-Bass.  
ISBN 1-55542-220-9; 355 pages;  
cost unknown.

The reflective practitioner, one who combines knowledge and art in practice, must be taught in ways beyond traditional, didactic, or rational theory and facts separated from context. The alternative proposed is the practicum, a learning by doing in a controlled environment under the care of a coach. The need for this approach, what learners get from it, and the dynamics of the coaching relationship are presented. There are several examples—architecture, music, psychology, consulting—worked out in great detail, with original case material.

Schön, Donald A. (1983).  
***The reflective practitioner: How professionals think in action.\****  
New York, NY: Basic Books.  
ISBN 0-465-06878-2; 375 pages;  
cost unknown.

Practice is defined as “the artful inquiry by which [professionals] sometimes deal with situations of uncertainty, instability, and uniqueness. This is the pattern of reflection-in-action, which is called ‘reflective conversation with the situation.’” “I have become convinced that universities are not devoted to the production and distribution of fundamental knowledge in general. They are institutions committed, for the most part, to a particular epistemology, a view of knowledge that fosters selective inattention to practical competence and professional artistry.” “When people use terms such as ‘art’ and ‘intuition,’ they usually intend to terminate discussion rather than to open up inquiry.” “We are in need of inquiry into the epistemology of practice.”

Wenger, Etienne (1998).  
***Communities of practice: Learning, meaning, and identity.\****  
Cambridge, UK: Cambridge University Press. ISBN 9-780521-663632;  
318 pages; about \$20.

Social practice is the fundamental process by which we learn who we are and the primary unit of analysis is neither the individual nor the institution. Communities of practice are small groups that participate in mutual engagement using shared repertoires to accomplish a joint enterprise. They share common identity negotiated through learning and meaning.

## 2008 MANUSCRIPT REVIEW PROCESS

---

Four unsolicited manuscripts were received for possible publication in the *Journal of the American College of Dentistry* during 2008. Two were transferred for separate review in the Issues in Dental Ethics Section of the publication following peer review of the other two; one manuscript was not accepted; and the other was accepted contingent upon substantial revisions. Nine reviews were received for these manuscripts, yielding an average rating of 4.5 per manuscript. Consistency of reviews was determined using Cramer's V statistic, a measure of association between review recommendations and the ultimate publication decision. The Cramer value was .863, where 0.00 represents chance agreement and 1.00 represents perfect agreement. The College feels that authors are entitled to know the consistency of the review process. The Editor also follows the practice of sharing all reviews among the reviewers as a means of improving calibration.

The Editor is aware of two requests to reprint articles appearing in the journal and three requests to copy articles for educational use received and granted during the year. There were two requests for summaries of recommended reading associated with Leadership Essays.

In collaboration with the American Association of Dental Editors, the College sponsors a prize for a publication in any

format presented in an AADE journal that promotes excellence, ethics, professionalism, and leadership in dentistry. Thirteen manuscripts were nominated for consideration. The winner was a discussion of academic integrity in dental schools and the profession, "Preserving the privilege," written by Dr. Fred Bremner and appearing in the August 2007 issue of *Membership Matters*, the publication of the Oregon Dental Association. Fifteen judges participated in the review process. Their names are listed among the *Journal* reviewers below. The Cronbach alpha for consistency among the judges was .943.

The College thanks the following professionals for their contributions, sometimes multiple efforts, to the dental literature as reviewers for the *Journal of the American College of Dentists* during 2008.

Chris Anderson, DDS, FACD  
*Lubbock, TX*

Anika Ball, RDH, MA  
*Loma Linda, CA*

Norman Becker, DMD  
*Shirley, MA*

Fred Bremner, DMD  
*Milwaukie, OR*

D. Gregory Chadwick, DDS, FACD  
*Charlotte, NC*

Steven A. Gold, DDS  
*Santa Monica, CA*

Theresa S. Gonzales, DMD, MS, MSS, FACD  
*Fort Hood, TX*

Bruce Graham, DDS, FACD  
*Chicago, IL*

Donna B. Hurowitz, DDS, FACD  
*San Francisco, CA*

Paul M. Johnson, MBA, DDS, FACD  
*Newport Beach, CA*

Michael Maihofer, DDS  
*Roseville, MI*

Max M. Martin, Jr, DDS, FACD  
*Lincoln, NE*

Frank J. Miranda, DDS, MEd, MBA  
*Oklahoma City, OK*

Detlef B. Moore  
*Milwaukee, WI*

Michael Meru, BS  
*Los Angeles, CA*

Nader Nadershahi, DDS, EdM, MBA, FACD  
*San Francisco, CA*

Laura Neumann, DDS  
*Chicago, IL*

John O. Keefe, DDS, FACD  
*Ottawa, ON*

Don Patthoff, DDS  
*Martinsburg, WV*

Bruce Peltier, PhD  
*San Francisco, CA*

Steve Ralls, DDS, FACD  
*Gaithersburg, MD*

Patty Reyes, BA  
*Sacramento, CA*

Cherilyn Sheets, DDS, FACD  
*Newport Beach, CA*

## 2008 ARTICLE INDEX

### JOURNAL of THE AMERICAN COLLEGE of DENTISTS, 2008, VOLUME 75

#### EDITORIALS

- Ethics as Permissible Behavior.....Number 3, page 2  
*David W. Chambers*
- Loose Talk.....Number 4, page 2  
*David W. Chambers*
- Positive Ethics.....Number 2, page 2  
*David W. Chambers*
- Thin Soup.....Number 1, page 2  
*David W. Chambers*

#### LETTERS TO THE EDITOR

- Luther L. Paine.....Number 3, page 4

#### COLLEGE MATTERS

- An Ethics War [President-elect's address].....Number 4, page 4  
*Max M. Martin, Jr.*
- Responding to a Culture-Based Health Need [Convocation address].....Number 4, page 8  
*Francisco G. Cigarroa*
- 2008 ACD Awards.....Number 4, page 11
- 2008 Fellowship Class.....Number 4, page 15
- 2008 Manuscript Review Process.....Number 4, page 64

#### THEME PAPERS

- Balancing Act: The Salvation Army in the United States.....Number 1, page 12  
*Melissa Temme*
- California Pipeline Program: Phase II.....Number 4, page 29  
*Paul Glassman*

- Canadian Red Cross .....Number 1, page 8  
*Colleen Lavender*
- Dental Pipeline Program: A National Program Linking Dental Schools with the Access to Care Issue .....Number 4, page 24  
*Allan J. Formicola*
- Dental Schools and Access Disparities: What Roles Can Schools Play? .....Number 4, page 20  
*Howard Bailit*
- Dental Students Persuade the Michigan Dental Association to Strengthen Its Codes of Ethics.....Number 2, page 22  
*Marilyn S. Lantz*
- Dr. Ben Pavone: Getting the Fit Right.....Number 3, page 14  
*David W. Chambers*
- Dr. Daniel Laskin: Calling Attention to What Matters in the Profession .....Number 3, page 9  
*David W. Chambers*
- Dr. Howard I. Mark on What It Means to Be a Professional.....Number 3, page 19  
*David W. Chambers*
- Dr. William E. Brown: A 50-Year ACD Member .....Number 3, page 17  
*Krista M. Jones*
- East Carolina University School of Dentistry: Impact on Access Disparities.....Number 4, page 35  
*D. Gregory Chadwick and James R. Hupp*
- Ethics in a Postgraduate Program .....Number 2, page 14  
*Hans S. Malmstrom*
- Fifty Years of Change in Dentistry with Dr. Gordon Rovelstad .....Number 3, page 5  
*Gordon H. Rovelstad and Stephen A. Ralls*
- The Honor Society of Phi Kappa Phi.....Number 1, page 4  
*Perry A. Snyder*
- Hugo A. Owens: Dentist, Civil Rights Leader, Politician .....Number 2, page 6  
*James T. Rule and Muriel J Bebeau*
- Pointing the Profession in the Right Direction.....Number 2, page 18  
*Brooke Loftis*
- Positive Ethics and Dental Students .....Number 2, page 27  
*Sigmund H. Abelson*
- The Role of Dental Schools in the Issues of Access to Care.....Number 4, page 42  
*Caswell A. Evans*

Rotary International .....	Number 1, page 17
<i>Janis Young</i>	
A Student-Initiated Movement toward a More Positive Ethics .....	Number 2, page 11
<i>Alvin Rosenblum</i>	
These Are Wonderful People.....	Number 2, page 4
<i>Phyllis Beemsterboer</i>	
Transforming an Icon: Girl Scouts of America .....	Number 1, page 21
<i>Michelle Tompkins and Victor Inzunza</i>	
Walter C. Sandusky, Jr. ....	Number 3, page 12
<i>Carl L. Sebelius, Jr.</i>	

## MANUSCRIPTS

Blurring the Lines Between General Dentistry and Dental Specialties [ACD/AADE Prize].....	Number 3, page 28
<i>Eric K. Curtis</i>	

## ISSUES IN DENTAL ETHICS

The Intersection of Dental Ethics and Law .....	Number 4, page 47
<i>David J. Owsiany</i>	
The Future of Dental Ethics: Promises Needed .....	Number 3, page 21
<i>Donald E. Patthoff</i>	
Ethical and Legal Considerations in a Case of Research Fraud Practical and Ethical Challenges .....	Number 2, page 29
<i>Sigrid I. Kvaal</i>	
What to Hope for and the Challenge of Getting There .....	Number 1, page 25
<i>David T. Ozar</i>	

## LEADERSHIP ESSAY

Practice.....	Number 4, page 55
<i>David W. Chambers</i>	
Gentlemen.....	Number 1, page 30
<i>David W. Chambers</i>	
Large Ethics .....	Number 2, page 36
<i>David W. Chambers</i>	
Stress .....	Number 3, page 33
<i>David W. Chambers</i>	



# Journal *of the* American College *of* Dentists

## 2008 STATEMENT OF OWNERSHIP AND CIRCULATION

*The Journal of the American College of Dentists* is published quarterly by the American College of Dentists, 839J Quince Orchard Boulevard, Gaithersburg, Maryland 20878-1614. Editor: David W. Chambers, EdM, MBA, PhD.

The American College of Dentists is a nonprofit organization with no capital stock and no known bondholders, mortgages, or other security holders. The average number of readers of each issue produced during the past twelve months was 5,363, none sold through dealers or carriers, street venders, or counter sales; 5,514 copies distributed through mail subscriptions; 5,352 total paid circulation; 162 distributed as complimentary copies. Statements filed with the U.S. Postal Service, September 25, 2008.





American College of Dentists  
839J Quince Orchard Boulevard  
Gaithersburg, MD 20878-1614

Periodicals Postage  
**PAID**  
at Gaithersburg, MD