# TOP GAME CHANGERS OF 2022

#### [by Lou Shuman, DMD, CAGS]

#### THINKING ABOUT THE TOPICS

and products that were game changers this year is a humbling and awe-inspiring experience. Visionaries in the dental community change the way we practice and the quality of care that we can offer our patients. Some, like the Bien-Air Nova and 3Shape TRIOS 5, have been Best-of-Class winners for many years, continually impressing my expert panel of dental professionals. Others are debuting on the scene and are sure to make processes more precise and accurate.



Nobio Infinix line of advanced restorative materials is also a multiple Best-of-Class award winner. With Nobio QASi antimicrobial technology integrated into the resin matrix, this updated composite is designed to help reduce demineralization and prevent recurrent decay. The ingredients contain an antibacterial molecule built into the resin matrix, killing bacteria that come into contact with it. A recent article in JADA by the esteemed John D.B. Featherstone noted that "QASi particles in composite restorations significantly reduce demineralization in enamel adjacent to these restorations."¹ He continued, "The addition of the QASi particles to the Infinix™ [range of products] reduces demineralization, which is part of the caries-formation process."



#### TRIOS 5

3Shape's debut of the TRIOS 5 Wireless brings a completely new, state-of-the-art intraoral scanner into the market. This is the company's smallest and lightest scanner to date. TRIOS 5 makes scanning simple, smoother, and faster, with its LED ring and haptic sensory feedback that guide you during digital impressions. ScanAssist technology lets you scan in any direction you want, while reducing misalignment and distortion in 3D models. Hygiene is raised to a new level with the FDA-cleared, closed autoclavable scanner tip protected by scratch-free sapphire glass, as well as ultra-thin, snug, and near-invisible single-use scanner body sleeve-covers that minimize risk for cross-contamination. The unit is 30% more compact than before and weighs 10.6 ounces with the battery, and 10.5 inches long.



### **Bien-Air Nova**

Bien-Air's newest update, Bien-Air Nova, sports a new design with small head and slim handle that enhances your field of vision and guarantees access to the back of the mouth. Stainless steel makes it lighter, improves ergonomics, and reduces wrist fatigue. The new design makes it 4 times more durable with gears reducing friction and protecting against wear, and the improved chuck system reduces the risk of jamming. With cross contamination as a concern, an anti-retraction valve reduces the flow of fluids from the mouth back into the dental unit's hoses, and the sealed head lessens aspiration of fluids into the instrument head. Heat-arresting technology prevents the buildup of heat to reduce the risk of burns to patients, and the Accu-Spray Quattro Mix system focuses 4 asymmetrical water sprays on the end of the bur with laser precision.

# **Women in Dentistry**

Women's impact on dentistry continues to be significant. According to an article in the American Dental Association (ADA) blog New Dentist, "Forty years ago, only 7% of dental school graduates in the U.S. were women. In 2017, according to the ADA Health Policy Institute, that percentage was up to 49%." The article continues that women dentists today make up 18% of dental school deans and 28% of state dental society presidents. There are more women than ever in non-clinical C-suite roles in dentistry. There is even a new non-profit organization, Women in DSO, to support and highlight the contributions of women in DSOs.

The group empowers women in DSOs by meaningful networking with industry experts, mentoring with DSO leaders, and offering a platform to showcase their talents and triumphs.





#### **OnX Printing Resin**

In-house production of 3D-printed denture teeth reduces patient visits and chair time. SprintRay's new OnX resin is a next generation hybrid ceramic, class II resin designed for the fabrication of dental prosthetics. Created using proprietary NanoFusion™ technology, OnX Tough is durable, and its smooth surface finish looks and feels like natural enamel. The resin is 5 times tougher than first generation technology and is easy to post process and characterize. Its advanced formula requires minimal resin prep that touts up to 7 times faster time to teeth than the leading competitor.



## OraCare

OraCare is an alternative to chlorhexidine and has impacted my overall health, as I use it daily. This revolutionary product line was created by dental professionals. OraCare harnesses the power of activated chlorine dioxide and xylitol to successfully combat bacteria, viruses, fungi, biofilm, and VSCs. It can be used for everyday care, tissue management, pre-rinsing, dry mouth, fungal infections, cancer care, bad breath, and periodontal disease.

# 8 IMPACTS • GAME CHANGERS

# **Artificial Intelligence (AI)**

Al is taking dentistry by storm with companies like Pearl and Overjet leading the charge. Pearl's Second Opinion software serves as the dentist's second set of eyes for many common conditions that appear in radiographs. The system detects signs of pathologies and other treatable conditions, including early caries or periapical radiolucencies. Don't just take my word for it — Second Opinion software received a special mention on *Time* magazine's Best Inventions of 2022 list.

Another Al standout, Overjet, helps payers and providers improve care by evaluating clinical performance and combining clinical Al findings in radiographs with patient and treatment data from the practice management system.

If you haven't heard of Diagnocat, you will. It's amazing. Diagnocat finds over 35 conditions in 2D images, Bitewings/FMX, and pans in 10 seconds and over 65 conditions including rare pathologies on your CBCT images in 5 minutes. Diagnocat offers preset 3D reports for multiple common situations, including a DICOM-to-STL conversion and segmentation of the anatomy that sections the facial soft tissue and all of the teeth into individual STL files. Diagnocat has also launched 3D Fusion, which does a superimposition of the intraoral scan and the CBCT along with a fusion of the crowns of the intraoral scan and the roots of the CBCT.

OraQ is a state-of-the-art clinical decision support system that quickly and precisely combines the power of AI with machine learning. It learns from the thousands of dental professionals who employ OraQ as their assessment tool. As the dentist, you still have 100% control to accept or reject diagnostic recommendations.



#### Promethean

Promethean Dental Systems' game-changing technology features a virtual reality-haptic simulator called the Simodont Dental Trainer. Outpacing manikins or human patients, the Simodont can replicate the operator experience of any handheld dental instrument, producing a real-time 3D rendering of the procedure while getting crisp and precise tactical feedback from the instrument. This technology is so realistic, you can distinguish between different dental tissues in a crown-prep procedure. And you can repeat the process to start over as many times as needed by pressing a button, promoting proficiency, speed, and efficiency. At Promethean's new Performance Institute at Lincoln Memorial University (LMU) in Knoxville, Tennessee, you can experience anything from simulated individual procedures to entire dental workflows as well as end-to-end, full mouth reconstruction in virtual reality.

#### **VICTORY FOR DENTISTRY**

Recently, Massachusetts voters voted to reform dental insurance, requiring carriers to spend at least 83% of revenues on members' dental expenses and improvements instead of administrative costs. The law, to come into effect in 2024, will create increased reimbursements to patients for dental care, and it is expected that dentists will also benefit from increased case acceptance for procedures that patients could not previously afford or choose not to pay for. Nationally, the ADA, dentists, state dental societies, and other health care organizations publicly backed the initiative.

These are such exciting updates, the products, people, and initiatives that are driving our profession to such greatness. Congratulations to the 2022 Game Changers and the significant impact you are bringing to the dental profession.

References available online at dentalproductsreport.com.

