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Component Dental Societies

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Mission

he *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.

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HE 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.

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Cover photograph: Explore the branching tripartite nature of dentistry. © 2011 Dan Leap, istockphoto.com. All rights reserved.

From the Editor

The Need for Bigger Bowls

here are many forms of yoga. Yin yoga is the Foster Farms version of the discipline. The goal is to stretch the fascia (that translucent tissue that keeps muscles and organs sorted) rather than strengthening muscles. In classical Chinese thought, "yin" is the quiet, passive, relaxed force that complements the hot, active, strong force called "yang." Balance and completeness come from bringing these forces into harmony. American culture and contemporary dentistry are obsessed with active change. Ours is the "just do it" culture; our wired world is all about yang. We tend to admire the form over the function.

I have told this story before, but it is wonderful. A wealthy American businessman was impressed by Eastern philosophy and spent large sums of money buying access to a Buddhist master. All he asked for was one lesson on becoming successful in life. The meeting was granted and took place as a tea ceremony. The Buddhist and the businessman knelt facing each other, a tea bowl between the knees of the businessman. Following some general preliminaries but no

explanation of what was to happen, the master very slowly began pouring tea in the bowl. The businessman watched as the bowl filled, then some tea was spilled, and soon a large puddle had formed. When the businessman's trousers were wet, he jumped to his feet in indignation and yelled: "Outrageous! There is no way I can get any value out of all that stuff you are pouring out." The master responded: "You have achieved the first level of enlightenment."

So often we seek answers to questions we do not understand or tools and powers we cannot control. By contrast, expanding our understanding of the problem often leads to finding the way forward. Some examples might include patient acceptance of better treatment plans, enthusiastic team morale, avoiding the increasing commercialism of the profession, and solving access issues. Beware the first person to show up with the perfect solution. Be doubly wary if that person is yourself.

One of the things we might consider doing is getting a larger tea bowl. It is about building capacity. A dentist who does not understand and honor the limits of his or her ability is the most dangerous of practitioners. One who does not continuously work to expand them is disappointing.

In the practice of yoga, this is known as working the edge. Each pose is defined

by placing the body in a position that brings one up against personal limits. And then we hold the edge. Through attentive practice we understand our limits and gradually expand them. Notice that the perfect pose in yoga cannot be defined objectively by looking at photographs of external posture. The practice management gurus have it all wrong. Best practices are about the individual requirements of one's situation.

If we stay with our personal edge, we will enlarge our capacity. Getting better is not about getting rid of limits; it is about replacing one configuration of limits with a more suitable one. The famous psychologist of motivation, Abraham Maslow, offered the advice that higher levels of performance are not goals to be worked toward; they are capacities one is released into when the more basic challenges have been met. "Stretch goals" really are just that: softening the constraints that limit our current level of performance. Over months and years of working a pose, progress can be noted by paying attention to where the new limiting factors are. We move the edge.

All of this may sound fine but a bit indirect or "soft." What has increasing capacity to do with the real world of dentistry? Isn't it all, in the end, about making things happen for the better? Not entirely; part of the issue is making good outcomes predictable and reducing the chances of bad things happening. CE presenters should be required to show a random selection of their cases, not just the best ones.

Engineering, one of the exquisitely practical disciplines, is mostly about capacity. This is expressed in a series of simple formulas for system capability, abbreviated C_{pk} , used to rate building materials, air handling, microwave transmissions, and complex systems such as computer circuits. Engineering is all about matching capacity to requirements. So is dentistry. What is the expected life of a posterior composite? What is the curing depth of a LED light? What patient load can our emergency delivery systems and our safety net systems handle?

Often, what throws us off is the questionable practice of expressing quality in terms of averages rather than risk. As the French say, a man could drown trying to wade across a stream that is only three feet deep on average. What practitioners want to know is how likely is this procedure or that product to fail. (Patients have an even deeper interest in such questions.) Three systems with the same average outcome may have widely different chances of failing. It depends on the system capability. The critical factors are system variability and where the edge is—that point where it will no longer work and where something else needs to be done instead. Normally we measure capacity in terms

of risk rather than averages. It is an intuitive ethic in all professions to reduce risk to acceptable levels. This is accomplished by managing the capacity of dentistry to address the needs of those seeking care.

I am sticking with my New Year's resolution of weekly yin yoga sessions. My goal is not to try out for the Cirque du Soleil farm team in Northern California. My more modest but infinitely more practical intention is to reduce the limitations of shoulder tension and to minimize my risk of falls.

The *39*th poem of the 2,500-year-old *Tao Te Ching* contains these words: "The virtue of a bowl is not in its sides but in the space these create." Let's move the edges; let's make bigger bowls.

Getting better is not about getting rid of limits; it is about replacing one configuration of limits with a more suitable one.

The Warner

Letters to the Editor

I recently read the winter 2010 issue of the Journal of the ACD. I would like to offer a few observations. I am a longtime advocate of evidence-based practice (EB) who has chaired the ADA's Council on Scientific Affairs for several years, chaired the ADA's expert panel that wrote clinical recommendations for oral cancer screening (published in JADA in May 2010), and now chairs the ongoing ADA review of non-fluoride anti-caries interventions and co-chairs the ADA-American Association of Orthopedic Surgeons expert panel now evaluating the evidence relevant to the possible need to prescribe antibiotic prophylaxes for dental patients with orthopedic implants.

- 1. There is no surfeit of quality evidence available to address most clinical questions. Indeed, for most questions there is a lot less good science than anyone who believes in science would like.
- 2. Results of systematic reviews are seldom, if ever, reported in the context of carefully structured cost versus benefit analyses. Nevertheless, users need to remember what should be obvious, namely that when the costs (includes risk, pain, delays of more definitive therapy, etc.) of an intervention are low and the poten-



- tial benefits are high, the evidence need not be as strong to support it as when the benefits are low and the costs are high.
- 3. Systematic reviews are based on studies that are replete with assumptions, some of which may or may not be relevant to individual patients at a particular time. For example: If a clinical question raises theoretical or known problems associated with comparing average outcomes, such problems are not mitigated by the use of meta-analysis. All of us know that no patient, no circumstance, no specific time is average—yet average responses (that assume normal distribution curves) are the most commonly compared scientific results. Clinicians need to remember that variations from average are normal-and sometimes such variations, no matter how rare, may be either highly beneficial or horrifying. The common use of surrogate outcome variables, such as probing depths or attachment levels in periodontal studies further complicates understanding when it comes to what matters to patients.
- 4. Numerous published systematic reviews are seriously flawed. The ADA's Evidence-based Center is actively engaged in assessing all systematic reviews in dentistry. So

far, about a hundred reports have been published either in *JADA*, *JADA* online, or on the ADA Web site. This ever-growing collection is worth perusal at www.ebd.ada.org.

- 5. The classic evidence pyramid, with "expert opinion" at its base and controlled trials (or in some cases, systematic reviews) at its peak, may also be flawed. This is because the pyramid fails to reflect that until experts interpret the results of a systematic review, good or bad or middling, the results have little or no utility for most clinicians. Therefore, at what I'll call the pyramid's tip, resides a group of experts who attempt to explain the results of randomized controlled trials or systematic reviews in the context of costs versus benefits (even if these latter are opinion-based).
- 6. Systematic reviews can go out of date quickly.
- 7. In circumstances in which the costs of being wrong are thought to be low, clinicians may want to consider trying novel therapeutic regimes (often relying on devices that are FDA-cleared by the 510[k] as substantially equivalent to another device already on the market). However, once a therapeutic approach has been in use for a time and no high-quality evidence appears, it's

probably time to step back and reconsider. In other words, case studies and thought-leader endorsements are nice but remain far from being high-quality evidence.

Despite their shortcomings, evidence-based reviews are an improvement compared with what was done in the past when clinical decision-making was mostly based on the advice of opinion leaders, consensus conferences, or on non-systematic literature reviews usually written by individual or groups of experts. This is because experts who endure the processes of systematic reviews become better experts. And yes, I know that I don't have high-quality evidence to support this observation!

Michael P. Rethman, DDS, MS, FACD Kaneohe, Hawaii rethman@hotmail.com Indeed, for most questions there is a lot less good science than anyone who believes in science would like.

The Pierre Fauchard Academy Celebrates Seventy-Five Years of Service to Dentistry

Terry Brewick, DDS, FACD

Abstract

In 2011 the Pierre Fauchard Academy celebrates 75 years since its founding with the objectives of elevating the dental profession through the literature, awards, personal contacts, education, patient health, and professional responsibility. With membership roughly equally divided between the United States and other countries, PFA publishes *Dental World*, supports a Hall of Fame, and conducts an active mentorship program.

he Pierre Fauchard Academy is celebrating its 75th anniversary this year. The academy is a nonprofit corporation that is named after the "Father of Modern Dentistry," Pierre Fauchard of France (1678-1761), who is credited with raising dentistry to a profession. He wrote a book named *le Chirurgien Dentiste ou Traite des Dents*, which was the first true textbook of dentistry.

Early History of the Academy

The Pierre Fauchard Academy is an honorary dental service organization that was organized in 1936. Its founder is Dr. Elmer S. Best, a Minnesota dentist. Troubled by the proprietary nature of many dental publications, he wanted to help the profession gain control of its own literature and assure its independence from commercial interests. His passionate concern for the search for knowledge and the raising of professional standards guided the beginnings of the academy, attracted outstanding dental researchers and teachers to its ranks, and led to a continuing role in fostering dental science.

CURRENT STRUCTURE

The Pierre Fauchard Academy comprises of 119 sections, 55 in the United States and another 64 in many parts of the world, including South America, Europe, Asia, and Australia. Worldwide, the membership is about 8,000, with 4,000

in the United States of America. The academy is administered by a Board of Trustees consisting of four officers and ten trustees from around the world. Section organization includes a chairperson and such other officers or committee members as the section may elect. The administrative office of the academy is located in Mesquite, Nevada. For more information, see www.fauchard. org and www.foundationpfa.org.

Fellowship

Candidates for active fellowship shall be ethical dentists and shall have made outstanding contributions to the art and science of dentistry or to society. Candidates in the United States or its territories shall be members in good standing of the American Dental Association. Those in other countries shall be members in good standing in the equivalent association of the country in which the candidate is associated with dentistry. Fellowship is by invitation only and candidates must have graduated from accredited schools at least five years prior to nomination.

Objectives

The objectives of the Pierre Fauchard Academy are to:



Dr. Brewick is the Colorado Section chair of the Pierre Fauchard Academy; tbrewick@govparkdental.com

- Elevate the character, education, and professional ability of dentists by making available to them dental literature representing developments and opinions in dentistry
- Encourage practitioners to contribute to the professional literature and otherwise share their knowledge with fellow practitioners
- Encourage, through annual awards, outstanding contributions to the art and science of dentistry and service to the profession
- Encourage personal contacts between leaders in the profession and those who seek advice on scientific, technical, or economic subjects
- Encourage dental students and foster advancement of their professional and scientific standards and encourage continuing education for all members of the dental profession
- Encourage improvement of the oral health of the public through prevention, therapy, and restoration
- Encourage fellowship among the membership and emphasize understanding of our professional responsibility to the public

The academy fulfills its objectives through meetings of international sections, an Annual Awards Luncheon, presentations of the Fauchard Gold Medal and the Elmer S. Best Memorial Awards, the Dental Trade and Industry Award of Recognition, its student Awards of Merit, and its publication of *Dental Abstracts* and *Dental World*.

Official Publications: Dental World and Dental Abstracts

Dental World is the successor to the Journal of the Pierre Fauchard Academy which was published during World War II, primarily for PFA members in the Armed Forces of the United States. In 1978 and 1979 Dental World was published under the title of PFA Newsletter. In 1980 the title of *Dental World* was readopted and it is the official publication of the Pierre Fauchard Academy. Published quarterly since 2010, it includes news of the academy, its foundation, and its regions and sections in the United States and abroad, news of individual members throughout the world, announcements of meetings, abstracts of selected articles from the world of dentistry with comments, reviews of books by PFA members, and occasional editorials. Dental World appears with the pages of the *Dental* Abstracts, which is distributed bimonthly as part of the membership benefits to fellows of the academy.

Dental Abstracts presents information around the globe in a bimonthly publication featuring approximately 50 abstracts from key articles in dentistry. Dental Abstracts keeps dentists informed of developments and advances in general dentistry and its specialties in an easy-to-read, abstract format. Graphs, tables, and figures that have appeared in original articles are also included.



Mentorship Program

Mentorship is one of the core values of the Pierre Fauchard Academy. Through a grant from the Foundation of the Pierre Fauchard Academy, the Mississippi Section developed resource disks on mentoring to assist sections in the mentoring process. The goals of the mentorship program are:

- To form relationships between students and members of the practicing dental profession
- To provide avenues for students when they are seeking additional information
- To provide students a relationship with an experienced professional outside of the dental school environment to "bounce" ideas off of or to go get an additional opinion
- To enable dental students to obtain guidance from an experienced professional concerning issues related to providing oral health care

Candidates for active fellowship shall be ethical dentists and shall have made outstanding contributions to the art and science of dentistry or to society.

Pierre Fauchard Academy Hall of Fame

The Pierre Fauchard Academy
International Hall of Fame of Dentistry
was established in 1992. This project
honors the elite and the greats of the
dental profession throughout the world.
The PFA Hall of Fame is located at the
University of Maryland School of
Dentistry in Baltimore, Maryland.

PFA Foundation

The foundation is a 501(c)3 designated IRS nonprofit and is governed by its officers and Board of Trustees. It is entirely independent from the Pierre Fauchard Academy, its parent organization.

The foundation works to advance its purpose by providing scholarships to deserving third-year dental students in the United States and around the world and funding for needed dental services through its grants program which offers financial support for charitable dental projects. The foundation is supported 100% by donations. Through this generous support the PFA foundation has provided \$1,800,000 in scholarships and \$2,464,500 in grants to charitable programs.

THE FUTURE

In his president-elect's address this year, Dr. Joseph C. Harris, spoke about the future of PFA.

The academy has reached a cross-roads in literal and figurative terms. The fellowship reflects the demographics of the general population with many of its ranks in the retirement phase of the life cycle. While these "retirees" were once the mainstay of PFA, we are now starting to see the younger practicing dentists taking charge of the inner

workings of the academy. As the younger fellows' involvement intensifies, the way in which the academy and its central office interact with its constituents will evolve with the cultural particularities of this new group. Communication is essential to maintaining our vibrant organization, and incorporating the media tools of this generation has become an important part of the PFA. The present executive board consists of two Americans, a French, and a Mexican fellow. While not too long ago this would have caused a logistical nightmare, Skype conference calls, e-voting, and Federal Express have made communications effortless. The cross-pollination that will occur from the expanded ranks will strengthen the academy with new blood and new ideas. Despite the fact we are on the forefront of a new beginning, we will remain ever faithful to our core values of education, philanthropy, and mentorship. Our mission shall never change. We will be strong and progressive due to the high-quality fellows that inhabit our rosters. Although a hierarchy exists within the political wing of the Pierre Fauchard Academy, the value and future of the academy lies within each individual fellow.

Editor's Note

The American College of Dentists takes this opportunity to congratulate the Pierre Fauchard Academy on its 75th anniversary. Very unusual technical difficulties prevented our including PFA in our previous issue on dental honorary organizations.

Dallas County Dental Society

A Tradition of Integrity and Care Since 1908

Marissa Gutierrez Linda C. Niessen, DMD, MPH, FACD

Abstract

The Dallas County Dental Society is approaching 100 years of service to dentists and patients. Begun with a focus on continuing education, the society now manages the large and successful Southwest Dental Convention. Member services, community programs, and leadership are among the hallmarks of the society. Its driving force has been a sustained effort on strategic planning and its implementation.

he City of Dallas, Texas, has a long and colorful history with the profession of dentistry. From the primitive "Wild West" practices of the late 1800s and the dental office of notorious gambling racketeer Doc Holliday to the early formation of organized dental groups, dentists have played a major role in the community for well over 150 years.

Dallas County Dental Society was organized in 1908, as an early professional study club named the Dallas Dental Society, which was dedicated to the enhancement of the profession. From the late 1800s to the early 20th century, Dallas experienced booming growth as a city because of its status as a major railroad hub. More and more families and professionals moved west. In 1915 the members of the DDS study club voted to dissolve and merge with another study club named the Dallas County Dental Society. The new organization retained the name of the latter group. and would later become the chartered local component society of the Texas Dental Association.

Dallas County Dental Society held its first official membership meeting on May 6, 1915, at a local YMCA, with 26 charter members. The young organization formed a constitution and bylaws and created committees to address various needs of the group. The society even participated in some early political work in conjunction with other dental groups in the state, including pushing (unsuccess-

fully) for a bill in the Texas Legislature to provide jury duty exemptions for practicing dentists. From early on, DCDS's primary intentions were to provide resources for fellow dental professionals and to help those in need in the community by providing services and contributions to local charitable causes.

The society also focused on providing continuing education for dentists. From its origins as a study club, the organization began hosting presentations and courses. In 1927 they formed the Dallas Mid-Winter Clinic, an annual meeting of dentists for the purposes of gaining additional education. The convention started small but progressively became a force in the dental conference world, bringing in prominent presenters and the latest technology from across the country. Renamed the Southwest Dental Conference (SWDC) in 1999, this annual gathering continues to gain prominence as a high-quality educational conference in North Texas each January.

Strategic Planning

DCDS prides itself on being a leader in organized dentistry. It attributes this suc-



Ms. Gutierrez serves as communications director for the DCDS and Dr. Niessen is a past president of the society and is currently a regent of the ACD; marissa@dcds.org, www.dcds.org

cess to a strong commitment to strategic planning. For more than 20 years, the society has been guided by a strategic plan that is consistently revised and updated. The strategic plan serves as a focused roadmap for ensuring that the dental society clearly articulates its mission and vision and identifies its goals and measurable objectives. Visionary leaders join together every few years to reexamine the mission of the society and to create a plan to effectively achieve its objectives. Component dental societies across the country have replicated this efforts and look to DCDS as a model for their own strategic planning processes.

DCDS's current mission is to serve as "the voice of dentistry in the area, committed to promoting high ethical standards and pursuing excellence in advocacy, community service, and education." Our DCDS vision is "the united voice of dentists and oral health care in the community." The values of DCDS include: (a) driven and responsive to members' needs; (b) anticipating practice needs with a future focus; (c) promoting lifelong learning: (d) inclusive of people, perspectives, and practices; (e) collaboration to benefit the community; and (f) strategically guided by integrity and ethics.

Goals are set for DCDS in the areas of membership, the Southwest Dental Conference, community oral health, leadership development, communication and advocacy, and organizational excellence. Each goal has two-to-four measurable objectives that are evaluated annually for progress. Either the board itself or the various communities of the dental society are charged with achieving

these objectives. The strategic plan is updated every three or four years.

DCDS is governed by an elected 18person Board of Directors. The Board of Directors guides the affairs of the organization, determines policies, appoints committees, and sets the strategic direction for the dental society. Members of both the board and its committees are installed at an annual ceremony that recognizes the new leaders as well as granting awards to members for their contributions to local dentistry. The awards include Dentist of the Year, New Dentist of the Year, Layperson of the Year, Lifetime Achievement Award, Baylor Faculty Award (nominated by students of Baylor College of Dentistry), and the Veteran's Award.

Membership

DCDS has more than 1,400 members representing general dentistry and the nine specialties recognized by the American Dental Association. More than 200 dentists are located outside of this geographic area and have joined DCDS as associate members. DCDS is the Texas Dental Association's 5th District Component Society within the Northeast Division, and the TDA is the 15th Trustee District of the American Dental Association. All three levels of organization form a tripartite structure, mandating simultaneous membership in all three levels.

DCDS is focused on providing excellent services for its members in order to help create a better environment for practicing dentistry in Dallas. The society seeks to find ways to address the challenges and stresses dentists face everyday and to make membership an invaluable tool in a fulfilling professional career. DCDS is concentrating on reaching new dentists through the development of social media strategies and addressing the needs of young professionals. The society has a close relationship with our local dental school. Texas A&M

Health Science Center Baylor College of Dentistry, and seeks to facilitate early involvement with the dental students during their education.

Other Member Services

Patient Referrals: DCDS provides a referral system to members of the public who need a local dentist for consultation and treatment. Unlike most referral organizations, DCDS assesses no fees to either the public or the dentist for referrals. This allows members of our community a direct link to their local dentist while helping our members connect with new patients in their area of the Dallas Metroplex.

Executive Office: DCDS owns its executive office building in North Dallas, where membership meetings, CE courses, events, and meeting facility rentals are available to members. Various rooms in the DCDS Executive Office Building are named after prominent DCDS members:

- Dr. D. Lamar Byrd Auditorium
- Dr. Paul P. Taylor Executive Board Room
- Dr. O. V. Cartwright Reception Hall
- Dr. Bernard Gottlieb Room
- Dr. Patricia Blanton & Dr. Hilton Israelson Room

The office is staffed by six full-time employees who manage and coordinate the activities of the society and the Southwest Dental Conference, led by Executive Director Jane Evans since 1993. During her tenure, Ms. Evans has contributed much to the profession of dentistry and has been recognized through honorary membership in both the American and International Colleges of Dentists.

Peer Review: The peer and judicial review processes of Dallas County Dental Society mediate patient complaints and adjudicate professional violations by members in an attempt to resolve issues outside of a court setting in conjunction with the TDA policy. Dentistry is a self-regulating profession, and we believe our peer review program benefits patients and the public at large.

Publications: While DCDS members all receive the official publications of the ADA and TDA, the society is proud to publish its own bimonthly newsmagazine. DCDS Connection has won awards from the International College of Dentists and American Association of Dental Editors for its content, design, and presentation. The publication seeks to keep members informed on past and future events, provide professional resources (such as a recurring column addressing legal and ethical issues), and serve as a platform for our members to communicate with each other. DCDS Connection has also moved online. appearing in a Web version that connects with social media, search engines, and interactive media.

Legislative work: Members of DCDS maintain constant communication with local, state, and national lawmakers through a grass-roots program. DCDS leaders recognize the importance of knowing and communicating with government representatives in order to thoroughly communicate the needs and perspectives of practicing dentists.

Professional resources and additional benefits: DCDS strives to provide resources that help its members thrive no matter what stage of their career they are experiencing—as practicing dentists, retired dentists, or faculty and student members. The society creates specially focused events to address the needs of every type of member, from the recently graduated to the retired lifetime members. Even simple resources such as preprinted school excuse forms, online roster access, and social events play a major part in the lives of our members.

As members of the tripartite system, DCDS members also receive all the bene-

fits and resources available through the American Dental Association and Texas Dental Association.

Southwest Dental Conference and Education

The DCDS sponsors one of the largest dental meetings hosted by a component dental society, the Southwest Dental Conference. In 2011, nearly 11,000 dental professionals from across the country registered for the conference. It featured three days of intensive lectures, hands-on workshops, live-patient demonstrations, and an extensive exhibition hall with 350 booths for companies to show the latest in dental technology. The meeting combines fun social activities for the entire dental team within an ambience of warmth and hospitality for all attending. Dental school classmates reconnect. members visit, and all learn with the ultimate goal of improving the oral health of the patients we are privileged to serve.

The *Dallas Business Journal* has ranked the SWDC among the top 25 conventions in Dallas.

Since the Dallas County Dental Society has its own facility, it regularly conducts onsite CE to benefit members. (The purchase of our building was a goal set and achieved in an earlier strategic plan.) The building is also used by various study clubs or other dental groups for education and social purposes.

On the Leading Edge

Many of our programs are replicated across the country; for example, the Southwest Dental Conference was the first to present live-patient demonstrations in a dental convention setting. The Dentists Concerned for Dentists program, a resource that anonymously

Dentistry is a self-regulating profession and we believe our peer review program benefits patients and the public at large.

assists members, staff, and families who are dealing with substance abuse, has been replicated on a statewide and national level. DCDS also has a Dentists Helping Dentists program to assist those dealing with financial hardships.

DCDS has recently received two Golden Apple Awards from the ADA for its development of innovative programs that have benefited the profession: the Dentists Concerned for Dentists program and its partnership with ICD Texas Section to create the dental student mentorship program Great Expectations: Mentoring Professionalism. DCDS has also received several awards for its new strategies in membership, marketing, and retention.

The society provides opportunities for its members to get involved in organized dentistry and has produced many prominent dental leaders throughout its 100-year history. DCDS serves as a training ground for these members and focuses on developing groundbreaking leadership seminars and resources for those members who are interested in leadership in organized dentistry, their

professional practices, or their everyday lives. Four members of DCDS (Dr. L. M. Kennedy, Dr. Gary Rainwater, Dr. Robert Anderton, and Dr. John Findley) have been elected president of the American Dental Association. More members have served as president of the Texas Dental Association. In the past ten years alone, three DCDS members have served as TDA presidents: Dr. Patricia Blanton, Dr. Hilton Israelson, and next year, Dr. Michael Stuart. Countless other members continue to serve in leadership roles in dental specialty groups, ACD, ICD, and other dental organizations.

DCDS in the Community

In 1999, DCDS formed the Dallas County Dental Society Foundation, a not-for-profit public charity focused on promoting improved access to oral healthcare education and research in the Dallas community to enhance the quality of life for Dallas residents. The foundation provides educational endowments. grants, and support for programs such as Give Kids a Smile, Texas Mission of Mercy (sponsored by the Texas Dental Association's Smiles Foundation), and many educational efforts. Members and attendees of the SWDC are encouraged to contribute to the foundation and provide their own pro bono work via their private practices or through the many volunteer events. Many have obliged, and in fact, a group of dentists in Dallas created an annual event each February called Dentists with a Heart, which seeks to provide free dental and orthodontic services over a weekend in designated offices. Members are asked to report all pro bono work provided throughout the year for recognition and to encourage other members to participate.

Another major force in promoting oral health care in Dallas is the Alliance

of the Dallas County Dental Society that has been serving the Dallas community for over 85 years. The alliance consists of the spouses and family members of DCDS members. Together, they coordinate educational presentations for senior care centers, schools, and community events year-round. They perform puppet shows to demonstrate proper brushing and flossing techniques to school children, provide oral care packages to the elderly, and do a number of fundraising efforts that are invaluable to the Dallas community.

Looking to the Future

Members of DCDS are well aware of the challenges facing dental professionals in a high-tech, fast-paced, and economically complex world. The leadership of our society seeks to identify and address the difficult issues that members face in the changing world of healthcare delivery in Texas and the United States.

As the society looks to the future, we continue to recognize the importance of strategic planning in guiding our success and supporting the leadership skills of our members. The future will hinge on creating a solid base of leaders and members within the newest generation of dentists. DCDS leaders hope that through strategic planning the society will continue to be a strong force in the dental community for years to come.

The Central Florida District Dental Association Collaborates to Serve Dental Professionals

Jim Antoon, DDS, FACD

Abstract

The Central Florida District Dental Association serves 12 counties around Orlando. This article describes the component, some of its history, and its current operations.

ission Statement: Central Florida District Dental Association serves the Central Florida dental community by recruiting and retaining all dentists; providing relevant and valuable services that include education, political action, staff and practice development, and professional interaction; promoting excellent oral healthcare and high moral and ethical standards.

The Central Florida District Dental Association, (CFDDA) is one of the six components of the Florida Dental Association (FDA) and the American Dental Association. It comprises the 12 counties of Alachua, Brevard, Flagler, Gilcrest, Lake, Levy, Marion, Orange, Osceola, Seminole, Sumter, and Volusia.

CFDDA history can be traced to the end of the Civil War, when James Chace became one of the first dentists in the state, establishing his practice in Ocala. In 1884, he founded the Florida State Dental Society, the group now known as the Florida Dental Association, and served as the first FDA president.

Dr. Chace's son, James Edward Chace served as FDA president in 1902-1904 and was one of the founding members of CFDDA in 1922. He was the first dentist in Florida to use an X-ray for examining teeth. Dr. James Edward Chace's son, Dr. Richard Chace of Winter Park, Florida, served as FDA president in 1962-1964 and helped start the

University of Florida College of Dentistry in the 1970s. His son Richard, Jr., is a practicing periodontist in Winter Park.

The Central Florida District Dental Association was officially organized as a component of the Florida Dental Association on May 22, 1922, by A. B. Whitman of Orlando, J. E. Chace of Ocala, and C. W. Fain of Daytona.

CFDDA membership includes about 1400 Dentists in an area that stretches from Alachua in the north to Brevard in the south. There are many cities, towns, and rural areas within the district. The largest concentration of members is in Orlando, with over 650 dentists in the Greater Orlando area. CFDDA headquarters is located in Orlando.

In spite of the large and diverse geographic area of the district, there is a ready willingness to help the public and needy individuals in every locale. The leadership of the district has always shown a great sense of professional cooperation among the board and the officers and within the affiliate societies



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In spite of the large and diverse geographic area of the district, there is a ready willingness to help the public and needy individuals in every locale.

as well. Younger members are joining CFDDA and are being welcomed into leadership positions. CFDDA leadership invites all dentists to join organized dentistry and enjoy the many benefits of FDA and CFDDA membership.

The affiliate organizations of CFDDA are Alachua, Brevard, Greater Orlando, Lake, Marion, and Volusia/Flagler. These organizations provide peer review services, adult volunteer clinics, and referral services for members. They sponsor "Give Kids A Smile" clinics each year and participate in other charitable programs.

The CFDDA keeps membership informed with a quarterly newsletter and a monthly broadcast FAX. They hold an annual membership meeting which includes quality continuing education. An additional meeting is held every other year to offer all courses required by the Florida Board of Dentistry. Between 14 and 16 hours of elective and required courses are offered free of charge to members. CFDDA also holds leadership meetings each year which include

strategic planning, political action and membership strategy and preparation for the annual and semiannual FDA House of Delegates' meetings.

Membership in CFDDA also provides dentists with all of the benefits of FDA membership. CFDDA is one of the larger components of the Florida Dental Association. The FDA immediate past president, Dr. Larry Nissen, is a CFDDA member and resident of Merritt Island. Florida's current ADA Trustee, Dr. Sam Low, from Gainesville, is also a CFDDA member and past president.

New York County Dental Society

Leaders Creating Change through Leadership

Patricia Sukmonowski, DDS

Abstract

The New York County Dental Society has recently worked through a transformation focusing on leadership that is responsive to membership needs. This article describes this leadership philosophy, organizational structure changes, new program activity, and communication strategies.

that they're at the very heart of things, not at the periphery. Everyone feels that he or she makes a difference to the success of the organization. When that happens, people feel centered and that gives their work meaning."—Noted organizational consultant, Warren G. Bennis

The New York County Dental Society (NYCDS), incorporated in 1868, has a long and illustrious background, with numerous dental professionals contributing their time and expertise to the excellence of our organization. We have evolved over the centuries into a proactive, enthusiastic group of practitioners dedicated to the health and well-being of our patients and the public. A large part of our success as an organization has been to draw support and guidance from our membership.

After a particularly challenging time several years ago, our then president recognized that the continued success of the organization rested on the basic premise that "the whole is greater than the sum of its parts." As he noted, dentistry is a singularly insular healthcare discipline. While many dentists, particularly in Manhattan, can operate with a minimal amount of contact with their peers, the interaction of individuals yields far more than what individuals can achieve in isolation. The concept of "colleagues not competitors" was created as the society started a new millennium with a new outlook and approach. The Board of Directors, committee members,

and committee chairs were urged to put this philosophy into action and advance the idea of sharing information and advice and to work for greater participation by all.

With this in mind, the society established a newly formed committee representing the diversity of the membership, the Future Focus Committee. Led by an outside facilitator, the committee used the findings from a survey designed to measure members' attitudes toward the society, along with other input, as the basis for drafting a road map for the NYCDS. The committee was charged with developing the ideas and suggestions from the survey into workable and attainable short and long-term goals and objectives to be implemented over the course of five years. The result was the Future Focus Plan, the first longrange plan the NYCDS had ever adopted. It provided a road map for the leadership and volunteers and was a manifestation of the views of the membership itself.

Many innovations came as a result of that first plan, including long-sought educational programs and practice services. New staff was hired to focus



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on service to members. There were technological updates and improvements, greater inclusiveness and accessibility among members, and expanded outreach to dental professionals outside the New York Metropolitan area. Fewer than three years after the plan was implemented, a follow-up member survey showed that nearly nine out of ten members expressed satisfaction with the performance of the society—a significant increase from the 76% satisfaction rate when the survey was first conducted.

Part of the wisdom and leadership evidenced in the original Future Focus Plan was using member feedback as its basis and guidepost for change. Two additional professionally conducted surveys of the membership have been undertaken and the Future Focus Plan has since been updated twice, most recently in late 2010, again using the services of an outside facilitator with the current president and president-elect serving as committee co-chairs.

As an organization with a long history, it is imperative that we regularly evaluate our goals and mission to make sure we keep current with the times and ensure that we are meeting the needs of our members in an ever-changing professional landscape. Updating our vision and establishing new goals is

critically important to our continued longevity, but we can never lose sight of the fact that it is only actualized and sustained by a strong foundation of volunteerism and organizational support. That is what makes the New York County Dental Society so unique and important to its members.

In my capacity as 2011 president of the NYCDS, I was afforded the opportunity to serve as co-chair of the Future Focus Committee, suggest new ideas and concepts, and work with my colleagues toward their implementation for our members. It is exciting to be part of a group that aims to elevate the society to the next level. As I have moved from committee member to committee chair. board member, and officer, I have been privileged to observe our dental leaders at work. And I have seen the Board of Directors grow from an entity that served an "administrative" role to one that is now grappling with the "big picture" issues that so dramatically affect our profession and the society. The most recent Future Focus Plan clearly set forth the path with which to enhance the role of the NYCDS Board of Directors to increase their effectiveness as stewards of the organization on behalf of a diverse membership.

Most importantly, we are looking to and anticipating the future of the society. We are embracing change and evaluating past history to learn what has been working well and what has to evolve. It is imperative to have good leadership so that we can establish a path forward by engaging a sufficient group of talented volunteers.

Our Board of Directors has been involved this year in a process focusing on issues we face in our practices every day. And, most importantly, we are examining the structure of our governance, the size of the Board of Directors,

and directors' length of service. We are committed to ensuring that our board is composed of individuals who reflect the diversity of our membership in terms of age, gender, experience, race, and ethnicity. It is this group that will lead change through their own leadership. And, what are the characteristics of these individuals? Our Future Focus Planning Committee has identified them as being members with a high level of integrity and forward thinkers with leadership skills, committee experience, and the ability to collaborate with others.

An important aspect of leadership is to be unafraid of challenging and changing the status quo. To its credit, our leadership embraced that notion and formed an ad hoc Nominating Advisory Committee to alter the nominating process so that it is transparent and fair. All members now know they can become involved and that they have as good a chance as anyone to assume a leadership role. This one change to an entrenched and established process will have a profound impact on our society for years to come.

We have also undertaken a number of other significant initiatives outlined in our plan.

We are stressing the importance of community service and oral health. I recently joined several members in making a presentation to students at a low-income school in East Harlem. We introduced the children to dentistry as a profession and discussed good dental hygiene habits. The enthusiasm of both the students and the volunteers is most inspiring, as it is when we visit schools for the neurologically challenged.

Our Membership Committee is actively engaged in reaching out to diverse communities in a welcoming fashion. New member receptions have garnered excellent attendance and an interest in getting involved by those participating. Our committee chair has proposed an innovative program to attract communities not presently part of organized dentistry. Residents who have recently joined are invited to membership meetings and introduced by our board members.

We have examined communication channels with our membership and are issuing more frequent, time-sensitive "You'd Want to Know" bulletins by fax and e-mail. We have reached out and asked each and every member how he or she would like to hear from us by e-mail, fax, or mail.

Communications technology is now a focus and our board and committees are actively planning to implement a social media program along with a modernization of our Web site, www. nycdentalsociety.org. We encourage members and non members, alike, to go to and use the Web site. Online course registrations have tripled!

Each generation sees farther than the generation preceding it because it stands on the shoulders of its predecessors. I am grateful for the trust, encouragement, and mentorship of those who served before me and I am proud of their accomplishments. They proved that different individuals from different backgrounds can come together and exercise shared responsibility for creating a better system.

It is my overriding goal that NYCDS will continue its mandate by moving forward as a society run by dentists and for dentists, gaining strength and wisdom from the established leaders of the profession to embrace the concept that we need to encourage and nurture our new members and recent graduates. The board and I are seeking to lead an organization that is now built on ethical and spiritual sensitivity, and a sense of community, mutual caring, and responsibility.

The simple truism "if nothing changes, nothing changes," is certainly apt in any discussion of leadership. I am proud to say that as an organization, we have come together and undertaken the difficult task of challenging longstanding ways of operating and come out ahead. The hard work we've done in recent years has created a new foundation for the future. Were it not for the foresight, dedication, and even I would say, courage of this organizations' leadership to advocate for change, we would not be flourishing as we are today... close to a century and a half after our beginning.

A large part of our success as an organization has been to draw support and guidance from our membership.

The San Antonio District Dental Society

History and Vision

John P. Schmitz, DDS, PhD Linda Shafer

Abstract

The San Antonio District Dental Society serves approximately 850 dentists in a diverse, 14-county region of southwest Texas. San Antonio is a large metropolitan area, with a major medical center and dental school. The city is also a popular convention destination, regularly hosting the Texas Dental Association and more recently hosting the American Dental Association and the American Association of Dental Schools meetings. The rural and poor areas of the district have prompted the district to sponsor a full offering of outreach and community oral health services programs. The district is especially proud of its relationships with young dentists, including them in the society's monthly meetings and governance structure and maintaining an active mentoring program.

he City of San Antonio, Texas, is currently the seventh-largest in the United States. It is also the second-largest city in the state of Texas, with a population of 1.33 million and an incorporated area of 412 square miles. Most of this city area is within Bexar County, of which San Antonio is the county seat. San Antonio traces its roots back to 1691 and to the infamous Battle of the Alamo in 1836.

Relationships

The San Antonio District Dental Society (SADDS) is the premier professional dental society for organized dentistry in southwest Texas. The city's history is represented in the SADDS logo which depicts the Alamo within the seal for dentistry. Established in 1913, the SADDS representation within the tripartite system extends over a large geographical region representing 14 south Texas counties: Atascosa, Bandera, Bexar, Edwards, Frio, Kendall, Kinney, Maverick, Medina, Real, Uvalde, Val Verde, Wilson, and Zavala. The organization is unique because many of its members come from counties with limited dental care and with the majority of general dentistry and specialty care provided within San Antonio and surrounding suburbs.

There are strong relationships which SADDS has developed over the years with many diverse institutions and organizations that make the organization unique. First, is the strong relationship between

the University of Texas Health Science Center at San Antonio (UTHSCSA) and the San Antonio Metropolitan Health Department. Since the great majority of dentists practicing in San Antonio are either graduates of the UTHSCSA dental school or received their residency training there, there is a strong local support for the UTHSCSA Alumni Association. Second, the SADDS Committee on the New Dentist (CND) is a highly successful SADDS program for new practitioners out of school fewer than ten years. The SADDS CND has received many awards, including the ADA 2009 New Dentist Committee's Outstanding Program Award of Excellence for its "CND Continuum of Excellence." The CND regularly conducts social and educational programs every month with its roughly 30-40 active members. Young dentists feel camaraderie with the CND that allows them to form a special support network. Third, the SADDS is extremely active and very supportive of the American Student Dental Association (ASDA), which is also very strong at UTHSCSA dental school. The SADDS has a history of ASDA leaders transitioning straight into a leadership role right out



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of dental school. The SADDS regularly invites two ASDA representatives to attend and present at the bimonthly Board of Directors meetings. The SADDS annually assists them in their tradeshow which brings in vendors to showcase dental supplies and materials for dental students. Finally, with the cooperation of the International College of Dentists, a "Great Expectations" mentoring program was recently initiated for first-year dental students. Students are given the opportunity to interface with two experienced dentists, two faculty dentists, and two student mentors to get a glimpse of what the profession is all about. A 2010 ADA New Dentist Committee Outstanding Program Award of Excellence was presented to Dr. Rise' Martin, SADDS past president, for this mentoring program as well as a 2010 ADA Golden Apple Award to SADDS for Achievement in Dental School/Student Involvement in Organized Dentistry for the Great Expectations Mentoring Program.

STRUCTURE

The SADDS is part of the tripartite system of organized dentistry which also includes the American Dental Association (ADA) and the Texas Dental Association (TDA). Since most of the surrounding counties do not share San Antonio's population density, most of the SADDS members practice within the Bexar County/San Antonio metropolitan area. Currently the organization has over 850 members, however this number fluctuates constantly as it does in most constituent

societies. Five years ago membership numbers were around 775-800; now it has increased to 825-875 members.

The SADDS governing leadership, the Board of Directors, is organized around officers in an Executive Committee; these include the president, president-elect, vice-president, secretary treasurer, and past-president. The Executive Committee members are in a direct ascension format with a Nominating Committee that solicits members for officer status from the membership. The board is overseen by a six-member Board of Directors representing different geographical regions of the society as well as an at-large director. The board conducts meetings every other month, while business meetings are held with the General Membership Meeting on alternating months. Support staff for SADDS currently consists of two full-time and one part-time staff members. The organization is exploring options to move to their own permanent facility large enough to conduct board meetings and hold small CE conferences.

Several years ago, the organization held its first strategic planning session to explore a vision for the future. The organization developed a unique purpose which was: One voice for dentistry in Southwest Texas. During this meeting, the SADDS also developed a set of core values. These included: (a) committed to

The SADDS has a history of ASDA leaders transitioning straight into a leadership role right out of dental school.

excellence; (b) encourage honesty and integrity among members; (c) promote oral health; (d) promote inclusiveness and diverse; (e) promote leadership and mentoring; (f) maintain interaction amongst professional and community organizations; and (g) enhance ethical governance. The vision of the organization is included to direct the SADDS to be the premier dental component, committed to meeting the diverse needs of members by promoting excellence, ethics, advocacy, community service, and education. In order to refocus the organizational values, a strategic planning session is scheduled for June 2011.

The SADDS continually upgrades its member services. We currently publish a *SADDS Newsletter* which is designed and printed in-house and mailed to all members and resides on the SADDS website. The recently updated website is fast becoming an informational centerpiece which allows members to quickly follow current events, register for meetings online, find members and specialists, and find staff from employment lists. Soon it will be a focus for online CE courses. Every year the SADDS conducts its own all-day CE meeting (The Fiesta

Meeting). This event has proven to be beneficial to our membership as attendance has increased each year since its inception. Funds from this event forestall member dues increases. We are also proud to host a members' night at the Texas Cavaliers River Parade during the annual Fiesta San Antonio. San Antonio has the pleasure of hosting the annual five-day Texas Meeting annual session for the Texas Dental Association (TDA). During this TDA event, we provide assistance with the TDA Council on Annual Sessions, clinician hosts, registration assistance, and staff information booths. SADDS hosted the ADA's Annual Session in 2008 in San Antonio. This meeting was so successful that the meeting is returning to San Antonio in 2014!

SERVICE

The SADDS is very active in service to the local community and to the area we serve. Members participated in two one-day volunteer activities in the past several years. In June 2009, SADDS members participated in a TDA volunteer organization known as the Smiles on Wheels (SOW) program which is part of The Smiles Foundation. This foundation is a component of the TDA with professional services donated by TDA members. The SADDS sponsored a SOW event in Rocksprings, Texas, which provided treatment with 20 dental chairs for the underserved where the closest dental care was 90 miles away. In November 2010, a similar program was conducted in Hondo, Texas, 30 miles west of San

Antonio. In Hondo, SADDS members provided nearly \$100,000 of free dental care. In March of 2012, SADDS will host a two-day Texas Mission of Mercy event with 50-60 dental chairs and a full-service laboratory. This will be held in the gymnasium and student activity center of St Mary's University in San Antonio. This is essentially a magnified version of the prior events and is expected to provide around \$300,000-500,000 of free dental care to approximately 1000 patients. This is expected to be the largest donated healthcare service event in the history of San Antonio.

During Children's Dental Health month in February, the SADDS hosts a Give Kids a Smile Day at the Ricardo G. Salinas Dental Community Clinic in San Antonio. During this event, members offer oral health screenings and sealants and provide free dental care for urgent dental needs. The Haven for Hope and the San Antonio Christian Dental Clinic are two additional volunteer organizations providing dental care for the disadvantaged citizens of San Antonio. In 2010 SADDS, together with the San Antonio Christian Dental Clinic which was invited to reside on the campus of the new Haven for Hope campus for the San Antonio homeless, hosted the first annual Smiles of Hope Clinic. One hundred and ninety-nine volunteers including local dentists, dental assistants and hygienists and SADDS Alliance members provided dental treatment valued at \$78,200 to 274 patients in one day. A large part of the success in these volunteer activities lies in the close association SADDS has with the San Antonio Metropolitan Health Department and the University of Texas Health Science Center San Antonio. The SADDS also participates in a Legislative Day where members travel on a bus together to the state capital in Austin to meet with Texas legislators.

Leadership

The SADDS considers itself an upwardly mobile and progressive organization. The organization believes that membership recruitment is the number-one priority for the future. Visions for accomplishing this include reaching out to the diverse groups such as the Greater San Antonio Hispanic Dental Association, the National Dental Association, and the Society of American Indian Dentists. To kick off this new endeavor the SADDS is sponsoring Dr. Raymond Gist, the ADA president, who will be speaking on "diversity" at our August 2011 General Membership meeting.

There are several "hot issues for local dentistry," which circulate throughout the local community. The first is the issue of providing adequate dental care for those disadvantaged patients in the state of Texas. The state oral health coalitions have proposed a mid-level provider as a solution. The TDA and the

SADDS have taken an opposition stance to allowing mid-level providers supplying unsupervised irreversible dental procedures. The second is the uncertainty over insurance reimbursements in lieu of the Health Care Reform Bill of 2010 and the growth of government health care intervening between the dentist-patient relationship. Overall in San Antonio, SADDS does not feel that any dentist is "struggling" and that the dental community is strong and prospering.

Looking to the future, the SADDS is gearing up for the year 2013 where the society centennial will be celebrated! Much has been accomplished in the last 100 years and much has changed during this time. Given that San Antonio is a predominantly Hispanic city with a diverse culture, the opportunity to practice dentistry here, and to participate with the SADDS is truly a unique experience.

The organization believes that membership recruitment is the number-one priority for the future.

Northwestern District of the Georgia Dental Association

Wilkie Stadeker, DDS, FACD

Abstract

The activities of the Northwestern District of the Georgia Dental Association are described, including three annual membership meetings for introducing the state association president and officers, visiting with legislators, and a meeting for continuing education. The legislative activities of the state association and the association's member benefits are also described.

he Northwestern District of the Georgia Dental Association is one of seven districts of the Georgia Dental Association (GDA). Each district represents a geographical area of the state of Georgia. Each district has officers ranging from president to secretary, with an executive council. The council's members hold various appointments, such as governmental affairs, dental recovery network, necrology, hospitality, peer review, forensics, retention and recruitment, GDAPAC, and non-dues revenues. Each district meets monthly from September to May at various locations within the district.

MEETINGS

The Northwestern District has three general membership meetings per year. The first is to introduce the membership to the officers of the GDA. This meeting is usually held in October or November. During the meeting, the president of the GDA is introduced and he or she meets and greets the membership and informs the membership about current dental issues in Georgia. This meeting is usually a few hours long and includes cocktails and a sit-down dinner. The GDA president attends this introductory meeting for each district in the state. Because the GDA president comes from a different part of the state in any given year, the introductory meeting is an opportunity for local dentists to have a conversation

and perhaps build a relationship with the GDA president that might not otherwise occur.

The second general membership meeting of the Northwestern District, referred to as the Legislative Fish Fry, is usually held in December. This meeting is very important and is usually our best attended meeting. Each legislator in the state is invited to this meeting by his or her contact dentist, who is a designated dentist in the legislator's district. Sometimes the contact dentist is the legislator's personal dentist. The contact dentist has an ongoing relationship with the legislator and has meetings throughout the year with the legislator. These meetings range from simple dinners to golf outings. The Fish Fry is typically held at a country club in the Northwestern District. Each legislator receives a Fish Fry tie or scarf and welcome gift. The Fish Fry ties are a big hit and the design changes each year. They are typically silk ties, may have a fish motif, and are always a good conversation piece. The menu at the Fish Fry is, not surprisingly, seafood-themed. No one leaves hungry. The meeting begins with a general greeting and introduction of the Northwestern District officers by the district's president. The executive



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director of the GDA then gives a short summary of the current dental legislative issues in Georgia. The legislators are then given the mike to introduce themselves and give a short speech. It is always interesting to hear different legislators from around the state. They each bring large personalities and a great sense of humor. The legislators appreciate the event and are always happy to attend. They never get tired of taking the mike and holding court. The event closes with an attractive door prize drawing.

The Northwestern District's last general membership meeting of the year is usually held in May. This is our continuing education meeting. Like the prior two meetings, the CE meeting is held at a local country club. A business meeting occupies the first 30 minutes. This meeting covers the year's notable events and the progress of dentistry's agenda in the legislature. The meeting also discusses the upcoming GDA summer meeting which is typically held at a beach venue. Once the business meeting concludes, the CE portion of the meeting commences. The CE lecture ranges from clinical dentistry, to self-help, to services offered by the GDA.

Legislation

Throughout the year, in addition to the general membership meetings, the Northwestern District also will conduct Executive Council meetings. These meetings are attended by each committee head. There are approximately 30 committees in the Northwestern District. These meetings are also attended by the

members of the Northwestern District. who sit on the GDA Board of Trustees. the American Dental Association delegates, and by delegates and alternate delegates to the Georgia Dental Association. Typically, between 30 and 50 people are in attendance at these Executive Council meetings. The meetings usually last about four hours and are filled with brisk conversation and debate. This is where the rubber meets the road, and all of the business of the Northwestern District is accomplished. There are typically four Executive Council meetings per year. They are a good opportunity to plan and problem solve. Relationships and alliances are formed and nurtured at these meetings. Members with opposing views on an issue are given ample time to discuss and speak their mind. When a decision or consensus cannot be reached, the issue is put to a vote. Once the vote is taken and the prevailing opinion is announced, the parties move on.

One of the biggest planning objectives at the Executive Council meetings is for the District's LAW Day. LAW Day is an annual event in which dentists from the district visit the State Capitol to educate lawmakers on current legislative issues affecting dentistry. LAW Day typically takes place on a Wednesday, between late January and early March. To prepare their respective legislators for LAW Day, contact dentists send them a short

Sometimes the contact dentist is the legislator's personal dentist. The contact dentist has an ongoing relationship with the legislator and has meetings throughout the year with the legislator.

Relationships and alliances are formed and nurtured at these meetings. Members with opposing views on an issue are given ample time to discuss and speak their mind.

e-mail or fax to let them know that the event is approaching. At the State Capitol, dentists are greeted by staff from the Georgia Dental Association. They have a nice breakfast and the dentists are briefed by the GDA staff. The briefing consists of reviewing every piece of pertinent legislation that will affect Georgia dentists. The GDA staff then assigns each dentist a legislator to contact at the Capitol. They concentrate on legislators who are involved in certain pertinent legislation and give them extra attention. For example, dentists may focus on a legislator who is on an important committee that will have a direct impact on a particular bill of interest. Following the briefing, the dentists and GDA staff walk to the State Capitol en masse. Before the legislators are called out of chambers, the dentists traditionally take a picture with the governor on the steps of the Capitol. The dentists in attendance will then have a page call the legislators out of chambers.

This is one of the most exciting moments of the day. The State Capitol is full of lobbyists and every imaginable interest group in the state of Georgia. This means that hundreds of people are clamoring to talk to a legislator. Once a legislator comes out of chambers and the page delivers him or her to the waiting dentists, a small group is formed in a corner of the capitol building for discussion. The legislators are very receptive and attentive and enjoy talking with the Georgia dentists. This process has been very effective in letting Georgia legislators know about issues facing dentists in Georgia. We are also fortunate to have two dentists who currently serve as State Senators. Every GDA member who attends the LAW Day program gets a special commemorative pin.

One great GDA accomplishment this year was the passage of landmark legislation, HB 167 ("Prompt Pay"). HB 167, authored by Rep. Steve Davis (McDonough), adds Third-Party Administrators (TPAs) including those for self-insured ERISA plans. The current Prompt Pay statute excluded TPAs working for ERISA plans. HB 167 requires third-party administrators to pay clean claims in 15 working days for electronically submitted claims and 30 days for written paper claims.

This is the third year that the Medical Association of Georgia and the GDA have championed the Prompt Pay bill. Last year we were successful in getting the prompt pay bill passed by both chambers only to have the bill vetoed by then-Governor Perdue.

The bill's opponents came out swinging this year, just as they had in previous years. The Georgia Chamber of Commerce, America's Health Insurance Plans (AHIP), and United HealthCare were the bill's biggest critics. They vigorously argued that a state law that requires third-party administrators to promptly pay claims is preempted by ERISA, the federal law that governs self-insured plans. Again this year the Georgia Chamber of Commerce made this a "score card" issue. The score card is used to let legislators know that their votes on specific legislation will be reported by the Chamber of Commerce to its membership. Fortunately for the supporters of this legislation, the legislators did not let the threat of the score card influence their vote on what they believe is right.

The House heard arguments from all interested parties and ultimately passed the bill 162 to nine. In a surprising turn

of events, when the bill reached the Senate, it was assigned to the Senate Judiciary Non-Civil Committee, not the Senate Insurance Committee as it was assigned in the House. As it turned out. this was an extraordinary piece of good fortune. The bill received a thorough vetting by the Judiciary Committee on the legal issues presented by both sides of the argument which helped to convince legislators that the Chamber of Commerce's legal position was not persuasive. Again, the contact dentist network sprang into action and was influential in helping to move the legislation through the Judiciary Committee and the Rules Committee to the floor of the Senate for a vote. Despite several additional attempts to block passage of the legislation, late into the evening on the 39th day, the Senate voted 45 to nine in favor of the bill. Since there was a minor amendment to the bill in the Senate, the House had to agree to the change, which they did at 10:45 pm. The bill has since been signed into law by Governor Nathan Deal.

Member Benefits

The Georgia Dental Association offers many benefits to its members. One such benefit is Professional Debt Recovery Services. Professional Debt Recovery Services, Inc. (PDRS) was created by GDA dentists to assist dentists dealing with the complex issue of debt recovery. PDRS provides clients with the most effective receivables management solutions. PDRS works exclusively with patient receivables and will provide clients with the assurance that their claims will be handled in a professional manner. GDA also has an extensive portfolio of insurance services called Georgia Dental Insurance Services. Georgia Dental Insurance Services, Inc. (GDIS)

was created in 1995 by GDA dentists to provide reasonably priced, comprehensive insurance products and services to dentists, their staff members, and their family members. The coverage available includes major medical, professional liability, property and casualty, workers' compensation, disability, and life. GDA also makes available a practice finance company for members. Bank of America Practice Solutions serves the dental community by offering customized financial solutions to meet dentists' needs. GDA also offers a credit card processing arrangement with Bank of America.

GDA also has a patient financing arrangement with Care Credit. GDA has an arrangement with CGI Communications which delivers high-impact marketing and promotion products to the dental community, such as streaming One-Click™ Web-based videos. V-Mail™ video emails, or highlight movies. Their SmartConnect service is a communication tool that can connect dentists' business phone, cell phone, website, e-mail, and more. SmartSites are fully functional Web destinations with embedded video, dynamic content, and user interaction. GDA also has an arrangement with The Dental Record. This company's services include online forms patients can download and complete prior to their first visit. GDA also has an arrangement with FedEx which offers special benefits to GDA members. GDA's relationship with InTouch Practice Communications allows participating members to manage their practice with an automated appointment reminder system. InTouch is the only such company endorsed by the ADA and GDA. GDA

also endorses Lands End and LifeLock. Through the GDA's relationship with Officite, members can arrange customized, professional medical and dental Web sites that are easy to set up, easy to maintain and effective at attracting new patients and gaining case acceptance. Since 2002, Officite has worked with more than 4,600 dentists and physicians to create Web sites, implement online marketing campaigns, and integrate practice marketing materials.

GDA has a special relationship with SurePayroll which allows employers to go online and enter employee hours and then have SurePayroll handle the rest, including taxes, direct deposits, and payroll reports. Through GDA's relationship with TransFirst, dental practices can accept credit cards and checks, thereby expanding their ability to assist patients and impact their bottom line. GDA partner UBS Financial Services provides retirement planning and wealth management programs customized for GDA members. GDA members now have access to the Whirlpool Corporation's VIPLINK program and can receive discounts on products from brands such as Whirlpool, KitchenAid, Maytag, and Amana, up to 12 products per year.

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Writing off the Copayment

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Abstract

Three dentists who have been involved in teaching ethics comment on a case where an associate discovers that the 40% of collections she was expecting as compensation is being reduced because of the practice in the office of routinely writing off patient copays. The commentators note legal requirements and professional codes, but generally seek alternatives that do not require that patients pay the amount agreed by insurance contracts.



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ASE: Dr. Schwartz This article includes the analysis ✓ and opinions of a panel of experts in dental ethics. They respond to a commonplace scenario in dental practice that has an impact on dental associates and that has been an applied critical-thinking assignment for my firstyear dental students. Three experienced dentists, with expertise in ethics, have volunteered to "weigh in" on this case. The three commentators, without prior consultation, have chosen distinctly different approaches. Dr. Larry Jenson focused mainly on the issues of the contract between the associate and the owner of the practice. Dr. Toni Roucka dealt with the complexities offered by the various state laws and third-party payers in conjunction with the principlebased ADA Code of Ethics. Dr. Don Patthoff reflected philosophically on the impact this case has on professionalism.

Martha, a recent graduate from dental school, has become an associate in a busy dental practice. The financial terms of her verbal agreement with the principal dentist include receiving 40% of the fees collected from the patients. Most of the patients have dental insurance, and the office accepts assignment of benefits. After many months, Martha became concerned that her paycheck did not reflect the work she was doing. When she investigated the patient accounts, she discovered that the office was not collecting the 20% copayment (patient's portion) of the insured patients, and the front desk was routinely writing off the

20% balance. Before confronting the principal dentist, Martha reflected on the ethical and legal issues involved.

In order to come to terms with this dilemma, the associate dentist must develop some structured reasoning in order to arrive at an ethical decision. The implications of her decision could affect more than just herself. Our experts were asked to respond to the case from an ethical rather than a purely legal perspective. The questions of interest include these:

- 1. What ethical issues are at play in this scenario, and how do they apply?
- 2. What legal implications involving the associate and the principal dentist might apply?
- 3. What guidance would the *ADA Code of Ethics* provide?
- 4. What would be the associate's options and how would they have an impact on:
 - The associate's professional career?
 - The profession and public opinion of dentists?
 - The public and the future of dental insurance programs?
- 5. Ultimately, after all things considered, what should Martha do and why?

Response: Dr. Jenson

In the scenario presented, it is important to distinguish three separate contracts.

The first is the ethical contract between

the treating dentists and the patient; the second is the contract between the dentists and the patient's insurance company; and the third is the contract between the associate dentist and her employer. Each contract brings distinct considerations to the general question of whether or not the scenario is a true ethical dilemma (in contrast to a mere personal conundrum) and, if so, what its resolution ought to be.

Contract between Dentists and Patient

The first contract, between the dentists and the patient, is based in the ethical obligations of the dentist-patient relationship. What obligations apply here? Dentists certainly have a general obligation to help their patients achieve oral health: this, of course, comes from the ethical principal of beneficence. But are there limits to what a dentist is obligated to do toward this end? Are dentists obligated to provide dental care at no charge in order to honor this obligation? Are dentists allowed to deceive a patient in order to honor this obligation? Are dentists allowed to threaten or coerce a patient in order to honor this obligation? And in the case presented, are dentists allowed to break contracts and the law in order to honor the obligation?

Most would agree that there are indeed limits to helping patients. For example, no one would argue that dentists have an obligation to provide free dental care for any patient at any time in order to fulfill their ethical

I would argue that routinely writing off a copayment is unethical as it undermines the total dental care available to the public.

obligations. What this scenario suggests is that if the dentists are failing to collect a copayment from the patient in order to lower costs to the patient and therefore help the patient achieve a higher level of health we might be inclined to say that this is ethical. After all, the net effect of this action is that the patient receives care that he or she may have otherwise declined. But is it as simple as this? Do not dentists have ethical obligations to other patients as well, patients that they may not even see in their own practice? For example, is it enough for a dentist to focus on his or her practice population and ignore wider dental public health issues? Can we say that a dentist is being ethical while not participating in the promotion of, say, water fluoridation? Whether they acknowledge it or not, dentists most certainly have obligations to the public that go beyond their responsibilities to those they treat directly.

In the given scenario, what possible obligation to the public might be in conflict with these dentists' obligations to help their patients? Does a consistent writing off of copayments do anything to jeopardize the overall dental insurance picture? Does this behavior drive up costs for the insurance companies and eventually lead to higher premiums and less coverage? The insurance companies would certainly argue for this, and I happen to believe that it is true. While no fan of the profit motive in dental insurance. I can understand that theirs is a business based on utilization rates and that more patients opting for more treatment due to no copayment barriers is logically going to result in higher premiums for all.

Now, whether or not the obligation to the public interest is stronger than the obligation to a specific patient in a specific instance remains to be argued (and would require much more space). At this point, it is enough to say that it

should be obvious that a general policy of writing off copayments will eventually have a negative effect on covered benefits for all. Thus there is a true ethical dilemma hidden in this situation, and I would argue that routinely writing off a copayment is unethical as it undermines the total dental care available to the public, particularly when one considers that the writing off of a copayment is almost always intended to enrich the dentist by increasing productivity and by attracting and keeping patients in a competitive market.

Contract between Dentists and Insurance Company

The second contract to be distinguished in this scenario is the one between the dentists and the insurance company. To my mind, this is a simple legal contract. Any dentist who violates the terms of an insurance agreement is in breach of a contract, and, though I am not a lawyer, I believe the law would back me up on this. Moreover, this type of behavior, as I understand it. can also be construed as fraud and is therefore a criminal act not just a civil dispute. Should a dentist break the law if it helps a patient? There are certainly instances where a good argument can be made for this, but here again, the case would have to be very specific and highly constrained and this is not the case here.

If a dentist has any moral qualms about the provisions in an insurance contract, he or she should decline to participate. If a dentist has any ethical obligation here, it is to advocate for public policies that create a more humane and efficient health insurance industry. The systematic cheating of an insurance company is a dubious guerilla tactic in these important public battles.

Contract between Employer and Associate

The third contract in the scenario is the one between the two dentists: the

employer and the associate. This too is a legal contract (verbal or written). Payment based on collections is fairly straightforward, and the employer dentist in this situation has certainly kept his or her word by paying the associate based on what has been collected. If the associate is not happy with the contract, she should renegotiate it for compensation based on production or some other understanding that is acceptable to both. From an ethical standpoint, the associate needs to evaluate her ethical obligations to the public and determine if she can remain in an office that is not in congruence with those ethics. I would argue, for reasons already mentioned, that she should resign if she cannot get the employer to change his or her policies.

Response: Dr. Roucka

Dental care is expensive for both patients and insurance companies. One established method of cost containment adopted by many third-party payers back in the 1980s and continuing today is the concept of patient copayments. A copayment is the percentage of a dentist's fee that is not reimbursed to the patient or dentist from the insurance company. This is what the patient will pay "out of pocket" directly to the dentist. Besides making dentistry more affordable for insurance companies, copayments encourage providers to involve patients in discussions about treatment options and the resulting cost implications. This, in turn, places a value on the care being provided and helps patients gain an appreciation for, and a sense of ownership regarding, their oral health (Breneman, 2000).

The dental profession has accepted the American Dental Association's *Principles of Ethics and Code of Professional Conduct* to be a document that not only serves as a resource for guidance to the profession when its members encounter an ethical dilemma but also as the standard of care in such situations. Its advisory opinions are many times very clear and concise, leaving little to the interpretation of the reader. Others are more vague, leaving much more open to interpretation. This is not a bad thing as most ethical quandaries are not black and white. All of the facts and principles in conflict must be weighed and a conclusion derived that makes the most ethical sense at the time for that particular scenario.

At first glance, the advisory opinion in the ADA Code's Section 5.B.1, Waiver of Copayment, which is the subject of this case, appears to be one of those cut and dry ones, leaving very little to interpretation. The entire passage reads:

A dentist who accepts a third-party payment under a copayment plan as payment in full without disclosing to the third party that the patient's payment portion will not be collected, is engaged in overbilling. The essence of this ethical impropriety is deception and misinterpretation; an overbilling dentist makes it appear to the third party that the charge to the patient for the services rendered is higher than it actually is.

When read this way and taken out of context from the rest of the document, there is no question as to whether or not it is permissible under the *ADA Code* to waive copayments for patients with third party plans; it is not. However, when we explore other areas of the document where it addresses issues that relate to the principles of beneficence and justice, we may argue this point. I will revisit this idea later in this opinion.

When we compare the *ADA Code* to the *Code* of *Ethics of the American Medical Association*, the wording is quite different. Since most dentists are probably not familiar with this code, this section is worth quoting for the sake of

discussion here in this case. Both dentists and physicians bill insurance companies in a similar fashion, so why are the codes so different? Under Section 6.12, Forgiveness or Waiver of Insurance Copayments, it is stated:

Under the terms of many health insurance policies or programs, patients are made more conscious of the cost of their medical care through copayments. By imposing copayments for office visits and other medical services, insurers hope to discourage unnecessary health care. In some cases, financial hardship may deter patients from seeking necessary care if they would be responsible for a copayment for care. Physicians commonly forgive or waive copayments to facilitate patient access to needed medical care. When a copayment is a barrier to needed care because of financial hardship, physicians should forgive or waive the copayment... Physicians should be aware that forgiveness or waiver of copayments may violate the policies of some insurers, both public and private; other insurers may permit forgiveness or waiver if they are aware of the reasons for the forgiveness or waiver. Routine forgiveness or waiver may constitute fraud under state and federal law. Physicians should ensure that their policies on copayments are consistent with applicable law and with the requirements of their agreements with insurers.

In this particular scenario, Martha, a recent graduate and associate dentist in an office with a senior dentist, is questioning whether or not she is getting her financial due. She was promised 40% of fees collected from her patients. This is, in fact, what she is receiving. The current practice of the office is routinely

If the dentist is unaware, this opens a whole other set of issues perhaps including an embezzlement scheme at play here. A society could, for example, make it legal for some members to take from others what ordinarily would not be theirs to take.

writing off all copayments associated with all third-party-billed services, so as a result, her actual income is 20% less than she expected. Martha feels deceived and misled.

Martha is also questioning the legal and ethical implications of the office's billing practices. Each state has different laws regarding this issue. Different insurance companies will also have different requirements for the practice of waiving copayments. Martha needs to do her homework and find out what the applicable laws are in her area and what the contractual arrangements are with her third-party providers before approaching the senior dentist with her concerns, if this is what she ultimately chooses to do.

According to Schulte (2004), dentists are free to determine the amount of fees that they will charge for their services and what discounts they will offer to their patients. However, the first set of constraints on this, if they accept insurance, is what is stated in the various participation agreements for the third-party payers involved.

If Medicaid services are provided in Martha's office, the Federal False Claims Act poses the next hurdle. Any individual or organization that knowingly submits a false or fraudulent claim for payment for services (e.g., healthcare services) pursuant to a federally funded program (e.g., Medicaid) may be liable for significant fines and penalties. The primary purpose of the Federal False Claims Act is to combat fraud and abuse with regard to federal health care programs. The False Claims Act does this by making it possible for the federal government to bring legal action against healthcare providers who submit "false claims." The False Claims Act also permits lawsuits brought by individuals, typically employees or former employees, who

have knowledge of fraudulent activities. These individuals are called "qui tam relators" or "whistleblowers" (Hanna, 1994). Martha may be considered subject to severe penalty under this law if she looks the other way when she knows health care fraud is occurring. On the other hand, she is protected from persecution by her employer if she chooses to "blow the whistle." According to the Department of Health and Human Services, waivers of Medicare and Medicaid copayments and deductibles made on an individual basis due to a patient's financial hardship would not be subject to prosecution (Schulte, 2004). Where does this leave Martha and her office since copayments seem to be waived universally?

Revisiting the ADA Code Section 3, Beneficence, dental professionals have the "duty" to act for the benefit of others, i.e., our patients. It states "Dentists may choose to enter into contracts governing the provision of care to a group of patients; however, contract obligations do not excuse dentists from their ethical duty to put the patient's welfare first." Section 4 addresses the principle of justice and states that dental professionals "have a duty to be fair in their dealings with patients, colleagues, and society. In its broadest sense, this principle expresses the concept that the dental profession should actively seek allies throughout society on specific activities that will improve access to care for all."

All things considered, including the AMA code opinion on copayments, when weighing the ethical implications of waiving copayments for patients so they can afford needed dental care verses collecting the additional 20% copayment to satisfy the law and insurance companies and eventually the dentist's bottom line, the decision is not as clear cut as ADA Code Section 5 might imply.

Martha must decide how to approach this situation. Once she has done her legal homework to know where she stands under the laws of her state and with the rules of her third-party payers, she should determine the motivation behind the offices copayment policy. It will be a difficult conversation to have, but she needs to approach the topic with the senior dentist. There are a couple things to consider here. Possibly, the senior dentist does not even realize this is happening. In the case scenario, it states that the "front desk" was writing off the copayments. Why? Because the dentist asked them to, or was this "policy" initiated without the dentist's knowledge? If the dentist is unaware, this opens a whole other set of issues perhaps including an embezzlement scheme at play here. At the very least, it is causing the office a significant reduction in revenue. In that case, the conversation will become much easier as the dentist will undoubtedly be thankful that this was brought to her attention.

On the other hand, if the office policy was initiated by the senior dentist, then what is the motivation for doing so? Is it a ploy to attract new patients in hard economic times? Or is it because the majority of the patients in the practice are struggling financially and the dentist is trying to make care more affordable for them? According to what is stated above in both the ADA and AMA codes, the latter reason involving the pursuit of affordable care is more ethically acceptable than the self-serving attempts to gain new patients.

If the senior dentist's intentions are good, Martha should inform him or her of the legal implications of the office's policy. It is unlikely that all the patients in the practice are experiencing financial hardship simultaneously. According to Dennis, when the waiver of patient obligations for copayments becomes routine and the insurance carrier is not notified, the dentist is then running

the risk of crossing the line into illegal conduct (Dennis, 2009).

If the senior dentist refuses to change the office policy after learning of the legal risks or had unethical intentions in the first place, this puts Martha at legal risk under the Federal False Claims Act now that she is cognizant what is happening. She is obligated under law to report the fraud (Schulte, 2004). If she does so, continuing to practice there would be a challenge, to say the least. Finding a new job with the possible pressure of student loan obligations places Martha in a tough predicament but one she should seriously consider.

As members of the dental profession, we are often confronted with challenging, multifaceted scenarios such as this. We have the obligation under our professional code to "give back" to the community in some way. It is our further obligation to do so in a manner that is within legal and ethical boundaries and to participate in the process of selfregulation of our profession when called upon, even when the decision to do so is difficult. The occasional waiving of copayments for patients undergoing financial hardship can, and arguably should, be done. Each office should know the law, develop a consistent policy in dealing with such cases, and document their efforts (O'Trompke, 2001).

RESPONSE: Dr. Patthoff

Similar to life's realities, this case is very complex and worth exploring from an ethical perspective. Building a reason for Martha to make an ideal decision based on the information given in this case, and from what each of us does naturally and constantly in life (often without thinking), then, takes years of guidance and practice as well as our experiences of failures and successes. Those of us who have had more time and opportunity to make major mistakes about such matters will see this situation differently from

those who are new to the situation and who will have new tools and views they would like to explore.

This case provides a host of pitfalls and challenges, however, no matter the amount of experience or new tools and views, most of which would not even be considered if professions were being strengthened rather than weakened in the United States. With this in mind, I will comment on the loss of the professional voice as a unique moral community (Patthoff, 2007). I will then propose that the complexities of this case fall aside once a faith in professionalism is realized and is fully committed to.

The practice of the knowledge and skills of dentistry are intimately tied to, and dependent on, the faithful preservation of the nature of professions. This case nicely reveals what is at stake and why some choices are better than others with respect to society's need for professions and their voices of professionalism. The central issue is that neither Martha nor the owner of the practice appear to be aware of, or are committed to, taking advantage of the roles and responsibilities of an existing moral professional community. As a result, in an effort to keep two feet in three camps—bureaucracy, markets, and professionalism-no one wins, profits, or cares. Considering this central issue, then, several points must be considered.

LEGAL IMPLICATIONS

In Martha's case, existing laws will apply. And, although allegiance to them is part of being a good citizen, working to change unfair laws is also the responsibility of a good citizen in a democratic republic.

A society could, for example, make it legal for some members to take from others what ordinarily would not be theirs to take. For instance, certain groups could be allowed to take what they want as long as they give a portion back to society—a form of taxation. Some individuals, depending on what group one belongs to, may view such actions as buccaneering or piracy, while others may look at them as merely valid contract services. Whatever the law decides is okay to do is okay to do.

In this kind of theoretical social scenario, being ethical is irrelevant. The law is used to justify ethical reasoning. One needs only to read the small print, avoid being a sucker, and concentrate on being a smart businessman or a savvy politician. The common notion of seeing ethics as a basic tool for the construction of building just laws is then lost.

Without being able to use ethical deliberations as a basis for action, the Marthas of the world and, consequently, their patients and communities are cast into moral poverty. The particular sort of ethical deliberations called for in this case involves the norms of professionalism, which are expressed in dentistry's codes of ethics.

Guidance from the ADA Code of Ethics?

There are many codes of ethics that pertain to all sorts of occupations, some of which are clearly recognized as professions while most are not. Within dentistry, a number of its subgroups have formulated their own codes of ethics. The most dominate one, the American Dental Association's *Principles of Ethics and Code of Professional Conduct,* was also dentistry's first. Over time it has evolved through an active, but cloudy, dialogue with society. It has, in major ways, (whether one agrees

with all of it or not), helped shape the mission and vision of its members as a moral profession. It does this by articulating some of the common behaviors and core values that help shape collaborative behavior among its members that is one of the basic characteristics of a healthcare profession.

This being said, Martha is in a situation where it is hard to see herself as an independent professional tied primarily to the well-being of the patient, society, and the profession. And, because her employer also does not see her as an independent professional, she seems to have no real options other than to violate some moral, legal, business, or professional obligation. However, her dilemma, as frustrating as it is, is actually a pseudodilemma. It exists only because Martha has no solid sense of a dominant authentic professional reality—a reality that is absolute and that offers a firm foundation for sound judgment.

Martha's Verbal Agreement

The financial terms of Martha's verbal agreement with the principal dentist provide her with 40% of the fees collected from patients. Verbal agreements are a common characteristic of healthy families, friendships, and professional interactions, so simply condemning Martha for accepting a verbal agreement is not going to help her decision making. In fact, in most such informal relationships, there is open communication and equal respect that actually become the basis for resolving conflicting values and beliefs.

Furthermore, oral articulations can be, and are most likely taken to be, contracts in the legal sense. Therefore, they can be interpreted to be business agreements rather than merely guidelines for the prioritization of professional promises that aims to build, and conserve, a professional covenant. The American Dental Association Contract Analysis Service (www.ada.org/1308.aspx) offers material

and some support to help further explore and discuss such contractual details.

Insurance Consideration

The practice in which Martha works has two important characteristics to consider: first, most patients have dental insurance; second, the office accepts assignment of benefits. Each characteristic generates multiple questions, some of which are important for Martha to understand.

At first glance, the decision to accept assignment of benefits could seem to be a caring and compassionate decision helping patients to manage expensive dental treatment. However, like all decisions, they do impact others; asking additional questions about a decision's impact on others, then, is part of ethics: Do patients in the practice who are without insurance pay the full fee? Were office fees raised to recover the loss of the write-offs that resulted from this particular decision? (This is a decision that is distinctively different in its reasoning from that of periodically forgiving the debt of patients whose circumstances prevent them from paying no matter how frugally they live.) Do full-paying patients without insurance need to know that the fees of patients with insurance are less? Why should people who work without benefits and make just above the welfare benefits line, help underwrite those who have higher paying jobs with benefits? All these questions need answering to fully analyze Martha's situation and her decision.

A dentist, who accepts only the reimbursement of a third-party payer is still faced by other ethical and legal questions even when forgiveness of a copayment is legally agreed upon through a contractual agreement with a particular third-party payer. How does this impact, for example, a dentist's relationships with other carriers that may

have "favored-nation" clauses as part of their agreements? These clauses add claim support to an insurance company or a contractor who decides to take legal actions to recover any overreimbursements it may have paid out. This decision would be considered should a third party learn that a dentist accepts a lower reimbursement from another carrier, or hears that another carrier receives some better deal from a particular dentist or group of dentists.

Professionalism

There are also the ethical and legal issues of fraud. These include even those situations where a dentist advises an insurance company that the balance will be written off after the company makes payment. In addition, the particular questions concerning fraud that will arise will depend on how tax responsibilities are assigned among the various dentists, or even how continuing education and occasional dental supplies and purchase discounts are handled. This is then further compounded depending on whether the office accounting system is built around office production charges or office collections.

In dealing with questions such as those faced by Martha, professionals must maintain a voice that is distinct from that of the overall marketplace. For Martha, this is easier said than done, because she appears to be in a situation that ethicists call moral distress. That is, no matter what she decides, she will violate some part of her personal identity and will continue to get into more distress until she understands her situation in the context of how professions ought to function in society. The only possibility for improvement in Martha's situation is for her to somehow clarify the organiza-

tional structure under which she works and find a way where she can have real decision-making input. This requires settling important issues about how she views dentistry and the role she will play in it for the rest of her life. Essentially, the question is: To be, or not to be, professional? The answer she chooses will either send her on the path towards an authentic professional life or toward a career in business using the word professional.

Even a single dentist's choice down either of these paths will have an effect on both the profession and the public opinion of dentists. A handful of dentists with a common choice will have an even bigger impact. A large majority down either path will not only influence opinions about the profession and the public opinion of dentists, it will actually influence the opinion that the public has of itself. A society that cares, or a society that believes in business as usual will, in turn, ultimately impact the structure of how health care is defined, systematized, and reimbursed.

In my ideal world, I uphold the ideals that define dentists as professionals. These include several essential concepts. First, professions are essential components of society. Members of a profession are the only ones who practice it, and even though a profession is defined and shaped by an ongoing nebulous conversation between the profession and society, it is the profession that articulates its goals and characteristics and works towards their realization. Every member of a profession should choose those paths that will help them become the ideal professional. Only then should he or she consider how those paths will integrate with the various businesses and bureaucracies with which it must deal.

If I were Martha, I would approach the chief decision maker of the practice and simply state something like: "I'm really concerned about our practice and

my role in it, especially regarding the waiver of copays. Before I became a dentist, and then again at graduation, I had some sense of what that dentistry is and what my role in it ought to be. But now I find myself in a situation where my values are being challenged. I think we can be better than we are. To do that, though, we need to get some agreement on what dentists are and what they should do. We can start by figuring out exactly what it is we are already doing that will get us there and then, perhaps, start changing those things that are not getting us there. I think there are a few things that need to change if I am to stav here."

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Swarm Intelligence

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Abstract

The standard view of how things work is that an outside force impacts a group of individuals and causes outcomes they are interested in. The outside force may not affect all individuals to the same extent, but we can summarize the effect by taking the average. Effective influence is thought to come from the top, not from the group that is being led. The alternative considered here is that a substantial degree of intelligence resided in the individuals or elements that someone wants to study or change. And these elements of the system interact with each other. This phenomenon goes by many names, but will be called swarm intelligence here. There are many cases where simple rules followed at the local level trump or outperform understanding or control from above. Five examples will be given: (a) ethics; (b) the progression of periodontal diseases; (b) dental continuing education; (c) leadership from within: and (d) the wisdom of group decision making.

ocation, location." To be one of the "in" people you have to be where the "in" people are. But here is the paradox: how do the original "in" people know where to be? There are many situations in life where the smart thing to do depends on what other presumably smart people are doing. But being smart in this sense cannot be reduced to objective independent criteria. We are part of the decision we make, and so are others who are making the same decision at the same time. As Yogi Berra said of Toots Shor's nightclub "No one goes there anymore. It's too crowded."

Ethics as a Group Phenomenon

Consider what it means to be a chump. Literally, that is the thick end of a piece of wood or joint of meat; by extension it means someone who plays by the rules when others know the rules are not really meant to be taken seriously. A chump drives 55 miles an hour in a 55-mile-anhour zone. Chump behavior is also exhibited by taking one's fair share of call or Medicaid patients on the belief that others are doing the same thing. It must be excruciating for good dental students who want to get into graduate programs to decide not to use "pirated" National Board questions to crib for these important tests. If no one cheated that way, only the qualified would get into graduate programs; if qualified students did not cheat while weak candidates did, they would be handicapping

themselves and not getting what they deserved. A chump is a person who is being ethical in a sense he or she expects others to be without any good assurance that others are playing by the same rules.

One of the reasons it has been so difficult to raise the level of moral behavior around us is that we have framed the question in an inadequate sort of way. Our scientific and rational tradition has taught us to look for causes, and these causes have to be outside the people or systems we are studying. Objectivity is a presumption of rationality. Caries and various periodontal conditions are believed to be 100 percent explainable eventually in terms of scientifically understandable, exogenous factors. Insurance-free practices are thought to cause healthy bottom lines. Dentists cure oral disease. $X \rightarrow Y$. It is a natural extension to think that unhealthy morals are caused by some factors such as perverse incentives or bad character. If we can discover the cause of immorality it is just a matter of mounting a mass delivery campaign with the antidote and we will soon have it under control. There are many people who have pointed out symptoms; there are some who have announced the cure but are wanting only the delivery system.

But what if the general run of moral behavior is a group phenomenon rather than one where each individual is an interchangeable agent to be managed separately or included in average? Perhaps the more accurate model is $X \rightarrow (Y \leftrightarrow Y)$. What if part of what it means to be ethical is defined by how others are behaving? According to the IRS, the average

American tax declaration is more than \$3,000 short of what is actually owed. Surveys reveal that taxpayers understand this situation in ambiguous terms. Without being exactly precise about their own behavior, most Americans say "it is somewhat a matter of definition what it means to make a 'fair' contribution to the public good," and they would be willing to pay more if they were confident that others were paying their share or they knew for certain that the money was being well spent. In survey after survey, college students report that the number one reason for cheating is the belief that others are cheating.

What we are facing is the need to fix a system, not individuals within it. The individuals influence each other: they interact. Intricate and sometimes unpredictable outcomes emerge when we try to apply a simple answer to a complex problem. It is a bit like the difference between treating a tooth and treating a patient. We are, in fact, our brothers' and sisters' keepers. The prescription for mending ethical problems involves hands-on participation, and such participation means the condition changes precisely because we participate in it. Chumpiness is a social condition. It can only be addressed from within the system.

Social scientists first started studying the interrelations of the parts in systems that needed fixing about 100 years ago. The Italian economist Vilfredo Pareto was one of the first to notice it. He realized that wealth is not randomly distributed. Most people have a little and a few people

have a lot. Wealth follows a much skewed distribution. This is sometimes called a Pareto curve, and he is credited with having discovered the "80:20 Rule."

The more interesting question is why the curve is skewed. The answer is that it is easier for people who have some money to get more and that those who have little to begin with are actually likely to slide backwards. Every advantage or disadvantage affects future success or failure. Social engineering efforts such as economic stimulus packages actually work best when applied to thriving economies. Whenever we see a skewed distribution it is reasonable to expect that there is some form of interaction at play. This phenomenon is also called the "Matthew Effect" after the verse in Matthew 13:12: "for whosoever hath, to him shall be given."

We need new ways of looking at these kinds of problems where the individuals of interest are actually an interacting, self-organizing and selfdefining, dynamic swirl of causes and effects that we cannot pick apart and fix one at a time and then reinsert into the system. Such alternative ways of studying systems have only emerged in science in the past 50 years. RCTs and EBD are now old school. The new methods go by names such as systems theory, selforganizing groups, equilibrium theory, complexity, emergence, and the one I will use here, "swarm theory." Incidentally, it is an ancient view. The Hippocratic

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tradition held that health was a complex and dynamic balance of the physical and mental parts of one's nature. Illness was, in that view, an imbalance; the role of the healer was in assisting the patient to reestablish balance.

Here is a rough characterization of a swarm. The behavior of a group is not equivalent to the average of the behavior of individuals in the group. Nor is it completely explained by the totality of all the influences outside the group. Individuals within the group use simple rules to conform their behavior to what they believe is going on in their immediate environment and what they see others around the doing. There is no awareness of, or at best a muddled picture of, a grand vision for the entire group that individuals agree upon. And yet the group adapts appropriately to the changing environment, often better than if someone had claimed to know and tried to communicate a grand scheme for things.

Periodontal Diseases

It is generally assumed that periodontal diseases are progressive throughout the lifespan and that their effects are cumulative. Although there has been progress on understanding some of the mechanism involved, the causes remain vaguely understood. Sometimes it may even be misleading to report average scores in epidemiological studies because the sample is known to contain a mixture of individuals with conditions that have different characteristics.

A simple analogy may be useful for demonstrating the swarm characteristic of self-reinforcing interactions. If I put \$100 in the bank at 2% interest and leave it alone for ten years, I will have about \$122 at the end of that time. The 2% is calculated at each period on both the initial investment and on the gain from previous interest. The interest is both a

multiplier and a factor that is multiplied. If I put \$200 into this scheme, I would net \$244. But note that the rate of *growth* is the same 2% in both examples. This can be expressed mathematically by a power curve such as aXb, where X is the length of time I do nothing, a is the original investment, and b is the compounding rate. Such curves, if graphed, will bend upward if the power coefficient b is positive. A is roughly equivalent to how high up on the y-axis of the graph the curve starts and b determines the amount of bend in the curve. This is known as a nonlinear relationship because the graphed line is not straight.

Virtually all dental research assumes linear relationships. We tend to believe that what happens in both disease processes and in curative interventions is entirely a straight-line function of outside forces. It would be unusual to find anything in the literature that describes how a disease process feeds on itself or even how restorations change in likelihood of failure due to internal processes. The essential characteristic of a nonlinear relationship is that some of the effect is coming from within the system itself.

For completeness, it should be pointed out that the case of compound interest involves only one positive feedback loop. Growth continues in one direction based on some rate factor and on the current state of the world. Such singlefeedback loop situations can be described completely by calculus—they are said to be "closed." Obviously, such systems are only closed under some set of reasonable conditions. We do not assume that savings will compound forever: there is not enough money in the world to permit this and I will die (allowing the government to come in and make an adjustment) before this.

There are also negative feedback loops. My anger over a personal slight cools over time; so does my enthusiasm for any new project. Complex systems are combinations of positive and negative feedback processes that interact in intricate ways. Eventually, complex systems will spin out of control if the positive feedback loops overwhelm other forces and resources. This is a technical definition of a bubble, such as the dot.com bubble or the sub-prime housing bubble. Alternatively, the system will die if the negative feedback predominates. In most complex and stable systems, an equilibrium will emerge based on a balancing between positive and negative feedback and the system will settle into a steady state. Think of acquired immunities and the differences in common infection rates for children and adults. Health can be considered such a steady state where professional interventions hold back the ultimate influence of negative feedback loops.

In 1986 Harald Löe and colleagues published, in the *Journal of Clinical* Periodontology, a seminal paper describing the progression of periodontal disease in a cohort of Sri Lankan tea harvesters. Four hundred eighty laborers were examined six times from 1970 through 1985, with measures taken of gingival index, attachment loss, plaque index, calculus index, and DMFS. Subjects in the sample were remarkably free of caries, but periodontal disease progressed apace, as measured by attachment loss. By adjusting subjects for age groupings, a semi-longitudinal study design was created. Löe and colleagues described what they observed in ten tables and nine figures, as well as multiple comparisons between averages in various groups at various times and in several other papers. The burden of these multiple analyses was directed toward demonstrating that periodontal disease, as gauged by attachment loss, progresses at various rates in different

groups. One group, representing 8% of the population, was labeled "rapid progression" based on either four mm of attachment loss on two permanent molars or incisors by age 21 or eight missing teeth attributable to periodontal disease by age 30. A "no disease progression" group, constituting 10% of the population and being significantly vounger than the other groups, had no more than two mm of attachment loss on mesial surfaces during any examination. The remaining subjects were included in a "moderately progressing" group. There were two conclusions drawn from this research. First, "In the absence of any intervention, the loss of periodontal attachment is continuous, and that given time, the progressive destruction of the periodontium will lead to exfoliation of the teeth" (438). Second, "The rate of progress of the disease clearly varies between groups of individuals" (439).

The authors point out that their research does not support any conclusions about what causes periodontal disease or even what affects its rate of progress. All that is being presented is the fact that some individuals suffer more periodontal destruction over time than do others. Although not calculated, linear regression lines on the three groups would have revealed different slopes, suggesting different modes of disease progression.

The only "variable" in this study was time. But there is no theoretically grounded reason given in the paper for dividing the sample into three groups rather than four or seven. And the groups were created using the same information that was reported as an outcome. In other words, we have a swarm situation here, or certainly one where compounding is taking place across time.

Viewed in this way, it is possible to directly test the assertion that the rate of disease progression differs across the three arbitrarily chosen groups. Because the original data are not available, we can only perform approximations based on the averages by age categories presented in the various tables of the article. The issue of interest is the pattern of changing attachment loss across time in the three groups. Solving for a power function rather than imposing a straight-line linear model on the data allows us to solve the equation aX^b, where X is time, a is an indicator of initial disease condition, b is the rate of disease progression, and the equation aX^b gives the expected attachment loss. We can also calculate an R² value, the traditional measure of goodness of fit for a regression equation, where 0.0 shows no relationship and 1.0 shows perfect fit.

For the subsample of "rapidly progressing" subjects, the power equation is Attachment Loss = .0008 Age $^{2.5928}$, with a very high R^2 = .9172. Attachment loss increases with age, and it increases faster the older one is. It is a compounding condition, and the compounding is large because the rate coefficient is more than 2, meaning the rate more than squares.

Now we can compare this to the rate of compounding for periodontal disease in the group labeled "moderately progressing" in the same fashion. The equation is Attachment Loss = .0001 Age $^{2.3017}$, with an even greater R^2 = .9585. The same general pattern of disease compounding emerges. This group begins with less disease (because they were defined that way by the researchers), but the rate of progression of the disease is almost identical.

Next, we can perform the same analysis on the group labeled "no

progression." Attachment Loss = .00008 Age $^{2.6126}$, with 2 = .9078. The a-value corresponding to the amount of initial disease is smaller because it was defined that way in the study, and the rate of disease progression, b, is about the same as for the other groups. The analysis for the "no progress" group is "wobbly" at the upper end because only 3% of subjects were over 30 years of age, compared to 18% in the "rapid progression" group and 28% in the "moderate progression" group.

What this reanalysis suggests is that subjects assigned to various groups based on their periodontal status at time of initial examination show roughly the same rate of disease progression. This finding is contrary to what Löe and his collaborates claim. They have confused the presence of cases with large periodontal destruction as absolute outcomes rather than as the inevitability of a compounding process over time. This is something like the difference between investing \$100 or \$200 at 2% compound interest.

The identity of disease progression rates in Löe's research can be confirmed by "cutting out" power curves from the "no progress" group and shifting them laterally along the age axis to match baseline in other groups and seeing that the curves align. The power function for all subjects combined is Attachment Loss = .0008 Age $^{2.4348}$, with a very high $R^2 =$.9238. This simple equation is similar to all three subgroup analyses and explains more than 90% of the variance in attachment loss as a function of nothing other than initial level of experience and compounded age. There is no "rate of progress" factor operating in these findings. The power function, which allows compounding or a swarm view of the

progression of periodontal disease, accounts for 12.5% more variance in predicting attachment loss than does the linear model which uses age but not the effect of previous disease on future disease.

In the years since Löe's original work, the classification of periodontal disease by rate of progression have been softened and researchers have begun looking for "swarm" or self-reinforcing and self-limiting effects such as pocketing that is both an effect and a cause of the disease process and to the interaction of bacteria ecosystems.

Innovation in Dental Practice

Many years ago, dentists did not use composites on posterior restorations, LED curing lights, Sargenti paste, sealants, CAD-CAM, or even EBD. In each case, a cautious few were first adopters; then more followed. Sometimes what our friends in industry call "market penetration" was quick, sometimes slow; the eventual level of penetration is very high in some cases. It will recede in every case due to development of superior substitute technologies, sometimes more quickly and sometimes to good, as in smoking cessation.

Research has revealed some pretty useful predictor characteristics of speed and extent of adoption of innovations. For example, new methods and ideas will go farther and faster if they are perceived as providing a clear advantage over present practice. A curing light that is a few seconds quicker, a capsule delivery system, and impression material that costs a few cents less are all perceived as improvements. Reading ads aimed at dentists in the journals makes a strong case that dentists are interested in innovations that are faster, cheaper, and easier to use.

But to have a chance in the competition for innovation, changes should also be compatible with existing practice.

There are two paths to FDA approval for

drugs and devices. An innovation that operates on new principles goes through the full review, usually involving years and millions of dollars. By a huge margin, most innovations follow the 410(k) process and have only to demonstrate that they are substantially the same as previously approved drugs or devices. Often the "breakthrough" is a change in dose of active ingredient and a new color on the packaging.

A third characteristic of rapidly advancing innovations is their being relatively easy to understand and use (low complexity). "Plug and play" computer apps are now de rigueur: if they come with a manual they are DOA. On the other hand, EBD is in danger of becoming a slogan rather than a practice just because it is hard to understand.

A fourth predictor of success in technology transfer is trialability. Innovations that can be tested on a small scale are on the fast track.

Finally, it makes for easy adoption if the results of change can be observed: we need evidence that is quick, conspicuous, and of meaningful magnitude. The best performing stocks in the market are devilishly difficult to detect because we have to wait years to see whether we were right sometime in the past.

We also know a thing or two about which kinds of people are more likely to adopt innovations. They have higher levels of education and are socially upwardly mobile. They have enough wealth to absorb losses if things do not work out, including those who work in larger organizations that can provide the financial cushion. They are smarter, less dogmatic, capable of thinking abstractly, and able to tolerate ambiguity. Adopters are well-read, have large social networks, and entertain a wide range of interests. Some people are just more likely to pick up new trends than others are.

But here is the problem. We know many of the characteristics of technologies that innovate well and we know many of the characteristics of those who pick them up, but the shape of the curve for technology innovation cannot be predicted well from these factors. The linear model does not seem to fit the data. Rather, adoption of innovation always follows an S-shaped curve. It starts slowly and gradually picks up speed, then it tapers off, and if followed long enough drops quickly as other innovations come on line. The S-shaped curve is such a clear characteristic of all kinds of complex change that innovation cannot be understood without getting a grip on what causes the two bends in the curve. The answer comes from a careful study of ants.

A preoccupation of ants is finding food and bringing it back to the nest. There are a very large number of ants involved in this activity and they must work in harmony. There is also the problem of finding good food sources, especially given that the current best source will eventually peter out. The challenge is figuring out how these really simple-minded little buggers accomplish this intricately complex and coordinated process. We know there is no "master plan." There is no set of committees that meets at high levels to debate policy. We also know that the folks who know where the best food is have no means of communicating that information to all of their mates. Ants do not Tweet. In a word, we know that ant intelligence is a simple process built in at the level of the individual ant. It is swarm intelligence.

Here is how it works. A significant amount of ant behavior is random. As they travel they release a tiny amount of a chemical substance, a pheromone, which naturally decays over time. There are two rules that make the system effective. First, when an ant finds food it heads to the nest via the shortest route. Second, in a probabilistic fashion, going out from the nest is guided by reading pheromone trails. That is it. Two simple rules, programmed into ants from birth and part of the makeup of each ant individually and not communicated at any central level.

The ant returning to the nest with food goes by a direct route so the pheromone track is more recent and stronger than the pheromone track left by an unsuccessful, randomly meandering forager. If an outbound ant comes to a fork in the road, it usually follows the track with the strongest scent. That increases the chances that it will find food, and when it does, it returns directly, adding its pheromone to the desirable path. This process becomes self-reinforcing and pretty soon the ant swarm is beating a path to the peanut butter and jelly sandwich your son dropped. The effect is to create that nonlinear upward bend in the food-seeking behavior curve one would expect in innovation adoption behavior. The more success some adopters experience, the more they will be imitated by others like themselves. And the rate of adoption compounds.

There is a bit of a paradox in this system the smart reader may already have detected. Every ant does not make the correct choice—some get confused, some are not very smart ants, a few are laggards who have let the pheromone trail evaporate. The survival of an ant colony depends on there being freethinkers and some who are not very bright. Theoreticians who study these things describe this effect neutrally as there being different individual thresholds in sensitivity to environment clues. Organized society could not survive without these differences. What would happen if all ants made perfect and exquisitely discriminating choices to

The essential requirements for being a leader from within are two: (a) know where you are going and (b) work harder at getting there than those around you.

follow the path laid down by their predecessors? They would very quickly find and exhaust a particular (perhaps not the best) food supply and then starve to death by continually returning to it. Every individual and every organized group of individuals must maintain a balance between exploiting and exploring. The dentist who skips from one new technology to the next without developing the full benefit of each approach is a dull ant; so is the dentist who is still trying to perfect his or her gold foil technique. Managing harvesting and hunting depends on there being some who forget, who respond to chance, or just have high levels of curiosity or boredom. And the gradually diminishing strength of the pheromone trail due to disuse helps as well. As some of those explorers find new food, the pheromone track begins to build up on a new path.

The initial part of the S-shaped curve for technology adoption is an accelerating phase where the track one individual leaves for his or her immediate neighbor becomes stronger, promoting exploitation of desirable resources. Gradually, more and more individuals explore as the track gets weaker and as they in turn contribute to leaving a weaker track. Now the S-shaped curve takes its downward inflection and compounds in the other direction. Again we have found that what appears to be complex behavior that can only be approximately understood by trying to impose an external, rational, and centralized but fully communicated view on the world can be better understood as simple rules used by individuals who are paying attention only to their immediate neighbors.

Can anything resembling the ant colony be observed in dentistry, say at

dental conventions? There certainly are high-concentration resource stashes on offer at the meetings. The speakers present summaries of research and slides showing their best work. The vendors have answers to problems some dentists did not even realize they had. But that is not where the real action is. It is in the hallways where dentists bump into each other and compare notes about what they have heard. It is much more sophisticated than a chemical trail, but it works the same way. Dentists talk to each other. They realize that some of their colleagues are hypersensitive to changes and others are wonderfully cautious. They know they will never be able to hear and see everything that is being presented nor be able to completely sample the reactions of their colleagues. But dentists do change their practices, predominantly by sampling the reactions of those near them. In the long run, actually for most working purposes, the wisdom of the profession is in the individual practitioner who is vigilant about local changes and not in major movements or grand breakthroughs.

Leadership from Within

There are several varieties of leadership. Some identify it as position. One goes through the chairs in this organization and then the next. Organizations have "leadership institutes," the primary qualification for attendance being that one has been elected to a leadership position. There are symbols of the office. This theory of leadership is easy to understand: you are not a leader until you are named to a position, and you cease to be a leader following your term as immediate past president. There is also a charisma school of leadership. The notion is that some people naturally inspire respect from others. Others what to be like the charismatic leaders and by being close to them they expect some of the influence to rub off. In the past, it was argued that charisma flowed from

personal attributes such as identification with the masses, good public speaking, or even tall stature. Not much is made of this view any more. The transactional school of leadership is favored by politicians. The idea is that exchanges of influence are good for many and can be managed. Those in central positions have greater power because they are good at managing exchanges. In the process they pick up authority and are sought by others who want to exchange influence. Often the true leader in a dental office sits at the front desk. The currently fashionable leadership style is transformational. These leaders work at the value level, stimulating organizations to reinvent themselves. Of course, any individual can combine these leadership styles, and most of the great ones do.

But all of the classical approaches to leadership are based on the one-to-many (undifferentiated) model. The only true essential characteristic of leaders, says the wag, is that they have followers. And the followers are assumed to be interchangeable. We readily speak of a leader of a group, but the term seems somehow inappropriate in the context of leading an individual or even of leading different people in different ways. (We have other terms such as mentor and advisor and boss and even friend for those relationships.)

Leadership theories have difficulty accounting for such facts as leaders being startled by shifts among their followers they did not anticipate, mass movements that cannot be controlled (as currently in the Middle East), or the simple fact that it is impossible that leaders of large organizations could possibly affect all individuals they lead. The pace of political change is not linear; it seems as though nothing is happening, and then the crowd is in crisis. There is some sort of compounding going on and

the crowd is interacting with itself as much or more so than it is being directed by the leader.

What has recently been learned about bee swarms may be instructive. It has been known for 50 years that bees signal the presence, direction, distance, and size of quality nectar sites by performing the "waggle dance" when a scout returns to the hive. This part of the story has filtered into the popular literature because it reinforced the linear, rational. organized group lead by a communicative leader linear model. And it is in fact a description of a process that has some useful effect. The problem is that it provides an incomplete explanation. Only a handful of bees in the hive, the ones close enough to see the scout waggle, receive the message. There is no passing on of the message to other bees, but the entire swarm finds the food source. It is a little like the king in Antoine de Saint-Exupéry's story *The* Little Prince. The king knew he was a leader because every morning he commanded the sun to rise and it did.

The other part of the story about how bees find food has also been known for years, but it is not as popular. The waggle dance is enough to get the swarm going. Flights of bees and birds (and crowds of people too) navigate as a swarm by following three rules: (a) go in the same general direction as the mean of those near you, (b) stay close, and (c) avoid bumping into others. Computer simulations of blops of light on the screen that have been programmed with nothing more than these three rules are indistinguishable from the patterns of the flight of birds.

But in every swarm there are a few individuals (usually 5% to 10%) that fly faster and straighter than the rest.

(Actually, most bees in a swarm follow a somewhat curved path so as to increase their chances of getting near a variety of neighbors.) These "leader bees," the ones that look like they know where they are going and are eager to get there, have a greater effect on the paths of those near them than their neighbors have. In other words, there are leaders scattered throughout the swarm. When the leaders encounter each other, their paths are harmonized. The swarm reaches its target because individuals conform their behavior (again with appropriate individual deviation) to those near them and not because they have little maps or GPS devices that someone in authority has issued. It appears that the group as a whole knows where it is going when actually the coordination is local, including allowing for a statistically greater influence by some neighbors and not because they are organized from above. The leaders are in the group.

Several years ago this journal published a theme issue on national organizations that operate through local chapters. Included were the Salvation Army, Red Cross, Rotary International, Girl Scouts, and others. All those organizations that said they were effective claimed that initiative and leadership came from the chapter level. Those that described a history of struggling to bring vitality to their organizations spoke of national campaigns, bringing in top-flight experts, and sweeping national strategic plans.

The good news is that no one needs to stand for office, have his or her fingers on the scarce resources, or even have truckloads of charisma to become a leader. At least one important form of leadership is inherently local and works only by means of influencing the few nearby. When that model is multiplied, it compounds into swarm intelligence. The essential requirements for being a leader

The crowd really is smarter than the individuals in the crowd.

It has been wisely observed that any group that is so much in the dark about an issue that it realizes it needs an expert is probably in the dark about how to pick a good one.

from within are two: (a) know where you are going and (b) work harder at getting there than those around you. Titles are optional.

THE Wisdom of Groups

We live in an age of experts. Western society has prospered through division of labor and specialization. There is no way that lay individuals can know how to repair the damage in their mouths, although they can learn quite a bit about slowing it down and they are the true experts for choosing among offered options. There is no way a general practitioner can know everything a specialist in endodontics or periodontics knows. The average American cannot replace government specialists, elected or appointed, either. Experts purport to provide the overall view. They have something to say about how systems work that is assumed to be more useful than the particular view of the individuals within the system. Of course, they are right: and they are wrong as well. There is wisdom in crowds, sometimes called swarm intelligence.

The story is often told of Francis Galton, an English statistician of rather patrician inclinations. He made measures of population characteristics, including intelligence, and generally thought little of the average man's abilities. (Characteristic of the times, he did not think about women's abilities at all.) But something important happened in 1906 when he attended the West of England Fat Stock and Poultry Exhibition. A fixture at such gatherings was a contest to

guess what the weight of a live ox would be when it was killed and dressed. Seven hundred and eighty-seven country folk bought tickets, made guesses, and waited to see if they had won the prize. The actual weight was 1,198 pounds, but the winner was many pounds off. Galton obtained the entry slips and calculated the average: 1,197.

It is a dependable rule that the average of independent guesses from a representative group of individuals is closer to the true value than are the best of the individuals within the group. This generalization applies to experts as well. Every individual's view of the world is composed of true insight and error. The random error in individuals' guesses will cancel out when combined, leaving only the true insight. The crowd really is smarter than the individuals in the crowd.

The rules for bringing out the wisdom of crowds are simple. First, get a diversity of representative individuals involved. There is a big difference between unanimity and being right. Independence of decisions is also critical. Consensus is a false goal: the true aim is a sound decision. Discussion should be strictly limited to explaining and bringing out the consequences of alternative positions and individuals should be prevented from attempting to change the position of others. Decentralization helps as well. Each contributor should tell it as it is from his or her perspective. The group as a whole will develop a general perspective, but when individuals attempt to substitute their interpretation of what the group should do, they are playing high and mighty and distorting the group's function. Finally, there has to be some system for gathering and combining the input without introducing any distortion.

Voting is usually the best method.

These four rules can be summarized as

follows: (a) get a representative group at the table; (b) aim to understand each position, not to judge it; (c) each person represents only and necessarily his or her own view; and (d) combine the opinions so that random variation cancels out. Incidentally, this approach demands a certain toughness. Individuals must be strong enough to speak for what they value and not in order to curry favor among peers, and those in charge must place right decisions with civility above the group's good feeling.

There are several ways of combining independent input depending on what kind of information is available. When the decision is one of finding some value (such as the right allocation of the organization's portfolio to stocks), averaging of independent votes works best. When the decision permits only selection from mutually exclusive alternatives (such as meeting in Chicago or San Francisco), the modal (highest vote-getting option) is best.

When experts are involved, a good rule is to have several of them. It has been wisely observed that any group that is so much in the dark about an issue that it thinks it needs an expert is probably in the dark about how to pick a good one. There is a priesthood among experts. By habit they exaggerate the monumental nature of the decision about to be made, they speak in technical terms to elevate the mystery and importance of what they say, and they overplay the benefits on offer. A good rule, if somewhat annoying to some, is to insist that the expert translate what they have to say into terms that are understood by the group. If they cannot do this, it is likely that they are not translating effectively in the other direction

and they are not really addressing the group's true problem.

On the TV game show *Who Wants* to Be a Millionaire? contestants who consulted an expert received correct advice 65% of the time. Those who asked the audience got wisdom 91% of the time. Every important decision is in jeopardy when left to a single individual. The true wisdom is in the crowd.

Economists are fond of saying that the market is never wrong. It may not be what we would like it to be, but, per definition, the market reflects the judgment of all those with skin in the game regarding what the net present value of companies' resources are at any time. There is no other standard against which to measure current estimates. (Of course, the market may fail to accurately predict the future, but no one can make any money waiting until the future is revealed and then buying at historical prices—except for the fat cat execs with big stock option benefits.)

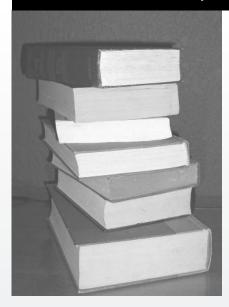
Markets satisfy the four criteria mentioned above for effective group decisions. They are representative. independent, personal, and aggregated. That is why market systems are now being used as forecasting systems. The Iowa Electronic Market, for example, allows individuals to purchase, for a few dollars, "shares" in political issues such as picking candidates for public election or ballot measures or Supreme Court decisions. Participants get a small payout based on the actual outcomes. The guestion is whether such markets are effective in predicting actual future behavior. The answer is that they are consistently better than the public opinion polls. Large companies are beginning to sell low-cost options in various product innovations, plant relocation sites, and manufacturing technologies. Employees get a share of the small cash pot based on how

successful the innovation options were that they picked and the company gets market intelligence. Typically such markets are more accurate than the companies' top strategists or the hired outside consultants.

Of course there is a trick in this market mechanism and independent group decision making. Participants are not exactly expressing what they want. In fact, that is why political polls are inaccurate: pollsters ask the wrong question. They invite individuals to take a theoretical position on a personal preference in the abstract. People are notoriously deceptive under these circumstances: after all, it is anonymous and no commitment is involved. That is the old linear model where we think we are learning something by taking the average of individual information.

The nonlinear model asks individuals to choose a position with respect to others based on their true self-interests and rewards them for being right. We buy stocks because we expect others will want them in the future; dentists adopt technology or favor policy because they believe that is what will be best in the future all things considered. We participate in the swarm, not as isolated individuals but as interacting components in a system.

Recommended Reading



The literature on swarm theory or non-linear systems generally tends to be highly technical. The references below marked with an asterisk are among the more accessible. Each is about five 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 20 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 swarm theory; a donation of \$50 will bring you summaries for all the 2011 leadership topics.

Christian Blum and Daniel Merkle (Eds) (2010)

Swarm Intelligence: Introduction and Applications.*

Berlin, DE: Springer. ISBN 978-3-642-09343-2; 282 pages; about \$65.

This is a collection of papers on the technical aspects of swarm theory, probably the proceedings of a conference. There is much valuable insight, if one

skips through the formulas. "Instead of a sophisticated controller that governs the global behavior of the system, the swarm intelligence principle is based on many unsophisticated entities that cooperate in order to exhibit a desired behavior.... Coordinated behavior emerges from relatively simple actions or interactions between the individuals".

Len Fisher (2009)

The Perfect Swarm: The Science of Complexity in Everyday Life* New York, NY: Basic Books. ISBN 978-0-465-01884-0; 260 pages: about \$23.

An easy read about self-organizing groups where there is wisdom in being guided by the behavior of those nearby rather than having a goal outside the group. Many practical examples are given, such as how to move most quickly in a crowd and how to make correct decisions in a group setting. Nice touches of humor.

www.red3d.com/cwr/boids and www.vergenet.net/~conrad/boids Demonstrations of the mimicking of bird flock flight behavior through simple simulation rules.

Howard Rheingold (2002)

Smart Mobs: The Next Social Revolution*

New York, NY: Basic Books. ISBN 978-0-7382-0861-9; 266 pages; about \$20.

Readable commentary about the way mobile communication creates new networks of information, changing status, the value of information, and what it means to communicate or know. Surprisingly current for being ten years old in a rapidly changing world.

Everett M. Rogers (1995)

Diffusion of Innovations (4th ed.)* New York, NY: The Free Press. ISBN 0-02-926671-8; 520 pages; about \$33.

The dean of innovation studies summarizes his own work and the accomplishments of the whole field over the past 60 years in a comprehensive and straightforward book. It is large and comprehensive, with 864 references in the bibliography. Rogers argues that the adaption of innovations goes through predictable stages and the extent of adoption is dependent on characteristics of the innovation and characteristics of the adaptor community, as well as diffusion strategies such as the use of media, opinion leaders, etc. "An innovation is defined as an idea, practice, or object that is perceived as new by an individual or another unit of adoption". Innovation is a social process. The text is filled with rich case studies.

James Surowiecki (2004)

The Wisdom of Crowds*

New York, NY: Anchor Books. ISBN 978-0-385-72170-7; 306 pages; about \$15.

A columnist for The New York Times makes a strong case that groups are better served by following the unconstrained collective wisdom of their diverse members than letting the experts decide. This very readable book is filled with wonderful stories about collective wisdom in markets, bees finding honey, lawyers and politicians thinking they know more than they do, crowds staring up at nothing in particular because others are doing so, the value of decentralized systems, why we are "contingent consenters" when paying taxes, why traffic jams occur, what reputation means, and how to pick winners in beauty contests.



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