

CASE STUDY

High Tech, High Trust

Revolutionizing the dental patient experience with Al



Patients with twenty-first century expectations

At the Newport Beach Dental Studio in California, Dr. Tai Ha's patients are typical of the beach town's young, active, and professional population.

They jog along the marina while their smart watch tracks miles and monitors their heart rates. They navigate their hometown using in-phone GPS systems that suggest their frequent destinations. And they come home to voice activated assistants that know what they need to add to their grocery cart.

In short, they are patients with twenty-first century expectations. Like many young patients today, they want more than just a check up. They want data-driven, personalized care, and Dr. Ha has enlisted Pearl's Second Opinion software to deliver it.





"There's definitely a 'wow' factor"

Dr. Ha's office is designed to impress. Patients are welcomed into a sleek, contemporary waiting room with Eames-style chairs before they are seated in an exam room with plenty of natural light. But the exam room is where Dr. Ha's lifelong penchant for technology really shines.

"I built my own computers. I liked jailbreaking iPhones when they came out, and just tinkering with electronics," he says. While in dental school, Ha started Dental Technologies Club of USC, and has made sure his office is stacked with every capability a clinician could want.

The office boasts intraoral scanners, cone beam CT machines for cutting edge implant and endo imagery, plus 3D printers and dental mills so they can fabricate night guards and crowns on site. He also offers Digital Smile Design to patients who want a perfect Californian smile.

Pearl's Second Opinion® is Ha's most recent tech acquisition, and the most impactful. Once x-rays are captured, the AI-powered software aids in the import work of identifying disease and communicating treatment needs and options to patients.

Displayed on a large, ceiling-mounted screen for viewing by patients in the dental chair, Second Opinion® automatically examines the images for a range of common dental conditions, including caries, periapical lesions, margin discrepancies and more. Then it highlights any findings with colorful overlays and labels, giving patients an objective, easy to understand view of their dental health.



Patients in the chair see their x-rays on a ceiling-mounted screen where Pearl's Second Opinion® AI system automatically highlights disease and other common dental conditions.

"We're full blown digital, so there's definitely a 'wow' factor," says Ha. "They're already laying down and then they see it in real time when I'm scanning their mouth."

Second Opinion® delivers radiologic Al detections in real-time. A Caries Enamel: 74% Dentin: 26% A Calculus A Calculus

In Data + Dentist, We Trust

It's been quite a while since patients implicitly trusted their healthcare providers.

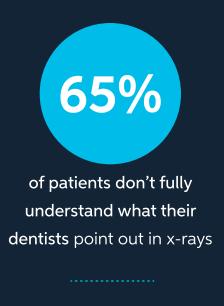
With so much personal data available at their fingertips—calories consumed, real-time health indicators, genetic mapping—it's understandable that patients value statistics over subjective opinions.

But traditional x-ray diagnosis relies on a dentist's judgment alone. "Every doctor is a little bit different. Everybody's diagnostic skills are a little bit different," Ha said. Different dentists may interpret the same x-ray differently, or miss early stage caries.

"The cavities that are still in the enamel, the really, really, really small ones—those are the ones that I would say the majority of dentists would not catch. However, Pearl does catch them," Ha said.

Meanwhile, even what dentists do catch, patients struggle to see. According to Pearl's 2022 Trust and Technology survey, 65% of patients do not completely understand what their dentists are pointing out on x-rays. That lack of understanding undermines trust: When asked if they completely trusted their dentist's diagnosis, 59% of respondents said no.

Pearl's Second Opinion® helps Dr. Ha build trust with patients by providing an objective, data-backed evaluation. "When I mention to patients that we're using AI technologies to detect these cavities, it's no longer subjective. Second Opinion really solidifies that there is a need." Dr. Ha then follows up with a first-hand exam and his expert opinion, the one-two combination that patients trust most.





of patients don't trust their dentist's diagnosis



of patients are more likely to trust their diagnosis if the dentist is using Al

Your teeth, now in vibrant color

Beyond identifying caries, Dr. Ha says Second Opinion has been helpful as an education and communication tool for building rapport with patients.

"When we have new patients come in, we really take a lot of time with them to just build rapport. We don't rush through that first appointment. When I review the photos and X-rays of their teeth on our 65-inch TV, I can show them exactly what I see."





Pearl has made that visual communication even more powerful. "Now that we use Pearl, it highlights areas of concern and it does it automatically," Ha says. "So I don't have to use the mouse or my finger to point to a shadow on the X-ray. The technology is telling me and our patients that there is a potential cavity in this area."

Further, because Pearl's software includes a tooth part mapping feature, Ha can easily show patients how far along a cavity has progressed.

"I can show them: this cavity is still in the enamel. It's still on the very outside of the tooth. We have two options. We can just leave it alone, or we can treat it. There's a fighting chance the tooth can remineralize," with the help of a prescription toothpaste, Ha said. "But once it passes the purple and goes into the green, the tooth won't be able to fix itself."

Pearl has made case treatment planning easier, and increased acceptance, Ha said, because patients can see exactly what's happening in their mouths and make informed decisions.

The software pays for itself

Dr. Ha's tech- and patient-forward approach is reaping multiple rewards for his growing practice.

To start, it has attracted a larger clientele, particularly among the Millennial and Gen Z cohort. That's not surprising, considering that, regardless of their age, 87% of patients say it's important for dentists to have the latest technology, and 77% said they would be more likely to choose a dentist that uses advanced technology, according to the 2022 Trust and Technology study.

"The technology alone has brought us a lot of patients, because they do their research," said Ha.

87%

of patients say it's important for dentist to have the latest technology

77%

of patients they would be more likely to choose a dentist that uses advanced technology

"Within the last month, I've probably caught 10 cavities I wouldn't have seen."

Dr. Ha sees about 13 patients per day and, thanks to Pearl, appointments run more smoothly. Dr. Ha spends less time explaining diagnoses and convincing patients they need treatment because Second Opinion is there to back him up.

Additionally, the number of treatments are up. "Within the last month, I've probably caught 10 cavities I probably wouldn't have seen." The software also indicates when patients need a new crown—which Ha makes on site. "The software pays for itself over and over again."

Join the thousands of dentists like Dr. Ha who have supercharged their practice with the power of Al.

Visit hellopearl.com/getdemo or scan:







o fearl