## It would be hard to work without **Pearl's Second Opinion**® **Al**!

## By Makenzie Harris & Martina Dietrich

The early adopters are speaking up, and the reviews are overwhelmingly positive! At Gamma Tech, we're confident that dental radiologic AI will become a standard in all dental practices in the coming years, given its high intrinsic value. This technology benefits dentists and patients alike by creating a higher standard of care, fostering trust, and promoting transparency. After a short time in the ANZ market, our clients are coming forward to share their remarkable experiences with Pearl's AI-powered chairside pathology detection software, Second Opinion\* and the benefits are undeniable.

Meet Dr Prayeen Mathew, an esteemed dentistandowner of Mathai Dental in Taupo. New Zealand. With a strong background in Oral and Maxillofacial Surgery, gained from his time spent at renowned NHS hospitals in the UK, Dr Mathew's journey in dentistry is nothing short of extraordinary. In 2011, he set his sights on New Zealand, initially at the Otago University Dental School before lending his expertise to communities in Turangi, Raglan, and ultimately, Taupo. After establishing his practice, Dr Mathew's innovative and pioneering mindset led him to the newly evolving landscape of AI, where he saw its potential for the dental community.

"I have been using Pearl's Second Opinion" for the last 4 months and my experience has been a positive one. It has been useful, particularly in explaining to the patient the extent of decay in their teeth and patients seem to appreciate and comprehend it better than a clinician trying to explain things on a black and white x-ray."

## Fostering clarity and trust in diagnosis

Integrating AI technology into your diagnostic presentations can help with transparency and trust. Radiography technology – how we take x-rays – evolved rapidly throughout the 20th century to provide high-quality, efficient images while minimising radiation exposure. Now, in the 21st century, the software has caught up to the hardware, providing dentists – and patients – with automatic AI-generated insights into detected pathologies and conditions.

Rather than conveying findings to a patient with "untrained eyes" on a greyscale



Dr Mathew utilising Second Opinion® while chairside with his patient.

image, Second Opinion\* offers a visual aid making it easier for patients to understand what is being shown and diagnosed. In addition to the AI annotations, it features a tooth segmentation tool that highlights different tooth parts in distinct colours. Patients can now clearly see where tooth decay resides in the enamel and where it has progressed into the dentin or cementum, highlighting the need for treatment. This empowers patients to make more informed decisions and also leads to a 38% increase in case acceptance, ultimately improving oral health outcomes and promoting more preventative dentistry.

## **Consistent diagnostic outcomes**

Familiarity or repetitive processes, among other factors, can result in inconsistencies in how a diagnostic image is interpreted. A dentist may view the same radiograph at different times and arrive at different diagnoses. However, your patients depend on your ability to provide accurate and consistent treatment outcomes. This is where AI plays a crucial role. While the responsibility for diagnostic accuracy remains with the practitioner, Second Opinion® serves as a second set of eyes for them. It establishes a practice-wide standard of care and enhances clinical consistency.

"From a clinician's point of view in managing carious lesions, particularly the RA3 lesion, it has been very helpful in standardising care and documentation."

At Mathai Dental, Second Opinion\* provides Dr Mathew with an automated perspective on pathological findings in his radiographs, pointing out areas of interest



Pearl's tooth segmentation tool automatically distinguishes tooth parts and supporting structures, allowing dentists to effortlessly communicate their findings to patients.

while he is chair-side with his patient. This not only alleviates decision fatigue, which plagues many dentists worldwide, but also helps identify the early signs of pathologies that are otherwise difficult to visually detect, such as early bone loss, small carries or enamel reduction.

Incorporating radiologic AI software into your practice is about equipping yourself with the best tools available, to provide the best oral healthcare to your patients. It enables you to detect more and visually communicate findings with your patients, empowering them to be more informed and engaged in their treatment. The future of dentistry is here, and it's available in the ANZ region through Gamma Tech. ◆

Curious about how Second Opinion® can benefit your practice? Planning on attending ADX Sydney (21-23 March 2024)? Stop by booth #384 for a demo!

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