Making All the Right Moves

Dr. Jonathan Gordon followed his heart and good advice to build his dream practice.
Axeos Covers Every Angle at Infinite Smiles

So, what does it take to blow the mind of a clinician who admittedly has every dental technology under the sun? Patel’s Galileos CBCT imaging unit from Dentsply Sirona has served him well over the past decade, but in 2020 he discovered a new unit that he felt finally challenged its abilities.

“When I heard the Axeos was available, I knew I had to have it,” said Patel of Dentsply Sirona’s newest 3D/2D imaging unit with a large field of view and wide treatment spectrum. He believes that the technology infused into Axeos will take him well into the next decade of his practice.

“Our office already had a cone beam system, so the fact that all we did was upgrade to a newer unit and this is still a game changer is pretty unique,” said Patel, adding that for clinicians who’ve never had access to this kind of technology, introducing a system like Axeos will completely revolutionize their practice. “I’m excited for my peers who don’t have it yet, because the potential for them to magnify what they do and improve the result of their clinical therapy is unparalleled.”

A Game-Changing Workflow
The imaging acquisition logistics of Axeos are relatively the same as with Galileos, but the Infinite...
Smiles clinical team has enjoyed how much easier it is to get patients positioned in the machine and capture images. Axeos offers a smart functionality that adapts and adjusts to the patient depending on their head tilt and position, which virtually removes clinical error from the equation.

“The user interface makes it much easier for my clinical team to adjust the machine, field of view, or the other parameters that they need to input, as opposed to running back to a computer, making the changes, and then going back to the machine,” said Patel. “They can stay with the patient and adjust everything through the panel, which is fantastic.”

The Galileos unit took anywhere from seven to ten minutes to

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**THE AXEOS EDGE**

Not only is Dentsply Sirona’s Axeos on the cutting edge of imaging technology, but it also gives dental practices an edge when it comes to quality care, patient experience and improved workflows. It’s many benefits include:

- a range of volume sizes for flexibility and precise evaluation
- 3D low-dose and HD images
- an Award-winning design
- Smart Height, which adjusts to individual patients
- Metal Artifact Reduction for sharper 2D images
- intuitive imaging software that’s compatible with more than 200 practice management systems
- Sidexis 4 technology for DICOM, STL and CEREC data integration

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A cloud-based software solution is essential when you have more than one location. They can work together and create this new patient experience no matter where the patient calls.

– Abby Howell, practice manager
There is such great technology out there, but in my opinion, it needs to be integrated by a professional like Patterson so that everything runs smoothly for the doctor and from the doctor’s perspective.

— Neal Patel, DDS

populate an image, which Patel admitted he had gotten used to. However, as his practice grew and became busier, he started to realize it was becoming a bottleneck. With Axeos, once the image is taken, it’s typically on the computer screen within two minutes.

“IT’s night and day in terms of speed,” Patel said. “Regardless of whether the image quality is the same or better, the workflow is improved significantly. A five-minute reduction in time-savings is absolutely significant, and I think most successful dentists realize the value of five minutes from a production standpoint. You can potentially save an hour a day, which makes the team more productive and signals a massive leap in workflow efficiency.”

A Trusted Technology Partner

As game changing as Axeos has been for Infinite Smiles, the imaging unit didn’t come out of the box that way. Although some digital tools may be true plug-and-play solutions, most investments require a bit more attention. That’s why step one of incorporating any new technology into the practice is choosing a partner who can ensure implementation and training go smoothly and that clinicians and their dental teams get the most out of their purchase.

In 2007, when Patel was opening his practice doors and implementing the Galileos CBCT imaging unit, he turned to Patterson Dental to guide him through the process from start to finish. Because of Patterson’s comprehensive portfolio of industry-leading vendor partners in the technology and equipment sector, the relationship has continued to grow and become stronger with every digital investment.

“There is such great technology out there, but in my opinion, it needs to be integrated by a professional like Patterson so that everything runs smoothly for the doctor and from the doctor’s perspective,” he said. “Implementing one piece of technology requires several steps prior to just plugging it in. There’s infrastructure — which calls for the coordination of different elements like compressed air or electrical
requirements – space considerations, networking and so forth.”

In addition to helping him navigate the logistical aspects of implementing a technology like cone beam imaging, Patel says that over the years, Patterson Dental has become familiar with the blueprint of his practice. So, no matter which digital tool he’s acquiring, whether it’s a digital sensor, imaging software or 3D printer, it can be tailored exactly to how he and his dental team need to use it.

“Patterson is unique in my opinion because they are always customizing the solutions to me,” added Dr. Patel. “Instead of looking at me like another dental practice, they know my practice very well and understand not only how I operate as a person, but how I operate within the walls of my practice. So it’s a great relationship from that perspective, and I trust that Patterson does that with every one of their customers around the country.”

**Dentist Input Improves Product Development**

Not only has Patel benefited from Patterson’s service and support when implementing the growing number of technologies at Infinite Smiles, but his relationship with the supplier has evolved in a way that allows him to give something back to practice owners around the country.

“Patterson is my trusted supplier, but I also enjoy being a doctor who helps them figure things out so that, before they go to market with a product, they have an answer and an understanding as to how to implement these technologies, because that’s one of the hardest things to do,” he said. “I enjoy helping other practices implement the same technology that I’ve implemented and benefited from in my own practice, whether it’s cone beam imaging, CAD/CAM, digital sensors, or an intraoral camera.”

Another key reason that partnering with Patterson has been great, added Patel, is because they’re addressing digital dentistry from all angles. Patterson’s comprehensive portfolio gives him full confidence that when his practice needs a particular digital solution, they’ll have a product that fits the bill – as well as the support to go along with it.

**EFFICIENCY AND ADAPTABILITY**

Cloud-based practice management software and a 3D/2D digital imaging system may be two very different kinds of technologies, but they resulted in the same outcomes for Southern Roots Dentistry and Infinite Smiles. Their practices are growing, their patients are happy, and their teams are operating at peak performance because they have the tools to ensure they can work efficiently and easily adapt, as necessary, to changing needs and circumstances.

The Axeos user interface makes it much easier for my clinical team to adjust the machine, field of view, or the other parameters that they need to input, as opposed to running back to a computer, making the changes, and then going back to the machine.

– Neal Patel, DDS
In both our personal and professional lives, the technology around us is evolving at such a rapid pace that the phrase “game changing” has started falling on deaf ears. However, early adopters of Axeos – Dentsply Sirona’s latest-generation 2D/3D imaging unit with a large field of view and wide treatment spectrum – have been saying exactly that, especially when it comes to expanding treatment possibilities, streamlining the imaging workflow and creating a calm and collaborative patient experience.

EXPANDING PATIENT CARE
One of Axeos’ key features is its large, tailor-made 3D volume sizes – ranging from 5 x 5.5 cm to 17 x 13 cm – which allow practices to expand their treatment offerings into dental implants, endodontic therapy, orthodontic treatment, sleep apnea appliances and more. In addition, a Direct Conversion Sensor converts X-rays directly into electric signals, ensuring that Axeos 2D and 3D images exhibit a uniquely high level of sharpness, even when captured at an extremely low dose.

SLEEK AND SIMPLE BY DESIGN
Axeos offers a sleek, modern design with ambient backlighting in over 35 color options that easily blend in with a practice’s look and feel, while making patients feel calm and comfortable during image acquisition. Patient Positioning & Image Assistant (PIA) technology simplifies matters for the clinical team by automatically establishing the correct inclination of the patient’s head and positioning them in the occlusal plane to avoid unnecessary correction scans.

Just when it seems that dental technology has finally reached its peak, a 2D/3D imaging unit designed with a large field of view and outstanding image quality paves a path forward for general practitioners to expand treatment possibilities and elevate clinical outcomes.
Neal Patel, DDS, CDT, is known around the world for implementing state-of-the-art systems into his practice, Infinite Smiles, which he founded in 2008. He has helped thousands of clinicians integrate technology into their offices.

**PATIENT IMPACT**

Axeos has a new low-dose scan that’s beyond the lowest of any I’ve seen, yet it gives a full volume of information. For example, if we’re assessing growth and development of a pediatric patient whose adult teeth are coming in, we can visually inspect the number of teeth or identify if the patient is congenitally missing a tooth – without having to expose them at the normal dose. It is such an important tool for younger patients, patients with a history of radiation treatment and those who are generally concerned about radiation exposure.

**IMAGE QUALITY & EASE OF USE**

Axeos can adjust according to the patient, which takes clinical error out of the equation. The user interface makes it much easier for my team to adjust the machine and the field of view, as opposed to running back and forth between the Axeos and the computer to make changes. They can stay with the patient and adjust everything through the panel. And image quality is phenomenal; everything we’ve captured with Axeos has been crystal clear.

**INTEGRATED WORKFLOW**

Once an image is captured, it’s on the computer screen in about two minutes. But the real benefit is the open software structure that allows me to go to any computer to evaluate images and plan implants. I can be more flexible and nimble.

**TREATMENT POSSIBILITIES**

Axeos’ field of view can be collimated or adjusted. If we’re only interested in looking at a specific quadrant, we can take a cone beam or a 3D image of that quadrant, as opposed to exposing the entire patient. The largest field of view captures a significant portion of the mandible, maxilla and cranium, which gives us treatment flexibility. The clarity of the image also lends itself to an improved diagnostic capacity that allows me to visually detect things with much greater certainty.

Ross Enfinger, DMD, attended the University of Florida College of Dentistry and received extensive training in smile design, cosmetic dentistry and facial esthetics. His artistic nature and devotion to the health sciences drives his ongoing passion for the dental profession.

**PATIENT IMPACT**

Axeos has a modern look with gorgeous backlighting, and it includes all the ergonomic design features of its predecessors. Its visual impact continues through its user-friendly viewer software, Sidexis, where patients can see their images and get involved in their own treatment planning. We review images with patients in real-time, and we’ve noticed a significant increase in case acceptance since introducing Axeos to the practice.

**IMAGE QUALITY & EASE OF USE**

Positioning patients for a CBCT has never been easier thanks to Axeos’ PIA technology, which includes a height memory for each patient. Our team members are excited about the low-dose option for comparative evaluations and postoperative implant assessments with 3D images at or near dosages normally only seen with 2D radiographs. The quality of the Axeos’ 2D Panorex and extraoral bitewings also are outstanding.

**INTEGRATED WORKFLOW**

The integration of CEREC with Axeos has never been better, allowing for seamless implant planning and fabrication of prosthetically driven surgical guides. We also use the SICAT Air software module to evaluate patients’ airways, SICAT Endo for guided endodontic access and SICAT Function to determine patients’ occlusal movements for TMD treatment and large reconstruction cases.

**TREATMENT POSSIBILITIES**

Upgrading to Axeos has expanded our scope of practice into specialty areas that weren’t possible before. It has four variable fields of view, so we have access to volumetric airway analysis, TMJ imaging, and cephalometric capability. Seeing more structures in higher detail means we can treat patients comprehensively and offer more solutions.
SYNCING UP
Technology frequently depends on whether it can easily bridge to other tools and software that drive further treatment planning, such as for implant or endodontic therapy. Providing diagnostic support during treatment analysis, the Sidexis 4 imaging software allows clinicians to view 2D and 3D data simultaneously and side-by-side without switching between programs. For example, a doctor can compare two CBCT images, up to four 2D images simultaneously or create visual case presentations that impress patients and improve communication.

Axeos is proof that cone beam imaging has come a long way since it made its debut into dentistry in the early 2000s. We can count on this next generation of imaging systems to be infused with the technology and usability that will guide clinicians – specialists, oral surgeons and general practitioners alike – into the next decade of the profession, where wide-ranging treatment options and elevated clinical therapy possibilities will be the expectation for both dental professionals and patients.

TO GROW THROUGH TECHNOLOGY, PICK A PARTNER
Patterson Dental works with a comprehensive portfolio of industry-leading vendor partners to connect clinicians with the equipment and technology solutions for their unique practices – offering guidance every step of the way from flexible financing options and equipment installation to initial training and ongoing technical support.

When it comes to introducing a new technology like CBCT imaging into your practice, there’s a lot to consider. Luckily, Patterson takes a comprehensive approach to every equipment installation, guiding practices through details like office layout, technical requirements and operational best practices.

“There is such great technology out there, but in my opinion, it needs to be integrated by a professional like Patterson so that everything runs smoothly for the doctor and from the doctor’s perspective,” said Neal Patel, DDS, CDT. “Implementing one piece of technology requires several steps prior to just plugging it in. There’s infrastructure – which calls for the coordination of different elements like compressed air or electrical requirements – space considerations, networking and so forth.”

AN INVESTMENT IN ONGOING SUPPORT
After implementation, support specialists at the Patterson Technology Center are available via phone, email or chat to address technology and equipment issues – resolving over 90% of support calls during the initial call. Additionally, local Patterson branch TechEdge service technicians provide in-office equipment repair, preventive maintenance and more.

Patel noted that over the years, Patterson has become familiar with the blueprint of his practice. So, no matter which digital tool he’s acquiring, it can be tailored exactly to how he and his dental team need to use it.

“Patterson is unique in my opinion because they’re always customizing the solutions to me,” Patel added.