

# **Membership Matters**

A publication of the Oregon Dental Association • June/July 2020

# **TECHNOLOGY IN DENTISTRY**

Also Inside CE Calendar, page 9 Dental Foundation of Oregon, page 22

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#### GUEST EDITORIAL

# COVID-19 — No Mulligans



By Dr. Rickland Asai

#### HERE WE ARE, NEARLY EIGHT WEEKS

**INTO** our shelter in place order. I am doing okay, hanging out at our condo in rural Clackamas County. As we are situated on a golf course that has not closed during the shelter in place order, I have endeavored to get some fresh air activity playing golf. What I have developed is a slightly lower handicap and tendonitis in my elbow. (No pain no gain?) Now mind you, I'm not complaining. I feel fortunate to have an outdoor escape that allows an easy form of social distancing. Being retired rather than unemployed or furloughed is also a relief of one less thing to worry about. I think I can wait this out even though I miss getting together with family and friends and going out for a nice meal once in a while.

I am concerned about the shuttering of dental offices for all but emergency care, even though I agree with the premise of this being the best way to manage community spread of the novel coronavirus pandemic. I worry about the economic consequences of the hiatus of professional services such as dentistry. As dentists we are driven by our desire to help others maintain optimal oral health. This is not, however, something that we can do effectively from home. Dentistry has always been a "high touch" profession, even as we have more recently become more "high tech."

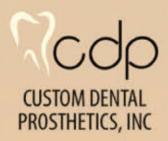
If there is one profession that is most attuned across the board in dealing with transmission of droplet-spread, potentially infectious material, it is us in dentistry. Ever since the HIV/AIDS crisis of the early 1980s, we have become very adept at disinfecting surfaces, sterilizing instruments, and donning and doffing our PPE. We are champions when it comes to universal precautions. In fact, it has become so routine for us, it is easy to forget how much we do this day in and day out.

With this newest respiratory pandemic, however, we are once again dealing with a pathogen we know very little about, though we are learning more and more each day. It has proven to be very virulent *and* contagious. Clearly it is spread by droplets, but we know less clearly to what extent it is spread by aerosols. Until proven otherwise, because of its virulence, experts are cautioning on the side of presumed aerosol transmission. This has necessitated the recommended use of higher levels of PPE.

As we gradually "reopen" the economy, we need to continually be vigilant both in the office and out in the community if we are to continue our progression of more public interactions. The ADA guidelines for reopening are a good source of information for the dental office. Wearing a mask in public, avoiding gathering in large crowds, and using a little common sense will go a long way in a smooth reopening protecting us all. After all, we are all in this together.

Unlike a friendly game of golf, we are not afforded the luxury of a mulligan off the first tee. We need to get this right as best we can on the first swing. How? Keep our eye on the ball, head down, and follow through. We can do this. It's par for the course.

The opinions expressed in this editorial are solely the author's own and do not reflect the views of the Oregon Dental Association or its affiliated organizations.



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## UP FRONT Life Membership

Congratulations to the following members who are eligible for Life Membership in 2021. We appreciate your service and support of the dental profession. If you know any of these members, please congratulate them on this membership milestone!

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# Events & Education Component CE Calendar



Calendar provided by Mehdi Salari, DMD

Due to the COVID-19 pandemic, events may be altered or postponed. Please visit the host dental society website for the most up-to-date information.

Date	Host Dental Society	Course Title	Speaker	Hours CE	Location	More Information
10/21/20	Multnomah	3D Printing Techniques-Biometric Tissue Engineering	Luis Bertassoni, DDS, PhD	2	Portland (OHSU — SOD)	multdental@aol.com or lora@multnomahdental.org
10/27/20	Clackamas	Risk Management	Chris Verbiest	3	Oregon City (Providence Willamette Falls Comm. Center)	www.clackamasdental.com or executivedirector@ clackamasdental.com

Find this calendar online at www.oregondental.org. Click "Meetings & Events" > "Calendar of Events".

Due to the COVID-19 pandemic, many component meetings were canceled or postponed. Looking for additional ways to get CE? The American Dental Association has a large collection of webinars and on-demand video learning opportunities available, many of which are free to members. Visit **adaceonline.org** to catch up on the latest offerings on your own schedule.

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# TRANSITION POINTER

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  - Financial terms
  - Timing
  - Covenant-not-to-Compete
  - Future employment contract, partnership, or expense sharing details (if any).
- My liaison with your attorney and CPA enhances the legal and financial planning.
- My qualified Financial Resources insures that the buyer can obtain 100% financing.
- My 49 **Point Transition Checklist**, reviewed with yourself, your staff, and the buyer details the administrative and clinical tasks necessary for a successful transition.
- Sample Patient & Referral Source Letters of Introduction assist you in writing your own letter.
- If you are to be employed by the buyer in the future, my **Employment Agreement Questionnaire** will outline specific details.
- If this is to be a partnership or solo/group practice entity, my **Management Operating Agreement Questionnaire** outlines management roles and how income will be shared.

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## PRACTICE TRANSITIONS MADE PERFECT!™

# **Board of Trustees Meeting Highlights**

**UP FRONT** 

Friday March 6, 2020

- Dr. Calie Roa was elected to serve as the 2020-2021 ODA President Elect.
- Dr. Bruce Burton, Dr. Ken Chung, Dr. Eddie Ramirez, and Dr. Jossi Stokes were elected to serve as Alternate Delegates at the 2020 ADA House of Delegates.
- Dr. Ericka Smith was appointed to a second term on the Annual Meeting Council.
- ODA's co-endorsements with ADA Business Enterprises were renewed.

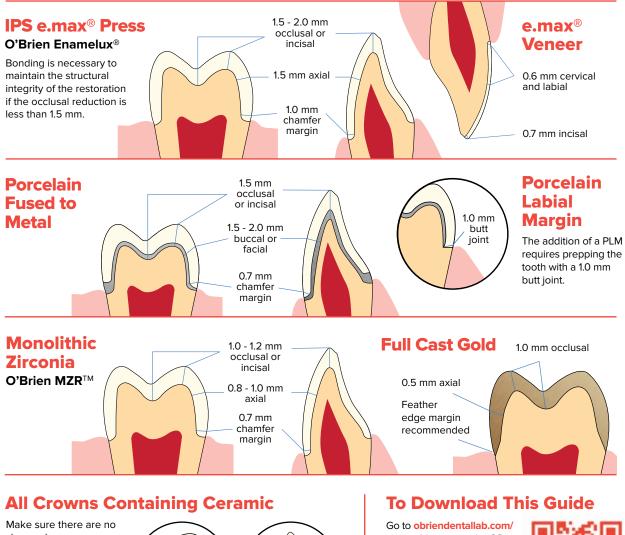
# Save the Date

#### for the 2020 ODA House of Delegates!

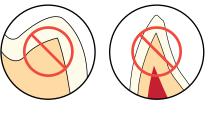
The 2020 ODA House of Delegates will take place September 26, 2020, at the Riverhouse in Bend. A social event will be held the evening of Friday, September 25th, with the formal business of the House scheduled on Saturday, September 26th. All ODA members are welcomed and encouraged to attend — contact your local component society with your interest, and look for registration information soon. We look forward to seeing you there!

# **Minimum Tooth Reduction** & Prep Guide

Prep recommendations for the most common restoration types.



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#### MEMBER BENEFIT OF THE MONTH

# **COVID-19 Resources**

**IN AN EFFORT TO KEEP MEMBERS INFORMED** during these uncertain times, the ODA has compiled a list of COVID-19 resources on our website. We have information on a wide variety of COVID-19 topics including:

- Guidance from the Oregon Health Authority and the Centers for Disease Control and Prevention
- Access to ODA's COVID-19 Hot Topics webinar series
- Access to free ADA webinars
- CARES Act resources
- Wellness tools and resources
- · Human resources and business management
- Return to work guidance
- PPE updates and resources

The ODA continues to update these resources as the COVID-19 situation develops. Visit **oregondental.org/government-affairs/regulatory-information/coronavirus** for a full list of updates and resources.



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## What's New at OHSU

CAD/CAM

By Amit Punj, BDS, DMD, MCR, FACP, and Hide Watanabe, DDS, MS

#### Introduction

A generation or so ago, technology was a much sought-after commodity attainable only by a privileged few. But now it is difficult to avoid technology as it has become an integral part of our daily life. New and emerging technologies, such as 5G network, autonomous driving, cloud computing and storage, artificial intelligence, extended reality, and robotics will readily be available to us very soon. Every industry has followed this trend, and dentistry is no exception. The digitalization of dentistry can be categorized into three major areas.

- 1. Digital technology as it relates to direct patient care.
- 2. Digital technology and practice management.
- 3. Digital technology and education.

The first wave of digital dentistry occurred in the 1980s, when the popularization of computer assisted design/computer assisted manufacturing (CAD/CAM) and intraoral scanners emerged. It was also during this time that digital radiography was just emerging as a viable alternative to standard film-based radiography.<sup>1</sup> Practice management and patient education software became more popular with the expansion of the internet and World Wide Web.<sup>2</sup> To keep up with the times, dental education adopted these technologies to train the next generation of dentists. Several articles have been published that have recorded the ways in which students show increased motivation and enthusiasm for learning this



AMIT PUNJ

Dr. Craig Robbins works with dental students on a CEREC crown in the pre-doctoral student clinic.

technology and in which it facilitated more student-faculty interaction.<sup>3</sup>

OHSU School of Dentistry has been keeping abreast with developments in market and industry trends, and digital technology has permeated almost every aspect of the student experience at the school. This article highlights some of the technology available in the different departments and showcases the array of experiences the graduating students have.

#### OHSU School of Dentistry Department Technology Highlights

In the department of oral and maxillofacial surgery (OMFS), Dr. Mark Englestad, associate professor and director of the residency program, pioneered a new software called Entrustable that records and analyzes the experiences of dental students into a smart portfolio. It uses computerized knowledge of anatomy, devices, clinical findings, and procedures to give students and teachers personalized, actionable information they can use to identify experience gaps and monitor progress.

The OMFS faculty and residents also use Blue Sky Plan (Blue Sky Bio) and Simplant (Dentsply Sirona) dental implant planning software to improve accuracy and minimize complications during implant surgery and dentoalveolar reconstruction.

In addition to the above, the department also uses additional virtual surgical planning software for: 1. Orthognathic/Craniofacial surgery

- Reconstructive surgery after removal of benign and malignant tumors.
- 3. Repair of complex facial injuries 3D systems VSP technology,

KLSMartin, and Materialise as Virtual Surgical Planning software are used to perform all three of these kinds of surgery virtually — before doing them in the operating room. This allows the creation of patient-specific implants and cutting guides to improve intraoperative accuracy, minimize time in the operating room, and optimize patient outcomes.

In the general practice residency (GPR) department, Dr. Malin Friess, director of the program, and his faculty are committed to improving patient care and outcomes using technology. They currently manage sleep apnea by working closely with the patients' sleep physician and prescribing various mandibular advancement devices (MAD). For CAD/CAM restorations, they use CEREC and have partnered with Artisan dental laboratory to procure a TRIO 3Shape unit for intraoral scanning that will be shared with the faculty practice dentists and GPR residents.

The orthodontic department has, according to Dr. Michelle Kim, the director of the undergraduate orthodontic program, an iTero intraoral scanner used exclusively for Invisalign (Align Technology) treatments in the graduate clinic. To assist with treatment planning orthodontic cases, the residents and faculty use Dolphin imaging software (Patterson Dental) that is capable of cephalometric analysis and virtually planning for orthognathic surgeries.

The department of periodontology works closely with the department of restorative dentistry for dental implant procedures using Simplant (Dentsply Sirona) and surgical guides for planning and placing dental implants. They also use Piezo-electric handpieces for their periodontal surgeries.

Pediatric dentistry is using Epic Wisdom, the dental component of the larger medical electronic health record (EHR) Epic, which is used in Doernbecher Children's Hospital's pediatric dental clinics and operating rooms. In addition, they use a handheld device called a NOMAD (Kavo) for digital radiography in the operating room. For clinical applications, the residents use an Isolite (Zyris) to achieve retraction and isolation along with some new materials, such as MTA biodentine pulp medicaments. In the near future they plan on using prefabricated zirconia crowns.

Unfortunately, the beginning of 2020 brought with it a global pandemic that has disrupted everyone's lives. The School of Dentistry faced these challenges by using technology to ramp up distance learning for the students. Some of the technology listed below helped connect students remotely with the School of Dentistry to stay current.

- AnkiMobile
- MindNode 6
- Quizlet
- iAnnotate 4
- EndNote
- Notability
- Citrix
- Poll Everywhere
- Explain Everything
- Classroom
- 3D Tooth Atlas
- Examplify
- Vital Source
- Webex

Students and faculty also have access to Apple TV, which helps facilitate more active learning opportunities in the classroom by untethering the instructor from the podium.

The department of integrative biomedical and diagnostic sciences has MiPACS (Medicorimaging) digital X-ray software and a cone beam computed tomography (CBCT) unit (Carestream dental).

The department of restorative dentistry is actively involved in digital dentistry, and the remainder



CEREC Omnicam units lined up in the Simulation Clinic for student practice.

of this article will shed light on these activities.

In the early 2000s, the department of restorative dentistry procured one of its first CAD/CAM units. Just like in many other U.S. dental schools, CEREC (Dentsply Sirona) played a significant role in the early stages of CAD/CAM education. As versions were updated from CEREC® Redcam to Bluecam in 2009, OHSU obtained 35 Bluecam units to be used mainly for preclinical education. It took another 5 years before applying this technology to routine clinical care with the "powder-free" Omnicam units. The School of Dentistry currently has eight Omnicam devices that are used as image acquisition and designing units and 12 MCXL milling units for tooth and implant borne restorations.

For students, the exposure to this technology in the early phase of their education is indispensable for future clinical success. Their initial exposure to digital dentistry is during their dental anatomy course in the first year. Students have two class sessions to scan and perform digital wax-ups using the CEREC Bluecam units. In this course, students are required to use the software to design teeth based on their knowledge of tooth morphology. Then, in the second year, students are given opportunities to use these units to learn about indirect restorations and implant crowns. In these courses, students learn the basics of scanning and designing and start to link their newly learned skills to actual clinical cases. For example, in the implant course, they learn how to use a scan-body in an implant fixture for digital image acquisition on a cast. Once proficient in these introductory projects, they are enrolled in an intensive 8-week CAD/CAM restoration course that is scheduled toward the end of the second year and just before entering the clinic. In each session, students

prepare multiple teeth according to the all-ceramic preparation quidelines; Omnicams are used for scanning. Bluecams are used for designing, and MCXL units are used for milling lithium-disilicate restorations. Students also get to practice crystalizing, staining and bonding the restorations into the preparations that they previously prepared. The course, although hectic, prepares students well to achieve the speed and accuracy necessary to complete a clinical CAD/CAM restoration in half a day or a full day. In this preclinical course, students also self-evaluate their projects using an iPad application (Numbers).

## CAD/CAM Experience in the Clinic

Prior to 2017, CAD/CAM procedures were treated as a regular restorative procedure and were not given any special accommodations. This approach made the assignment of CAD/CAM faculty and the allocation of CAD/CAM units difficult, resulting in sporadic CAD/CAM treatments planned in the clinic. In 2017 the department dedicated specific chairs in the student dental clinic exclusively for CAD/CAM procedures. Also, CAD/CAM trained faculty were specifically assigned to supervise only those procedures during that specific clinic session, thus providing maximum guidance and facilitating the completion of the case within a single clinic session whenever possible. Two certified dental technician (CDT) faculty were assigned to assist students with implant and anterior esthetic treatments. Using this new protocol, the total number of tooth-borne CAD/ CAM restorations increased from 99 to 387 between 2018 and 2019. The number of implant crowns fabricated using CAD/CAM technology exceeded 100 in 2019. In addition to

the CEREC system, the department recently procured a TRIOS 3Shape intraoral scanner and a Moon Ray 3-D desk top printer (SprintRav). mainly for implant restorations and surgical templates. According to Dr. Hide Watanabe, director of the CAD/CAM program, "Our immediate to short-term educational goal is to offer two kinds of digital approaches for restorations - 'one-day' single crown delivery (digital operative dentistry) and diagnostics, planning, and outsourcing of complex cases that require digital communication with dental laboratories (digital prosthodontics)."

### The Future of Technology in Education

In pre-clinical education, virtual anatomy, haptic feedback technology, augmented reality<sup>4</sup>, digital charting and self-assessment tools will give students prompt evaluation without direct faculty supervision. Machine learning and artificial intelligence (AI) which compiles information from large data sets will be valuable in clinical decision making. With technology ubiquitous in dentistry, it is not far-fetched to incorporate computer programing and coding as part of the dental curriculum.<sup>5</sup>

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## Digital Impressions and Your Dental Lab

CAD/CAM

By Derrick Luksch, CDT, Owner, O'Brien Dental Lab

#### ARGUABLY, THE MOST SIGNIFICANT TECHNOLOGICAL

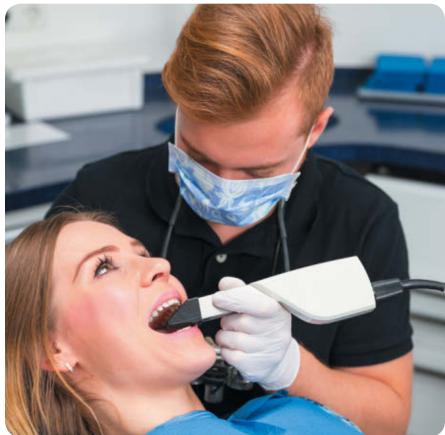
ADVANCE in dental office to dental lab workflow is intra-oral impression scanning. While the motivation to adopt this technology varies from practice to practice, it has proven especially beneficial for Invisalign cases, guided surgery stents, and implant cases when using scan bodies in the mouth. Intraoral scanning is also increasingly being used for crown and bridge cases. For this purpose, it's critical to remember some key factors.

First, because no system can see through saliva, blood, or tissue, the

process still requires proper tissue displacement by packing cord. (If you can't see the margin, neither can the scanner.)

Second, not every lab produces restorations in the same way when working with digital impressions. It's important that the lab has a digital workflow for every type of restoration that you prescribe. Knowing your lab's digital capabilities is vital. Here's a general breakdown of digital workflow within the lab, by product type.

Full-contoured monolithic zirconia is the most streamlined process because it's 100% digital and technically requires no model.



However, your lab must have printing capabilities if you prefer a verification jig to check the accuracy of contacts and occlusion. Layered zirconia does require a model because it's hand-layered and contoured. Full cast metal and pressed e.max, although monolithic, require a model for verification of contacts and occlusion due to expansion and contraction during casting or pressing. And PFMs need a model for proper contouring of the veneering porcelain.

It's also important to note that full cast metal, PFMs, and pressed e.max are produced through the lost wax method, which requires an accurate wax pattern compatible with the burnout and casting requirements of the investment. Your lab must be able to mill this pattern from the original digital file precisely. The printed model should not be relied upon for the contours at the margin because the resolution of even today's best printed models are not accurate enough when using the traditional molten wax technique.

Intra-oral impression scanning is just one of many technological improvements that have graced our industry. However, as technology continues to evolve, our primary focus in the adoption of any new method should always be the improvement of the final product, not merely convenience, efficiency, or for the sake of the technology itself. Committing to this philosophy will ensure that we always remain on the right track in serving our patients in the best way possible.

# Digital Technology at Artisan Dental Laboratory

#### CAD/CAM

By Mike Wilson

"Change is the only constant in life" — Heraclitus, Greek philosopher

This is an accurate description of our corner of the dental industry. Today, the velocity and scope of dental technology is growing exponentially. New hardware, software, restorative options, materials, workflows, and techniques are continually coming to market.

These technologies offer advantages: improved quality and consistency, increased patient satisfaction, new restorative options, cost savings, scalability, and, in some cases, faster turnaround times.

There are also challenges for labs: increased capital expenditures that require return on investment, additional costs of education and implementation, synchronizing analog and digital workflows, communicating new capabilities to customers, and developing policies for details such as PHI security and digital file storage. Labs must conduct significant research prior to investing in new technology so that we can produce a successful outcome. We must also explain solutions to an audience with varying levels of experience, knowledge, exposure, and interest in digital technology. More than ever, we rely on collaboration with customers, fellow dental labs, and OHSU School of Dentistry to troubleshoot problems and improve our results.

A quick summary of digital technology we have incorporated into our lab:

**Digital Impressions:** STL files are accepted from all major IOS manufacturers including Sirona/ CEREC. 95%+ of scans received are for fixed cases. 15-20% of cases received are IOS.

**Sx Guides:** Capability to propose a surgery from STL and DICOM files and/ or print guide as designed. Models can be submitted via IOS or PVS.

**Crown & Bridge:** Cases can be submitted via IOS or PVS. Substantial aspects of our manufacturing processes utilize CAD/CAM technology.

**Implant Restorations:** IOS cases are very predictable for implants. Can save an appointment if provided by surgical specialist. Not proven reliable for edentulous arches.

**Night Guards/Splints:** All the splints we produce can be manufactured from IOS or PVS impressions. Excellent



*NIKE WILSON* 

An example of two digitally designed splints being produced.

results (precise fit, minimal occlusal adjustments) are achieved via IOS, particularly when the clinician scans the bite at the desired vertical dimension. **Bruxguard** orthotics are selectively manufactured with our Carbon 3D printer. **Acrylic Night Guard** are selectively milled from pucks of PMMA. We have received very favorable feedback from customers.

Immediate/Interim Economy Dentures: In September 2019, we received training to produce complete dentures that are fabricated with our Carbon 3D printer. Feedback on the fit and occlusion is favorable, but with minimal long-term clinical research, we position them as an interim prosthetic. At this time, only conventional impressions are accepted for these cases.

Computer Engineered Complete Dentures (CECD): In December 2019, Artisan Dental Lab was the first dental lab in Oregon to receive training to fabricate complete dentures utilizing 3D printing and Lucitone material. Cases are designed with CAD software and utilize carded denture teeth. Case selection is critical to success. Feedback has been positive — particularly with fit and occlusion. At this time, only conventional impressions are accepted for these cases.

There is a lot to be excited about with respect to digital technology in dentistry. Challenges remain, of course. Having a partnership with OHSU allows us to support educational objectives (such as "Plaster Free in '23"), and to receive invaluable feedback when adopting new technology.

#### DENTAL FOUNDATION OF OREGON

# The Dental Foundation of Oregon

#### The Tooth Taxi

Dear Friends:

Dr. Amit Ray said, "In every crisis, doubt or confusion, take the higher path — the path of compassion, courage, understanding and love."

On behalf of our Tooth Taxi team of dental professionals and our board of directors, we hope that each of you is safe, connected and optimistically preparing for the future.

As I write this on April 20th, like many of you, we are continuing to honor Oregon Governor Kate Brown's Stay at Home, Stay Safe executive order to help flatten the COVID-19 curve. During this time, we remain humbled by your outpouring of generosity shown to the Tooth Taxi and The Dental Foundation of Oregon as we temporarily pause providing dental services and community outreach in support to Oregon's most vulnerable citizens: our children.

Although times appear uncertain and stress levels have been high, we are confident that together, we shall overcome this challenge due to our commitment, passion, skills and talent thus ensuring that when we are able, the Tooth Taxi will once again travel Oregon's scenic coasts, high deserts, and mountain ranges.

In preparation and anticipation of our hitting the road, we hope you will consider a donation to help see us through these uncertain times. Please visit us at **https://bit.ly/2wExb6J**. Every gift will be used to meet the increasing needs of those we serve because of this crisis.





With gratitude for your support,

Amber Fowler, Executive Director The Dental Foundation of Oregon























ALL PHOTOS COURTESY OF THE TOOTH TAXI TEAM

#### Here's How You Can Help

General donation gifts of any amount help support the Dental Foundation of Oregon and the Tooth Taxi, while raising awareness of our mission to advance oral education, provide charitable care, and coordinate resources for Oregon's children and vulnerable communities.

- Get involved with DFO-led events including our annual Chip for Teeth Golf Tournament, purchase Motor Mouth Car Raffle tickets or donate wine for the Wall of Wine.
- Host a third-party event where you and/or others collaborate to hold a birthday fundraiser through Facebook, host a dinner, garden party, movie night, or trivia night to help raise funds for the DFO. The ideas are endless!
- Honor a friend, loved one, employee, or referring dentist. Make a gift in the name of someone you care about. An acknowledgement card is sent on your behalf to honor the memory of a departed loved one, celebrate a special occasion, or recognize a valued employee or business partner.
- Get your company involved and include the DFO in your employee giving campaign. Companies like Moda Health and Nike often match employee contributions, and this is a great way to involve employees and demonstrate your commitment to our community.
- Get your school involved with help from teachers and students who can create their own school project for the Tooth Taxi, such as collecting toothbrushes, toothpaste, and floss to create oral hygiene kits for kids or host a poster contest to raise awareness of the importance of good oral and dental health in your school.
- Volunteer dental professionals can join us on the Tooth Taxi or host the Tooth Taxi at your dental office. Donate a day, or even half a day to help deliver oral health education to children in classroom settings in schools.
- Everyone can volunteer to help promote or serve at one of the many DFO events including registration at our golf tournament, donating bottles of wine for the Wall of Wine, or even selling Motor Mouth Raffle tickets.
- Join the DFO's Cornerstone Society! Join other like-minded individuals who have remembered the Dental Foundation of Oregon in their estate plans, ensuring the future of the foundation and leaving a true legacy for Oregon's children and vulnerable communities.
- Shop and give to the DFO every time you shop. At no cost to you, you can contribute by quickly registering the DFO as your beneficiary through the AmazonSmile program, which donates 0.5% of the price of your eligible AmazonSmile purchases to the foundation, and registering your free Fred Meyer Community Rewards card to the DFO #81176 with a percentage of your purchases donated quarterly to the foundation.
- Gifts to the DFO including charitable annuity, securities, or monthly gifts through a planned account withdrawal system support the DFO throughout the year.
- **Corporate partnerships** in support of DFO events are always welcome, and we can tailor a sponsorship package to help meet your organizational aspirations.

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## **Treatment Templates: Convenient or Careless?**

RISK MANAGEMENT

By TDIC Risk Management

#### THE DAY-TO-DAY RUNNING OF A

**PRACTICE** can be hectic at times, so many dental professionals use set systems and procedures to streamline their work. After all, less time on the back end means more time on patient care. But occasionally, cutting corners can lead to unwanted risk. This is especially true when it comes to patient records. Taking shortcuts on charting, such as using pre-established templates, may seem like a convenient time saver, but it can cause more headaches down the road. At best, it can leave patients unhappy. At worst, it can lead to potential liability claims.

In one case reported to The Dentists Insurance Company's Risk Management Advice Line, a patient came in for a routine cleaning. She called the office the next day to say she felt cheated because she did not receive a polish at the end of the cleaning. The office staff assured her that the polish is part of the cleaning and they would look into the matter. They reviewed the notes and found documentation that polishing did, in fact, take place. As a goodwill gesture, the dentist allowed the patient to return to the office for another polish. The patient was pleased.

Three weeks later, another patient called and reported there was no polish at the end of the cleaning. Again, the chart note indicated the polish took place. This time, the dentist looked into the matter more



critically and found that the polish was part of the treatment template and was automatically populated. He discovered that at times, the hygienist did not do the polish due to time constraints.

While digital templates can keep notations clear and consistent, they should be used with caution, said Senior TDIC Risk Management Analyst Taiba Solaiman. The use of templates, especially if fields are auto-populated, can lead to errors and omissions.

"Inconsistent notes can reduce the credibility of the dentist, and the onus is on the dentist to make sure that chart notes are an accurate depiction of what transpired at each appointment," Solaiman said. "It's best to refrain from pre-populating notations whenever possible."

Although no great harm came from the case above, the use of templates can have more serious effects. In another case reported to TDIC, a 4-year-old patient presented for restorative treatment due to rampant decay on multiple teeth. The procedure was performed under conscious sedation. Vital signs were obtained and noted on the patient's sedation record. At the end of the procedure, the patient was breathing and her eyes were open, but the dentist could not arouse her. She was immediately placed on oxygen. The patient wasn't responding to verbal or physical stimuli. Her blood pressure and oxygen saturation levels were dropping, so office staff called 911. The paramedics arrived and transported the patient to a local hospital.

Upon reviewing the patient's chart entries the following day, the dentist noticed that there was no mention of the patient's drop in blood pressure or oxygen saturation levels. Even more concerning was a note that the patient was discharged "awake, alert and ambulatory." The dentist then contacted TDIC Risk Management for advice.

One of the concerns in the above case is that some of the recordings of vital signs on the sedation record were pre-charted in the interest of time. The dentist quickly recognized that this method carries with it the potential for inaccuracies. The dentist was concerned that the parents would view the time-saving approach as reflective of an overall approach to patient care, which may lead them to wonder what other "shortcuts" could have led to this incident. While no liability has been established in this case, it brings to question the safety and accuracy of the record-keeping method used. The analyst advised the dentist against pre-charting and cautioned the dentist about editing entries after the fact.

"We do not recommend using pre-charted notes, as the notes may not accurately describe the specific details of the treatment completed or any unusual occurrences," Solaiman said. "When dentists or staff use predeveloped templates, sometimes the information may not be complete or it may not be applicable to the actual treatment rendered."

Whether digital or written, comprehensive and accurate patient records are the best defense in liability claims. They should include (among other information) diagnoses, treatment plans, progress notes, vital and diagnostic signs, exam and treatment notes, informed consent discussions and forms and all interactions with patients, such as conversations, phone calls and emails.

"Records serve as credible evidence of discussions between you and your patient as well as the actual treatment provided," Solaiman said. "Accurate and complete records are critical for demonstrating sound clinical judgement."

Dentists and their staff should be extremely careful in not only *what* they document, but *how* they document. Chart notes should be written during, or soon after, the appointment. The more time that passes, the greater the likelihood of details being forgotten or inaccurate. Although entries can be edited, after-the-fact edits increase scrutiny and can appear suspicious in a liability case. Practice owners should also review all chart notes completed by their staff. Legally, the dentist is responsible for all errors that occur within his or her practice.

"We also recommend that the dentist check over every provider note to make sure that the entry is correct and that the dentist feels confident speaking to the notes," Solaiman said.

Faulty records can strengthen a professional liability case against a dentist in litigation. Many plaintiff attorneys are becoming increasingly sophisticated in reviewing treatment charts. Audits can be run on electronic records that show the history of all entries made by whom and when. Records come under intense scrutiny, and the slightest mistake or omission can make an otherwise defensible case indefensible.

Accurate, thorough and up-to-date treatment records are a dentist's best defense in a liability claim. They are considered legal documents and, as such, must be created and maintained with the utmost care. Pre-established treatment templates may save time, but what's saved in minutes can, and often will, create more problems down the road. These measures can also appear careless and insensitive to patients, eroding confidence and leading them to believe that the practice values production more than patient care. Ultimately, patient safety should supersede convenience.

TDIC's Risk Management Advice Line is a benefit of ODA membership. If you need to schedule a confidential consultation with an experienced risk management analyst, visit **tdicinsurance.com/RMconsult** or call 800.733.0633.



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Save the date !



The 2021 Oregon Dental Conference will be held at the Oregon Convention Center on April 8-10, 2021!

Due to the COVID-19 pandemic, the 2020 Oregon Dental conference was forced to cancel. Fortunately, all of the 2020 conference planning served as the foundation for next year's event and we are happy to announce that we have successfully rescheduled many of our 2020 speakers to present at the 2021 Oregon Dental Conference!

A sneak peek of the 2021 ODC conference speakers includes: Professor Karen Baker, Nancy Dewhirst, Marianne Dryer, Dr. Mel Hawkins, Dr. Tieraona Low Dog, and Dr. Susan Maples. Based on 2020 preregistration patterns, we know you are as excited as we are to have another opportunity to see these leading experts! A full list of 2021 speakers can be found on our website at **www.oregondentalconference.org**.

In addition, the 2021 Solutions Marketplace will continue to offer a unique exhibit hall experience fostering connections with dental partners while supporting all of your one-stop shopping needs!

We look forward to a successful conference next year and cannot wait to see you there!

Need CE before the 2021 Oregon Dental Conference? Stay tuned for additional continuing education opportunities from the Oregon Dental Association with more information to come in the Summer and Fall of 2020.

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