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The Gift of Freedom



Scott Adams

Each summer I have always looked forward to celebrating the Fourth of

July. I must admit this year it was a little tough to be excited. As the son and grandson of lifers in the Marine Corps – two men who were willing to lay down their lives

There are times we all take it for granted, but as we pass the midway point of a chaotic year, let's pause for a few minutes to be thankful for our imperfect country.

for our country – I am saddened by the shape in which we find ourselves. But I think it's important to take a hopeful look at what we are blessed to have as Americans.

We are all free to get on a plane and fly to see our parents and children. We are free to become whatever we want. We are free to choose our religion or have none. We are free to drive across this amazing country without restrictions. We are free to love who we want to love. We are free to use our voices. Freedom is a gift that many in this world never taste, yet as Americans we are free and we cannot forget that. Thank you to the men and women who provide us these freedoms.

As Americans we are free. There are times we all take it for granted, but as we pass the midway point of a chaotic year, let's pause for a few minutes to be thankful for our imperfect country. Let's turn off 24-hour news for a while and just be grateful for where we live and our ability to change and be free.

Dedicated to the industry, *R. Scott Adams*



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Secure Patient Messaging



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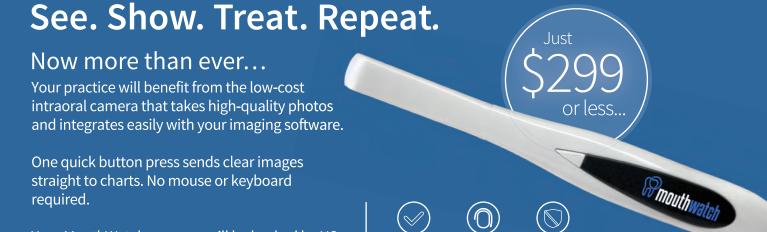


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Warranty



In today's climate, it's easy to get overwhelmed. Emmet Scott, CEO and co-founder of National Dental

Partners[™] and Smile Magic Dentistry, and the newly elected president of the American Dental Service Organizations (ADSO) said he's tried simplifying things during challenging times with a guiding principle. He calls it his North Star, and it's kept him on course, even amid the changing marketplace and a global pandemic.

Scott asks himself one question – What does the customer want?

"If I want to know what the future is going to hold, I look to my customers, namely their lives, needs, and wants," Scott said.

Efficiency in Group Practice discussed a wide array of topics with Scott, including what it takes to build a successful group practice, where dental offices were with re-opening as of mid-summer, and his insights on how 2020 will shape the industry for years to come.

Efficiency in Group Practice: Can you give us an overview of National Dental Partners? How did it get started?

Scott: In many ways, everything begins and ends with friendship. My partner, Dr. Chad Evans, and I have been friends since we were 2 years old. As we grew up, we both pursued our passions, his being dentistry and mine, business.

Then about ten years ago he reached out to me. At the time, I had a consulting firm called Entrepreneur Advisors and a radio show called The Entrepreneur Life. The radio show centered around answering the question, "How do you move from entrepreneur to executive?" I found that that's really the key issue challenging potentially successful entrepreneurs and clinicians – they don't know how to scale to that next level.

I think what really made us National Dental Partners, beyond just pediatric dental partners, was our awareness that there was a group of practices that were struggling in rural towns and dentists that needed help. These were practices that served communities that needed them, and they needed us, or they wouldn't survive.

At the time, Chad was in the Dallas area, and was going to start his first practice. He had been really successful as an associate but now things were different, so he called me for advice about setting up a good practice, and as a friend, I was eager to help.

After a visit, I looked at the marketplace and saw a really big opportunity – especially when it came to scaling his dental business. Again, like most business owners Chad's response was, "Well, I know how to take care of patients and deliver excellent dental care, but I don't know how to scale a business." So, I agreed to help.

In many ways that moment was the planting of a seed that would later blossom into National Dental Partners (NDP). It was the combining of two friends, two partners, who each wanted to do the best that he could in the way that he serves, for the good of the practice and ultimately, to deliver the best service and experience to the patients.

Efficiency: Can you give us some concrete examples of some changes you made in Chad's business that allowed him to grow his practice effectively and efficiently, truly making it a leader in the field? It's a wonderful case-study of the success when dental expertise combines with business expertise.

Scott: Of course, here are some reallife examples of changes we made...

The first thing we had to get right was really designing his practice. Chad wanted to see and serve kids. He was a general dentist, he himself has seven kids, and he had been treating kids already – all of this meant he could handle what came along with the pediatric dental market (including behavioral management). At the same time, he had a passion for

the Medicaid market and taking care of the underserved.

In Texas, a lot of the kids who need care are on Medicaid, and a lot of doctors don't want to treat Medicaid. So, there was already this theme developing from day one, of, "We're going to treat the underserved. We're going to treat those who don't get care." We were finding his niche, his specific customers, and developing his brand. Eventually this focus allowed us to make choices that helped our patients choose Smile Magic over other practices.

remains the happiest and most desirable place on earth for families to visit. As crazy as it may sound, we wanted to create that type of experience in a dental practice. This led us to ask ourselves, "What if we combined outside industries into dentistry?"

It's that's kind of thinking that has led Smile Magic Dentistry's growth – it's been our theme from the beginning.

Efficiency: How does that kind of thinking play out in your dental practices? What does that look like?

Participating practices can customize their support needs and we will serve them in the ways they need, as determined by them. Dental practice work isn't one-size-fits-all and neither is the way we support our partner businesses.

For instance, as we looked at pediatric dental, there was nothing particularly exciting happening in the market. Nothing felt different, unique, or truly innovative. Dentistry's hard to market in general, but pediatric dentistry in particular. So, we said, "Who has a really good model out there?" Well it comes to serving children and families, creating a positive experience they'll want to come back to, we were inspired by companies like Disney & Chuck E. Cheese (in its glory years). There was a time when 10 years ago Chuck E Cheese was really the only space that you could take your family for quick easy fun. Disney

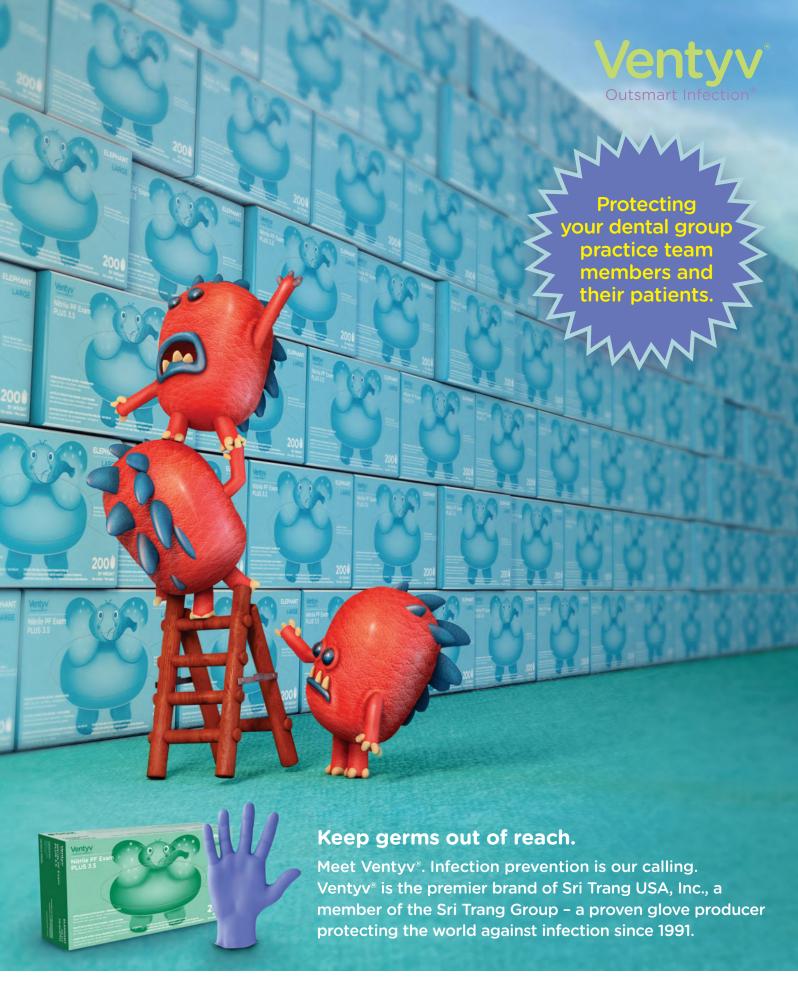
Scott: We built a movie theater and a play gym right in our lobby, and we built the practice as if it was a storybook. That's a lot of what Disney does, it makes the rides a story. So, when you go into the X-ray room, it says, "Once upon a time, there was a chipmunk named Charlie..." And so, the experience begins. And remember, we aren't just creating an experience when we do this, we are creating a lifelong relationship between our pediatric patients and their dental health that feels far better and far different than their friends and counterparts are getting at other practices.

Anybody who's been on a Disney ride kind of knows how the excitement of visiting different parts of the theme park is, and our patients feel the same things when they visit us. Along the way, each operatory is a different page in our storybook, and the kids get gold coins as they complete each piece. At the end, after their treatment, patients sit on a throne and we crown them to celebrate them while saluting them with, "For your bravery in dentistry, we now crown you king or queen of Smile Magic." Everybody claps, and they leave with a balloon and sticker that says, "Amazing Child of Smile Magic."

That is how you create families that want to come to the dentist – that choose to come to the dentist. At a time when so many are opting out of visiting dental practices (the statistics are staggering) it is our job to find ways to make patient acquisition and retention part of the work we do, and again the friendship that evolved into a business relationship, the joining forces of two talented professionals in their fields, is how we managed to do it.

Efficiency: Can you tell us about how you celebrated the moms of your patients who also quickly came on board the practice and brand you created?

Scott: Of course! Moms are a big part of the treatment and experience, so we created new stickers that read, "Amazing Mom of Smile Magic" which they receive in the process as well. Now everyone wins when they come through our doors, and these kids are walking out our



door and immediately saying to their parents, "When do I get to go back to the dentist?" We achieved it. Oral health is now fun. Smile Magic is accomplishing its mission, and my friend is doing what he loves (and leaving the rest to me and my team).

Efficiency: How did you grow the business from there?

Scott: At a good dental practice, if you can get 100 new patients in, that's great. If you can have 400 patient visits, that's even better. We had 1,000 first visits in the first three weeks. So, we scaled and built multiple Smile Magic locations, and we were off to the races trying to just manage all of this.

As we grew I was able to use my business acumen on the back end to make the rest of the practice flow more smoothly and successfully, which meant the dentists could do what they do best while I made sure they were supported by the best possible practice.

Some examples of systems that we saw needed an overhaul, that allowed us to grow (and continue to grow today):

Our billing systems needed a serious upgrade to handle growth and multiple locations. This was upgraded and changed – today we have a fully centralized billing team.

As you grow you are managing more humans and more patients and lots of regulations, which led to me immediately hiring a compliance officer on the first practice – something that many now consider commonplace which at the time was a very new idea.

Other additions as we grew included a software development team and call center. We really just tried to build things right so the practices could do their best and their teams could feel their best and most supported. And they do.

Efficiency: Using these systems and changes, what else led to your scaling from a pediatric dental partnership to National Dental Partners?

Scott: I think what really made us National Dental Partners, beyond just pediatric dental partners, was our awareness that there was a group of practices that were struggling in rural towns and dentists that needed help. These were practices that served communities that needed them, and they needed us, or they wouldn't survive. The ripple effect of that is huge, and the fact that these practices could stay afloat simply by getting our support, while they carried on serving as they know how to serve really called to us.

Dr. Evans ended up buying those locations and we started supporting them. With that we expanded our work for the underserved beyond pediatric Medicaid underserved, to



Even Treated City Water Isn't Pure Enough for Sterilizing **Dental Instruments.**

That's because dissolved mineral content—also known as **Total Dissolved Solids** (TDS) needs to be removed first. The lower the TDS, the purer the water. For steam sterilizers, in particular, TDS levels should be virtually zero (<5 partsper million).

Very high-TDS water can also be problematic for dental delivery units. High mineral content can contribute to poor taste and increased scaling and corrosion of equipment over time. That's why many practices purchase bottled water to fill their steam sterilizers and dental bottle systems manually—but that can get expensive, time-consuming, and really inconvenient.



Did You Know?1

- Total Dissolved Solids (TDS) is a measurement that includes common minerals, salts and metals—such as calcium. magnesium, potassium, and sodium—as well as small amounts of organic matter that dissolve in water.
- Zero-TDS water is ideal for steam sterilizers, but not recommended for use in dental delivery units. Absolutely pure, zero-TDS water is a solvent that can "attack" various materials used in the construction of dental delivery units over time.
- Using lower-TDS water in ultrasonic cleaners helps to avoid any possible interference of dissolved solids in the water with the function of enzymatic cleaners.
- Much like a "spot-free rinse" in a car wash, using low-TDS water for the final-rinse cycle of instrument washers helps to protect dental instruments from spotting, discoloration and oxidation that can be exacerbated by dissolved mineral content in the water.

Onsite (or In office) water-processing systems like the VistaPure Water Purification System can produce appropriate grades of water quality for steam sterilizers, dental bottles, ultrasonic cleaners, and the final-rinse cycle of compatible instrument washers—saving space, cost and time while helping to protect dental equipment and instruments.



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Removes remaining TDS after Hyperfiltration element

#4 | Hyperfiltration element

Removes 95-98% of TDS from city water, up to 100 gallons per day

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Ensures particulate-free process water sent to bottle faucet

#6 | Permeate pump

Enhances system's production efficiency

#7 | Water-storage tank

Ensures purified process water is ready on-demand

#8 | Autoclave wand

Dispenses deionized water for filling steam sterilizers

#9 | Lead-free faucet

Dispenses purified, non-corrosive water for filling dental bottles & ultrasonic cleaners

For more information, call 888-276-7783 or visit crosstex.com

¹ Chandler, Jim. The Book on Dental Water. VistaTron Publishing, 2016.

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Why Treat Dental Unit Waterlines?

Narrow Tubing = Microbial Colonization = Biofilm Growth

Research shows that the extremely narrow design of waterline tubing promotes water stagnation and bacterial accumulation.1

Stages of biofilm growth in untreated waterlines







Untreated procedural water should not be used on patients

Per the CDC, removal or inactivation of DUWL biofilms requires use of chemical germicides²

Simplifying DUWL maintenance protocols.

One DentaPure Cartridge = 365 days of compliant dental procedural water 3



Ref.#	Description	Quantity
DP365M	DentaPure [™] 365-Day Municipal Cartridge	1Each
DP365B	DentaPure [™] 365-Day Independent Water Bottle Cartridge	1Each

U.S. CDC (Centers for Disease Control) dental unit waterlines, bacteria, and water quality - general recommendations:



Product claims meets EPA Standards <500 CFU/ML



Discharge water and air for 20-30 seconds after each patient from all devices connected to the dental water system



Consult dental unit manufacturer for methods to maintain water quality

Consult dental unit

maintenance of anti

retraction mechanisms

manufacturer for periodic



Consult manufacturers for recommendations on monitoring water quality

Waterline Testing Options

"The only way to ensure effectiveness of a dental unit waterline cleaning regimen is to actually test the water coming out of the unit."

- AMERICAN DENTAL ASSOCIATION





Water testing is an integral part of your overall dental unit waterline protocol. Options are available for both in office and mail in services. When sampling your water for testing, there are critical steps to ensure that this is being done properly.

Waterline sampling technique guide available for download at Crosstex.com, or via request for hard copy through Samples @crosstex.com.

Visit crosstex.com for more information or contact your preferred dental distributor to order.

http://www.osap.org/?page=Issues_DUWL_1 ²CDC MMWR: Guidelines for Infection Control in Dental Health-Care Settings – 2003 3Or 240L of water if usage records are kept

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rural towns with all types of underserved populations.

The kids need care there, but the adults need care there too, and we decided to provide that to them sealed our vision for National Dental Partners. We're going to support dentists who are serving the underserved, whatever their age or location.

support to feel like they have the time to do what they do best and enjoy the most, while we handle the rest, so the first thing about Open Source is that they, the dental practice members, choose what and how much support they need. Is it accounting? Call center support? Scaling advice? What are the blocks

level and the doctor owns 100% of the practice. Maybe that 50/50 comes from that community feel of two friends, which again, is how this all began, through friendship. We feel like that equal partnership is an authentic and strategic way to say "Hey, let's bring our value together and be partners. We're in this together."

It's also important to note that only dental clinicians can own practices, so there aren't "businessmen with money" in the background running the show secretly. We are very strict on corporate practice of medicine laws and have been from the beginning. I, not being a clinician, can never own a practice. Dr. Evans can. Our other member doctors and associate doctors can. What we own is an entity that supports them, and we provide them services. So, I'm a shareholder in a business that works to support the success of a dental practice that is run by a dentist, a member of the dental community.

Efficiency: You mentioned that you as a non-dentist cannot own a practice, but really quickly I'd like to highlight that for a non-dentist you love the dental industry and are highly involved in it and respected by its community, tell me about that.

Scott: You could say I'm a bit of a dental industry super fan. I've recently taken on the role of president of the ADSO (American Dental Support Organizations), an honor for which I'm excited and humbled to take on and lead.

Outside of running National Dental Partners with my friend and partner Dr. Chad Evans, I'm also the

I call COVID-19 "The Great Accelerator". People were using Zoom before COVID-19, so it wasn't like Zoom got created during COVID-19. People were using telemedicine before COVID-19. There were regulations. There were roadblocks. There were mindsets. There were my own mindsets of where I needed to be to have a meeting with somebody.

By doing this, we allow dentists to retain autonomy in terms of how they practice, because they know their patients and communities, and we're able to bring in what we know works on the back end to support their business while they support their community's dental health, without stressing about practice survival.

Efficiency: Can you talk about your new offering with National Dental Partners and how that works? I've heard it called "Open Source" and I'd love to hear more about what that means.

Scott: That's correct, we are the first truly Open Source DSO[™]. We always want the practices and dentists we

and issues holding you back? You tell us so we can take care of them with you. We don't charge any markup for our services either. Everything we do is at cost. If you imagine a practice was stuck in the dark while trying to get to the light at the end of the tunnel, think of us as the bridge that gets going to get you to that light faster than you can imagine.

Participating practices can customize their support needs and we will serve them in the ways they need, as determined by them. Dental practice work isn't one-size-fits-all and neither is the way we support our partner businesses.

Anytime we're partnering on a DSO entity with another doc, we always like to be 50/50 at the DSO

host of the DSO Secrets podcast and community, and a senior faculty member and partner of DEO, the Dental Entrepreneur Organization.

Efficiency: From your observations, where are dental practices in the re-opening process as of mid-summer?

Scott: It's been really interesting because as a member of ADSO I'm able to talk with some of the biggest DSOs. That coupled with my work with the DEO (Dental Entrepreneur Organization) and on our DSO Secrets FB group, gives me a flavor of the industry – in real-time.

What's happening is, frankly, different than anything anyone predicted. People predicted customers and patients were going to be very concerned about coming into the dental office. That really hasn't happened for many practice owners. I mean, not on a bulk scale.

What has happened, and I'm sure many people can relate to this, is that people are just wondering what your rules are. They're asking, "So do I have to wear a mask here?" "Do I not?" "What's going on?" There is an expectation that you're a clinical office and you know how to handle this thing. Patients probably have had more respect for us than we've given to ourselves.

The reality is, dental offices are some of the safest places in the healthcare industry. Remember, we were the ones in the '80s who had to deal with the AIDS epidemic and since then a lot of the protocols have already been put in place.

We're noticing patients want to come back and need to come back.

So, the patient flow component is there and that's happening across the industry.

The other interesting thing that's happened is, we're noticing a kind of the great exit. Instead of exiting over the next five years and however that would have segmented out, it just all happened in June. Dentists are just closing the doors. The way many are thinking is, if you were going to retire in the next three years and you're 65-70-years-old, why ramp back up your workload in this chaos?

Another scenario? Maybe you're a dentist with five locations. Two were doing well, but three weren't. With those three an owner says, "I'm out." It's just too much to manage. Because the other side of this is yes, the patient flow and demand are there, but the staffing piece is super complex. The dentists who are willing and have patients coming in don't always have the support around them that they need. I think that's been a struggle.

Where these challenges may have been easier to manage before, life is more complex these days for everyone, from patients to practices and managing that can be more difficult than ever.

It's been very clear through all of this that those with the biggest support teams are able to handle the most chaos. Members of DEO have leaned on each other and supported each other. Members of ADSO have done the same. This has been the great accelerator and humbler for all of us that we need teams of support to handle this level of workload and information.

What does this mean for dental practices? We encourage our practices

to help make their patient's lives easier and safer while taking the necessary steps to ensure their own business can survive and thrive.

Efficiency: Have you seen any forecasts on when we'll be back to pre-COVID-19 levels?

Scott: We actually have the data from China and Europe that's come out because they were ahead of us on a lot of it. They came out of the gates at like 50% the next month after re-opening, and then they were at 75%, and then they trickled back to 100%.

America has responded a lot faster than that. Across the board, at minimum, dental offices were at 50% as soon as their states reopened. Many are now anywhere from 75-100%, or even above 100%. It's because the supply has shrunk. The demand stayed the same. So, all those reoccurring visits that didn't happen in April, those needed to get in.

I would say the other interesting component is the limitation on distractions we've had as Americans. Typically dental gets moved down the stack of "most important things to do today." We have to do a better job marketing the value of oral health and the oral systemic link. Right now we are getting an artificial boost but soon others industries will be marketing more aggressively and taking the hearts and minds of our patients to other products and services.

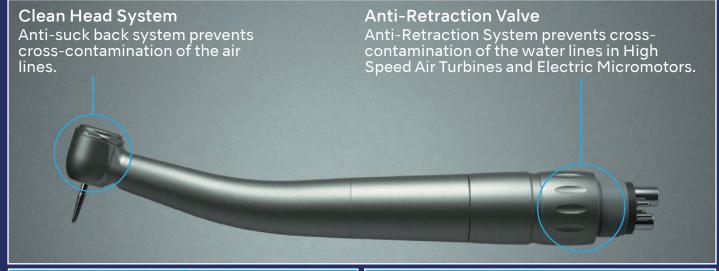
I fully believe supported practices with large teams are in the best position and I know so many in this industry who are feeling that as well,

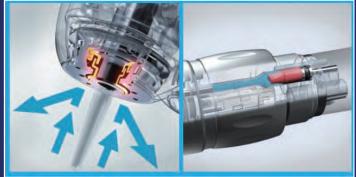
DualDefense





NSK instruments are designed with DualDefense infection protection. The Clean Head System prevents suck-back into the head and the exhaust line and the Anti-Retraction Valve prevents contamination of the water supply.







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(of equal or lesser value)

Buy 3 Z95L or nano95LS handpieces



Get 1 NLZ Electric Micromotor System



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partly because the amount of information, data and complexity that this has put on the system is so high. For instance, now you've got PPP loans coming in, EIDL loans, etc. You're navigating new compliance components and PPE. How do I procure all of this and ensure high level of compliance?

If you don't have a division of labor capability, if you're like the single doc trying to do it with staff who have their own life complexities, you just can't ramp up fast enough into this game. But if you're able to divide out and you have an infrastructure in place, you're more ready to serve the customer, the patient.

They have teams that can help them navigate all this complexity. All great athletes, even if they look like they're alone, have huge teams.

This complexity, having a team, network, and support system, I think everyone's saying, "Yes, at this level you do need a team. You do need support."

That leads me into how we evolved and became what we are today, National Dental Partners, which happened before we knew there was going to be a global pandemic. That said, the state of our country has shown us and participating (and interested) members that there has never been a better time for partnerships and collaboration like this in our industry.

People want to communicate more than just yes or no on the confirm text. They want to be able to say, "I can't do it right now, but can we move it to this time without having to call in?" We want to be able to get on when we get in bed at 10 o'clock at night and reschedule things.

Efficiency: Speaking on behalf of DSOs across the nation, has the pandemic made DSO offerings more valuable to the independent dental office?

Scott: Yes. I think this was already starting to happen. Even dentists who were kind of wary on DSOs are seeing that these DSOs are willing to provide more capital to them if they want to exit or if they're looking for a partnership. That's interesting to them.

National Dental Partners (NDP) is taking groups who have built some infrastructure or have a vision on how they could really support patients, but don't have the finances for things like a call center and a full executive team. CFOs are expensive. You're not just competing against dental offices for CFOs. You're competing against a lot of industries. And they need CTOs to get the technology, to feed them the data. All of these needs quickly

become expensive and a struggle if the infrastructure is not there.

We created National Dental Partners to provide our infrastructure to emerging DSOs, so that they can skip over that dark tunnel many are in and skip that place of having to build everything out. They simply must stay focused on just taking care of patients.

Efficiency: As you said earlier, doctors are retiring earlier, but many of the consequences due to the change in practice have been well-documented, such as the struggle for procuring and using PPE, staffing issues, and patient confidence returning. What are some of the unintended consequences of the change in practice you are seeing?

Scott: I call COVID-19 "The Great Accelerator". People were using Zoom before COVID-19, so it wasn't like Zoom got created during COVID-19. People were using telemedicine before COVID-19. There were regulations. There were roadblocks. There were mindsets. There were my own mindsets of where I needed to be to have a meeting with somebody.

There were things already in motion, and frankly, DSOs were in motion long before COVID-19, because of the complexity of dentistry and our desire to streamline our member's work and organizations. We have been here watching and planning as regulation continues to increase and the patient's demand for standardization, more availability and time open and all of that continues to increase as well.

Thank you, iPhone, Walmart and Amazon and every other customer

centric company. They've made us entitled customers. What COVID-19 has done is move us five years into the future where we have needed to move.

I talked to someone the other day who set a goal at the beginning of the year to have a 20% of his meetings this year be virtual. He's a forward thinker – this was before COVID-19. He said COVID-19 helped him crush his goal. He's had 100% of his meetings virtual. That's what I think has happened for anyone who was forward-thinking. Whether they saw it was a train coming or the future coming, it came fast and furious within 90 days instead.

If you were already running that way, then it just felt like you sped up.

If you were resisting, it felt like you got shoved. Or if you were going in the wrong direction, you kind of got shoved into this direction.

I think that's going to be the consequence of this. There will be some level of normalization. For example, that guy I mentioned above won't be 100% next year with virtual meetings, he'll drop down, but maybe he'll drop down to 50%. So, he'll be way ahead of where he thought he was going, but not so much being forced, like this is.

I think the DSO consolidation will go faster. I think anything that was technology driven will go faster. We're all moving faster on that piece. Let's call it unintended consequences of this or byproducts.

Efficiency: Looking into your crystal ball, what do you see for the next 12-18 months for the industry?

Scott: With so many things going on, it's easy to get overwhelmed. It's easy to see so many data points. My North Star in business and maybe for life has always been the same thing. What does the customer want? If I want to know what the future is going to hold, I'd look to the customer. What does the customer want? The good news is, all of us are customers. So, it's easy to diagnose too, because we can say, "What do I want as a customer?"

I look to the future, that's what I think is going to keep driving this



DSO misconceptions

What is the biggest misconception when it comes to DSOs?

The power that the clinician has, Scott said. The fear among dentists is a DSO will come in and tell the clinician what clinical care needs to be provided. Any investor or DSO wants the dentist to keep doing what he or she is doing and providing the care they know their community needs. "We will do all the admin and business things to keep their practice growing and thriving that they likely don't love in the first place!"

Scott has his own term for that type of organization, a DCO – a Dental Control Organization. "And I don't think those should be around," he said. "I think the misconception is, they say DSO, but they don't really think about what the name is. Dental Support Organization. As a clinician, you're in control. You're where revenue happens. So, when I hear stories of, 'They came in, they told me what I needed to do,'I want to say, 'Well, tell them no or quit. You have power."

The Dental Support Organization's goal is to relieve the clinician in such a way that they can provide better clinical care, Scott said.

"I want you to imagine two dentists. One is on his own. He feels independent. This means he or she is also responsible for payroll that week, for how many patients are coming in, and the tiff that's happening between the front desk team members. The dentist is responsible for

the computers going down and responsible for all of the admin and business chaos."

How is that dentist providing better clinical judgment and care than a second kind of dentist who's not responsible for any of that back-office stuff, who's not responsible for patient flow and scheduling, HR human resources, and technology upgrades?

"I believe the second dentist actually has more autonomy to focus on the clinical care at hand and serve the patient. All he or she is responsible for is to show up and take the best possible care of that patient, and choosing what supplies they need for that," Scott said. "I mean, just think about brain power and mental focus. You can see that a DSO done right, the clinical piece outperforms an individual dentist just because of human bandwidth realities."

And finally, Scott adds, "This entire DSO world of National Dental Partners really began as the friendship between two people: a dentist and a businessman, Chad and Emmet. I like to think that in some way that is how a DSO done right can act for its member practices – as a true "friend" in the dental industry that is there for support, encouragement, helping you improve the places in your life that you need improvement, all from a place of trust and care, all with the benefit of all involved – both friends – in mind."

industry. "Can you make it more convenient for me?" What's more convenient? So, if convenience means more technology, then it's going to drive more technology.

Here is another piece of advice as you plan for the future of dentistry, and your success in it: You can't think of dental just from a clinician perspective of procedure types. You have to now start thinking about customer avatars within dental and think of bringing them exactly what they specifically need.

For example, I think how the 60-years-and-older demographic is going to have a very specific desire. Maybe there's more desire around PPE and cleanliness and convenience, but maybe you're not feeling as much pressure around time slots. Maybe they have more flexibility.

Those in the pediatric market, on the other hand, may be less concerned about PPE. Whether it's subconsciously or consciously they are saying, "This hasn't really affected kids as much, and I just need convenience. I need you to open at these times and I need you to not have too many demands on what I have to do to get an appointment."

What else do I see when I look at providing convenience? I see two-way

texting and communication becoming the demand. That's something that we've now implemented. People want to communicate more than just yes or no on the confirm text. They want to be able to say, "I can't do it right now, but can we move it to this time without having to call in?" We want to be able to get on when we get in bed at 10 o'clock at night and reschedule things. So, whether we like that or not from a business perspective, as a customer, we love that idea.

Efficiency: Any last tips for practices trying to take care of these patient avatars in the best possible way?

Scott: Really look at your practice and ask yourself: What do you hate? I'll do what I call a feelings audit on a dental practice. I'll drive up. "How do I feel right now?" I'll look around at the space and notice things such as, "Okay, that tree bugs me," or whatever it might be. The signage isn't right, etc.

When I walk in, how do I feel as a customer? Because that's the only thing customers are actually experts on, how they feel. They don't know the margins. They don't know any of that. They're concerned with: "How do I feel? Does this feel safe? Is this good? Well, one of the things that I always hate is, I have to fill out that

paperwork again." So that goes on the list to solve.

Customers are going to keep demanding those kinds of things. And when I say demand, it means they'll actually switch service providers over those type of things or simply stop coming and do something else with their day. I hear it all the time. "I left whatever relationship because they had an app and it was easier. I left this because they have this way that this worked, and it was just easier." So, I would just say that if you're preparing for the future, do that feelings audit and look for where convenience could be better driven in your business and in your practice.



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PPE Past, Present and Future

A PPE leader examines how the spike in demand due to COVID-19 compares to other historical markers, and how it could reshape the industry moving forward.

Editor's note: Billy Harris, CEO of Sri Trang USA, Inc., spoke with *Efficiency in Group Practice* Publisher Scott Adams on the history of the glove business as it relates to public health scares, how demand spiked during COVID-19, the challenges of bringing manufacturing of gloves to the United States, and more. The following were ten insights from the interview.

This isn't the first time we've faced a PPE shortage

In 1989, the Food and Drug Administration (FDA) issued universal precautions because of AIDS. The universal precautions were just a simple statement: if you encounter bodily fluid, you should glove, gown, and mask. "That took the whole industry by a little bit of surprise," said Harris.

For the glove business, the universal precautions of 1989 meant explosive growth. In that particular year in Malaysia alone, the Malaysian government issued 300 permits for the manufacturing of gloves, Harris said, "though not all of those permits were fulfilled, or factories built." At the time, there was still a fair amount of domestic production in the United States.

However, since then, manufacturing has migrated to places like China, Indonesia, Thailand, and Vietnam.

Glove manufacturing didn't leave the U.S. because of cheap labor

When the gloves produced in the United States migrated to South Asia and China, it wasn't because of cheap labor, Harris said. "Gloves left because that's where the raw material is, and the raw material most in demand at

the time would've been latex." In the 1980s and up until about 2000, latex would have been the first choice of product, then vinyl, and then nitrile, Harris said. Today it's nitrile, vinyl, and then latex.



Following the universal precautions in 1989, there's been an event every few years that felt like it was going to have an impact on infection prevention and PPE

For instance, in 2001, you had the anthrax scare with the U.S. Postal Service, Harris said. "At one point, the U.S. Postal Service wanted everybody to glove and have some form of protection, but that lasted for about three months. The U.S. Postal Service went out and bought millions of gloves. Three months later they were trying to return them

because none of the workers would use them, and the whole anthrax scare went away due to good law enforcement practices to get to the root cause of it."

- >2002: A West Nile Virus outbreak occurred, "but it really didn't have an impact on the U.S. market in terms of any unusual demands outside of the normal demand."
- >2003: SARS. "It didn't really impact availability of product."
- >2005: The system was challenged with bird flu. "When I say the system, I mean the manufacturing community," Harris said, "which needed to make sure we had enough gloves not just in the U.S., but other hot spots of the world. So, there was a demand issue."
- >**2006:** An *E. coli scare*, "but that did not negatively affect the glove business," Harris said.
- >2008: An economic downturn. "Interesting enough, at least in the glove business, when there were tough economic times, we tended to thrive better both in volume to the market and in profitability for the company."
- >2009: H1N1, or swine flu, "and again that was a global issue

that we saw, and it created a higher demand for product. But the demand never really exceeded the capacities that were already installed."

- >2014: Ebola made headlines. It was mostly in African regions with some hot spots in other parts of the world. "In the U.S. we had a couple of places, but that was really squashed out. It got so much attention from the healthcare community, the scientific community, that it became almost a nonissue. But it was a little bit of a scare."
- >2015: Measles, which didn't really challenge PPE at that time.
- >2016: Zika.
- >2019: Another outbreak of measles.
- >2020 will be remembered as the year of COVID. However, December 2019 was the discovery of the virus and analysis has found that first cases were likely November 2019, Harris said.

Not surprisingly, during the peak of the COVID-19 crisis, demand was much higher than installed capacity

Harris said at its peak on a global basis and even in the U.S., the demand for gloves was 70% higher than the installed capacity. "It's a little bit difficult to really get a hard number, but we use 70%. Maybe you can discount some because you get three inquiries that might be for the same millions of gloves for some government agency, or some state agency, or just some local hospital," he said. "But we just know that the demand is higher than the available supply."

Why gloves are harder to produce

For masks, you can buy a machine that will make a mask and put it in your basement, your living room, or any empty building anywhere in the world and be in the business of making those products in relatively short order, said Harris. There is a raw material issue that you need, but that raw material is fairly available both domestically and abroad. Gowns are of a similar situation. "A little bit more higher tech in terms of the machine that you need to buy, but you can buy a machine, put it in your basement or an empty building, and in 60 to 90 days be making product domestically."

But gloves are very different, "because you don't buy a machine and put that in your basement, your living room, or an empty building," said Harris. The average single production line of making gloves is three stories tall and 100 yards long. For example, Sri Trang's group has three manufacturing sites with seven production facilities. The largest of the group sits on 190 acres of land.

"So, you don't just go build a glove line," Harris said. Plus, the raw material for gloves is still coming from either Korea, Taiwan, mainland China, Malaysia, Japan, or Thailand. "That's where your nitrile raw material comes from, and you have 12 producers in total that are based in each of those countries." For petroleum based paste or pellets – readily available raw material is in China, and 99% of the world's vinyl gloves come from China.

While it's possible that a new group, or even someone already in the glove business would set up manufacturing sites in different parts of the world, it would be challenging. "It's really all about the raw material, because it's always best to ship a finished good than it is to ship a raw material," said Harris. "Of course, in times like this, people get a little bit energized, but then do they follow through and actually do it?"

It takes a reasonable amount of space, and a reasonable amount of capital. If you invest somewhere around \$30 to \$40 million, that might build a 12-line production facility somewhere in the United States. "And then you've got regulatory challenges to navigate your way through, because when building a glove factory, it's similar to that of a chemical plant even though you're not making chemicals," Harris said. "You need a lot of water. You must have holding ponds to return the water, and that's the big challenge that you typically have here in the U.S. So, it's a big investment. And then of course you've got to import all your raw materials."

However, other PPE, like masks, hand sanitizer and gowns may come back to the United States for production

Producing masks, hand sanitizer and gowns in the United States is much more feasible due to the raw materials and equipment needed. "If it's not here in the U.S., it'll be nearby in Mexico or Central America. Some of that already exists."

China's export problems with PPE supplies didn't necessarily affect all glove manufacturers

Harris said Sri Trang was fortunate because it is based in southern Thailand, and not dependent on any significant raw material or labor coming from China. "In the U.S. it's all about nitrile gloves, and we have nitrile raw material that we can buy from Malaysia, Taiwan, Korea, Japan or Thailand, and those are our suppliers and we had no disruption in the supplies," he said. "Packaging is all made and produced in Thailand, and we have the benefit of using 80% post-consumer recycled packaging, and that's been part of our program all along. No disruption there. Then the few other little chemicals and things, it was zero impact for us."

Giving manufacturing capacity "110%" is a myth

"Pre-COVID-19, we were running at about 93% capacity," said Harris. "With COVID, we jumped full utilization of all assets, but the reality of manufacturing across any industry is that the theoretical capacity and actual capacity rarely equal."

PPE demand has turned the supply chain upside down

"All of us grew up in a time that everything was focused on just-in-time (JIT) delivery and single sourcing," Harris said. "It's not going out the window tomorrow, but it's going to go out of the window eventually because COVID-19 is going to leave some deep scars and memories. People will be in the position to

say, 'Well that's not going to happen to me ever again.'"

Yes, there will be higher demand, because more people across all industries are going to glove, gown, and mask. Some will be more short-term. For instance, some of the inquiries that Sri Trang received over the past few weeks are mostly coming from industry. "They're trying to get their employees back to work, whether it be in a factory or a restaurant."

Another example was the cruise ship industry. When it was shut down during COVID, those companies buying gloves for cruise ships found themselves sitting on idle inventory. "Well, that idle inventory was only idle until somebody figured out that, 'Oh, there's some idle inventory, let's go buy it because we can use it over here in other parts of the market." Anybody that was in the food service business saw a decline for a short period of time. But their glove sales and mask sales remained because they started selling it to customers who were not in their traditional wheelhouse.

The dental market did the same thing, Harris said. For seven to eight weeks, they went from 100% utilization in dentistry down to maybe 15%. It was only the dentist and maybe one other person in the office during that period of time. The dental supply people were sitting on inventories and having inventories coming in, so they started selling gloves, masks, gowns and hand sanitizer to everybody. They even went to the market to try to get more. Some of the dental distribution business is now trying to figure out how to leverage that long-term in healthcare and the medical side, not just the dental side, Harris said. So, unless you were specializing in cancer treatments and things of that nature, you saw no decline. But the general practitioner certainly saw a big decline.

There's going to be a change in the supply chain, Harris said. The market's going to look very different, and the demand will probably jump from 70 billion to maybe 90 billion when it all starts to settle out, "because we're all going to be doing more cleaning, deep cleaning, things of that nature."

Market growth

How much has the glove market grown? Around 1990, the U.S. market for disposable gloves and exam gloves was estimated to be about 15 billion pieces, said Harris. In 2019 pre-COVID, the estimate was about 70 billion gloves in the U.S. and 300 billion globally. "So, in a 30-year period, we went from 15 billion gloves to 70 billion in consumption."

The glove market isn't exclusive to healthcare. Harris qualified the number as including disposable and exam gloves, and for markets that include the food service industry. "But it goes to show how just the hand protection and thin wall disposable gloves has grown in that 30-year period."

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By Nick Partridge, founder and president of Five Lakes Dental Practice Solutions

Nick Partridge is the founder and president of Five Lakes Dental Practices Solutions, a consulting and technology firm helping dental practices develop, implement and manage a PPO participation strategy to attract and retain patients. Five Lakes has helped over 2,200 practices nationwide. The company is a four-time Inc. 5000 honoree as one of the fastest growing private companies in the United States.

For more than 10 years, Partridge has been an industry leader in understanding and analyzing the impact of dental insurance networks on the financial health of a dental practice. He has been featured as a guest speaker and guest columnist for many events and publications on the topic of dental insurance and dental benefits.

Managing Through the Pandemic

How to successfully overcome new PPE costs

The dental community has showed tremendous resilience, with 97% of prac-

tices now operational as of mid-summer. Re-opened practices are being met with much stronger demand than anticipated. So much so, that the ADA Health Policy institute revised upwards their forecasts on dental spending through 2021.

Managing through the pandemic has certainly been and remains trying. We're all learning on the job implementing workforce reductions based on evolving state mandates, understanding and applying for PPP, implementing remote work for essential staff – and now returning to work.

While many of these concerns presented temporary hurdles, the significant increase in costs to meet new personal protective equipment (PPE) requirements is a more serious issue.

Bearing new costs

In late April, the ADA released a statement urging third-party payers to alter their policies and fees to provide financial relief to dental practices bearing new and significant costs related to PPE requirements. In response, many insurance companies have launched programs to provide assistance. At present, eight dental networks have specific programs for PPE reimbursement based on reimbursing per patient visit. In addition, 10 Delta Dental member organizations comprising more than 61% of the U.S. population are offering programs. These programs vary in duration and benefit. Most programs end the late summer/early fall, but four of the programs are scheduled to run through the end of the year.

In a recent study of a small group practice in Illinois, we identified less than 22% of the patient base was insured by one of the 18 companies reimbursing for PPE. Further we estimated that in a two-month window from June through July based on the specific PPE programs, the practice would net roughly \$1,500 in PPE reimbursements on just under 200 patient visits.

With a group practice in Georgia, our analysis revealed that approximately 30% of the patient base was covered by a PPE reimbursing plan. Our estimates for the practice were to expect to collect just under \$24,000 on nearly 2,500 visits.

While helpful, this temporary relief is not moving the needle. In both examples, less than one-third of patients were affected. The long-term solution to recovering profit eroded by

the spike in PPE costs is to retake control of pricing power at your practice.

Pricing power is your ability to raise prices over time. When we think about our inability to control prices, we immediately think of our insurance contracts. Insurance participation decisions affect reimbursement rates. While there are many benefits to participating in-network, one of the consequences is accepting a discounted rate as payment in full. When you accept a contracted rate, you effectively lose pricing power.

Dental Groups and Dental Service Organizations (DSOs) understand the importance of pricing power as it pertains to aggregating leverage through size. After all, this is one of the primary objectives of affiliating. However, many of these efforts are spent managing down expenses.

Considerably less effort is placed on the more important effort to manage pricing power. If you don't actively manage pricing, you will be forced to focus on reducing expenses. The cost to deliver services will always increase so long as there are people and property involved.

As a group, below are three important steps to take to more effectively manage pricing power:

- 1. Review your UCR annually
- 2. Manage insurance participation more aggressively
- 3. Improve data management in your practice management system

Annual review of UCR

Every dental group should review the fees they charge to patients annually.



In dentistry, most practices price their services based on what others in the area charge. As a result, practices should plan to purchase claims data to benchmark their fees. The best source of information to benchmark your fees is the data from Fair Health. The Fair Health claims database represents over 75% of all dental claims in the U.S. and is the same source of information the insurance companies use to establish fee schedules.

Reviewing your usual, customary and reasonable (UCR) fees allows you to position your pricing according to your business strategy. Your UCR is also the foundation for building a successful in-house membership plan and in your negotiations with payers.

Manage insurance participation more aggressively

Decisions to participate as an in-network provider are made for a variety of reasons. As groups grow through acquisition, it is important to review participation and implement a PPO participation strategy regionally or by practice depending on your model. The single act of developing a strategy will improve revenue cycle functions to ensure payments are made according to the correct fee schedule and consistently across providers. When providers are contracted consistently, in the same plans according to the same fee schedules, the patient gets a better experience.

The decision to participate should be based on:

- The opportunity to attract or retain patients
- > Capacity to service those patients

- >Financial benefit
- >Business goals.

Thus, the need for a well-defined insurance participation strategy. In dentistry today, your participation strategy should be one of the key inputs to your overall business plan. Importantly, the longer you wait to install a PPO participation strategy, the more costly to implement, but also the more disruptive to your business.

lower reimbursement rates on average, this network avails providers of all Cigna PPO dental members. However, Cigna DPPO is their secondary network which reimburses providers better, but only applies to members with access to DPPO. DPPO providers are considered out-of-network for Advantage policy holders.

Practice A: Original platform facility. Participates in Cigna Advantage.

Considerably less effort is placed on the more important effort to manage pricing power. If you don't actively manage pricing, you will be forced to focus on reducing expenses.

Given the importance of insurance participation to most practices, groups must be more focused on managing their insurance participation at a high level.

Improve data management within the practice management system

Implementing documentation best practices will facilitate better decision making when it comes to PPO participation. Dental networks are increasingly segmenting their networks to control claims costs. Your documentation should follow suit. Let's walk through an example:

Cigna Advantage is Cigna's bread and butter network. With

Practice B: Newly acquired practice participates in Cigna DPPO.

How can you evaluate which patients have which network when the payor is simply defined as Cigna in the practice management system? Revenue cycle teams must start drilling down and providing additional detail so that reporting can facilitate better decisions regarding PPO participation.

While many insurance companies have provided relief to dentists during this difficult time, all of these programs are temporary. As a result, groups need to think about ways to regain or retain pricing power to build long-term profitability.



By Dr. Joe Blaes

Dr. Joe Blaes created a unique, insurancefree, fee-for-service general practice in St. Louis, Missouri, that emphasizes preventive, esthetic, reconstructive and implant dentistry. Because of his interest in new, innovative and more efficient materials and techniques, Dr. Blaes began writing a column. "Pearls for Your Practice" in Dental Economics. This column became a trusted source for maximizing dental practice efficiency. For almost two decades he was best known as the Chief Editor of Dental Economics. His lectures and hands-on programs for Dentists, Dental Assistants and Hygienists have won rave reviews around the country. In addition to memberships in many professional organizations, Dr. Blaes is a Fellow of the American College of Dentists, a past President of the American **Academy of Dental Practice Administration** and a Founding Member of the American Academy for Oral Systemic Health. His honors include St. Louis University's coveted Alumni Merit Award and the AGD Missouri Dentist of the Year Award 2007. Dr. Blaes is an educator, clinician, and lifelong learner. He can be reached at joeb@drjoeblaes.com

First Class Infection Control

Prepping teeth with no water spray and no aerosols

As dentists during the worldwide pandemic, the greatest enemy facing us is the aerosols we produce with our handpieces and ultrasonic devices. Many restrictions on the use of a treatment after producing aerosols have been placed by government and professional organizations. Our greatest concerns were; how can we protect our patients, our team, our family and ourselves in every way possible?

Our team came together to examine everything we knew and did and what our fears were. Having always been committed to first class infection control, all we had to do was to add the extra PPE to our protocol. We would then develop the exact wording to communicate to every patient, easing any and all of their concerns.

While the office was closed due to the mandates from the ADA and the State of Missouri, everyone was asked to watch a number of webinars and then send in a link to their favorite webinar for the entire team to watch. In doing so, each listed four things they had learned and wanted to use in easing any patient's anxieties and their safety. This time was a great bonding and learning experience for all of us. We came back even stronger and more enthusiastic than ever before.



The danger of aerosols

Many of the webinars were about the danger of the aerosols that we produce while prepping teeth and how hazardous this was to everyone in the dental office. Some of them promoted expensive devices that were supposed to control the aerosols. However, I have been using rubber dams in my practice from the beginning thanks to my mentor, Dr. Roy Wolff, who insisted I use one for every procedure. If my dental assistant is using the high volume evacuator (HVE) correctly, she can easily control most of the aerosol produced by the handpiece, and the rubber dam seals off the rest of the mouth, which inhibits being exposed to the virus and bacteria in the mouth. Regrettably only about 6% of dentists use the rubber dam.

There are more advantages to prepping teeth without the air water spray. Since this air water spray makes it difficult to clearly see the tooth when you are prepping, you will be able to better see what you are doing as you are prepping the tooth. This means more precise preparations. However, we have always been taught that high speed handpieces must be run with an air water spray.

I watched a webinar featuring Drs. Gordon and Rella Christensen. Dr. Gordon said that he has been prepping small class I, II, III, IV and Vs without air and water sprays for years. He stated that this was 60-year old research done by the University of California. This got me to thinking, what if I could do larger restorations like crown preps, inlays and onlays, veneer preps without air and water sprays? If I could do this, it would protect everyone in my office.



FLIR TG54 Spot IR thermometer

I started a research project to prove that the temperature of the tooth being prepped did not increase enough to damage the pulpal tissue. I used a highly accurate FLIR TG54 Spot IR thermometer to measure the heat of the extracted teeth being prepped with carbide and diamond burs and no water spray. The constant air flow from the handpiece was not turned off so the tooth was still receiving some cooling effect.

The potential damaging effect of temperature increase on pulpal tissue during dental treatment has always been a concern. An in vivo qualitative estimation of the temperature increase resulting in trauma to the dental pulp was published by Zach. et al. [1]. They showed that healthy pulps failed to recover from intrapulpal temperature increase of 52 degrees F in about 60% of the cases, while 15% of the teeth heated to 42 degrees F failed to recover.(1)

The protocol began with the dry prepping of extracted molar teeth using both carbide and diamond burs. I dry prepped class IV and V preparations, crown preps, and I sectioned teeth. During these

procedures, the temperature measured never exceeded more than an 8 degree F increase. A normal amount of pressure on the handpiece was used to cut the tooth at the normal speed that I use in the mouth. In an attempt to increase the temperature, the pressure was increased on the diamond burs but there was no increase in temperature. This procedure was done on more than 60 teeth and the results were the same. Each procedure was video taped with the FLIR IR Thermometer results in view. In order to decrease thermal damage to the pulp during dry tooth preparation, it is important to limit bur contact time within 20 seconds.

Using this procedure in the mouth produces dust and debris that must be removed by the high volume evacuator (HVE). Dry prepping the tooth produces an odor but this can also be controlled by the HVE. Be certain that the HVE is functioning as it should. Dr. Rella Christensen has worked with engineers to determine how a dentist can know if his HVE is adequate. All you need is a liter bottle like an old pop bottle or empty milk bottle that you fill up with tap water. Then turn off your HVE in all of your treatment rooms. I would go into whatever you consider your main operatory. Then turn on the HVE and put the tip into the bottle and it should be emptied in eight seconds. If your HVE takes longer than this, you have a problem that needs attention!

I read an article by Mary Govoni who is an expert on infection control. This is what she said about the threat of aerosols: "It is frustrating and fearsome to hear dental professionals not taking the threat of exposure to aerosol production in dentistry seriously. It is also frustrating to hear that many dental professionals would rather accept respiratory protection that is less than optimal in their haste to reopen their practices. While I completely understand the financial impact that this pandemic has had on practices, the financial impact of a doctor or team member being exposed to or developing a COVID-19 infection would have an even greater impact."

preparations. However, we have always been taught that high speed handpieces must be run with an air water spray. What you may not know is that many high speed handpieces need constant coolant water moving through the handpiece to keep it cool so the operator does not burn their patients intra and extra oral tissues or their own hands.

I have been using an electric handpiece for over 30 years. I have used many different brands, but my favorite is the Bien-Air EVO.15 electric handpiece. All of the preparations described in this article were



There are more advantages to prepping teeth without the air water spray. Since this air water spray makes it difficult to clearly see the tooth when you are prepping, you will be able to better see what you are doing as you are prepping the tooth. This means more precise done with the EVO.15. With my Bien Air Electric I will not burn my patient. The patented COOL TOUCH push button has heat arresting technology which prevents any burns. Since this electric handpiece doesn't heat up, we can prep teeth with no water spray and no aerosols.

[1] L. Zach, G. Cohen, Pulp response to externally applied heat, Oral. Surg. Oral. Med. Oral. Pathol. 19 (1965) 515-530



Test, Shock, Maintain

When it comes to waterline treatment, ignorance is no excuse.

BY LAURA THILL

Despite the growing awareness around the importance of waterline

treatment, some dental practices still don't adhere to testing protocols to protect the dental team and their patients. Either they aren't making the effort or they're going about it all wrong, according to Air Techniques Inc. dental hygiene specialists Gaylene Baker and Carly Fish.

"It has been my experience that dental practices rarely get water-line treatment correct," says Baker. "Either they don't understand that something needs to be done, or they are utilizing a product completely incorrectly. Each product that is used to treat dental unit waterlines (DUWLs) has a specific protocol that should be followed to prevent biofilm growth and maintain units of heterotrophic bacteria per milliliter of water (CFU/mL) at or below 500 CFU/mL. Simply complying

with a portion of a waterline treatment's IFUs isn't sufficient and can put patients and clinicians at risk of being exposed to disease causing microorganisms.

"In my experience, some dental offices are not doing as good a job as they can of maintaining and monitoring the dental waterlines," says Fish, noting that some dental offices only test their dental water when an incident prompts them to do so. "Many clinical teams forget to maintain waterlines and are unaware of

how to properly maintain the dental water quality, she points out. "If the practice doesn't treat their waterlines, the microbial count can reach as high as 200,000 CFU/mL in a matter of days, even when the tubing lines are new. I've had dental assistants and hygienists discreetly tell me the water smells or tastes funny, which obviously is not a good sign."

Fish recommends that dental practices take the following steps to ensure their waterlines meet acceptable standards:

> **Test.** Test water on a regular basis (ideally every three months) and monitor the water quality to ensure bacterial counts remain at 500 CFU/mL or less.

- **>Shock.** If the dental practice suspects the waterlines are compromised and the microbial counts have exceeded 500 CFU/ mL, it should initiate treatment immediately.
- > Maintain. The practice should follow manufacturer guidelines for disinfecting waterlines and eliminate dead ends in plumbing, where stagnant water can enable the formation of biofilm.
- Daily drain and flush. Per recommendations by the Centers for Disease Control and Prevention (CDC), the American Dental Association (ADA) and the Organization for Safety, Asepsis and Prevention (OSAP), dental practices should flush their waterlines for several minutes each morning, before they begin patient visits. They should flush handpieces with air/water for 20-30 seconds between patient visits. And they should install sterilized handpieces and sterile or disposable syringe tips after flushing to reduce cross-contamination.

"Using an independent water reservoir system will eliminate the inflow of municipal water into the dental unit," she adds. "This will permit better control over the quality of the water source, and eliminate interruptions in dental care when 'boil water' notices are issued by local health authorities."

Misconceptions

If some dental practices are lagging behind with regard to waterline treatment, it's certainly not intentional in every case, note Fish and Baker. "Some dental practices may think that because they're using distilled water, they are supplying safe water to their patients," says Fish. "They may not realize that biofilm is growing within the water lines."

Waterlines are moist, warm and dark, with periods of stagnation and slow flow rate, making them breeding grounds for biofilm, she points out.

a CFU count over 500/mL," she says. "If they don't monitor their waterlines, how will they know this?

"There is also a great misunderstanding that utilizing distilled water is sufficient, and no treatment is required," she continues. "Distilled water is a great source of water, but without waterline treatment, the DUWLs will absolutely grow biofilm."

"The bottom line is, if the dental office is negligent and doesn't treat its waterlines, there are legal implications. I didn't know is not a defense. It is every dental practice owner's duty to know what must be done in order to comply with laws or guidelines."

- Gaylene Baker, Air Techniques Inc. dental hygiene specialists

It's not uncommon for dental practices to believe their treatment protocol is simpler than it really is, leading them to overlook important steps, says Baker. Furthermore, they may not realize they need to validate that they are complying with EPA and CDC treatment standards to ensure their water does not exceed 500 CFU/mL, she explains. Even if a product does not include validation recommendations in the IFUs, the practice must take necessary steps to validate their protocols and account for the possibility of errors occurring. "Dental offices often have a waterline design that facilitates growth of biofilm that can be released into treated water causing

Misunderstanding or not, when dental professionals are negligent, they place both their patients and their practice at risk. Take an incident impacting a Georgia pediatric dental clinic in 2015, where 20 children who received pulpotomies required hospitalization due to chronic infections. "The investigation revealed a direct link between these infections and contaminated dental unit water at the clinic," says Fish. "The average CFU count was 91,333/mL," she explains. "M. abscessus was isolated from all water samples and genotyping validated that it was responsible for introducing infections into the chamber of the tooth during irrigation and drilling." Signs and symptoms of this infection include pain, swelling, osteomyelitis (an infection of the bone), pulmonary nodules (a small, round- or oval-shaped growth in the lung caused by an infection) and fever. Treatment can be extensive and expensive.

"The bottom line is, if the dental office is negligent and doesn't treat its waterlines, there are legal implications," says Baker. "I didn't know is not a defense. It is every dental practice owner's duty to know what must be done in order to comply with laws or guidelines. They also have to train their employees on why waterlines must be treated, and how to treat them. And, they must implement an office policy specifying how the dental team should use their chosen product and validate compliance."

The good news is that, while some dental practices have some catching up to do with regard to waterline treatment, market data reflects a growing interest in newer products available to ensure dental water meets EPA drinking water standards, according to Fish. "Given how much this product category has grown in recent years, it's clear that more and more dental offices recognize the importance of treating their waterlines," she says.

Today, in-office and chairside water test kits are available, which are convenient, economical and save doctors time, Fish points out. "Although less reliable than laboratory testing, in-office tests provide actionable results based on a pass/fail baseline, enabling the dental office to take fast action if biofilm starts to gain ground.

"In-office tests require a sample be taken directly from each unit and left to incubate for 2-5 days, depending on the method used," Fish continues. If used more frequently, these tests can help ensure staff compliance and provide an early warning if there's a problem, she adds.

Today, in-office and chairside water test kits are available, which are convenient, economical and save doctors time.

 Carly Fish, Air Techniques Inc. dental hygiene specialists

"Air Techniques offers Monarch Lines Cleaner, an intermittent, chlorhexidine-based liquid treatment," Fish explains. "Monarch Lines Cleaner is both a shock and maintenance product. It removes biofilm containing odor-causing bacteria from dental unit waterlines with a fast, effective and efficient application. The solution is ready to use, with no mixing or diluting required. After coating the tubing walls nightly for 3 weeks to ensure buildup in waterlines is eliminated, Monarch Lines Cleaner should be used weekly."

Clear and concise

As important it is for dental professionals to follow manufacturer instructions for use, it's up to manufacturers to provide clear, concise instructions, notes Baker. IFUs for

waterline treatment products can be confusing to say the least," she says. "Is it necessary to shock? If so, when? Do I need to test? Again, when?" Whole office systems require maintenance with shocking and filter changes, she adds - something dental offices may not realize. "Many dental offices believe that once they install whole office systems, they are finished, but that's not true," she points out. Manufacturers bear the responsibility of providing easy-to-follow documents, which may also be used for recordkeeping to keep track of treatment, monitoring and protocols for addressing failed tests. "This would help dental practices follow proper protocols for their product of choice, and keep clinicians and patients safer in the long run," she says.

It's especially important that dental professionals understand the risks involved if they do not follow the product IFUs and adhere to CDC guidelines, notes Fish. "Easy-to-follow instructions and instructional videos can be helpful," she says. "In addition, manufacturers should follow up with the office once the sale has been made to ensure the customer is using the product according the to the IFUs."

Running a dental practice can be overwhelming, says Baker. Add to that the need for regular waterline filter changes, shocking, monitoring and recordkeeping, she points out. The better educated dental professionals are with regard to the importance of adhering to waterline treatment protocols and maintaining EGP drinking water standards, the better equipped they will be to keep their staff and patients safe.

SUPERIOR TECHNOLOGY



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- George Freedman, DDS

From the Utility Room to the Operatory, Air Techniques Has You Covered.



Dr. Andrew Matta, DMD, MBA, Founding Partner & Chief Medical Officer, North American Dental Group



Efficiency: What does it mean for your DSO to be a leader in today's dental market?

Dr. Andrew Matta: For us, it really means leading the way in how we interface with the many constituents that we serve. Our approach has always focused on the team members that take care of our patients. When you approach your team with gratitude and empathy it creates a culture of compassion which is key when you are a healthcare provider. In doing so the patients win as they have highly motivated and engaged teams taking care of their needs. When patients are happy, communities are happy, which we believe is the true measure of success for long-term viability of our practice.

Efficiency: In your opinion, what are the three most important characteristics of a leading DSO?

Dr. Matta: We understand that we are in the business of taking care of people; whether our team members or the patients we serve. The three characteristics that we feel are most important is for us to have:

> Clinical Leadership - It is essential to have a strong focus on clinical leadership. Also, having a healthy working relationship between the business and clinical leaders.

- > Servant Mentality this allows all team members organizationally to know that we are all here to serve. When you lead by example from the top to the bottom and the bottom to the top it helps create cultural alignment.
- Field First Approach we know that patient interactions are critical in the quality of the care our supported doctors and supported teams provide and having the entire organization focused on that helps us make great patient decisions.

organization has worked as a community to establish a group collaboration of high standards around quality and safety of care. Those standards and the mission should continuously improve and evolve.

Efficiency: How are dental patients' expectations changing, and how do leading DSOs help their practices respond appropriately?

Dr. Matta: We have seen a continued focus on convenience, quality, and just-in-time care. Even though we serve many different demographics them. We have seen an influx of decisions around online feedback versus historical community-based reputation. Lastly, patient do not want to wait. They are used to getting their way to what they want now, and the consumption of content and e-commerce has continued to train and evolve the consumer to this point. We feel that these three key points need to be an area of focus for us to remain viable.

Efficiency: Are DSOs being called on to provide a new, creative leadership in dentistry?

Dr. Matta: Leadership within the dental industry is continuously changing and we are being asked to step-in and fill the leadership void as we welcome new, young dentists starting their careers and, at the same time, senior dentists are retiring. We recognize the shifting landscape of our profession, but we also know that regardless of the paradigm, there is no substitute for excellent patient care. Whether we are partnering with a clinician in our organization close to retirement or with a new associate joining our group, we know we can unite around a collective purpose regarding patient care. Layering standards of care, measuring outcomes, and focusing on quality allows us to build bridges with these different mindsets. The flexibility in approach allows us to lead these people with some of the key common themes described. It is like a language where we are all using the same alphabet and our job is to make it all come to life with the same narrative so that it all makes sense.

Our approach has always focused on the team members that take care of our patients. When you approach your team with gratitude and empathy it creates a culture of compassion which is key when you are a healthcare provider. In doing so the patients win as they have highly motivated and engaged teams taking care of their needs.

Efficiency: What is your organization's mission? In order to be a leading DSO, must that mission change or evolve over time?

Dr. Matta: Our organization's mission is to deliver "best in class care – every patient/every visit". We have an internal dialogue and North Star of being the Cleveland Clinic of Dentistry. Cleveland Clinic and Mayo Clinic are among the world's best health care institutions. Our doctor led and socioeconomic statuses, we see that there is a general theme to make the overall experience more convenient to busy lifestyles. Whether that is scheduling tools, hours of operations, days of operation, and/ or the customization of care, the convenience factor is in play. Quality matters - they are reading the reviews, watching the videos, and learning as much as possible of the people that are going to take care of

Dental News

North American Dental Group names new CFO

North American Dental Group (NADG) (Pittsburg, PA) announced Jonathan Walker as its new chief financial officer (CFO). The DSO says that Walker will play a key role on the company's leadership team influencing overall strategy while leading all finance related activities.



Prior to joining NADG, Walker served as the CEO of MedExpress, a leading urgent care and employer on-site clinic management services organization with more than 300 locations operating across 26 states. Walker joined MedExpress in early 2013 to lead the Financial Planning & Analysis and M&A functions and later served as MedExpress' President and CFO before becoming CEO in 2018.

"Jonathan is a seasoned, growthoriented executive with deep experience in multi-site healthcare services. He is results-oriented with
depth in areas of finance, operations
and P&L oversight," said NADG CEO
Ken Cooper. "As our industry continues to evolve, Jonathan's leadership and track record of building and
motivating teams is exactly what
NADG needs to continue executing
our vision for the future."

"I am excited to join NADG at such a pivotal moment in its evolution. They've created an entrepreneurial culture and collaborative approach to group dentistry that's truly differentiated," said Walker. "I look forward to helping advance that unique approach and partnering with NADG-supported dentists and clinicians in their mission to deliver best-in-class care to every patient at every visit."

ADA seeks entries for 2020 ADA Design Innovation Awards

In search of dental facilities that seamlessly combine esthetic appeal, function and design, the ADA Council on Dental Practice, ADA Member Advantage, and BMO Harris Bank are seeking entries from July 6 through Sept. 4 for the 2020 ADA Design Innovation Awards. Association members are encouraged to submit entries for the "remodel," "large new build," and "small new build" categories. Judging criteria for the contest includes esthetic appeal, such as use

of color, light/windows and theme; utilization of technology; function and efficiency; innovation; and how well the design has accomplished the entrant's objective. Judges from the ADA Council on Dental Practice will select three finalists from each category. Dentists will cast votes online to determine the winners, who will be announced no later than Nov. 15. Winners will receive \$1,000 each and be featured in ADA publications.

Aspen Dental launches digitally enhanced patient experience at all offices

Aspen Dental has rolled out a "digital check-in experience" across all of its more than 820 offices in 41 states. The system allows patients to manage their dental visit as they do much of their lives - digitally, saving them time – an average of 15 minutes per patient – while dental care teams can provide a more integrated patient experience. Aspen Dental Management, Inc. (ADMI) developed the digital check-in technology suite in-house. The rollout is a part of Aspen Dental's move to a more digitally integrated patient experience. Digital charting and notes through the Perio charting system, are currently being tested in several Aspen Dental locations, while artificial intelligence (AI) enhancements, such as biometrics and fingerprint/facial recognition, are being evaluated to continue to improve check-in and check-out.



Removing mercury from the dental practice (and the environment) is a good thing - and we're way ahead of the game. When it comes to Amalgam Separation, no one knows more than Solmetex. Twenty-five years ago, our experience in water science led us to create a system that easily and affordably removes amalgam waste from dental practices. Our signature product, the Hg5, is the industry standard and has won more awards than all competitors combined. As a 'total solution provider,' Solmetex takes care of waste handling and recycling so you don't have to.

Good for you and good for the environment.

Solmetex – clearly the leader in amalgam separation



