

State and regional board examinations of dental students

Rating performance, ethics and professionalism

By Jonathan Shouhed, fourth-year dental student, Ostrow School of Dentistry, University of Southern California

Do dental students treat patients holistically and humanely during dental competency examinations? As student dentists progress through their education, clinical skills are learned and then challenged during competency and licensure exams to make certain that the student is prepared to practice dentistry independently.

State and regional board examiners detail the requirements and percentage value for caries preparation form, restoration anatomy and integrity and the maximum length of time allowed to complete any procedure (including



State and regional board examiners detail the requirements and percentage value for caries preparation form, restoration anatomy and integrity and the maximum length of time allowed to complete any procedure in order to achieve a passing grade. Photo/www.sxc.hu

periodontal, endodontic and operative treatment) in order to achieve a passing grade. Unfortunately, the emphasis on ethical and professional behavior during these exams is far less specific.

Beauchamp and Childress (2001) agree that dentists fulfill the criteria of professionals because they are specially trained and licensed, and they are committed to the provision of important health care services to their patients. As Tartakow (2010, p. 96) reported “Certosimo cited five principles of ADA codes that included: non-maleficence, beneficence, justice, veracity, and patient autonomy, [suggesting] that these were the obligations for all health-care providers to make available in order to address the needs of patients and the profession.”

As defined by Rule and Veatch (2004, p. 45-46), patient autonomy, or the “pa-

► See EXAMINATIONS, page 4

Studying oral health in the United States vs. foreign countries

By Jaclyn Kostelac and Nicole Ranney, third-year dental students, Ostrow School of Dentistry, University of Southern California

Abstract

The aim of this study was to compare the oral health status of underserved individuals in the United States with underserved individuals in two other countries, Colombia and Kenya. Each year, dental students from the Ostrow School of Dentistry of University of Southern California (USC), Dental Humanitarian Outreach Program (DHOP) travel overseas to countries where residents with untreated dental problems have no access to dental care. The 2011 and 2012 locations visited were Cartagena, Colombia, and Nairobi, Kenya; both are considered third-world countries.

Inhabitants in these locations were compared to Los Angeles residents who also had untreated dental problems with no access to dental care. All patients at each of the three dental clinic locations were treatment planned by student dentists, obtaining approval for proceeding with dental care from USC dental school volunteer faculty.

Once formal and appropriate data were collected, specific dental needs were determined as low, moderate or severe. Dental treatment was limited to prophylaxis, restorative treatment and extractions. Final analysis of dental care from each of the three clinics showed that the individuals from both third-world communities as well as Los Angeles had varying degrees of dental needs. Regardless of whether patients treated lived in third-world countries or in the United States, their needs for dental care were emergent and crucial to bettering their general and oral health condition.

Introduction

The DHOP dental students travel overseas each year to countries where residents are underserved with respect to their dental needs. Dental treatment and procedures completed included (a) periodontal cleanings; (b) restorative dentistry, i.e., caries cleanout followed by amalgam or composite-

► See FOREIGN, page 4

PRSRF STD
U.S. Postage
PAID
San Antonio, TX
Permit #1396

Dental Tribune America
116 West 23rd Street
Suite #500
New York, N.Y. 10011

Teaching residents to act morally in the presence of risk

By Dennis J. Tartakow,
DMD, MEd, EdD, PhD, Editor in Chief



As Rushworth Kidder (2006) suggested, moral courage bridges talking ethically and performing ethically. Although Kidder's book is meant for everyone, it is a *must* for physicians and dentists.

Performing ethically is not always easy and is therefore important to be stressed during formal educational programs. Dental students must recognize that moral courage is frequently needed to address ethical issues in order to take action for doing *the right thing* when questionable issues arise with patients that place the clinician in an uncomfortable position.

Health-care professionals often face complex ethical dilemmas in the workplace; some clinicians tackle ethical issues directly while others turn away. Regardless of whether a doctor is involved with private clinical practice, education, research or administration, they are not immune to facing moral dilemmas or experiencing unethical behavior. Moral courage takes into account the principles of ethics and the courage to act accordingly. Courage is not the absence of fear...it is doing what's right even in the presence of fear.

Educators and scholars have disputed the diverse meaning of moral courage over the centuries. Ancient Greek philosophers Plato and Aristotle repeatedly used this term in reference to character on the battlefield, discussing courage as a trait set aside for situations where individuals feared death. Aristotle specifically discussed moral courage in the context of being able to wage war while being mindful of the possibility of injury or death. To Aristotle, bravery was a virtue that enabled Greek soldiers to

respond appropriately to the fear of the battle.

How a doctor responds to ethical dilemmas depends on his or her (a) previous experiences with unethical behavior, (b) individual personality traits, (c) moral values, and (d) knowledge of social justice principles, for which moral courage is needed to confront unethical behaviors. As a result of cost control procedures, inadequate staff levels, shortage of clinicians in some areas delivering patient care, merging of health-care organizations and ineffective leadership, there is an increase of ethical dilemmas in the health-care milieu today and it directly affects all doctors.

The AAO's Principles of Ethics and Professional Code of Conduct, Section VI, states, "Members may exercise discretion in selecting a patient into their practice, provided they shall not refuse to accept the patient because of the patient's race, creed, color, sex, national origin, disability, HIV seropositive status or other legally recognized protected class."

Although dental schools and hospital clinics often accept fee reimbursement from federal funding, most private practitioners do not. It is considered discriminatory for a dental school or hospital faculty to reject a patient based on a disability, even though a "contract" between the clinic and the patient at a screening evaluation might not yet have been established.

It would also be unwise to refuse a patient from your private practice if the reason is based on discrimination, including any of the reasons listed in the AAO's Principles of Ethics and Professional Code of Conduct.

Even though there is no universally accepted Hippocratic oath for dentists, it should be stressed to our dental students that they must adhere to affirmations such as:

- I may not always do what's right, but I will always *try* to do what's right.
- It is sometimes hard to do the right thing and sometimes hard to know what the right thing is, but once you know what that is, do it!

A temperamental tolerance of courage over timidity is needed when facing risk management issues. The tenets of decision-making are related to ethics and social justice principles, which directly begs the clinician's ability to

serve the (a) individual, and (b) community (educational services, outreach programs, welfare agencies, public service, etc.), are risk management issues (Walzer, 1983). Such concerns are becoming increasingly more critical for the profession as well as society.

According to Wren (1995), "Since the function of leadership is to produce change, setting the direction of that change is fundamental to leadership." Setting direction and planning are two separated activities — activities that coincide with teaching and which directly relate to teaching our dental students how to ethically and morally cope with adversity and risk.

References

- 1) Kidder, R. (2006). *Moral courage*. Harler-Collins Publishers, New York, NY.
- 2) Walzer, M. (1983). *Spheres of justice: A defense of pluralism and equality*. New York: Basic Books.
- 3) Wren, J. (Ed.). (1995). *The leader's companion*. New York: Free Press.

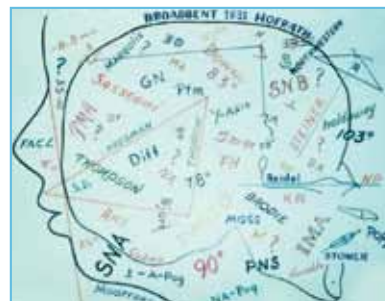


Image courtesy of Dr. Earl Broker.

Corrections

Ortho Tribune strives to maintain the utmost accuracy in its news and clinical reports. If you find a factual error or content that requires clarification, please report the details to Managing Editor Sierra Rendon at s.rendon@dental-tribune.com.

Tell us what you think!

Do you have general comments or criticism you would like to share? Is there a particular topic you would like to see articles about in Ortho Tribune? Let us know by emailing feedback@dentaltribune.com. We look forward to hearing from you! If you would like to make any change to your subscription (name, address or to opt out) please send us an email at database@dental-tribune.com and be sure to include which publication you are referring to. Also, please note that subscription changes can take up to 6 weeks to process.

ORTHO TRIBUNE

PUBLISHER & CHAIRMAN
Torsten Oemus t.oemus@dental-tribune.com

CHIEF OPERATING OFFICER
Eric Seid e.seid@dental-tribune.com

GROUP EDITOR
Robin Goodman r.goodman@dental-tribune.com

EDITOR IN CHIEF ORTHO TRIBUNE
Prof. Dennis Tartakow
d.tartakow@dental-tribune.com

INTERNATIONAL EDITOR ORTHO TRIBUNE
Dr. Reiner Oemus r.oemus@dental-tribune.com

MANAGING EDITOR ORTHO TRIBUNE
Sierra Rendon s.rendon@dental-tribune.com

MANAGING EDITOR SHOW DAILIES
Kristine Colker k.colker@dental-tribune.com

MANAGING EDITOR
Fred Michmershuizen
fmichmershuizen@dental-tribune.com

MANAGING EDITOR
Robert Selleck, r.selleck@dental-tribune.com

PRODUCT/ACCOUNT MANAGER
Charles Serra c.serra@dental-tribune.com

PRODUCT/ACCOUNT MANAGER
Humberto Estrada h.estrada@dental-tribune.com

PRODUCT/ACCOUNT MANAGER
Mara Zimmerman m.zimmerman@dental-tribune.com

MARKETING DIRECTOR
Anna Wlodarczyk-Kataoka
a.wlodarczyk@dental-tribune.com

C.E. DIRECTOR
Christiane Ferret c.ferret@dtstudyclub.com

Tribune America, LLC
116 West 23rd Street, Suite 500
New York, NY 10011
Phone (212) 244-7181
Fax (212) 244-7185

Published by Tribune America
© 2012 Tribune America, LLC
All rights reserved.

Tribune America strives to maintain the utmost accuracy in its news and clinical reports. If you find a factual error or content that requires clarification, please contact Managing Editor Sierra Rendon at s.rendon@dental-tribune.com.

Tribune America cannot assume responsibility for the validity of product claims or for typographical errors. The publisher also does not assume responsibility for product names or statements made by advertisers. Opinions expressed by authors are their own and may not reflect those of Tribune America.

EDITORIAL BOARD

Jay Bowman, DMD, MSD (*Journalism & Education*)
Robert Boyd, DDS, MEd (*Periodontics & Education*)
Earl Broker, DDS (T.M.D. & Orofacial Pain)
Tarek El-Bialy, BDS, MS, MS, PhD
(*Research, Bioengineering & Education*)
Donald Giddon, DMD, PhD (*Psychology & Education*)
Donald Machen, DMD, MSD, MD, JD, MBA
(*Medicine, Law & Business*)
James Mah, DDS, MSc, MRCD, DMSc
(*Craniofacial Imaging & Education*)
Richard Masella, DMD (*Education*)
Malcolm Meister, DDS, MSM, JD (*Law & Education*)
Harold Middleberg, DDS (*Practice Management*)
Elliott Moskowitz, DDS, MSD (*Journalism & Education*)
James Mulick, DDS, MSD
(*Craniofacial Research & Education*)
Ravindra Nanda, BDS, MDS, PhD
(*Biomechanics & Education*)
Edward O'Neil, MD (*Internal Medicine*)
Donald Picard, DDS, MS (*Accounting*)
Howard Sacks, DMD (*Orthodontics*)
Glenn Sameshima, DDS, PhD (*Research & Education*)
Daniel Sarya, DDS, MPH (*Public Health*)
Keith Sherwood, DDS (*Oral Surgery*)
James Souers, DDS (*Orthodontics*)
Gregg Tartakow, DMD (*Orthodontics*) & Ortho
Tribune Associate Editor

'Even though there is no universally accepted Hippocratic oath for dentists, it should be stressed to our dental students that they must adhere to affirmations ...'

Member Publication
AADE
American Association
of Dental Editors

YOU TREAT TO BOARD STANDARDS. AveX Suite[®] MAKES IT FASTER AND EASIER.



With accurate, CNC-machined slots, AveX brackets help you achieve beautiful, board-standard finishes with less wire bending.

"The accuracy of the arch wire slot significantly reduces the need for arch wire bending." – Dr. Richard P. McLaughlin



Before



After

Photo Credit: Dr. Richard P. McLaughlin



AveX brackets are also available in two ceramic options: AveX CX and AveX CXi.

888.863.5883 | opalorthodontics.com

© 2013 Ultradent Products, Inc. All rights reserved.

1. Cash AC, Good SA, Curtis RV, McDonald F. An evaluation of slot size in orthodontic brackets—are standards as expected? Angle Orthod. 2004;74(4):450-453. 2. Bennett, JC. Fundamentals of orthodontic bracket selection: a user guide (2 ed). London, UK: LeGrande Orthodontic Publishing; 2010. p. 83.



Research has shown that most brackets have oversized and/or irregular slot sizes.^{1,2} Opal AveX brackets are made using a proprietary CNC process that provides more accuracy than any other bracket.

Find out how the AveX Suite can help you get board-quality finishes. *Predictably and efficiently.*

Call **888-863-5883** or contact your Opal Orthodontics representative to learn more.

SCAN HERE to view a video about the complete AveX Suite.

 **opal**[®]
ORTHODONTICS
by **ULTRADENT**[®]
PRODUCTS-USA

◀ EXAMINATIONS, Page 1

tient's right to make decisions based on his or her own values, principles or ideals," can only be upheld if "the health-care provider respects the patient's rights to be adequately informed and acts accordingly." Rule and Veatch persisted that the principle of justice delineates the intrinsic worth and certain rights that every person possesses and that others are obliged to respect, signifying that no one patient deserves any more or less comprehensive treatment than another.

This ideology works in concert with the principle of veracity, which according to the AMA (Rule and Veatch, 2004) urges an individual to act honestly and without concealment regardless of benefit produced or harm encountered. These principles of social justice create a unique environment of honesty and respect in which fair treatment of patients is contextualized.

During dental competency examinations such as state boards, circumstances arise that can jeopardize these principles of practice. Through personal experiences and witnessed accounts of misconduct during practical exams, it is clear that ethics violations occur when a student is not mindful of his or her responsibility as a professional.

For example, the WREB Candidate Guide outlines the assessment of point deductions if a student fails to finish the procedure in the allotted time; completion more than 15 minutes late garners a score of "0." As a result, student doctors may use improper isolation, etching time and instrumentation as ways to complete exams when time becomes limited. They may also ask patients to limit questions regarding the treatment being received during the appointment, failing to follow proper protocol regarding informed consent in an effort to gain more "working" time. Under these circumstances substandard care can occur. This quandary, though, is not the only ethical gray-area on test day.

During the preparation and restoration evaluations, evaluators must review students' work and may lower a score for any technical errors found during these checkpoints. This risk of losing valuable points can bring about the fear of forthright communication, which would directly result in error detection. For in-

stance, a student may be aware of a void in a composite restoration or an open margin on a provisional crown, but fail to present this to an evaluator. A sub-marginal restoration can be "corrected" by removing sound tooth structure or being "built-up" with adhesive resin.

Concealment of errors even becomes a risk as a student can instruct a patient to "tap lightly" when occlusion is being checked. These examples encompass the inherent conflict of interests involving the student's desire to pass an exam and his or her obligatory honesty to the patient and the examination process itself, thus endangering ethical boundaries that are vital to the concept of being a professional.

While these examples may present complex scenarios, the response should not be to eliminate time constraints during exams or the examination process as a whole. Instead, ethical virtue can be assured on exam day with proper planning and execution. For example, by explaining the risks and benefits of treatment to patients during a prior appointment, with full access to descriptions of the procedure, a patient's true informed consent can be gained without pressure to do so during an exam. A patient's rights to autonomy and making informed decisions are unalienable. No amount of time saved or advantage gained by a student justifies the failure to deliver a patient these basic rights.

A student must show preparation and confidence in clinical skills during an exam but must not attempt a competency exam for which he or she is unqualified. Proper case selection is vital to this concept. An example of this is the attempt of a potential graduate to complete a gold complete veneer crown preparation on a second molar with no distal contact and a gingival overgrowth in the area for a test.

Independent of skill and experience, a satisfactory crown preparation, gingival reduction, final impression and provisional restoration fabrication would be an ambitious task for any dental student to complete in a single appointment and brings about the potential for: (1) excessive patient discomfort, (2) poor treatment execution and (3) irreversible tissue and pulpal trauma. Had this patient's treatment needs been assessed for clinical exam appropriateness with

a faculty member prior to test day, the student may have been advised against performing a procedure that is not in the best interest of the patient. In addition to procedural responsibility, there are also personal obligations of the student doctor to professional behavior that protect the patient.

Above all other extrinsic factors, a student must value and protect his or her integrity as a doctor. He or she should always portray this decorum; that is, to pass exams based on merit and capability, not good fortune and concealment. The honesty with which doctors act engenders a trust between patient and doctor; honesty that has not been corrupted by selfishness and self-interest, the way Allan Bloom (1987) suggested modern honesty has, is central to this trust. Bloom's argument for a review of contemporary "honesty" during a time in which moral code is being eroded by knowledge of popular greed, is of particular importance to the medical field: a doctor's commitment to selflessness displays profound strength of character, and makes him or her worthy of total trust.

Continuing this tradition is pivotal to the esteemed reputation doctors possess. Dharamsi et al. posited "dental and postgraduate residency programs must develop curricula with social justice and social responsibility as topics for educational training" (Tartakow, 2010, p. 87). These ethical standards should be applied to the test taking process in order to prove true proficiency in the principles of medical and dental practice.

Brown opined that "only through critical reflection, lucid dialogue, and strategic praxis can programs be set into practice for future leaders regarding ethics, social justice, and the equity to grow in awareness and action" (Tartakow, 2010, p. 92). Presently, a disconnect exists between the values of the medical profession and the standards to which students are held during performance examinations. Standards such as close attentiveness to others and procedural fairness, for example, have been lost in the student dentist's overwhelming desire to pass a competency exam. It is this disconnect that brings about the potential for patient mistreatment.

If students place personal interests aside, as contemporary bioethical standards demand, the implementation of

ethical standards during exams can begin; the use of substandard practices during exams could then subsequently end. In accordance with Brown, critical reflection, lucid dialogue and strategic praxis is interpreted to mean that patient well-being must become a priority to student doctors during exams and in the future as a practicing professionals. After all, including morality, humanity and ethics in a dental student's education is not an option. It must be highlighted and emphasized throughout the four years, as a professional education cannot be considered complete without it.

References

- 1) Beauchamp, T.L. & Childress, J.F. (2001). Principles of biomedical ethics (5th ed.). New York City, N.Y.: Oxford University Press, 57-103.
- 2) Bloom, A. (1987). The closing of the American mind. New York City, N.Y.: Simon and Schuster Inc, 185-187.
- 3) Rule, J.T. & Veatch, R.M. (2004). Ethical questions in dentistry (2nd ed.). Chicago: Quintessence Publishing Co, 51-63.
- 4) Tartakow, D.J. (2010). An analysis of factors that align with faculty vacancies in orthodontic education. Doctoral Dissertation, ProQuest Information and Learning Company, Ann Arbor, Mich. (UMI No. 3438516).
- 5) Western Regional Examination Board. (2012). Dental Exam Candidate Guide. Phoenix, Ariz.

About the author

Jonathan Shouhed was born and raised in Los Angeles, California as the youngest of three brothers. After receiving his bachelor of arts in political science at the University of California, Los Angeles (UCLA), he has continued to pursue



his education at the Ostrow School of Dentistry of USC as a candidate for doctor of dental surgery. While remaining engaged as a student and teacher at both UCLA and USC, Shouhed also enjoys active hobbies such as golfing and coaching in a young men's basketball league. In the future, he hopes to continue his work as an educator and researcher. For any additional information regarding this article, contact Shouhed at jshouhed7463@gmail.com.

◀ FOREIGN, Page 1

resin restorations; and (c) oral surgery for patients with unrestorable teeth. The 2011 and 2012 abroad clinic locations visited were Cartagena, Colombia, and Nairobi, Kenya. Both cities were considered to be third-world populations and the patients treated resided in slum areas within these cities. A review of the literature verified that dental needs in third-world countries were more extreme than those found within the United States (Nunn et al., 2008). This study was conducted to evaluate and compare the oral health status of individuals from the following three locations: Cartagena, Colombia; Nairobi, Kenya; and Los Angeles.

Materials and methods

Data were gathered from clinics in three countries: Colombia, Kenya and the United States. All patients at each of the three

city locations were treatment planned by student dentists, obtaining approval for proceeding with dental care from USC dental school volunteer faculty.

After oral examination and radiographic screening, data were collected; the need and priority for specific dental care was determined. Periodontal health was assessed from levels of (a) plaque, (b) calculus and (c) inflammation and measured as low, moderate or severe. USC student dentists and faculty assessed inflammation levels as either localized (< 30 percent) or generalized (> 30 percent). Bone level and gingival attachment were measured to finalize each patient's periodontal diagnosis.

The severity of decay and restorability of teeth were also evaluated. Dental treatment was limited to (a) scaling and root planing, (b) restorative treatment, and (c) tooth extractions due to constraints such as time, financial resources and volume of patients.

Results

Data analysis from each of the three dental clinics showed that individuals in underserved, third-world communities had varying degrees of dental needs, but greater than did U.S. citizens. Data were collected from 490 patients in Colombia, 187 patients in Kenya and 110 patients in the United States.

Periodontal health and restorative needs were the most impacted variables. Poor access to care and financial restraints were two primary restrictions for achieving optimal oral health. Overall dental care data indicated the following extent of needs: (a) moderate to severe in Cartagena, Colombia; (b) severe in Nairobi, Kenya; and (c) low to moderate in Los Angeles.

Need for dental care was measured based on the following parameters:

- Low: Prophylaxis treatment and no carious teeth

- Moderate: Prophylaxis treatment and 1-3 carious teeth

- High: Prophylaxis treatment, three or more carious teeth and/or one or more unrestorable teeth due to caries or infection

Discussion

Proportionally, more prophylaxes than restorative treatments were completed in Cartagena, suggesting that many patients had previous dental treatment and/or better oral hygiene. In Kenya, dental prophylaxis and restorative treatments were found to be equal, with no patient records of previous dental treatment. The decreased numbers of patients treated in Kenya compared to Colombia were affected by (a) limited power supply, (b) supply arrival delays and (c) time allotted to treating each patient as a result of the severity

▶ See FOREIGN, page 14

ortho :)

essentials

A comprehensive program that empowers your patients and helps grow your practice

■ Improves Oral Hygiene

The PRO-HEALTH SYSTEM® helps ensure that orthodontic patients complete their treatment with healthy, beautiful smiles.

■ Drives Patient Compliance

Introducing **EMBRACE IT!** – an exciting new tool that helps patients and parents stay engaged in oral care.



■ Supports Practice Building

Provides online customizable referral materials to connect to the community and local dentist offices.



To learn more, contact your **Crest Oral-B representative**, visit dentalcare.com/ortho, or call **1.800.543.2577**.

Impact of automated patient appointment reminders on orthodontic practice no-shows

By Diana P. Friedman, MA, MBA, and
Tim Williams, BA, MS

The internet age has dramatically altered communication patterns. Face-to-face interchanges continue to give way to digital message exchanges. Channels for these digital communications have rapidly morphed and expanded over the past years toward a faster, more interactive means of exchange.

This is the reality that faces orthodontic practices — interaction with current and prospective patients will predominately take place online. In order to maintain a productive level of engagement, orthodontic practices have to identify effective ways to leverage these new channels of communications. Patient engagement not only drives retention, but new patient acquisition — two cornerstones of a profitable practice. Research has consistently shown patients welcome the adoption of digital interchanges.

A national research study by Sesame Communications documented that 92 percent of orthodontic patients stated they find it more convenient to find answers online rather calling the practice. The same study found that orthodontic patients prefer SMS text and email reminders over phone reminders four to one.

Automated appointment reminders

Sesame Communications pioneered the first automated appointment reminder system for dentistry in 1999. Automated patient reminders enable the practice to confirm scheduled appointments via email, text messages or automated voice reminders.

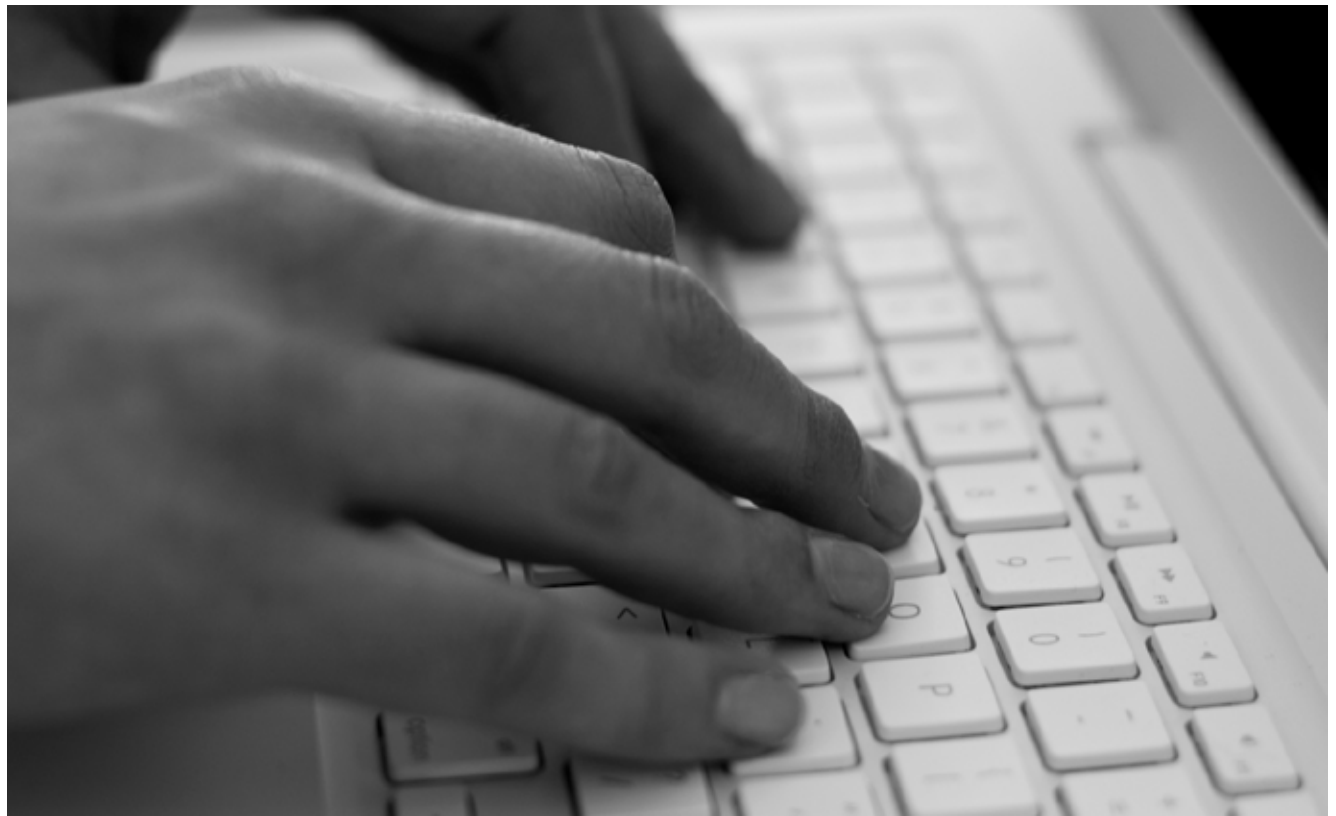
Sophisticated patient portals let patients define their preferred method of contact. This type of service not only provides a great convenience and benefit to patients, it can dramatically improve efficiencies for the practice.

Increased production is at the epicenter of a practice's financial performance, impacting cost structure, revenue flow, and ultimately, profitability. Appointment no-shows have a devastating impact on practice financial performance. In a 2012 national research study, 20 percent of orthodontists stated their top need was to reduce no-shows in the practice. Automated reminders have the potential to cost effectively and efficiently address this need.

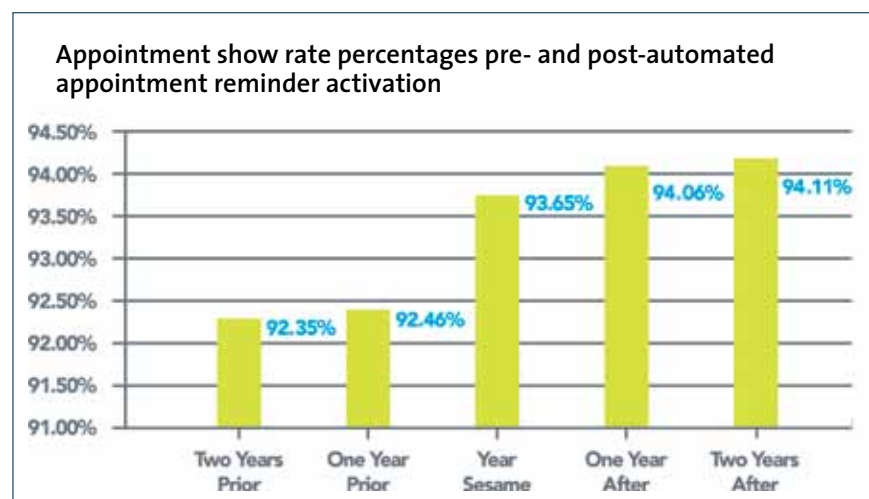
Research shows that today almost 70 percent of orthodontic practices have some form of automated appointment reminder solution. However, until recently there has been very limited research to document the impact these solutions on no-show rates and practice production. With advanced systems costing \$300 per month on average, the Return on Investment (ROI) justification for this investment has, to date, been a challenge.

New practice production study

Sesame Communications recently an-



A national research study by Sesame Communications found that orthodontic patients prefer text and email reminders over phone reminders four to one. Photo/www.sxc.hu



nounced the results of a breakthrough study measuring the impact of automated patient appointment reminders on practice production. The study analyzed five years of performance data and tracked the detailed confirmation and patient attendance rates on 19,773,041 appointments across 427 practices.

The study tracked no-show rate changes, both pre and post-implementation, of automated appointment reminders.

The study found that orthodontic practice no-shows were reduced by 21.83 percent.

The financial implication of schedule compliance is significant. This research documented \$105,322 in incremental production for orthodontic practices due to schedule compliance — revenue that would otherwise be lost. The benefits of practice production improvements continued throughout the 36 month post-activation period.

The data clearly demonstrates a positive productivity impact when integrating automated patient appointment reminders into the practice. First-year fees for this service should be recovered within the first six months post-activation. Additionally, time previously used by the administrative team on confirmations can now be leveraged to build relations with patients, market the practice and activate patients.

Conclusion

Automated appointment reminders dramatically reduce practice no-shows and positively impact production. It enables communication in the patient's preferred method. It improves efficiency and profitability. Finally, 90 percent of dental professionals agree that automating patient reminders gives them peace of mind that all patients are consistently contacted prior to appointments.

About the authors

Diana P. Friedman, MA, MBA, is president and chief executive officer of Sesame Communications. She has a 20-year success track record in leading dental innovation and marketing. Throughout her career, Friedman has served as a recognized practice management consultant, author and speaker. She holds a master's in sociology and an MBA from Arizona State University.



Tim J. Williams, MS, BA, is vice president of product strategy at Sesame Communications. As a former business owner, he understands the challenges dental and orthodontic practice face in today's marketplace. He holds a master's in applied information management and a bachelor's in psychology from Stanford University.





CALL: 1.866.752.0065 | VISIT: www.orthoclassic.com



Pay-As-You-Go
Only pay for the inventory that you use

Touch Technology
Quick and easy vending interface

Automatic Reordering
New product ships so you never run out of inventory

Organized Inventory
Un-clutter your office and reduce loss

Fail-Safe Sensors
Ensure proper vending every time

Online Management
Track usage, inventory levels and expenditures

INVENTORY MANAGEMENT HAS NEVER BEEN EASIER!

CUSTOM-WRAP YOURS TO MATCH THE OFFICE



Two Services to Put You Ahead of the Competition!

ORTHO CLASSIC: 1.866.752.0065 www.orthoclassic.com 1.503.472.8320

www.orthoamp.com



What is OrthoAMP?

Our full-featured advertising, marketing, and practice building service. We provide custom designs and marketing with unmatched efficiency and quality.



VEHICLE WRAPS



WEBSITES



PROMOTIONAL ITEMS

- Why Choose OrthoAMP?**
- Fully Customized Designs
No Templates. Every Design is Unique.
 - Full Rights to Final Design
 - Efficient Designers
 - Specialized in Dental / Ortho
 - Design, Marketing & Printing
All Done In-House
 - We Keep You Updated
Every Step of the Way



DESIGN & ILLUSTRATION



Imaging Sciences debuts new i-CAT FLX

Cone-beam 3-D system optimizes clinical control, ease of use and fast workflow

By Imaging Sciences International staff

Imaging Sciences International is pleased to announce a new addition to the award-winning i-CAT® family of cone-beam 3-D imaging — the i-CAT FLX — an innovative 3-D imaging solution that can help clinicians to quickly diagnose complex problems with less radiation* and develop treatment plans more easily and accurately. This newest system to the i-CAT brand offers 3-D planning and treatment tools for implants and restorations, oral and maxillofacial surgery, orthodontics, plus TMD and airway disorders.

i-CAT FLX has a range of innovative features that deliver greater clarity, ease-of-use and control.

- Visual iQuity™ image technology provides i-CAT's clearest 3-D and 2-D images*.

- QuickScan+ allows for a full-dentition 3-D scan at a lower dose than a panoramic image*.

- SmartScan STUDIO's touchscreen interface and integrated acquisition system yields more control and workflow flexibility by allowing the clinician to easily select the appropriate scan for each patient at the lowest acceptable radiation dose.

- Ergonomic Stability System (ESS) offers seated positioning, robust head stability, and adjustable seating controls to minimize patient movement, thus reducing the need for retakes. ESS also provides wheelchair accessibility.

- i-Collimator electronically adjusts the field-of-view to limit radiation only to the area of scanning interest.

- i-CAT FLX's small footprint fits easily into any practice.

- i-PAN for traditional 2-D panoramic images

Of course, as with all i-CAT products, the Tx STUDIO™ optimized treatment planning software provides immediate access to integrated treatment tools for implant planning, surgical guides, and other applications.

"We are thrilled to debut the i-CAT FLX — a complete 3-D treatment solution," said Kalpana Singh, senior product manager for Imaging Sciences International. "Given its high level of control over radiation dose and easy workflow, we know that the i-CAT FLX can benefit dental team members and patients they treat."

In 2012, Imaging Sciences International celebrated two decades of dedication to dental imaging, developing and manufacturing advanced dental and maxillofacial radiography products including the i-CAT Next Generation™ and i-CAT Precise™ and their exclusive software applications. The i-CAT brand has become among the most trusted 3-D radiographic systems in the

dental industry. Now, i-CAT FLX continues this legacy.

About Imaging Sciences International

Serving the dental industry since 1992, Imaging Sciences is at the global forefront in the development and manufacturing of computer-controlled dental and

maxillofacial radiography products and internationally recognized by highly regarded dentists and radiologists as one of the most innovative companies in dental imaging. The i-CAT system offers clinicians enhanced features for highly effective treatment planning and surgical predictability. For more information, visit www.i-CAT.com.



The i-CAT FLX is a new 3-D imaging solution aimed to help clinicians quickly diagnose complex problems with less radiation and develop treatment plans more easily and accurately, according to Imaging Sciences International.

Photo/Provided by Imaging Sciences International

'Given its high level of control over radiation dose and easy workflow, we know that the i-CAT FLX can benefit dental team members and patients they treat.'

FORESTADENT Orthodontics, Dr. Ronald Roncone team up

By Forestadent Orthodontics staff

FORESTADENT Orthodontics recently gained attention and support from a high profile leader in the orthodontic community. Dr. Ronald Roncone kicked off 2013 with a big announcement that he is joining forces with Forestadent.

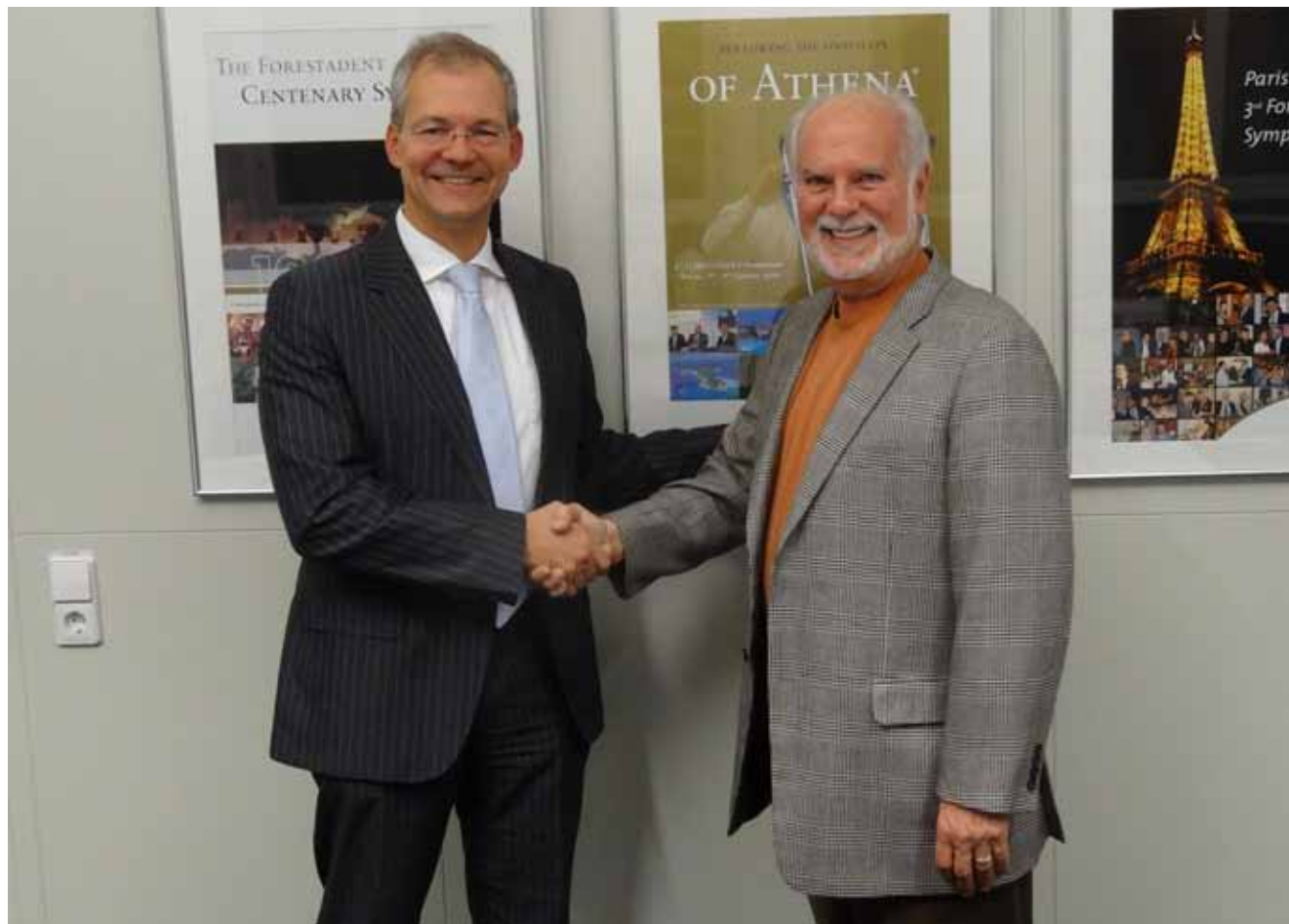
The thriving global orthodontic manufacturer has seen rapid growth in the last few years and is excited to have attracted the attention of such a respected leader. Roncone will contribute on many levels within the company, both domestically and internationally, as an advocate, product advisor and lecturer.

Roncone received his dental degree at Marquette University School of Dental Medicine while he simultaneously completed his graduate studies in physiology and neuroanatomy. He obtained two postdoctoral certificates from Harvard School of Dental Medicine and the Forsythe Dental Center.

In addition to his extensive resume of worldwide seminars, Roncone has developed an extensive training course called JSOP (Just Short Of Perfect), covering everything from the business of orthodontics, to in-depth training of the Roncone philosophy, and marketing and communications.

These year-long courses consist of four sessions and are held in Southern California where Roncone maintains a private practice specializing in adult treatment (esthetics, surgical and TMD) as well as "early" treatment for children.

Roncone has dedicated his career to the advancement of the specialty of orthodontics and continued awareness of a pre-adjusted appliance. As such, he developed the Roncone prescription. "There is and never will be a perfect orthodontic prescription due to biological and anatomical differences between patients," Roncone said. "However, an orthodontic prescription and treatment sys-



Dr. Ronald Roncone, right, has teamed up with FORESTADENT Orthodontics. Photo/Provided by FORESTADENT Orthodontics

tem should make treatment (especially finishing) easier. An orthodontist should not have to undo unwanted effects of a pre-adjusted appliance or use special wires to finish cases."

The Roncone prescription and system of treatment has been proven during the last 14 years. Forestadent has agreed to make some minor changes and additions to improve even more this J.S.O.P. system.

Roncone added: "I am pleased to join such a distinguished orthodontic fam-

ily organization. FORESTADENT has a history of success and dedication to the orthodontic profession. This remains a company totally focused on orthodontics and orthodontists. It continues to understand that orthodontists and the practice of orthodontics is very unique. In the current changing corporate environment, it is very refreshing."

With more than 100 years of experience, FORESTADENT is a leading global manufacturer of orthodontic prod-

ucts, specializing in brackets, bands, screws and functional appliances. FORESTADENT USA is headquartered in the heart of the United States in St. Louis, Missouri.

During the past 25 years, the company has experienced exceptional growth due to the high quality products and excellent customer service. For more information, about the company or scholarship opportunities, visit the website at www.forestadentusa.com.

Complete Clinical Orthodontics Summit: Connecting individuals, ideas and inspiration

The orthodontists of Complete Clinical Orthodontics understand that curiosity can't be taught, but it can be satisfied. If you're an orthodontist of unusually high standards, then you're invited to join us in Philadelphia on the day before the AAO for the inaugural Complete Clinical Orthodontics symposium. The CCO is a comprehensive system that addresses diagnosis, treatment planning and treatment delivery in a single, inclusive approach.

This year's speaker list includes Dr. Antonino Secchi, Dr. Ryan Tamburrino, Dr.

Celestino Nobrega, Dr. Jerry Clark, Dr. Rafaele Spena and Dr. Julia Garcia-Baeza. Don't miss this new generation meeting of the minds on May 3.

By uniting some of the brightest minds and ideas in orthodontics (Angle, Tweed, Ricketts, Andrews, Roth, Alexander, McLaughlin and Damon) the Complete Clinical Orthodontics can drastically enhance control, predictability and efficiency for all cases. The CCO represents a philosophy that — when correctly applied — enhances the capabilities of appliance-

es, improves treatment mechanics, and more importantly, produces better results. Ultimately the goal of CCO is to capitalize on the wealth of knowledge available to us as orthodontists, and to incorporate new technology and proven concepts to achieve a higher level of efficiency.

The CCO Summit is happening May 3 in Philadelphia. To share in the education, the ideas and the enthusiasm, please reserve your spot as soon as possible. You can do so by calling (800) 645-5530 or visiting www.mygcare.com.



MAY 3rd

Connecting Individuals, Ideas and Inspiration.