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Consistent infection control protocols throughout a large group practice protect dental owners, their team and their patients from the spread of disease.

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Phone: 770-263-5257 • Fax: 770-236-8023
www.dentalgroupprac tice.com

EDITOR
Laura Thill • lthill@sharemovingmedia.com

SENIOR EDITOR
Mark Thill • mthill@sharemovingmedia.com

MANAGING EDITOR
Graham Garrison • ggarrison@sharemovingmedia.com

ASSOCIATE EDITOR
Alan Cherry • acherry@sharemovingmedia.com

CIRCULATION
Laura Gantert • lgantert@sharemovingmedia.com

ART DIRECTOR
Brent Cashman • bcashman@sharemovingmedia.com

PUBLISHER
Bill Neumann
wneumann@sharemovingmedia.com

ADVERTISING SALES
Diana Craig
dcraig@sharemovingmedia.com

ADVERTISING SALES
Jamie Falasz
jfalasz@sharemovingmedia.com

Summer Reading

We are coming off a busy time for dental group practice and DSO meetings. In the month of June there were three dental group practice meetings.

Dr. Marc Cooper and company held their annual meeting simply called 'The Summit' in early June in Phoenix, Ariz. The middle of June saw the law firm Dykema and their ever-growing 'Definitive Conference on Dental Service Organizations.' Not to be outdone by the first two meetings in the month of June, Heidi Arndt and the Enhanced Hygiene team held their 'Dental Group Evolution' meeting, which focused on the clinical side of the dental group equation.

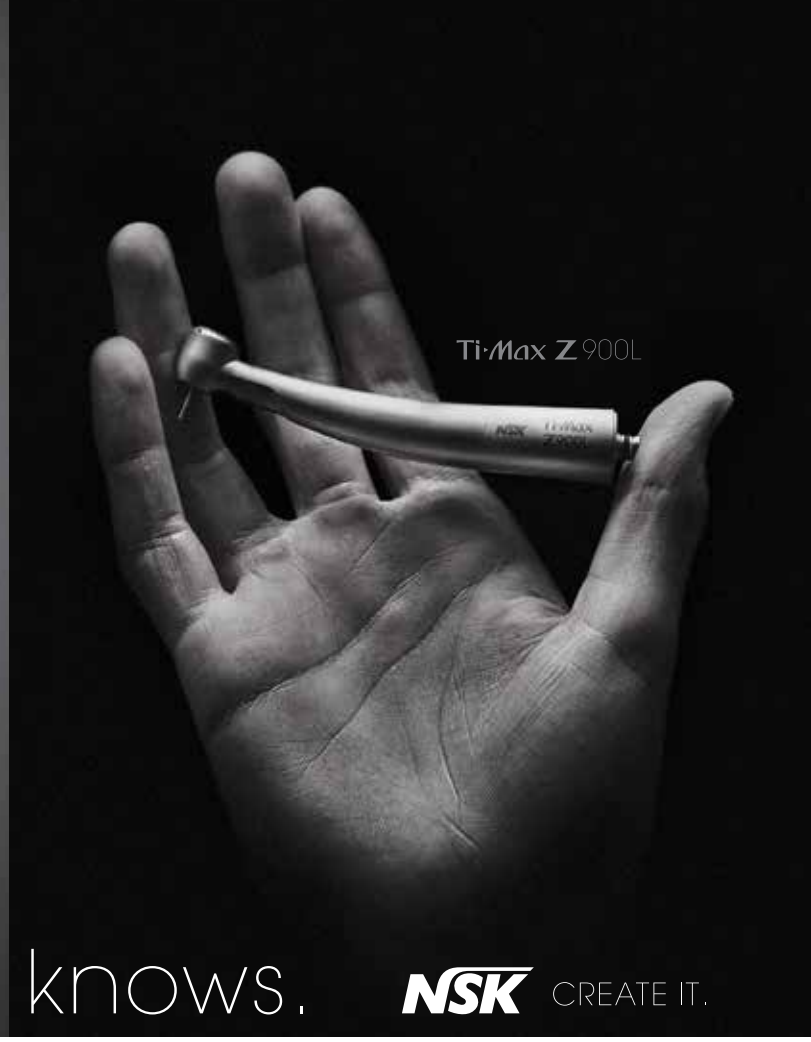
As we move deeper into the summer months, kids are enjoying their summer break, and many families are taking some much-needed vacation time. I find it is also a great time to catch up on education and reading. Keeping that in mind, we have some important topics in this issue of *Efficiency*. Compliance, infection control, Medicaid, and pain management may not make for light summer reading, but these topics are of paramount importance to dental group practices of all sizes.

Our cover story, *Culture of Compliance*, is a deep dive into the consistent protocols that several DSOs follow to protect their practice owners, dental teams, and their patients from the spread of disease. We review compliance protocol with Benevis, Great Expressions and Aspen Dental. A frequent contributor to *Efficiency*, Dr. Katherine Schrubbe and Dental Associates are featured in a piece on infection control and compliance titled *Sound Practices*.

Is Medicaid Dentistry Sustainable and *No Pain, Big Gain* are two other articles to put on your summer reading list. In the first piece, Lisa Mikkelsen, COO of Benevis, makes the case for continued Medicaid assistance for dental patients, talks about the changing reimbursement landscape and highlights how the DSO model is giving more access to these Medicaid patients. Access is not the only challenge for dental groups. Once a patient has access to care, how do you keep them calm and comfortable? We talk with several innovators in pain management to find the newest and most effective ways to "ease the pain."

Grab your beach chair and enjoy,

Bill Neumann



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Sound Practices

Dental Associates makes successful infection control principles a priority

ADSO members know very well the value of com-pliance to an effective practice-wide infection control program. This month, *Efficiency in Group Practice* recognizes Dental Associates – a large group practice whose mission "to improve our patients' quality of life through excellence in oral health care" provides the infrastructure to compliance to sound infection compliance principles.

Dental Associates' daily commitment to patient safety makes it essential for the dental practice to comply with all health and safety standards and recommendations set forth by OSHA and the Centers for Disease Control and Prevention (CDC), to provide a safe and healthful environment for all patients and staff members. "The infection control protocols that Dental Associates upholds ensure our staff remain safe and healthy and, in turn, these steps keep our patients safe and healthy," says Katherine Schrubbe, RDH, BS, M.Ed, PhD, director of quality assurance at Milwaukee, Wisconsin-based Dental Associates.

Patient and staff safety becomes a priority and the organization reduces its risk of liability.

Covering the basics

When dental facilities fail to adhere to infection control protocols, they can face a number of liability issues, notes Schrubbe. For one, "they can open themselves to potential OSHA inspections, which can result in costly citations," she says. "But, you can't put a price on patient safety and maintaining your credibility and reputation in the community as a safe dental practice," she adds.

Dental Associates ensures its infection control policies and protocols align with the Bloodborne Pathogens Standard and CDC Guidelines for Infection Control in Dental Healthcare Settings, which include – but are not limited to – sound practices for environmental disinfection, hand hygiene, the use of personal protective equipment, treatment of dental unit waterlines and instrument reprocessing.

"We provide our facilities with a comprehensive compliance manual that outlines the company's infection control policies and procedures," says Schrubbe. "In addition, we provide extensive initial training and annual refresher training sessions. Each clinic facility also designates a supervisor as the safety coordinator. This individual has regular communication with the corporate office compliance specialist, who is responsible for the development and implementation of new and continued infection control protocols and recommendations for the practice." Indeed, there are a number of dental staff members with an infection control education, such as certified dental assistants and registered dental hygienists, who often are interested in assuming the responsibilities of the infection control coordinator, she points out. "Group practices should work to identify key individuals who can fulfill this role."

Not only does the CDC recommend that, in any dental setting, at least one individual trained in infection prevention is assigned responsibility for coordinating the infection control program, but having a designated infection control coordinator at each facility within the practice ensures a consistent set of protocols is communicated and followed throughout the entire practice, Schrubbe continues. "The infection control coordinator can provide just-in-time [direction], as well as ongoing training and guidance, to staff in the facility." Patient and staff safety becomes a priority and the organization reduces its risk of liability. ■

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Ray Tai, CEO

Meet Their Needs

Going beyond the clinical to develop rapport, trust and loyalty with patients

By Deena J. Ali, RDH, BS, MBA

Deena is a Registered Dental Hygienist and business leader with over 15 years of clinical and leadership experience. Her depth of knowledge expands from private practice settings to acquisitions, to larger groups within the DSO environment. Deena earned a Bachelor of Science in Dental Hygiene from the University of Missouri, Kansas City- School of Dentistry and her Masters of Business Administration from The Lake Forest Graduate School of Business. Deena is a national speaker, known for holding her audiences engaged with her enthusiastic and dynamic style. Deena J. Ali, RDH, BS, MBA Deena@enhancedhygiene.com

Patients have choices. Not just a few choices, but a lot. Patients also have many factors that are influencing them on where to seek dental treatment, whether it is from friends, their insurance plans or a simple review on Google. So how do you stack up in comparison to other dental providers? Providing outstanding dentistry with state-of-the-art equipment and great customer service may no longer be enough.

Many dental professionals are constantly seeking guidance from known industry leaders and advocates such as the ADA, CDC and other well received resources. The industry has provided CDT codes to help with assessing and categorizing dental services. The mix of such services are constantly in review and can be validated with the annual addition or subtraction of codes as the profession evolves. However, if dental professionals all follow the same common core values, what is truly distinguishing from one clinician to another? And what can clinicians do to engage and retain patients as they land in their hygiene chairs?

This article will outline four easy steps to help every clinician – both new and seasoned – with specific techniques and tools to capture and retain patients!

Listen

Clinicians might be the experts in dentistry, but the patients are the experts in their needs and wants. Clinicians or their dental teams must take the appropriate time at the beginning of every conversation to uncover the patient's wants. This doesn't mean asking if the plan a clinician is creating works for the patient, but instead discovering what the patient's concerns are at the start of the appointment to help create the plan "with" them.

Pay attention to their ques to help you with their "language" style. Listen for specific words to help determine what drives their value proposition. Is the patient more interested in cosmetics, function, or feel? Whatever it is, listen for their

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communication style and try to emulate that style. For example, if they mention wishing their teeth were whiter, and you diagnose gingivitis, express the need to get their tissue healthy and the disease under control first, so you can then accommodate their whitening needs. Not verbalizing their needs and only addressing your clinical needs will leave them feeling unheard.

Validate

It is vital to address that you hear and understand their needs. This is especially important when their perceived needs might be different than their clinical needs. People want to feel acknowledged and validated. Patients today are more informed than ever, and often have previous knowledge of a situation or treatment perception, and clinicians must be respectful of that. You can do this by genuinely validating their fears, anxieties, and concerns. The patient might not always agree with your assessment, and might have a completely different idea of what should take place. To overcome this obstacle, it starts with validating them.

Research shows that patients remember the last part of the appointment, and when that is positive, they are more likely to return for subsequent appointments.

Solve

Lead with the findings and potential risk factors, and allow the patients to seek the solution. Clinicians often provide solutions to problems before a patient even sees or acknowledges this as a problem. An example of this is explaining how a scaling and root planning procedure will help treat their periodontal disease before you have even shown them the infection in their mouth. Clinicians often talk too much, or appear like they are "selling" as they try and engage patients in the solution they are seeking patients to accept and follow.

Instead, use tools such as your camera, radiographs and other clinical findings to help patients see their problems first. Wait for the patient to ask for solutions before you provide them with the treatment plan that helps solve their concern. Make sure you use simple words and stay away from dental jargon. It is not a time to impress them with fancy dental lingo, but a time to help them see clear solutions and potential risks for not acting on the prescribed treatment. As humans we all like to feel we are not alone, and a good idea is to use the rule of social norms as a way to compare their dental solutions to what other patients have also accepted. An example of this can be done by using the following verbiage: "Most of my patients choose this as a dental option."

Advocate

A lot of the dental treatment clinicians provide is routine to them, but it can be overwhelming or even embarrassing to patients. Keep this in mind as we move forward in treatment. Stay away from making patients feel "shame" or "guilt" for not seeking dental treatment earlier. Instead, be excited about what their future dental health holds. As a dental professional, provide comfort and support by verbalizing you will help them throughout their dental treatment. Use positive and energizing words such as 'let's" and "together" so they feel motivated and not alone. Research shows that patients remember the last part of the appointment, and when that is positive, they are more likely to return for subsequent appointments. Ending all appointments with a simple phrase such as "you did great today!" can help increase the likelihood patients will come back to complete their future dental needs.

In conclusion, clinicians must remember that professional development goes beyond seeking new advances in dental procedures and sharpening our clinical skills. Clinicians must remain aware of the psychological needs and relationship building techniques to develop rapport, trust and loyalty. These techniques are designed to help bridge the gap of patient acceptance instead of creating unintentional obstacles. ■

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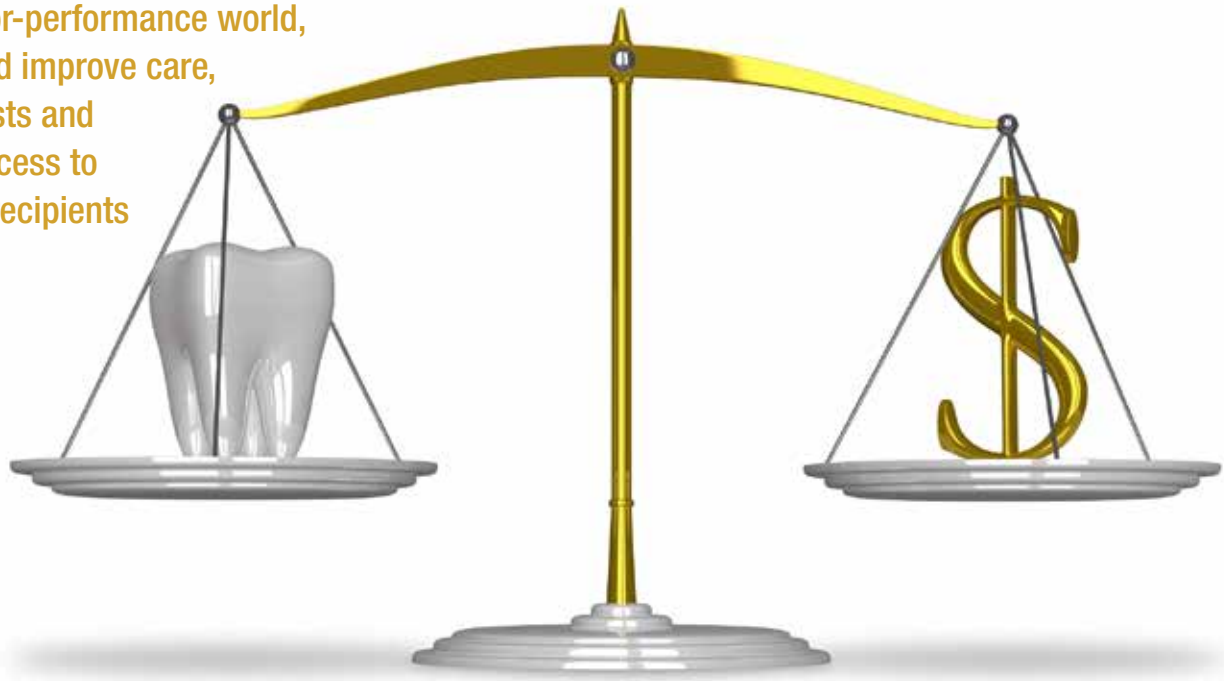
Is Medicaid Dentistry Sustainable?

In a pay-for-performance world, DSOs could improve care, reduce costs and expand access to Medicaid recipients



By Lisa Mikkelsen, chief operating officer, Benevis

Lisa Mikkelsen is chief operating officer for Benevis, an Atlanta-based DSO. Benevis provides practice support services to Kool Smiles, a leading Medicaid dental provider for children and families.

There is no doubt the state of healthcare in this country is in flux. As states brace for potentially sweeping changes to the Medicaid program, state Medicaid directors and policymakers will need to think strategically and creatively about how best to continue providing needed healthcare services while also improving outcomes and controlling costs.

Dental care is an area that presents unique challenges and opportunities for state Medicaid programs, leaving many to wonder: Is Medicaid dentistry sustainable in the long term?

The answer is yes, but only with appropriate action and reform. This article will explore the need for Medicaid dentistry, some of the access challenges that currently exist, and solutions that will help ensure we continue to build upon the Medicaid dental access gains that are already demonstrating improved health outcomes and increased cost savings in a number of states.

A pressing need

The merits of comprehensive dental healthcare – especially for the tens of millions of children covered by Medicaid – cannot be overstated. According to a 2016

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Pew Charitable Trusts report, tooth decay is the most common chronic disease among U.S. children – five times more prevalent than asthma – and dental care is one of the nation's greatest unmet health needs among children, especially in low-income, minority, and rural communities. In 2012, more than 4 million children did not receive needed dental care because their families could not afford it. Even when controlling for insurance status, low-income and minority children remain less likely than higher-income children to receive preventive dental care, according to the report.

Without access to preventive dental care, many patients are left to seek expensive emergency dental care for unaddressed oral health needs. In 2012, there were more than 2 million dental-related visits to hospital emergency rooms, which accounted for about $1.6 billion in health costs, according to the same report.

How are DSOs helping group dental practices keep their doors open to children and families who depend on their services? They do so by leveraging technology – including integrated practice management systems and economies of scale – to provide transparency and reduce costs, thereby expanding access, improving quality and promoting cost-effective solutions to reduce oral health disparities among children.

Access to care

Access to affordable dental care remains a challenge in many communities throughout the United States. A recent Health Affairs study shows that even though Medicaid expansion has resulted in increased coverage, it has had no impact on decreasing emergency room visits for dental care. The research suggests that coverage alone may not make a difference if patients do not have access to dental providers who accept Medicaid.

A 2014 survey from the American Dental Association confirms this trend: Only about one-third of all dentists accept Medicaid or other public insurance, according to the survey. Many start-up dental practices, which are typically smaller and family-oriented, begin taking all newcomers as patients. But once their commercial insurance and self-pay base is established, many practices begin to reduce – or eliminate – lower reimbursement payers, with Medicaid often being the first to go, as it is typically the lowest payer for dental care.

On average, Medicaid reimburses approximately 60 percent less than commercial insurers. Moreover, inflation is not built into the federal fee structure despite the ever-rising costs of labor, equipment and supplies, resulting in compressed margins year-over-year for Medicaid patients. On top of these challenges, offices serving Medicaid patients must navigate the administrative challenges involved with billing and collecting, including managing eligibility verification, service limit restrictions, and prior and post authorizations for certain services. Furthermore, practices face operational challenges of ensuring compliance with Medicaid payor-specific rules and regulations and higher frequencies of missed appointments from Medicaid patients.

All of these factors contribute to a situation that makes it financially untenable for most private practice dentists to accept a significant number of Medicaid patients.

Opportunities

Against this backdrop, group dental providers have risen to meet the access challenge by employing an innovative care delivery model built on the premise of

expanding access to care among Medicaid patient populations. They do so by partnering with Dental Support Organizations (DSOs) – practice support firms that specialize in non-clinical services, such as marketing, IT, purchasing, payroll and benefits administration, HR support, finance support and facility management. Medicaid-focused group dental providers attract dentists who want their professional life to fill an urgent societal need or simply want to focus on their clinical skills versus the administrative burden of running a practice. Group practices that have partnered with DSOs are able to provide administrative and operations support, allowing dentists to focus solely on providing compassionate and high-quality dental care to their patients.

How are DSOs helping group dental practices keep their doors open to children and families who depend on their services? They do so by leveraging technology – including integrated practice management systems and economies of scale – to provide transparency and reduce costs, thereby expanding access, improving quality and promoting cost-effective solutions to reduce oral health disparities among children.

In addition to expanding access, certain DSO-affiliated providers are leaders in improving outcomes and reducing costs to Medicaid programs. A recent analysis from national Medicaid research firm Dobson | DaVanzo & Associates looked at CMS data in several states and found that, as a result of Kool Smiles' focus on preventive dental healthcare, the DSO-affiliated dental provider performed 15 percent fewer services overall and had a Medicaid expenditure 33 percent lower than non-Kool Smiles Medicaid patients. The analysis found that these cost-effective strategies contributed to Medicaid savings that could fund dental services for up to 1.9 million more children nationally who currently do not receive care.

In 2012, more than 4 million children did not receive needed dental care because their families could not afford it. Even when controlling for insurance status, low-income and minority children remain less likely than higher-income children to receive preventive dental care, according to the report.

Solutions

Innovative dental providers like Kool Smiles are paving the way for meeting the Medicaid dental challenge. Now it is up to individual states to create an environment where this model can flourish. There is a longstanding issue of depressed Medicaid reimbursement rates. Medicaid rates are determined individually by each state, and in some states the rates are simply too low for Medicaid programs to attract and retain an adequate network of high-quality Medicaid dental providers, DSO-affiliated providers included.

However, the positive impact of DSO-affiliated Medicaid dental providers can be applied nationwide if reimbursement structures and incentives are aligned to reward providers that demonstrate superior outcomes. In other words, states that embrace the shift from fee-for-service to pay-for-performance, at a reimbursement level sufficient to attract providers, can reap the benefits in the form of additional providers, improved access and outcomes, and ultimately reduced costs to their state Medicaid programs.

While there are certainly very real challenges to sustaining Medicaid dental care, innovative group dental providers and care delivery models are the way forward. By effectively aligning incentives and revolutionizing reimbursement models and rate structures, states can help dental providers continue to meet the Medicaid access challenge and improve dental health outcomes for current generations and those to come. ■

Culture of Compliance

Consistent infection control protocols throughout a large group practice protect dental owners, their team and their patients from the spread of disease.

By Laura Thill

For large group dental practices, implementing and maintaining an effective infection control program can be challenging due to their size and the fact that they include multiple licensed providers. But failing to do so places them at a heightened risk of infection, making the effort well worth their while.


Samantha Sharon

"All dental providers should have protocols in place for infection control, but because the group practice typically has multiple licensed providers, we face a much greater risk if infection control protocols are not in place and followed," says Samantha Sharon, CHC, CHPC, vice president of compliance, Benevis. "Infection control processes and procedures should be implemented and audited regularly to ensure compliance with dental board rules and regulations, Centers for Disease Control and Prevention (CDC) guidelines (www.cdc.gov/oralhealth/infectioncontrol/guidelines), Healthcare Infection Control Practices Advisory Committee (HICPAC) regulations and OSHA (www.osha.gov). The protocols help to ensure patient and team member safety as part of day-to-day operations."

Ensuring that all facilities within a large group practice adhere to an infection control program may seem overwhelming, Sharon acknowledges. "But the end result – knowing that your offices provide the best care to your patients and having comfort in the fact that you are doing the right thing – is rewarding," she says. "Start by building a basic checklist of the most important items that the dental board and OSHA requires, and the CDC recommends. Implement a monthly auditing and reporting mechanism to ensure visibility and accountability. Don't let the little things slide, and always make this a priority. Creating a culture of compliance


Brian Bay


Elaine Olejnik


Dr. Robert Brody

takes time, but is well worth the effort to build a solid group practice foundation."

The first step toward a successful infection control program is "constant training," according to Elaine Olejnik, compliance officer, Great Expressions Dental Centers and Dr. Robert Brody, chief clinical officer, Great Expressions Dental Centers. Training should focus on "the what, the why and the how of infection control, as outlined by the CDC, the Organization for Safety, Asepsis and Prevention (OSAP), the Occupational, Safety and Health Administration (OSHA), the American Dental Association (ADA) and state and local dental associations," they point out.

"The second step is the implementation of sound infection control practices based on this training," Olejnik and Brody continue. The third and perhaps most important step is to implement a culture of safety, which is embraced by all levels of an organization, they add, noting that their organization addresses all of these with regards to its infection control program. "We are particularly proud of the culture of safety within the Great Expressions team, which we have developed to protect both our patients and our employees."

Consistent protocols

Dental groups have a lot to risk by failing to adhere to an effective infection control program. "There are a variety of illnesses and diseases – a primary one being Hepatitis B – that can be spread if proper infection control procedures are not followed," says Brian Bay, senior manager, risk management and loss prevention, Aspen Dental Management, Inc. (ADMI). Whether a large group or an independent practice, "any clinician or clinical team can face violations, such as unprofessional conduct, breach of the standard of care, dental board actions, lawsuits, etc.," he points out. "It's critical for any dental provider to understand and always follow infection control guidelines, procedures and protocols to protect themselves and ensure their patients are receiving the best quality care possible."

For this reason, every practice should designate an individual to oversee infection control, Bay notes. "At Aspen Dental branded practices, the lead dental assistant is tasked with coordinating infection control for all instruments," he says. Office managers are responsible for broader infection control programs in the practice. Ultimately, the licensed dentist is held accountable for infection control in the dental practice and [he or she] needs to be involved in the process as well.

Additionally, it's important that all facilities in a group practice follow consistent infection control protocols, Bay says. "At Aspen Dental branded practices, the owner dentists have adopted a standard procedure for infection control. ADMI has identified vendor partners who can help aggregate data, identify trends and report on metrics so we can best evaluate how well the practices' infection control procedures and protocols are working in every office."

> Having written protocols and a monitoring process, together with constant training and monitoring, is essential to ensuring so many employees across multiple sites follow a consistent set of infection control protocols.

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Indeed, it can be challenging when infection control experts such as Bay can't be on site at every office the DSO supports, ensuring first hand that the staff properly follow infection control procedures and protocols. "It never hurts to offer more training to the dental owners we support and their staff to ensure they have a better understanding of how to prevent cross contamination from occurring."

Consistent message

Group practices that emphasize a culture of safety often are more likely to implement a successful infection control program, according to Olejnik and Brody. "These practices have a consistent message stressing the importance of infection control," they point out. "As a result, they will develop a successful infection control program. Some may argue as to which comes first – the culture or the infection control program. Either way, both are needed to protect group practices from infection liability. You cannot have one without the other.

> "There are a variety of illnesses and diseases – a primary one being Hepatitis B – that can be spread if proper infection control procedures are not followed."
>
> **– Brian Bay, senior manager, risk management and loss prevention, Aspen Dental Management, Inc.**

Olejnik and Brody agree that having a designated infection control coordinator at each location helps reinforce the group culture of safety. "Though all successful infection control programs are a team effort, a leader or go-to person is needed to move it forward in a seamless manner," they say. "In fact, the CDC recommends there be a designated infection control coordinator. The Great Expressions infection control coordinators are our eyes and ears within each office. We work in tandem to ensure success of the program, and we could not do it without them." That said, it's important to have the right tools in place to support such a program. "Great Expressions Dental Centers utilizes a comprehensive tool – a monthly checklist – which ensures the infection control standards within the office stay compliant. GEDC is fortunate to have a forward-thinking IT department, which developed [our] Compliance Dashboard, providing transparency into each office's progress."

Having written protocols and a monitoring process, together with constant training and monitoring, is essential to ensuring so many employees across multiple sites follow a consistent set of infection control protocols, note Olejnik and Brody. That said, "while checklists and tools are wonderful adjuncts, the basis for Great Expressions' success is truly a team effort," they add.

Team effort

Because infection control affects the entire practice, all team members should be accountable for following appropriate protocols, notes Sharon. It's an important step toward creating buy-in to the culture of the practice, she says. That said, "it is also important to ensure there are team members who are responsible for auditing and holding teams accountable," she points out. "These roles should be assigned to at least two team members in a supervisory or management role. The responsibility of ensuring that infection control protocols are in place and being adhered to is not only practical, it is a requirement. Not implementing protocols can result in adverse patient outcomes, provider's licensure being at risk, fines, bad publicity and even closure.

"Educating everyone in the practice to help them understand the why behind each process creates more informed team members," says Sharon. "It also makes them more aware of their responsibility as healthcare providers to patients." Dental owners should provide their team with informative training materials explaining why the infection control program is in place, she notes. "Education should be a full circle. Simply telling team members to do something does not create buy in. Helping them understand why the program is in place and enlisting their help makes them a part of something bigger." Providers are likely to be more motivated when they understand these protocols are in place to protect their reputation and their dental license, she adds.

"The best part of group practices is their efficiency," Sharon continues. "It would seem like a natural part of

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the business to apply the same philosophy to infection control protocols. Having a common system, checklist and audit requirements for all practices ensure everyone is on the same page and working towards the same goal."

Sterilization protocols

All healthcare workers are at risk of contamination, says Sharon. "The key is to train the staff and ensure their understanding of the infection control protocols and the use of Standard Precautions to help provide protection against diseases. Without proper training for infection control protocols and utilizing Standard Precautions for all patients, employers are subjecting their employees to diseases that can spread through body fluids, such as hepatitis B virus (HBV), hepatitis C virus (HCV), human immunodeficiency virus (HIV), Mycobacterium tuberculosis, staphylococci, streptococci and other bacteria, which can colonize or infect the mouth and respiratory tract."

Sloppy or lax infection control practices not only place the dental staff and patients at risk for such diseases as herpes, hepatitis, HIV, AIDS and tuberculosis, they can be life altering, note Olejnik and Brody. "Many of these infections are chronic, life-long and even life-threatening diseases, and they are often carried by individuals who either do not know they are infected or do not want to disclose their full health history," they point out.

When it comes to infection control programs, "sterilization is by far the most important protocol, since instruments are being held by clinicians and placed in patients' mouths," says Bay. "Handwashing and disinfection are also critical to ensuring infection control best practices are always followed, but for a dental office, sterilization is definitely most critical."

In addition to hand hygiene and sterilization of instruments, several key protocols covered in an infection control program include the administrative role, training, personal protective equipment (PPE), sharps safety, disinfection of the treatment room, sterilization of the armamentarium, biological monitoring/spore testing of sterilization units and more, according to Olejnik and Brody. "Great Expressions patients should never concern themselves with infection control in our offices," they add. "Obviously, the PRIMARY concern is for the patient's and employee's well-being and health. However, a lack of adherence to a sound infection control program can also result in bad media coverage for the practice, legal ramifications and even a potential office closing."

Infection control checklist

Samantha Sharon, CHC, CHPC, vice president of compliance, Benevis, summarizes the key points of an infection control program:

- Spore testing.
- Instrument sterilization for both heat sterilization and cold sterilization.
- Hard surface sterilization and use of barriers.
- Sharps safety.
- Safe injection practices.
- Personal protective equipment (PPE) use and disposal.
- Hand washing.
- Waterline testing.
- Blood or other body fluid spills and clean-up process and procedures.
- Respiratory hygiene/cough etiquette.

When dental facilities do not adhere to standard infection control protocols, and staff or patients become ill, the practice is exposed to a number of liabilities, including the following, according to Sharon:

- Audits from the dental board and/or OSHA, potentially resulting in fines.
- A dental board complaint, which can result in legal costs, disciplinary actions, restriction or loss of license and fines.
- Malpractice litigation costs and settlements.
- A tarnished reputation.
- Loss of patients.
- Negative social media posts.

"The time, expense and repercussions of these negative consequences can be avoided if everyone adheres to an established infection control process," she says. "Although it seems like a big undertaking, implementing a basic infection control process in your office will promote patient and team member safety, protect you, minimize your risk and help ease your mind." ■

Taking Charge

A growing awareness of breaches in infection control and the resultant health concerns, together with advances in product technology, have motivated dental clinicians to take the necessary steps to protect their staff and patients. "An increased focus on – and awareness of – infection prevention and control has been evident over the past few years, both from a clinician and patient perspective," says Leann Keefer, RDH, MSM, director, corporate education & professional relations, Crosstex. "The highlighted issue of infection control breaches hitting the headlines has been a double-edged sword, unfortunately. Significant health concerns like the first documented patient-to-patient transmission of HCV at an oral surgeon's office in Oklahoma, or exposure to mycobacterium at offices in California and Georgia, (resulting in nearly 100 children being hospitalized), have brought to light the importance of following infection control best practices as outlined by the CDC."

Ensuring practice-wide compliance to an infection control program can be challenging, but it's key to ensuring a safe environment for staff and patients.

By Laura Thill

At the same time, advances in infection control products help ensure that dentists, their staff and their patients are better protected today, notes Doug Braendle, product manager, SciCan, Inc. SciCan autoclave bags are now equipped with inner and outer sterilization indicators, as required by CDC, he points out, which means the staff needn't take extra steps in order to comply with CDC requirements. Along the same lines, SciCan's STATIM sterilizers now come with G4 technology, which alerts offices to any potential sterilization issues. "They get e-mail notifications and a phone call from SciCan service managers to help keep offices safe," he explains.

Other examples of product improvement include dental unit waterline cartridges, now designed to provide continuous treatment for the delivery of safe, clean dental water, says Keefer. "Additionally, dental masks currently are available in three levels and are designed with materials that offer appropriate fluid resistance and filtration based on a procedure's time and aerosol level. And, built in external/internal chemical indicators on sterilization pouches not only save time but offer easy compliance with guidelines. Surface disinfectants have been improved as well, with reduced dwell and contact time." The list goes on, she points out. "Manufacturers are paying attention to the science behind the product and market based on efficacy and performance."

A designated infection coordinator

A successful infection control program depends on how well the dental staff complies with protocols. An

informed, designated infection control coordinator can provide written policies for the office, as well as educate and train the staff around compliance. "A clinician identified to coordinate infection control policies and protocols designed to help protect patients, staff and the practice is a critical component of a comprehensive infection control program," says Keefer. "Education should be provided during orientation and annually at minimum. Training records are an important factor based on state and federal requirements."

"At least one individual trained in infection prevention should be assigned responsibility for coordinating the infection control program," says Braendle. "Supplies necessary for adherence to the CDC's standard precautions should be readily available, and each facility should have a system for early detection and management of potentially infectious persons at initial points of patient encounter. Dental healthcare personnel should receive job or task-specific training on infection prevention policies and procedures, as well as the OSHA bloodborne pathogens standard, upon hire, annually, when new tasks or procedures affect [his or her] occupational exposure, and in accordance with state or federal requirements."

"At least one individual trained in infection prevention should be assigned responsibility for coordinating the infection control program. Supplies necessary for adherence to the CDC's standard precautions should be readily available, and each facility should have a system for early detection and management of potentially infectious persons at initial points of patient encounter."

– Doug Braendle, product manager, SciCan

The 2016 CDC dental update directs a dental facility's designated infection control coordinator to do the following, according to Braendle:

- Provide written infection prevention policies and procedures specific for the dental setting. The policies should be available, current and based on regulations and evidence-based guidelines, such as those provided by the CDC or the Healthcare Infection Control Practices Advisory Committee [HICPAC].
- Reassess infection prevention policies and procedures at least annually or according to state or federal requirements, and update if necessary.

Not only is it important for the infection control coordinator to educate the dental staff, he or she must stay current on new products, technology and revised guidelines. That means "constant learning," notes Keefer. "As research [sheds light on] new science, technology changes, materials improve and the microbiological world evolves, the only way to stay current is to keep learning," she says.

"There are plenty of quality infection control classes [available to infection control coordinators]," says Braendle. But, that requires motivation and taking time to seek them out, she notes. Some states, such as California, require dental professionals to take at least two infection control CE hours every year, he points out. So, it is not uncommon to see as many as 1,700 people in the early morning infection control class offered at the California Dental Association's annual meeting, he adds.

"Compliance versus complacency has always been a challenge," says Keefer. "However, a lack of compliance with published infection control guidelines can result in significant risk of disease transmission and compromise patient and staff safety, as well as the reputation of the practice.

"Now more than ever, the commitment to infection prevention compliance is monumental to every dental practice's success," Keefer continues. "Patients trust and expect delivery of dental care to be safe. Instrument processing and treatment room cleaning and disinfection usually occur out of the sight of patients. It is in these moments, when no one is watching, that clinicians must remain diligent to ensure adherence to sterility assurance protocol."

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Indeed, the success of an infection control program is dependent on "direction from the top," says Braendle. "Unless the doctors and management constantly reinforce the need for proper infection control, that action will never filter down. The person in charge of infection control must organize effective training and follow up with staff members on a regular basis." Not doing so can result in a couple of issues, she notes, the first being OSHA-related. "The dental office must pay about $3700 [in fines] per needlestick injury," he says. "If an office has too many of these issues, its [liability] insurance may be bumped to a higher rate or cut off completely."

In addition, when patients leave a dental office and become ill, while it's difficult to trace their sickness to their oral treatment, it does happen, leaving the office with a huge liability. "We had an [elderly, reclusive] patient in another country succumb to Legionnaire's disease, and it was traced to a dental office waterline," says Braendle. Had the patient been out and about more frequently, it would have been more difficult to associate her illness with the infected waterline, he adds.

The CDC offers several tools to help dental offices implement a successful infection control program. For instance, the Infection Prevention Checklist for Dental Settings is designed to:

- "Ensure the dental health care setting has appropriate infection prevention policies and practices in place, including appropriate training and education of dental health care personnel (DHCP) on infection prevention practices, and adequate supplies to allow DHCP to provide safe care and a safe working environment."
- "Systematically assess personnel compliance with the expected infection prevention practices and to provide feedback to DHCP regarding performance. Assessment of compliance should be conducted by direct observation of DHCP during the performance of their duties."

For more information and to view the checklist visit www.cdc.gov/oralhealth/infectioncontrol/pdf/safe-care-checklist.pdf.

Containing the Spread of Infection

A growing awareness in the dental community has led to greater compliance with infection control protocols.

Due to the nature of dental procedures, both patients and dental healthcare providers are at a high risk of exposure to pathogens through various possible entries, according to Yatao Liu, PhD, director of strategy, innovation and clinical affairs, Kavo Kerr. The good news is that, thanks to epidemiological studies, the Centers for Disease Control and Prevention's (CDC) infection control guidelines and product innovations, people are better informed and more compliant when it comes to following infection control protocols.

Infection control responsibilities

"The exposure risk includes direct contact with blood, oral and respiratory secretions, contaminated surfaces and equipment, aerosol transmissible pathogens, dental waterlines and more," he says. As such, "a highly trained staff member with in-depth knowledge of infection prevention would be very helpful in preventing infections among both patients and dental healthcare professionals."

A staff member tasked with infection control responsibilities must stay current with CDC

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guidelines and recent epidemiological studies, track and report infection prevention records, and educate and train other staff, Liu points out. Additionally, this person must have the ability to review existing infection prevention policies to identify gaps and out-of-date information. Particularly in multi-office practices, he or she must "observe current practices in different offices and understand the current gap between practices and policies, and develop engaging and effective training programs based on the identified gaps," he says. "In the early stage of product screening and trial phasing, it may be beneficial to use different products in different offices, and then do a cross-over switch to compare the products for the best fit." Once the right products are identified, standardizing across all offices could lead to a few advantages, he adds, including:

- A consistent set of procedures to follow means offices are less prone to errors associated with different product instructions for use.
- Standardization could lead to more convenient training programs.
- There is a potential cost savings due to larger purchase quantities.

Protocols and products

Education and training are key to encouraging dental clinicians to adhere to an infection control program, notes Liu. He outlines several key protocols that should be followed in every dental practice, regardless of its size or number of locations:

- **Sterilization.** Sterilization is mainly done by FDA-cleared devices or FDA-cleared chemicals with sterilization process validation mechanisms (e.g. chemical indicators). However, point-of-use cleaning and thorough cleaning, which is sometimes overlooked, is a necessary prerequisite to ensure effective sterilization.

- **Hand hygiene.** Education and increased awareness of the risks associated with the spread of infection have led to better hand hygiene compliance. Still, there is always room for improvement.

- **Surface disinfection.** Inanimate surfaces can harbor various pathogens. Most pathogens, including virus, bacteria and fungi, can survive on dry surfaces from hours to weeks. Compared to other infection prevention measures, compliance with surface disinfection has taken longer to catch on.

Dental clinicians today have more options than ever before to help them adhere to infection control protocols. Advances in technology have led to better, more effective solutions, and products such as the following – at one time seen only in a physician's office – have become commonplace in both solo and multi-office dental practices:

- Personal protective equipment (gloves, gowns/aprons, masks, goggles and face shields).
- Hand hygiene products (antimicrobial soaps, no-rinse sprays/gels, antiseptic towelettes).
- Surface cleaners and disinfectants. (Disinfectants must be appropriate for blood and saliva and offer broad-spectrum antimicrobial efficacy.)
- Single-use products (disposable prophy angles, disposable air/water syringe tips, barriers, etc.).
- Instrument cleaners (enzymatic detergent, alkaline detergent, etc.).
- Cold sterilants.
- High-level disinfection equipment.
- Sterilization equipment and accessories.
- Dental line maintenance products.

Armed with the right tools, clinicians have become increasingly vigilant in complying with infection control protocols, notes Liu. It's a trend he hopes will continue.

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Making the Transition

The shift from multi- to single-use devices

Increasing fears over the transmission of disease, together with advances in needle safety devices, have led many device manufacturers to shift from multi-use to single-use devices over the past 30 years.[1] All medical and dental devices are regulated by the Food and Drug Administration (FDA), which defines a single-use device (SUD) as one that is intended for one use on a single patient during a single procedure.[2] The FDA, through its Center for Devices and Radiological Health, is responsible for implementing those portions of the Federal Food, Drug and Cosmetic Act that deal with the approval, marketing and distribution of medical devices.[3] All dental practices should abide by these standards, however group practices have higher exposure and are at greater risk.

By Katherine Schrubbe, RDH, BS, M.Ed, PhD

Katherine Schrubbe, RDH, BS, M.Ed, PhD, is director of quality assurance at Milwaukee, Wisc.-based Dental Associates.

Making the transition

The transition from reusable medical devices to SUDs has presented an ongoing challenge in healthcare. As early as the late 1950s, when an outbreak of hepatitis in southern New Jersey was linked to cross-contamination from needles used for injection, the healthcare industry has become increasingly aware of – and concerned about – patient-to-patient disease transmission. The incident in New Jersey, due to faulty sterilization of reusable syringes, served as a major catalyst in the wide-scale transition to

SUDs that occurred just a few years later.[4] But this wasn't the only medical mishap that shed light on the risk of reusing needles. Around that same time, a dentist in New Jersey reused single-use hypodermic needles, resulting in nine patients dying of hepatitis.[5]

Prior to these incidents, most medical devices consisted of glass, rubber and metal, which were easy to clean and reprocess. With advances in technology, devices became more complex and, at the same time, harder to be properly cleaned and sterilized. As a result, the industry saw a high rate of pathogenic cross-contamination. In the 1960s, however, with the plastics revolution and the development of ethylene oxide (EO) sterilization, there was better access to convenient, disposable sterile products. Particularly with growing awareness of the human immunodeficiency virus (HIV), the prevalence of Hepatitis and the transition to the Centers for Disease Control and Prevention's (CDC) standard precautions, interest in these devices grew.[6]

Fiscally responsible, cost effective

In the current economic environment, dental practices are striving to be fiscally responsible and cost effective – but not at the expense of patient safety and sound, ethical infection control protocols. The dental practice utilizes many SUDs for patient care, including saliva ejectors, impression trays, prophy cups and irrigating syringes. Single-use devices usually are not heat tolerant and cannot be reliably cleaned.[7] Although all medical and dental devices and instruments approved by the FDA are accompanied by "instructions for use" (IFU), anecdotally, the dental office staff may decide on their own to reuse a device or instrument that is intended for single-use. An example of this is plastic perforated impression trays, which are labeled an SUD. The question that often arises is, "If the device was only tested in a patient's mouth for a minute, do I have to throw it away?" The answer is, "Yes!" Single-use means single-use.

The instructions for use for a single-use device do not include cleaning and sterilizing process instructions, so it is unacceptable for individuals at the dental practice to take it upon themselves to decide how to reprocess it. Nevertheless, dental team members sometimes decide on their own to immerse items in a cold sterile solution containing glutaraldehyde, without really knowing if this is an appropriate method for disinfection or sterilization of the device or instrument. Sparrow N. suggests several definitive reasons for not following this practice:

- **Potential cross infection.** Because of the composition of the device, the elimination of all viable microorganisms is questionable.
- **Possible leaching of disinfectants.** The composition of the device may absorb or adsorb chemicals, which may leach over time.
- **Material alteration.** Certain devices, such as processed plastics, may soften, crack or become brittle.[8] Therefore, placing the perforated impression tray in a chemical solution for disinfection or sterilization has the potential to impact patient safety. If an item is labeled single-use or disposable and does not include instructions for reprocessing, it should be used once and disposed of appropriately.[9]

Indeed, the manufacturer has labeled the device in this manner for a reason. A device may be marketed as an SUD because:

- The integrity of the product post-reprocessing is unknown because it was never tested.
- The product cannot be reprocessed safely and reliably.
- It is too expensive and time consuming to provide data or conduct studies required by the FDA to demonstrate the device can be reused.
- The liability for the product in case of product failure should be limited.[3]

Patients as consumers

Patients today have greater access to the Internet and other electronic media, making them better informed and smarter consumers. The result is a population that is increasingly healthcare savvy.[6] At the same time, with the use of SUDs, there are significant ethical issues regarding informed consent, patient safety and cost. Beneficence is "to put concerns for the patient's well-being above any benefit." Accordingly, a patient's autonomy is affected by not being informed about the use of a reprocessed SUD.[5,10] Consumers have the right to be informed and workers have the right to a safe workplace. All patients should receive the same standard of care without being harmed in the process or exposed to an increased risk of infection.[6] That said, there is little evidence that reprocessed SUDs are as safe as new ones, and the more times a device is used, the more likely it is to malfunction. And, since no process is perfect, the odds

of infection may be higher, if only slightly, when a device is used on more than one person.[10]

Weighing the risks

The OSHA Bloodborne Pathogen standard has been in place for over 20 years and the CDC Guidelines for Infection Control in Dental Health-Care Settings have been in practice since 2003. Seeking savings from reuse and ignoring manufacturers' instructions, as well as FDA regulations, can have legal ramifications, especially if patients suffer harm after being treated with these reused devices.[10] There are other questions to contemplate as well when considering reusing an SUD:

- Is the patient aware that this SUD is being used again?
- Should the patient be charged a lesser fee for the procedure since the device is not new?

Dentists should keep in mind that there is a cost involved in re-processing (cleaning, disinfection, packaging and sterilization) devices. And, even if that cost is less than the cost of disposing of SUDs, when one weighs the risks involved – and the costs associated with those risks – in most cases it will be more cost effective to dispose of the SUD.[9]

Environmental considerations

One disadvantage of SUDs is the addition of non-biodegradable plastic to the environment.[9] Indeed, most SUDs are not classified as infectious/regulated waste and can be disposed of in a regular trash receptacle. In fact, one study indicates that American healthcare facilities continue to dispose of over 4 billion pounds of waste annually in landfills and commercial incinerators, making the healthcare industry the second largest contributor to landfills after the food industry.[11] Nevertheless, in spite of these concerns, patient safety cannot be compromised and continued research, as well as innovative ideas for recycling, may be part of the solution to this issue.

At the forefront

Patient safety is at the forefront of all dental healthcare procedures. There is widespread utilization of single-use items during the delivery of dental care, helping reduce the risk of disease transmission. Using disposable items enhances infection control by eliminating the risk of patient-to-patient transmission of infectious microorganisms because the item is discarded and not used on another patient.[9] Dental healthcare providers have an obligation to follow FDA regulations and IFU to maintain high standards for care. "We must be vigilant about doing things the right way, the safe way. There is no room for practicing by tradition, accepting excuses for not following best practices, not being educated about published standards or for not asking the right questions. Always remember to ask what is right, not who is right. Safety isn't expensive - it's priceless".[12] ■

> In the current economic environment, dental practices are striving to be fiscally responsible and cost effective – but not at the expense of patient safety and sound, ethical infection control protocols.

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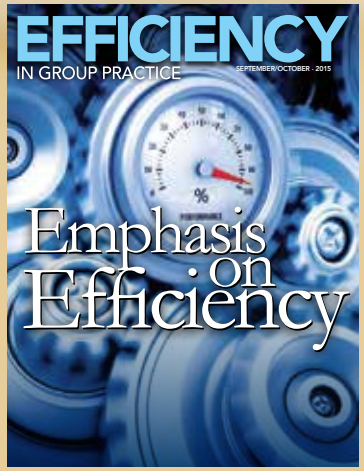

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Dental Infection Control: Promoting Awareness

In September 2017, the Organization for Safety, Asepsis and Prevention (OSAP) a growing community and membership association of clinicians, educators, policy makers, consultants and industry representatives who advocate for the Safest Dental Visit™, will celebrate the third annual Dental Infection Control Awareness Month (DICAM) to focus on the importance of infection control in dentistry.

The unique nature of many dental procedures and settings makes it especially important that dentists and their staff adhere to specific strategies aimed at preventing pathogen transmission among themselves and their patients, according to the Centers for Disease Control and Prevention. Particularly in large group practices, which can have higher exposure and greater risk, it's important to ensure that appropriate infection prevention protocols are practiced at each facility.

To promote patient safety and build patients' trust in infection control compliance – and to reinforce its efforts to provide The Safest Dental Visit™ – the Organization for Safety, Asepsis and Prevention (OSAP) is gearing up for its third annual Dental Infection Control Awareness Month (DICAM) this September. In addition to creating awareness around infection control, the organization aims at helping the dental community "engage with each other and the public in an open, safe and collaborative dialogue," says Christina Thomas, newly appointed executive director, OSAP.

Additional goals include supporting the CDC's infection control

checklist and championing the role of the infection control coordinator – a key staff member whose role it is to serve as a resource for the dental team in infection control and safety, and maintain oversight over the practice's written exposure control plan, notes Thomas. "We fully support and promote the adoption of the CDC's Summary and companion Infection Control Checklist and make this resource easily accessible to our members, partners and interested parties in support of the recommendations outlined in the CDC's *Guidelines for Infection Control in Dental Health-Care Settings–2003*," she says. "We also provide tools and resources on how to use this information to educate staff on OSAP.org and through training material such as OSAP's implementation workbook, *From Policy to Practice: OSAP's Guide to the CDC Guidelines*, updated in 2016. We work to support OSAP networks with access to this critical information in a variety of ways, including our annual observance of Dental Infection Control Awareness Month (DICAM)."

Supporting the ICC

The CDC recommends that every dental practice have an infection control coordinator (ICC), says Thomas. (For large group practices, many experts support having a designated infection control coordinator at each facility.) "The role of ICC is critical to help monitor compliance with regulations and spot possible gaps for review," she says. For those interested in specifics on the role, OSAP provides information on the ICC's main functions on OSAP.org, including:

- Lead in policy development, implementation and monitoring procedures using credible sources.
- Maintain relevant regulatory and guidance documents.
- Act as a resource on infection control/prevention for the team or organization.
- Maintain a basic understanding of products and equipment to maintain patient and provider safety.

Dental Infection Control Awareness Month will help us "communicate the importance of the role of infection control coordinator," Thomas continues. "We've developed a few tools to help in this process, including the Case for Designating a Dental Safety Coordinator and Defining the Role of the Infection Control Coordinator." OSAP also provides tools and resources for ICCs to educate them on CDC guidelines, complying with OSHA regulations, building a culture of safety and more, she adds. "We also encourage anyone involved in dental infection control safety to take advantage of OSAP membership to fully experience what this community has to offer."

Open dialogue

When dental practices – both large and small – encourage a culture of safety and educate their patients about proper infection control protocols, "the end result can be a more positive and safe patient experience," says Thomas. Therefore, "OSAP's resources support positive messages to reinforce what the dental team does to keep patients safe.

"We've developed a few tools to help in this process, including the Case for Designating a Dental Safety Coordinator and Defining the Role of the Infection Control Coordinator."

– Christina Thomas, OSAP

"Having an open dialogue is important, and finding ways to spark this dialogue is also key," she continues. "Dentists and their staff can promote Dental Infection Control Awareness Month through flyers and the resources we have available through DICAM tools. Having a poster or information posted in several areas of the office can serve as the catalyst for a positive conversation on infection control and safety."

Dental Infection Control Awareness Month is just one way the dental community can get involved in ensuring every dental visit is a safe dental visit, Thomas points out. "The community of members, the events, access to products and updates on the latest emerging trends and research are a few more ways OSAP members are staying connected and having an impact on the future of dental infection control and safety," she says. "There are many resources, as well as membership information, available on our website, OSAP.org. We encourage everyone to get involved and to make this September's Dental Infection Control Awareness Month a successful one. It's a topic that can't be overlooked, because safety matters!" ■

Pain Management

Improved technology and delivery systems have made it easier for dentists to keep patients comfortable and calm

By Laura Thill

The dreaded needle! For most patients about to receive an anesthetic, it's their biggest nightmare. And, the last thing dentists want is for their patients to be uneasy in the chair. But contrary to what many patients believe, the needle isn't their greatest source of their pain; the majority of the pain comes from the anesthetic itself, according to experts.

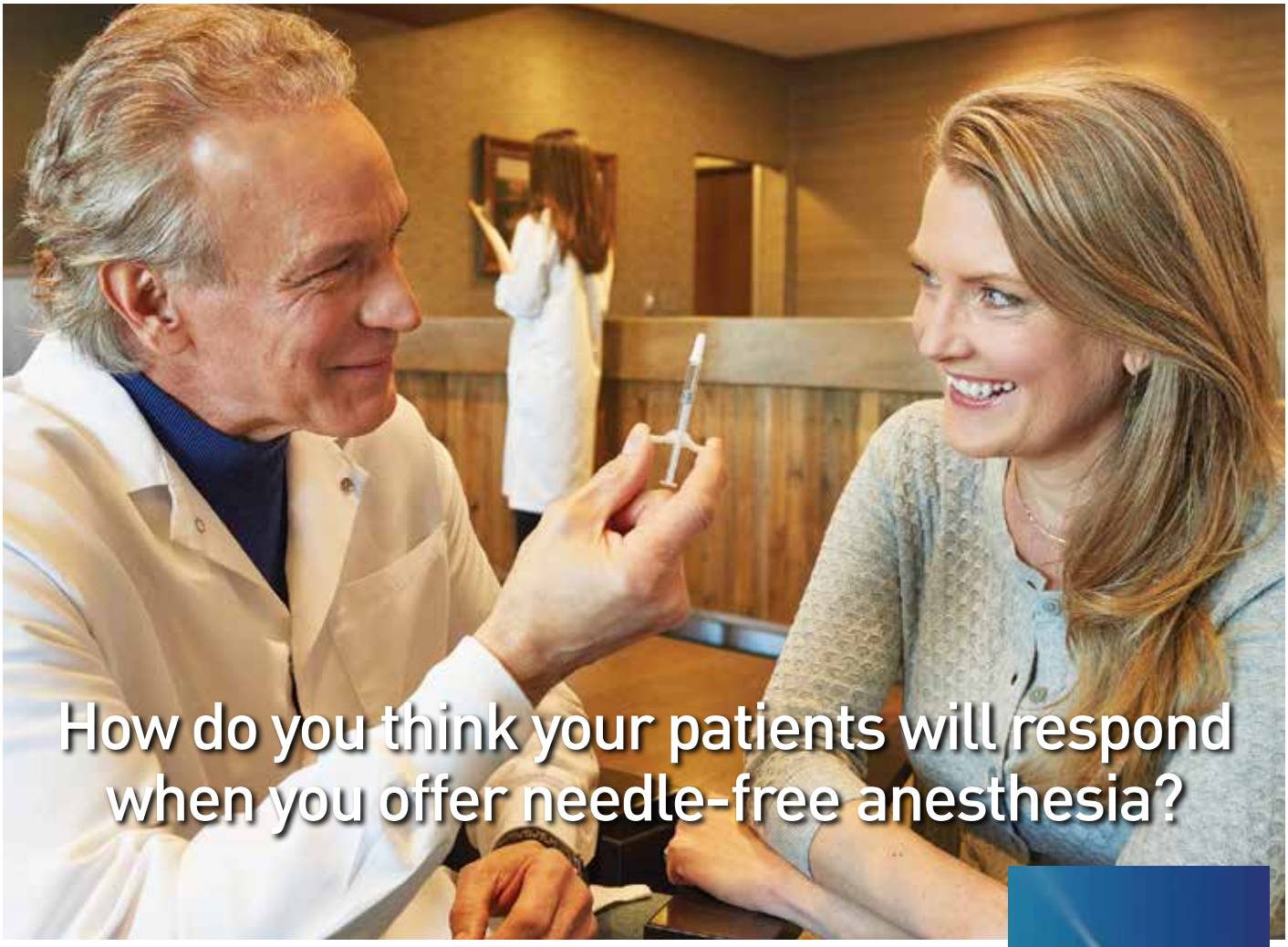
Pain: A major concern

For most patients, receiving an injection is the most "fear-inducing" aspect of a dental visit, says Stanley Malamed, D.D.S., Emeritus Professor of Dentistry, Ostrow School of Dentistry, University of Southern California, Los Angeles, CA. In fact, it is estimated that some 30 to 40 million persons in the United States avoid seeking dental treatment because of their fear of pain and needles.

Malamed – a consultant for St. Renatus – believes that "pain control is the most important aspect of dentistry, as most dental treatment cannot be performed without adequate pain control."

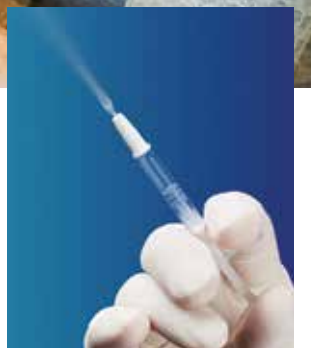
Not only do most patients fear the pain associated with an injection, many dentists are equally frustrated by their inability to successfully – and consistently – manage their patients' pain, Malamed points out. Making matters worse, some needle-phobic patients have been known to faint (syncopy) – the most common medical emergency in dentistry, he notes. This – together with concern that the use of a syringe and needle can lead to inadvertent needlesticks and potential transmission of such diseases as Hepatitis C and HIV – have led some doctors to explore a needleless alternative. "Kovanaze – a nasal spray consisting of 3 percent tetracaine and 0.05 percent oxymetazoline – effectively provides anesthesia to maxillary non-molar teeth via a nasal spray," he explains. "No needles are involved.

"Most dentists dislike administering palatal injections because, in their mind, they hurt," Malamed continues. "The same is the case for their patients. Offering a new technology that provides profound anesthesia without the need for injection should be well received by both doctors and patients. Further, there is no anesthesia extra-orally, so the upper lip does not get numb or droop." This is a "significant advantage in some esthetic dentistry procedures," he adds, as it won't impair the patient's ability to eat, drink or speak.



KOVANAZE® NASAL SPRAY

(tetracaine HCl and oxymetazoline HCl)



Kovanaze® is the first FDA-approved Nasal Spray indicated for regional anesthesia when performing a restorative procedure on teeth 4-13 and A-J in adults and children who weigh 40 kg or more. And as its name implies, Kovanaze Nasal Spray is *needle-free!*

IMPORTANT SAFETY INFORMATION: Use in patients with uncontrolled hypertension or inadequately controlled active thyroid disease of any type is not advised. Tetracaine may cause methemoglobinemia, particularly in conjunction with methemoglobin-inducing agents. Use of KOVANAZE in patients with a history of congenital or idiopathic methemoglobinemia is not advised. Methemoglobinemia should be considered if central cyanosis unresponsive to oxygen therapy occurs, especially if methemoglobinemia-inducing agents have been used. Confirm diagnosis by measuring methemoglobin level with co-oximetry. Treat clinically significant symptoms of methemoglobinemia with a standard clinical regimen. Allergic or anaphylactic reactions can occur. If an allergic reaction occurs, seek emergency help immediately. KOVANAZE is contraindicated in patients with a history of allergy to tetracaine, benzyl alcohol, other ester local anesthetics, p-aminobenzoic acid (PABA), oxymetazoline, or any other component of the product. Some clinical trial patients experienced an increase in blood pressure so blood pressure should be monitored. In addition, patients should be carefully monitored for dysphagia. KOVANAZE is not recommended for use in patients with a history of frequent nose bleeds. Concomitant use of monoamine oxidase inhibitors, nonselective beta adrenergic antagonist, or tricyclic antidepressants may cause hypertension and is not recommended. Discontinue use of oxymetazoline-containing products 24 hours prior to KOVANAZE administration. Avoid concomitant use of intranasal products. The most common adverse reactions to KOVANAZE occurring in >10% of patients include a runny nose, nasal congestion, nasal discomfort, sore throat, and watery eyes.

MRK-0002r4

Learn more at www.kovanaze.com or call the Kovanaze Support Line at 1.800.770.9400

Manufactured for St. Renatus

Brief Summary • Local Anesthetic for Regional Anesthesia

[See Package Insert for Full Prescribing Information]

KOVANAZE® (tetracaine HCl and oxymetazoline HCl) Nasal Spray

INDICATIONS AND USAGE

KOVANAZE contains tetracaine HCl, an ester local anesthetic, and oxymetazoline HCl, a vasoconstrictor. KOVANAZE is indicated for regional anesthesia when performing a restorative procedure on Teeth 4-13 and A-J in adults and children who weigh 40 kg or more.

CONTRAINDICATIONS

KOVANAZE is contraindicated in patients with a history of allergy to or intolerance of tetracaine, benzyl alcohol, other ester local anesthetics, p-aminobenzoic acid (PABA), oxymetazoline, or any other component of the product.

WARNINGS AND PRECAUTIONS

Risk of Hypertension: KOVANAZE has not been studied in Phase 3 trials in adult dental patients with blood pressure greater than 150/100 or in those with inadequately controlled active thyroid disease. KOVANAZE has been shown to increase blood pressure in some patients in clinical trials. Monitor patients for increased blood pressure. Use in patients with uncontrolled hypertension or inadequately controlled active thyroid disease of any type is not advised.

Epistaxis: In clinical trials, epistaxis occurred more frequently with KOVANAZE than placebo. Either do not use KOVANAZE in patients with a history of frequent nose bleeds (≥ 5 per month) or monitor patients with frequent nose bleeds more carefully if KOVANAZE is used.

Dysphagia: In clinical trials, dysphagia occurred more frequently with KOVANAZE than placebo. Carefully monitor patients for this adverse reaction.

Methemoglobinemia: Tetracaine may cause methemoglobinemia, particularly in conjunction with methemoglobin- inducing agents. Based on the literature, patients with glucose-6-phosphate dehydrogenase deficiency or congenital or idiopathic methemoglobinemia are more susceptible to drug-induced methemoglobinemia. Use of KOVANAZE in patients with a history of congenital or idiopathic methemoglobinemia is not advised. Patients taking concomitant drugs associated with drug-induced methemoglobinemia, such as sulfonamides, acetaminophen, acetanilide, aniline dyes, benzocaine, chloroquine, dapsone, naphthalene, nitrates and nitrites, nitrofurantoin, nitroglycerin, nitroprusside, pamaquine, p-aminosalicylic acid, phenacetin, phenobarbital, phenytoin, primaquine, and quinine, may be at greater risk for developing methemoglobinemia. Initial signs and symptoms of methemoglobinemia (which may be delayed for up to several hours following exposure) are characterized by a slate grey cyanosis seen in, e.g., buccal mucous membranes, lips and nail beds. In severe cases, symptoms may include central cyanosis, headache, lethargy, dizziness, fatigue, syncope, dyspnea, CNS depression, seizures, dysrythmia and shock. Methemoglobinemia should be considered if central cyanosis unresponsive to oxygen therapy occurs, especially if methemoglobinemia-inducing agents have been used. Calculated oxygen saturation and pulse oximetry are inaccurate in the identification of methemoglobinemia. Confirm diagnosis by measuring methemoglobin level with CO-oximetry. Normally, methemoglobinemia levels are <1%, and cyanosis may not be evident until a level of at least 10% is present. Treat clinically significant symptoms of methemoglobinemia with a standard clinical regimen such as a slow intravenous infusion of methylene blue at a dosage of 1-2 mg/kg given over a 5 minute period.

Anaphylactic Reactions: Allergic or anaphylactic reactions have been associated with tetracaine, and may occur with other components of KOVANAZE. They are characterized by urticaria, angioedema, bronchospasm, and shock. If an allergic reaction occurs, seek emergency help immediately.

ADVERSE REACTIONS

The most common adverse reactions occurring in >10% of patients include runny nose, nasal congestion, nasal discomfort, sore throat, and watery eyes. Transient, asymptomatic elevations in systolic blood pressure (≥ 25 mm Hg from baseline) and diastolic blood pressure (≥ 15 mm Hg from baseline) have been reported.

DRUG INTERACTIONS

Monoamine Oxidase Inhibitors: Use of KOVANAZE in combination with monoamine oxidase inhibitors (MAOIs), nonselective beta adrenergic antagonists, or tricyclic antidepressants may cause hypertension and is not recommended. Alternative anesthetic agents should be chosen for patients who cannot discontinue use of MAOIs, nonselective beta adrenergic antagonists, or tricyclic antidepressants.

Oxymetazoline-containing Products: Concomitant use with other oxymetazoline-containing products (such as Afrin®) has not been adequately studied. Use of KOVANAZE with other products containing oxymetazoline may increase risk of hypertension, bradycardia, and other adverse events associated with oxymetazoline. Discontinue use 24 hours prior to administration of KOVANAZE.

Intranasal Products: Oxymetazoline has been known to slow the rate, but not affect the extent of absorption of concomitantly administered intranasal products. Do not administer other intranasal products with KOVANAZE.

USE IN SPECIFIC POPULATIONS

Pregnancy Risk Summary: Limited published data on tetracaine use in pregnant women are not sufficient to inform any risks. Published epidemiologic studies of nasal oxymetazoline used as a decongestant during pregnancy do not identify a consistent association with any specific malformation or pattern of malformations. In animal reproduction and development studies, oxymetazoline given subcutaneously to rats during the period of organogenesis caused structural abnormalities at a dose approximately 7.6 times the exposure of oxymetazoline HCl at the 0.3 mg maximum recommended human dose (MRHD) of KOVANAZE. In a pre- and post-natal development study, oxymetazoline given subcutaneously to rats caused embryo-fetal toxicity manifested by reduced implantation sites and live litter sizes at approximately 1.5 times the MRHD and increased pup mortality at 6 times the MRHD. No adverse developmental effects were observed following subcutaneous administration of tetracaine HCl only to rats and rabbits during organogenesis at 32 and 6 times, respectively, the estimated exposure of tetracaine HCl at the 18 mg MRHD of KOVANAZE. In the U.S. general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2 to 4% and 15 to 20%, respectively.

Lactation Risk Summary: There are no data on the presence of tetracaine, oxymetazoline, or their metabolites in human milk, the effects on the breastfed infant, or the effects on milk production. Detectable levels of oxymetazoline, tetracaine and the major metabolite of tetracaine, *p*-butylaminobenzoic acid (PBBA), were found in the milk of lactating rats following subcutaneous administration of oxymetazoline HCl in combination with tetracaine HCl during the period of organogenesis through parturition and subsequent pup weaning. Due to species-specific differences in lactation physiology, animal data may not reliably predict drug levels in human milk.

The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for KOVANAZE and any potential adverse effects on the breastfed infant from KOVANAZE or from the underlying maternal condition.

Females and Males of Reproductive Potential:
Infertility: No information is available on fertility effects in humans.

Females: Based on animal data, KOVANAZE may reduce fertility in females of reproductive potential. In female rats, decreased fertility noted as a decrease in litter size occurred at 0.7 times the oxymetazoline AUC exposure at the MRHD of KOVANAZE. It is not known if the effects on fertility are reversible.

Males: Based on animal data, KOVANAZE may reduce male fertility. In male rats, decreased sperm motility and sperm concentration occurred at approximately 2 times the oxymetazoline AUC exposure at the MRHD of KOVANAZE.

Pediatric Use: KOVANAZE has not been studied in pediatric patients under 3 years of age and is not advised for use in pediatric patients weighing less than 40 kg because efficacy has not been demonstrated in these patients.

Geriatric Use: Clinical studies of KOVANAZE did not include sufficient numbers of patients aged 65 and over to determine whether they respond differently from younger patients. Other reported clinical experience has not identified differences in responses between the elderly and younger patients. Monitor geriatric patients for signs of local anesthetic toxicity, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

Of note, comparisons of KOVANAZE safety and efficacy results were generally similar among dental patients who were > 50 years old (n=66) and ≤ 50 years old (n=148). However, a trend toward a higher incidence of notable increases in systolic blood pressure was observed in dental patients > 50 years of age compared with patients ≤ 50 years of age (16.6% vs 1.4, respectively). These increases in blood pressure measurements were generally asymptomatic and transient in nature, and all spontaneously resolved without the need for medical intervention.

Hepatic Disease: Because of an inability to metabolize local anesthetics, those patients with severe hepatic disease may be at a greater risk of developing toxic plasma concentrations of tetracaine. Monitor patients with hepatic disease for signs of local anesthetic toxicity.

Pseudocholinesterase Deficiency: Because of an inability to metabolize local anesthetics, those patients with pseudocholinesterase deficiency may be at a greater risk of developing toxic plasma concentrations of tetracaine. Monitor patients with pseudocholinesterase deficiency for signs of local anesthetic toxicity.

OVERDOSAGE

No addictive properties have been reported in the literature for either tetracaine or oxymetazoline, but there have been numerous case reports of unintended overdose for both compounds. Side effects in adults and children associated with oxymetazoline overdose include dizziness, chest pain, headaches, myocardial infarction, stroke, visual disturbances, arrhythmia, hypertension, or hypotension. Side effects of tetracaine overdose include rapid circulatory collapse, cardiac arrest, and cerebral events. Possible rebound nasal congestion, irritation of nasal mucosa, and adverse systemic effects (particularly in children), including serious cardiac events, have been associated with overdosage and/or prolonged or too frequent intranasal use of oxymetazoline containing agents. Accidental ingestion of imidazoline derivatives (i.e., oxymetazoline, naphazoline, tetrahydrozoline) in children has resulted in serious adverse events requiring hospitalization (e.g., coma, bradycardia, decreased respiration, sedation, and somnolence). Patients should be instructed to avoid using oxymetazoline-containing products (such as Afrin®) and other α-adrenergic agonists within 24 hours prior to their scheduled dental procedure. Management of an overdose includes close monitoring, supportive care, and symptomatic treatment.

HOW SUPPLIED

KOVANAZE Nasal Spray is a pre-filled, single-use, intranasal sprayer containing a clear 0.2 mL aqueous solution at pH 6.0 ± 1.0 comprising 30 mg/mL of tetracaine hydrochloride and 0.5 mg/mL of oxymetazoline hydrochloride (equivalent to 26.4 mg/mL tetracaine and 0.44 mg/mL oxymetazoline). Each nasal spray unit delivers one 0.2 mL spray. Each 0.2 mL spray contains 6 mg tetracaine hydrochloride (equivalent to 5.27 mg tetracaine) and 0.1 mg oxymetazoline hydrochloride (equivalent to 0.088 mg oxymetazoline).
NDC: 69803-100-10

STORAGE AND HANDLING

Store between 2° and 8°C (36° and 46°F); excursions permitted between 0° and 15°C (32° and 59°F) [see USP controlled cold temperature]. Discard any unused solution. DO NOT use if drug is left out at room temperature for more than 5 days.

PATIENT COUNSELING INFORMATION

Inform patients of the likelihood of expected side effects (including runny nose, nasal congestion, mild nose bleeds, dizziness, and/or a sensation of difficulty in swallowing) that should resolve within the same day. Instruct patients to contact their dentist or health care professional if these symptoms persist.

Advise patients to inform the dental practitioner if they are taking monoamine oxidase inhibitors (MAOIs), nonselective beta adrenergic antagonists, or tricyclic antidepressants.

Instruct patients to avoid using oxymetazoline-containing products (such as Afrin® and other α-adrenergic agonists) within 24 hours prior to their scheduled dental procedure.

Advise patients of the signs and symptoms of hypersensitivity reactions and to seek immediate medical attention should they occur.

Manufactured for: St. Renatus, LLC, Fort Collins, CO 80526

 Rev. 04/2017

In addition, the availability of a relatively new drug called OraVerse – a local anesthesia reversal agent introduced to the market in 2008 – helps reduce the amount of time a patient is numb.

Needle: Addressing misconceptions

While more dentists are incorporating Kovanaze in their practice, needle injections remain a common and efficient means for delivering anesthetics. By selecting the right needle size, dentists can provide injections safely and more comfortably, notes Matt Woolson, product manager, Septodont. However, sales reps may have to help clear up a few misconceptions for their dental customers.

"Many dentists hate giving injections as much as their patients hate getting them," says Woolson. But that needn't be the case. Features such as needle sharpness, length, bore size and quality all impact the injection delivery, he points out. "Most dentists don't know what needle brand they use," he notes. Yet, the manufacturing process and quality of materials can have a big impact on the efficacy of the needle.

Dental needles are typically available in three gauges (25-gauge, 27-gauge and 30-gauge), according to Woolson. The smaller the needle gauge, the larger the needle size. In addition, the 25-gauge and 27-gauge needles are available in two lengths (long and short), while the 30-gauge needle is available in short and extra-short. Dental schools encourage students to use a 25- or 27-gauge needle, and most commonly a 25-gauge long needle and a 27-gauge short needle is used. However, practicing dentists tend to favor the 30-gauge needle because it is the smallest size available, he notes. Indeed, many dentists have a misperception that a smaller needle size is associated with less pain for the patient. "This is absolutely wrong and, in some cases, dangerous," he says.

"A 30-gauge needle is only available in short or extra-short," Woolson continues. "Extra-short needles are designed for use with PDL injections, while short needles are designed for infiltrations. (Long needles are designed for block injections.) Some dentists use 30-gauge short needles for block injections, but that is ill-advised, he says. This particular needle is 25 mm long, he notes. If it is used for, say, an inferior alveolar nerve block injection, and the dentist needs to advance the needle 15–20 mm into the tissue, "that leaves very little room for error if the needle breaks.

"I met one dentist who used a 30-gauge extra-short needle for an inferior alveolar nerve block injection," Woolson recalls. "An extra-short needle is only 10 mm long. That means this dentist not only advanced the needle to the hub, but had to compress the patient's tissue enough to permit the needle to be injected even further. Imagine the discomfort for the patient!" And, if the dentist inadvertently breaks a short or extra-short needle during an inferior alveolar nerve block, he or she may need to surgically remove it. To do so would cause scarring on the patient's neck, not to mention a lawsuit, he points out.

"Years of clinical research shows there is no perceptual difference between a 25-, 27- and 30-gauge needle when inserted into the oral tissues," says Malamed. "Yet dentists persist in using 30-gauge short and ultra-short needles for all injections, including the inferior alveolar nerve block." In fact, over half of all needles sold to dentists in the United States are 30-gauge, he points out. "I'd love to see them use 27-gauge long and short needles, but after 43 years of teaching and preaching, I'm running short on hope in this regard."

Looking sharp

At Septodont, needles and pain management can mix – as long as the needles are high quality and designed with optimal patient comfort in mind. First and foremost, needle sharpness is key, notes Matt Woolson, product manager, Septodont. In addition, the company offers the Septoject Evolution needle – a uniquely designed needle featuring a beveled scalpel – and the Septoject XL, which features an oversized lumen or bore. "The Evolution needle is so sharp, it is only indicated for infiltrations and PDL injections," he says. "There is too much risk using it on block injections, where it could damage a nerve."

Reaching out to customers

Reps can initiate a discussion about pain management by asking a few probing questions:

- "Doctor, have you ever had a patient faint during an injection?"
- "Do your patients ever ask you if you have to give them a shot in order to do a procedure? Do they ever confess that they hate getting shots, but once they are numb they're okay? These patients are prime candidates for needleless nasal spray for their planned treatment involving maxillary non-molar teeth."

The cost of new technology may be a factor to the dentist, but it shouldn't be, says Malamed. "I am perplexed at how a dentist can quibble over the cost of new technologies that enable him or her to provide better quality pain control, more easily, more comfortably and with increased safety. Yet they do. Yet these very same doctors will spend many thousands of dollars buying lasers, intraoral TV cameras and other truly expensive technology that, in many cases, cannot be used without the dentist first achieving effective pain control.

"To paraphrase the old Mastercard advertisements: What is it worth to be able to provide your patients with pain-free dentistry using, for example, a needleless technology, when the two most important items in a patient's shopping list for a 'good dentist' are, 'I don't want to be hurt' and 'a painless injection?' It is truly priceless." ■

Buffered anesthetic

For many patients, the worst part of a dental procedure is the initial injection of the anesthetic. A fear of the needle – together with their concern that the numbness might not last and they'll experience great pain – presents a challenge for dentists, whose goal is to provide an optimal patient experience.

Indeed, a common misconception among patients is that the stick of the needle is the biggest source of pain when, in fact, the bulk of pain comes from the anesthetic itself. "Local anesthetic is very acidic, with a pH level as high, if not higher than that of citric acid," says Ryan Vet, vice president of marketing, Anutra Medical. Consider getting injected with lemon juice, he points out. "No wonder it burns!"

One solution is the Anutra Local Anesthetic Delivery System, notes Vet. "By utilizing buffered anesthetic from the Anutra Local Anesthetic Delivery System, practitioners are able to inject local anesthetic at an acidity level that mirrors that of the patient's body," he continues. Some patients have even commented that they were unaware of receiving the shot, he adds. Additionally, whereas only two-thirds of patients typically reach pulpal anesthesia after the first injection of anesthetic, with buffered anesthetic, "the majority of patients get numb the first time," he says.

"Utilizing buffered anesthetic helps the anesthetic take effect – on hard-to-numb patients as well as during nerve blocks – in two minutes or less," says Vet, providing dentists with as much as 15-20 minutes for each restorative procedure they perform. For dentists who perform as many as 20 or more cases each week, they may gain an extra hour or two in a typical day, he points out, offsetting the higher expense for dentists purchasing a premium anesthetic such as Anutra.

Buffered anesthetic is far more reliable than traditional anesthetic, says Vet. This means fewer bail-out shots. Anutra is also more predictable, making it possible to schedule shorter appointment times and schedule more efficiently. Buffered anesthetic is more profound than traditional local anesthetic, allowing dentists to use less volume than they traditionally would have. Additionally, with the multi-dose Anutra Syringe, dentists are able to deliver the precise amount of anesthetic required, eliminating waste. This means the dentist is no longer confined to a 1.8 mL carpule. Most importantly, Anutra helps ensure peace of mind for patients, making their experience in the chair a positive one.

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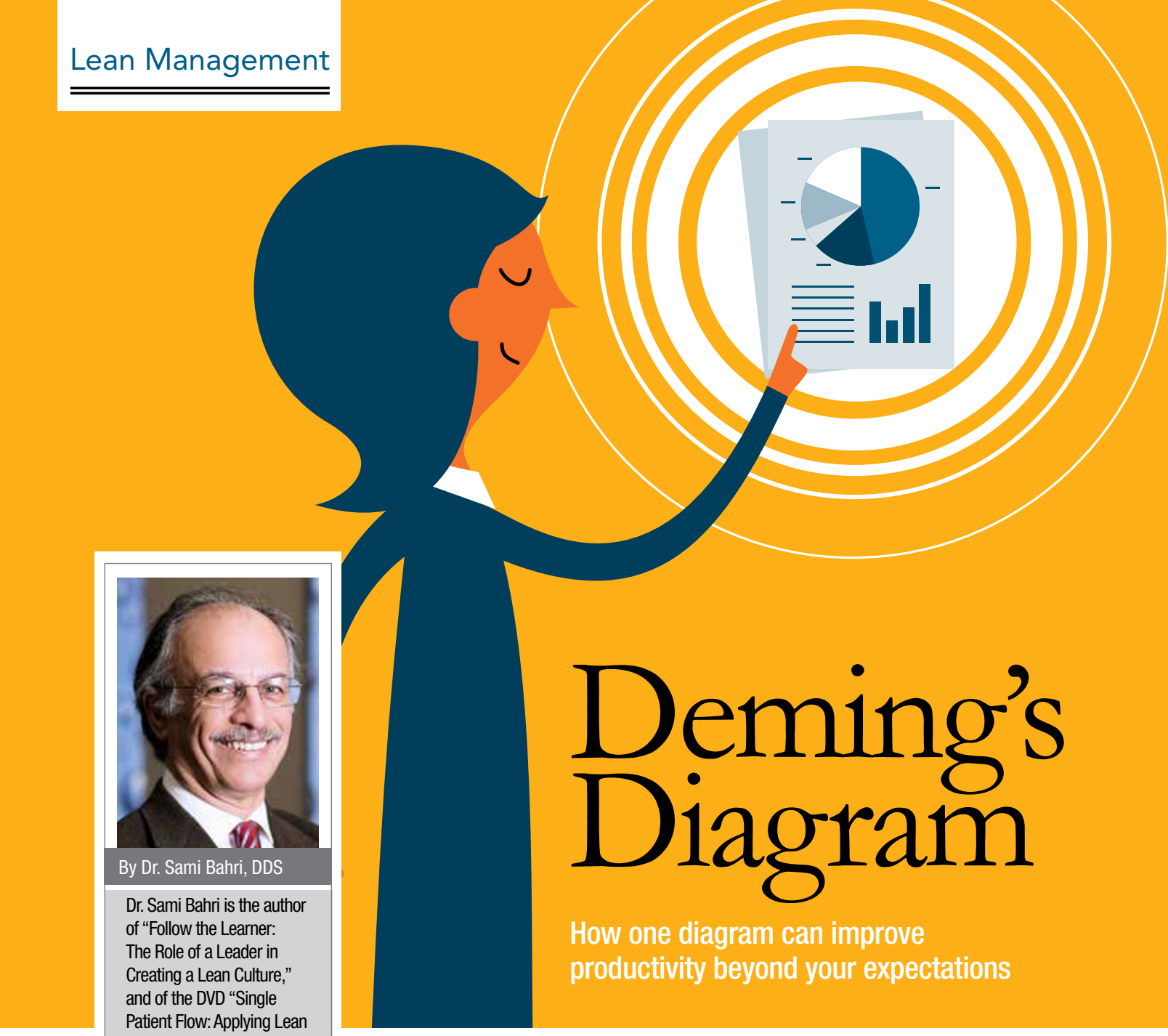


Deming's Diagram

How one diagram can improve productivity beyond your expectations

By Dr. Sami Bahri, DDS

Dr. Sami Bahri is the author of "Follow the Learner: The Role of a Leader in Creating a Lean Culture," and of the DVD "Single Patient Flow: Applying Lean Principles to Heathcare". The book won the 2010 Shingo Prize for Research and Professional Publication and the video won the same award for 2013. The Shingo Prize Conference also recognized Bahri as the "World's First Lean Dentist." He is a sought-after speaker and lecturer nationally and internationally on implementing Lean management in dentistry. Dr. Bahri can be reached at Sami@bahridental.com

"Information, no matter how complete or speedy, is not knowledge. Knowledge has temporal spread. Knowledge comes from theory. Without theory, there is no way to use the information that comes to us on the instant." Those are the words of management guru W. Edwards Deming in his book, *The New Economics: For Industry, Government, Education.*

The theory Deming invented is called Total Quality Management (TQM) – later, it evolved into six sigma. In the evolution of management knowledge, TQM evolved in the same period as the Lean Management Theory created by Toyota; and the two theories seem to be influenced by each other.

Going back to the above mentioned quote, Deming clearly wanted to seek knowledge, not just information. Unfortunately, still to this day, we practice in dentistry many beliefs that he considered as merely information, not knowledge.

For example, Deming wrote against setting numerical goals. As a statistician and a system's thinker, he knew that a process is always capable to produce a certain amount of work, which means that it will necessarily produce a certain amount of waste. To him, setting numerical goals that fall beyond to process capability is irrelevant. What is relevant is to increase the capability of a process by improving its design. To that end, Deming thinks that the only way is to follow a theory of process improvement. In my own experience, Lean management is the best theory today. However, it can become richer if we combine it with Deming's 14 principles of management.

Here is another practice that Deming admonished. How many times have you heard a manager say that if you can't measure it you can't manage it? Although a statistician is supposed to put a great deal of importance on numbers, Deming preferred a theory for improvement over measurements and numerical information as he wrote: "It is wrong to suppose that if you can't measure it you can't manage it – a costly myth."

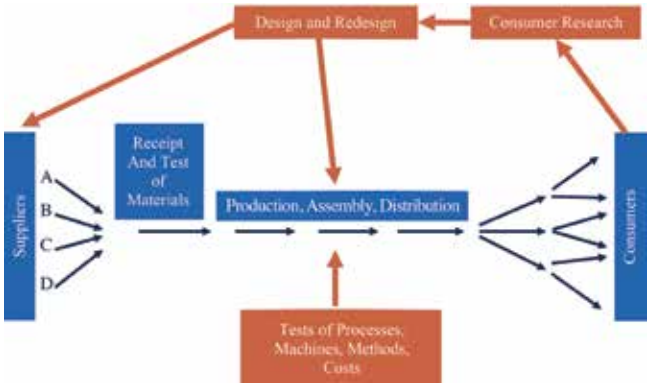
What did Deming recommend?

Deming did not stop at saying what not to do. He actually gave precious advice on what to do.

In his seminal book *Out of the Crisis*, he wrote that quality comes first, and when you improve it, you unleash a chain reaction. "Improve quality and costs decrease because of less rework, fewer mistakes, fewer delays, snags/ better use of machine-time and materials. This leads to improved productivity, allowing you to capture the market with better quality and lower price, which in turn allows you to stay in business and provide jobs."

The Deming Diagram

When he went to Japan to help in the rebuilding of the Japanese industrial production, Deming shared the following diagram as a basis for efficient productivity. According to him, this diagram was "… *taught to hundreds of engineers, [it] commenced the transformation of Japanese industry. A new economic age had begun.*" I hope that sharing it with you will commence a new economic age for dentistry.



This diagram views production as a system. Improving quality envelopes the entire production line. In our case, the production line translates into the entire chain of events that lead to the patient treatment; from the first call, to the exam and treatment planning, all the way until the mouth is totally healthy. As in lean management, Deming sees flow as the foundation of productivity;

From a flow point of view, every activity, and every job, is a part of a process.

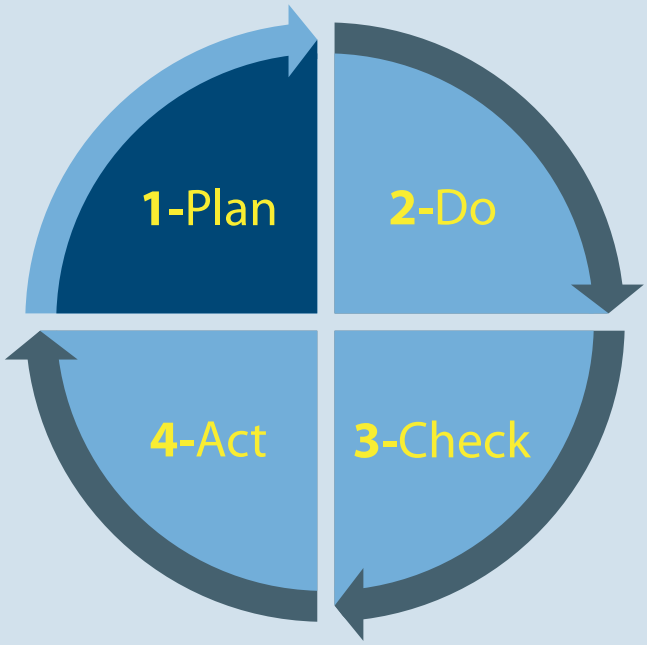
Flow diagrams are important tools to understand and improve productivity. To draw a flow diagram of any process, we will have to divide the work into steps. The steps should not be viewed as individual entities, each running at maximum profit, but as a connected whole, forming the process.

Work comes into any step, changes state, and moves on into the next step. In other words, at every step there will be production (seen as a change of state), input changes to output, something happens to materials, papers, information or the patient that come into any step; and they go out in a different state. Then they move to the next step that in production terms, is the client of the previous step.

As such, the efficiency of every step in the process becomes totally dependent on the quality of the work passed on by the previous step. Each step is responsible for two important aspects of production:

1. It needs to execute the work perfectly as agreed upon by the team, and pass on only good work to the next step.
2. Check the quality of its own work as experienced by the next step. With this constant feedback, the previous step is responsible for continuously

Shewhart cycle



1. Plan
- **a.** What could be the most important accomplishment of this team?
- **b.** What changes might be desirable?
- **c.** What data are available?
- **d.** Are new observations needed?
- **e.** If yes, plan a change or test.
- **f.** Decide how to use the observations

2. Do Carry out the change or test decided upon, preferably on a small scale

3. Check Observe the effects of the change or test

4. Act:
- **a.** Study the results.
- **b.** What did we learn?
- **c.** What can we predict?

improving the quality of its work, aiming at better and better satisfaction of its customer, the next step. That is when the concept of continuous improvement becomes crucial.

The Deming/Shewhart Cycle

Continuous improvement is a fact of life, otherwise, we would still be living in the Stone Age. Lean management took the idea from Deming, and his teacher, Walter A. Shewhart, and systematized it. It became part of a relentless pursuit for improving every aspect of production by everyone, everywhere in the practice, at all times.

Deming presented the following diagram to guide us through the efforts of continuous improvement; it is called the PDCA (Plan, Do, Check, Act) cycle. It is called a cycle, because it was conceived to be repeated indefinitely. We can never reach perfection and because every time we find an improvement idea, it can last until the environment changes. Technology changes, dental science changes, employees come and go; change is inevitable and the PDCA cycle helps us deal with it.

In conclusion, according to Deming, we need to follow a management theory if we intend to move our practices to the next level. The latest and most advanced theory in my judgement is Lean management. I hope to see dentistry move into the new era, the era of lean dental management that allows patients, practices and everyone who deals with them, to benefit. At the same time, I find the management principles that Deming taught to be timeless and invaluable. I strongly encourage you to learn them, the resources are readily available and abundant. Finally, continuous improvement is the way to apply those theories. If you have any questions, email me at sami@bahridental.com.

Technology News

Looking good

Look your best before meeting with your key customers with Amazon's newly released Echo Look. The device – available through Amazon's website for $200 – is being marketed as a fashion tool that can help users choose their outfits, reports *TIME*. The depth-sensing camera is said to be capable of taking full-length images and can blur the background, so you get a better look at clothing choices. Amazon also uses a combination of machine learning and expert input to provide a second opinion on clothing picks through a feature called Style Check. Submit two photos, one of each outfit, and the app will rate them based on their fit, color, styling and current trends.

Weekend jaunt

Don't let a lack of vacation time hold you back from traveling this year. Nearly three quarters of Americans are planning to take a long weekend trip this summer, according to data released by global travel deals publisher Travelzoo. The Travelzoo® Summer 2017 Travel Trends Survey reports that half of travelers say they are likely to take more long weekend trips – defined as an extra day added to a weekend – than they did last year. And, the majority of weekend travelers appear to be willing to travel three or more hours from home. While most tend to travel by car, for those whose destinations are over five hours from home, 40 percent of survey respondents say they will swap their car for a plane or train. Indeed, just over half appear willing to take a spontaneous long weekend trip to Europe, particularly with new low-cost carriers like WOW air and Norwegian offering more competitive fares. Particularly since the average American gets

two weeks of vacation time annually according to data from the U.S. Travel Association's Project, weekend trips make sense.

Adult fidget toys

Do you love to fidget but hate all of the childish fidget toys on the market today? FingerSpinner.com offers a variety of fidget toys for adults. For example, the 9mm-high, silent Tri Moon spinner – reportedly one of the most popular adult fidget toys – offers a discreet way to curb anxious energy and avoid nail biting, toe tapping or pen clicking. And, their ceramic bearings enable them to spin for several minutes with ease. For those who like to flip and click, Finger Spinner offers the Fidget Cube, which features six unique sides and comes in a wide variety of color schemes. For more information visit https://fingerspinner.com/fidget-toys-for-adults-235224/.

Negotiating the Cloud

An essential part of doing business, the cloud offers data protection, including backup, archiving and disaster recovery. Some may not realize, however, that it's important to carefully read and negotiate their public cloud contract before signing to ensure it meets their business requirements. Veritas offers three important points to keep in mind for professionals working with a cloud provider:

- **Know where your data is located.** Some cloud providers may process and store your data anywhere if you fail to select where it must be stored. It's difficult to verify that the data is actually processed in the data centers claimed by the cloud provider. Some providers may not disclose the data centers' locations at all. Know what data you store in the cloud. If guaranteeing the location of your data is crucial, then negotiate with the cloud provider to disclose the exact location of the data center in your cloud contract.

- **Does availability extend to your data?** Cloud providers are keen to emphasize how redundant and fault-tolerant their clouds are, but you still need to do due diligence. The cloud provider very often won't warrant data integrity or accept liability for data loss. Most cloud providers make you responsible for taking your own steps to maintain appropriate security, protection and backup of your data. Don't make any assumptions.

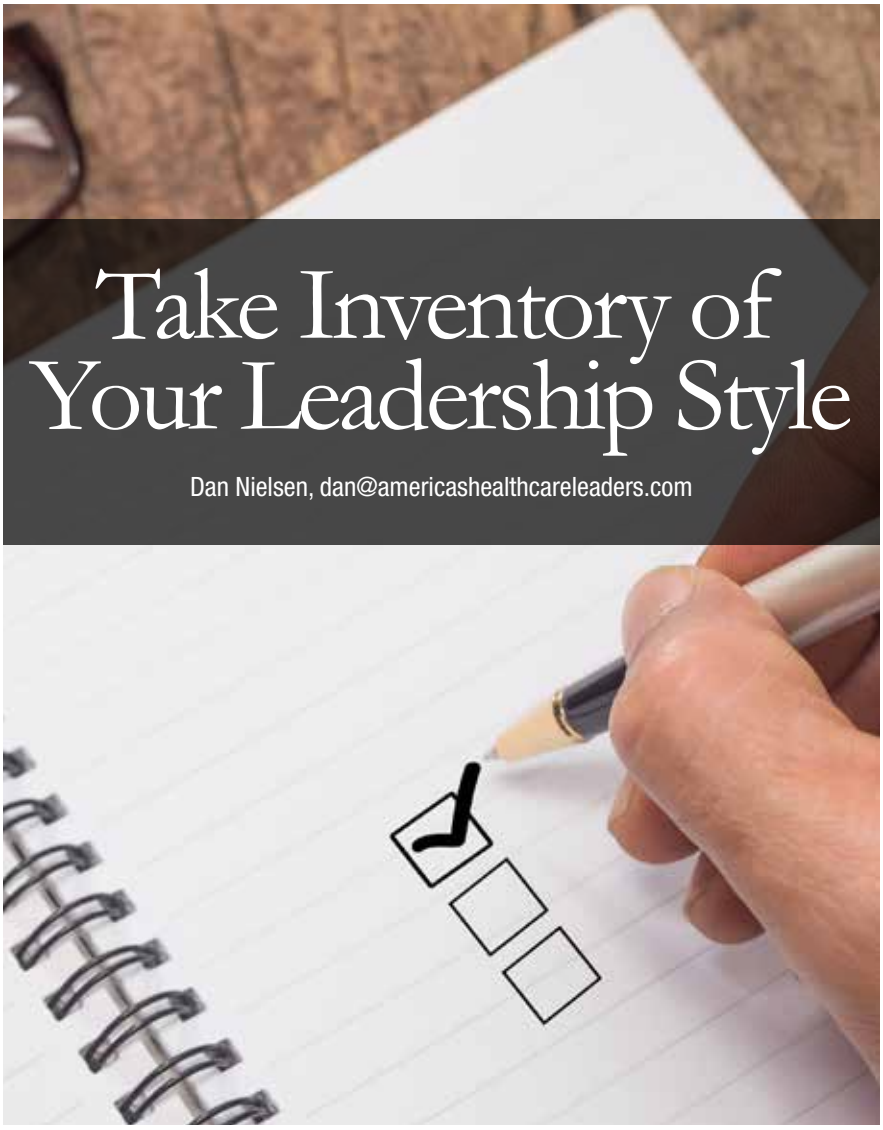
- **What happens to your data after termination of service?** Non-payment is just one of the reasons a cloud provider can terminate your contract. Other reasons may include material breach, breach of acceptable use policies or intellectual property rights. The problem is that the actions of one user may trigger rights to terminate the whole service. How long after termination do you have to recover data before your cloud provider erases it? Many providers delete all data immediately or after a short period; 30 days is common. It's important to understand the grounds for service termination and to negotiate sufficient time to have data returned upon contract termination. Also, consider keeping copies of your backups in another cloud or on a backup appliance.

Know what data you store in the cloud. If guaranteeing the location of your data is crucial, then negotiate with the cloud provider to disclose the exact location of the data center in your cloud contract.

Before deciding which cloud solution is right for your data, carry out a thorough risk analysis. If you perceive the risks to be so great that substantial contract negotiation seems essential before putting your data in the cloud, it may be that public cloud isn't the right solution for this type of data and an on-premises private cloud or backup appliance may be better suited.

Safe travels

For those who travel alone late at night or to isolated areas, the Swedish mobile phone company, Doro, has introduced the Doro 8020X, a handset that features a red call for help button on the side. When the button is pressed, the phone sends a text message containing its GPS location to up to five contacts. ■



Take Inventory of Your Leadership Style

Dan Nielsen, dan@americashealthcareleaders.com

In my book, *Be An Inspirational Leader: Engage, Inspire, Empower,* I state that every one is a leader, because leadership is not limited by titles or hierarchy. A leader is someone who influences others, and we all have influence on someone – in fact, virtually every person has influence on many other people.

With this in mind, every one can benefit from becoming an inspirational leader. Often it's not one big feature or obvious talent; leadership excellence is found down in the detail of personal character and everyday habits more than in any one trait or skill.

Why is inspirational leadership important? According to a study conducted by Zenger Folkman, the foremost authority in strengths-based leadership development, the leadership competency rated as the most important by managers, peers, and subordinates is "Inspires and Motivates Others." At all organizational levels, this competency was consistently rated as the most important.

Inspirational leadership isn't just a tagline; it is a proven leadership tactic. Inspirational leaders earn trust, respect, and loyalty, and inspire rather than just motivate.

Four questions to ask yourself

1. **Who is it you lead? –** Since every one is a leader in some capacity, who is it that you lead? Do not make the mistake of undermining your influence.
2. **What do you hope to accomplish with your leadership? –** Every leader has a different goal in mind. Have you identified yours, and are you actively working toward success in this area?
3. **How do you lead? –** Do you focus on external motivations to get desired results, or do you lead from a shared desire that inspires others to follow? Bob Nelson states: "You get the best efforts from others not by lighting a fire beneath them, but by building a fire within."
4. **When do you lead? –** One of the keys to being an inspirational leader is consistency in leadership. Do your daily habits and routine demonstrate a desire to lead with consistency?

I encourage you to reflect on these questions and identify your current leadership style. Don't write off inspirational leadership as a cheap catchphrase. Actively embrace it as a proven and effective leadership style no matter your career, organization, or industry!

For more information about my book and companion keynote presentation, please visit BeAnInspirationalLeader.com. ■

INDUSTRY NEWS

Great Expressions expands in Texas with Dallas and San Antonio affiliations

Great Expressions Dental Centers (GEDC) (Southfield, MI) expanded its presence in Texas through an affiliation with eight Floss practices. With the addition of the eight Floss practices, GEDC's footprint now spans 30 offices across the state, including locations in the Dallas, Fort Worth, San Antonio, and Austin metropolitan areas. This partnership will help GEDC further strengthen the exceptional and convenient care it provides and develop future doctor leaders. GEDC provides comprehensive affordable dental services through a network featuring more than 900 dentists and hygienists, all under a single brand and operating philosophy. Terms of the affiliation were not disclosed.

Christina Thomas

OSAP announces new executive director

The Organization for Safety, Asepsis and Prevention (OSAP) (Atlanta, GA) announced Christina Thomas as the new executive director, effective July 1, 2017. Since joining OSAP in 2016 in a senior management capacity, Thomas has enhanced corporate member partnerships, provided oversight to policy development, introduced new marketing initiatives and expanded the reach of the association. Therese Long, current executive director, will move into the role of emeritus director.

Aspen Dental opens first of 11 new offices in Louisiana

Dr. Chedly Schatzie Vincent

The first of 11 Aspen Dental-branded practices in Louisiana opened in Covington on May 18, 2017. The dental office is led by Dr. Chedly Schatzie Vincent. Dr. Vincent and her team will provide dental services ranging from dentures and preventive care to general dentistry and restoration. As part of Aspen Dental's Healthy Mouth Movement community giving initiative, the Covington office will provide free dental care to veterans on June 24. Ten additional Aspen Dental practices are scheduled to open in 2017. The 11 new Aspen Dental practices are located in 10 different parishes, eight of which have dental health professional shortage areas (HPSAs) as designated by the U.S. Department of Health and Human Services.

INDUSTRY NEWS

Patterson announces leadership transition

Patterson Companies Inc announced that Scott P. Anderson, president, CEO, and chairman of the board, will step down from those roles effective immediately. He will continue to serve as a director until the 2017 annual meeting of shareholders, but will not stand for re-election to the board. James W. Wiltz, a current director and Patterson's former CEO, will assume the role of interim president and CEO. John D. Buck, currently the company's lead director, will assume the role of non-executive chairman of the board. The company's board of directors has formed a search committee and retained Spencer Stuart to begin an immediate search for a permanent president and CEO.

Indiana University School of Dentistry Student Outreach Clinic wins $100K grant to expand treatment for poor

The Indiana University School of Dentistry Student Outreach Clinic has won a $100,000 grant from a new USA Today Network nationwide program called A Community Thrives. The program provides free dental care to uninsured adults in a poverty-stricken Indianapolis neighborhood. With the money, the program will be able to expand services at its east-side health center, where student dentists treat those who have nowhere else to go. Additionally, the program serves as a training ground for the dental students. Patients can get oral cancer screenings, cleanings, fillings, and extractions. All student dental services are supervised by IU faculty dentist volunteers.

Washington state passes DSO bill

Governor Jay Inslee signed into law a bill that will help ensure continued access to affordable, quality dental care for every Washingtonian. SB 5322 passed unanimously in both the House and Senate before being sent to Governor Inslee in late April. The bill covers agreements between dentists and third parties that provide supportive services to dentists. The new law will allow persons not licensed to practice dentistry to: own or lease assets used by a dental practice; employ or contract for the services of personnel other than dental professionals; provide business support and management services to a dental practice; and receive fees for any of these services as agreed to by the dental practice owner or owners. SB 5322 goes into effect July 23, 2017.

Hu-Friedy launches company blog

Hu-Friedy (Chicago, IL) launched its company blog, with the goal of enhanced digital engagement with the dental community. The company believes that for dental professionals to perform at their best, they must have access to the best information. The Hu-Friedy Blog will focus on a broad array of topics including, instrumentation, infection prevention, implantology, and many more. The blog will also address issues such as social responsibility in dentistry, continuing education trends, and new ways for dental professionals to connect and collaborate via social media. A key component of Hu-Friedy's blog will be to leverage its extensive network of key opinion leaders (KOLs). The company plans to feature a point-of-view from one of its 600+ KOLs on every blog post and is looking forward to comments and questions from blog readers and subscribers. Visit the blog at: www.hu-friedy.com/blog

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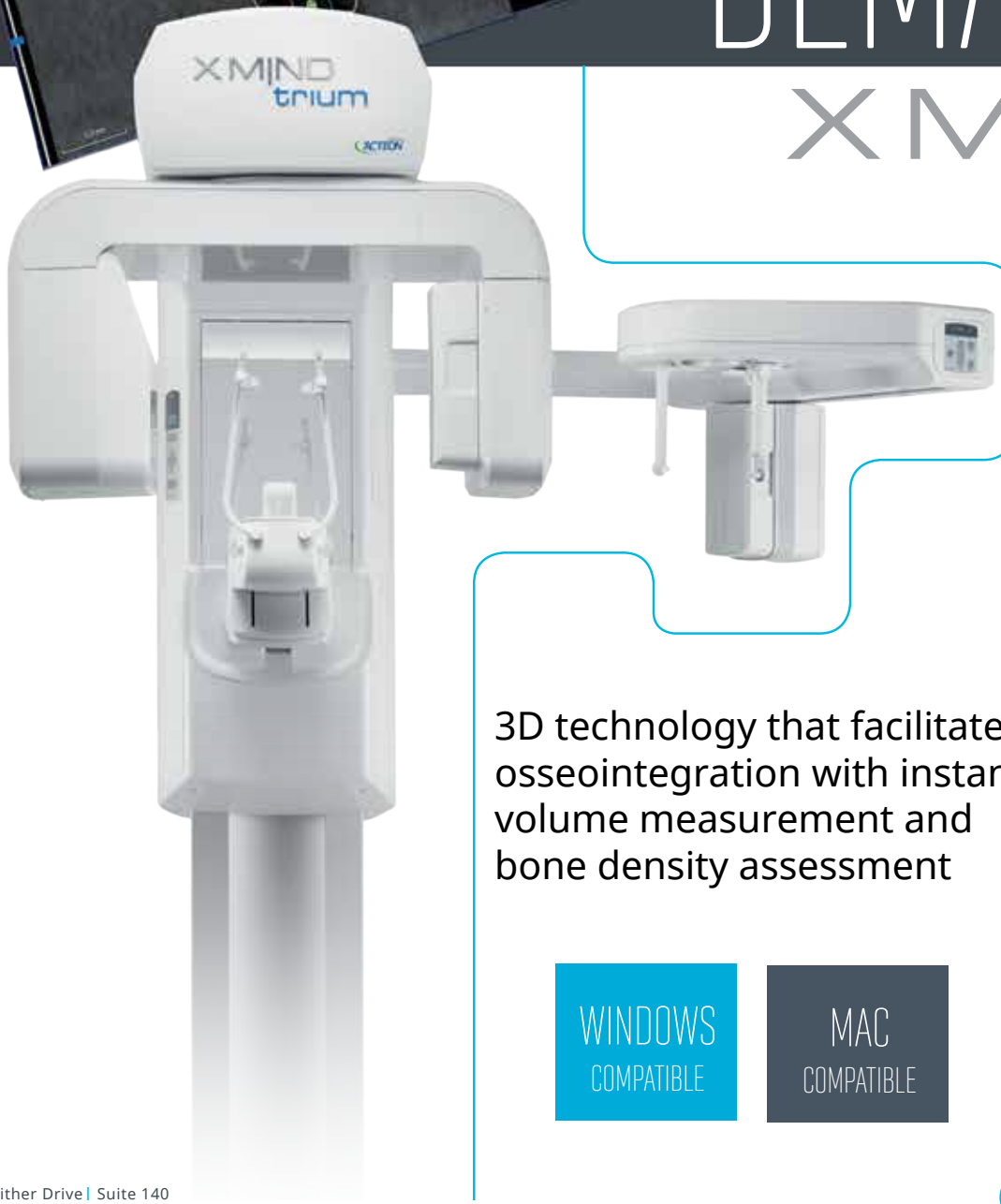


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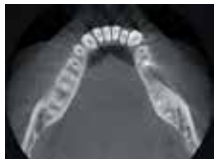


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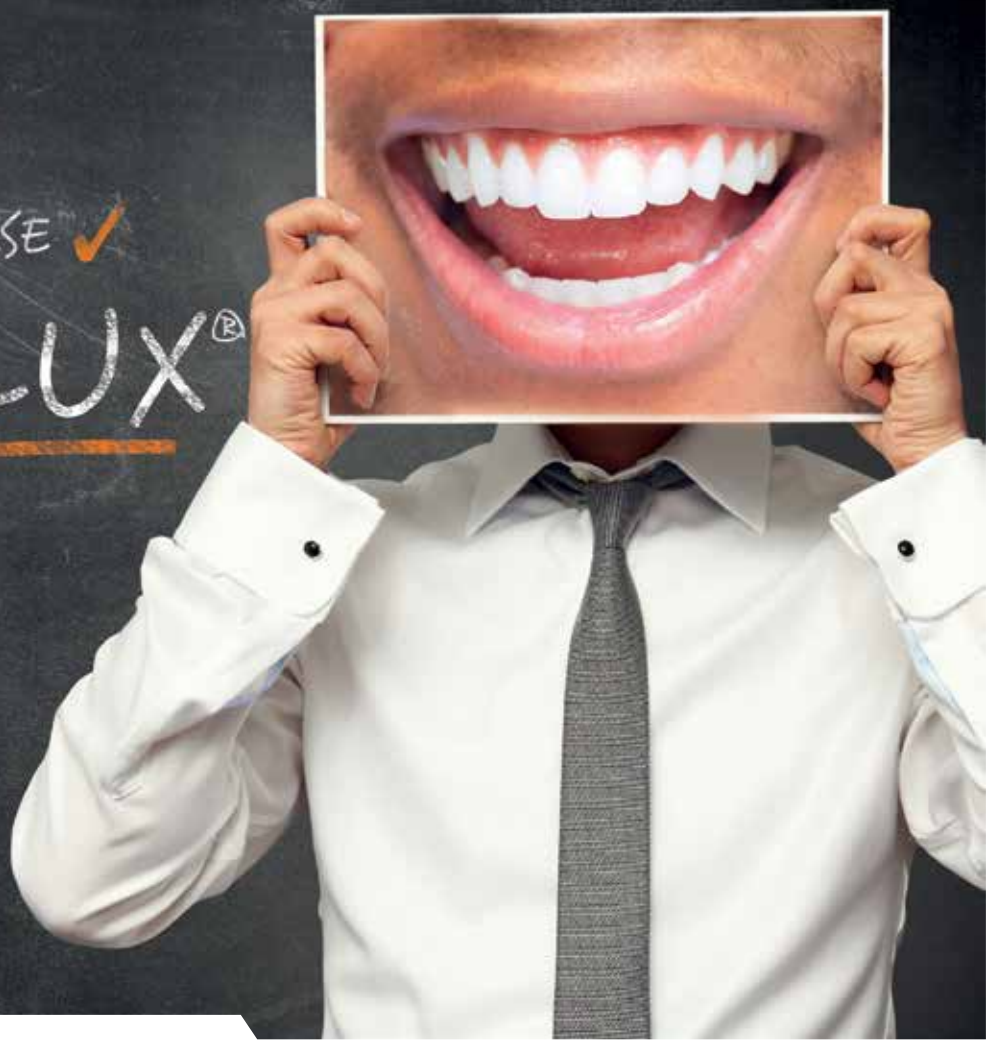

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