

# IMAGING DESIGNED FOR THE NEXT DECADE OF DENTISTRY

*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.*

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.



**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.

**LEARN MORE ABOUT AXEOS HERE.**