



Overjet AI Case Study

Discover how AI radiograph analysis and powerful clinical insights elevated patient care, enhanced operations, generated stronger schedules, and helped double case acceptance for a dental group with more than 75 locations.

Overjet AI Case Study: Jefferson Dental & Orthodontics

At Jefferson Dental & Orthodontics, technology must accomplish two goals. It must improve the lives of the patients they serve and it must make performing dentistry easier for the clinicians and team members.

In 2022, the dental support group implemented Overjet's artificial intelligence platform for radiograph analysis and clinical insights into all 76 of its practices - and quickly achieved both goals.

"The feedback I'm getting from providers is amazing," said Dr. Ankoo Raina, the Chief Dental Officer at Jefferson Dental & Orthodontics.

The FDA-cleared technology transforms traditional X-rays by adding color and quantification, detecting and outlining decay so it's easy to see, and quantifying bone level measurements to aid in the diagnosis of periodontal disease.

"Gone are the days when we had to squint our eyes to look at things on X-rays. The AI technology is a game-changer," said Dr. Jimit Khakhar, Regional Managing Director at Jefferson Dental & Orthodontics.

Overjet also analyzes the patient database, cross-referencing 18 months of radiographs with treatment plans in the practice management system to identify potential restorative and periodontal treatment needs. Providers can review past and current X-rays and compare the clinical findings.

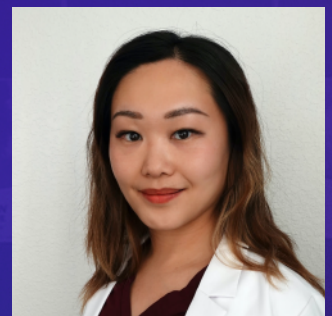
One of the biggest benefits, though, is the powerful patient education it provides.



Dr. Ankoo Raina
Chief Dental Officer



Dr. Jimit Khakhar
Regional Dental Director



Dr. Bing Wang
Regional Dental Director

Improving Patient Care with Dental AI

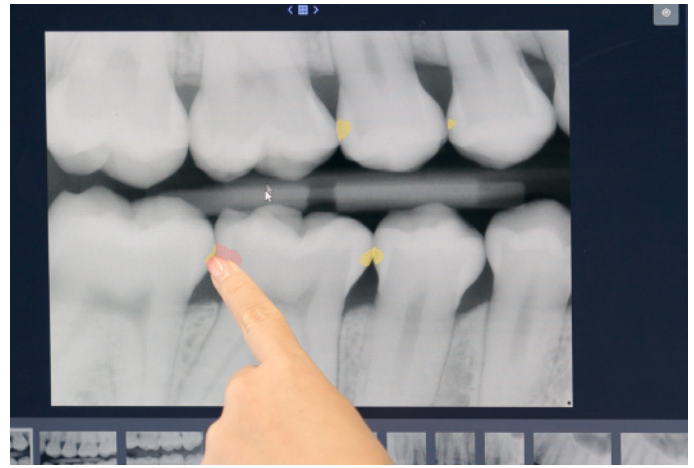
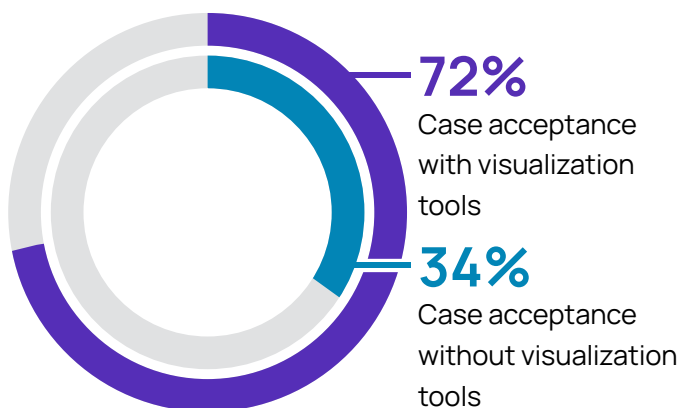
The group is passionate about helping their patients understand the condition of their oral health.

“We believe we are in the business of educating patients,” said Dr. Khakhar. “Case acceptance, conversion, production - all of those are simply the output of doing the right thing. If you educate your patients well, it’s almost impossible for patients not to understand,” he explained.

Dr. Khakhar gave this example of talking to a patient before the practice had Overjet’s AI annotations on the X-rays, and what happened after they implemented the technology.

“I had a conversation with a patient about six months ago about the decay that was going into the nerve, and he didn’t want to do anything. **When I showed him the X-ray this time with the decay highlighted in red, he could see how deep it penetrated the tooth,** and he wanted to get care, which ultimately saved the tooth,” said Dr. Khakhar.

The real-time analysis and annotations, combined with other visualization tools, has more than doubled the group’s case acceptance rate.



“We scan 100% of patients with a 3D scan plus do the Overjet analysis for every patient who walks through the door. It helps us deliver visual case presentations and builds trust with the patients,” said Dr. Raina.

When patients can see the colors on the X-rays indicating potential caries and bone loss, it helps them to visualize the condition of their oral health.

“The quantification that the AI adds makes it easier for patients to understand the condition of their oral health. Not just that they have bone loss, but how much bone loss there is, and showing the patients the numbers is a game-changer. Then they see the decay and how deep it goes. It takes the doubt away. We all know that seeing is believing,” said Dr. Raina.

“A lot of people tell me this is the first time they’re able to put a tangible measurement to their oral health. **They’re able to see the percentage of bone loss. They’re able to see the decay highlighted on their teeth,**” said Dr. Bing Wang, another Regional Director at Jefferson Dental & Orthodontics.

“Case acceptance has been our trust meter because we want to make sure that our patients that come through our door receive the care they need,” said Dr. Khakhar. “Many patients that come in for single tooth care lack awareness around comprehensive care and how it relates to their overall health. This helps them to understand.”

Standardizing Quality of Care

The AI software does more than help patients see what their doctors see and build trust between the patient and provider.

It also helps the relationship between providers.

“The doctors’ training and philosophy guide their diagnosis. But having AI provide objective data helps standardize the treatment protocols, which leads to better clinical alignment and a better patient experience,” said Dr. Raina.

“When it comes to detecting decay or determining the extent of the decay, there are no more gray areas. It’s clearly outlined on the radiographs,” said Dr. Khakhar

It’s also helped strengthen the relationships between dentists and hygienists when it comes to diagnosing periodontal treatment. “The feedback from hygienists has been that it can be difficult initially to integrate with the dentists. With this technology, it calibrates them quickly. This eliminates the doubt about what the findings show. That helps us recruit and retain hygienists,” explained Dr. Raina.

“We give a lot of credit to Overjet because it’s bridging the gap between the doctor and hygienist. Hygienists are very happy to have this tool to show patients the bone levels and like having this system supporting their recommendations. It’s not subjective,” she continued.

Overjet’s AI software also helps the orthodontists in the group. Referring dentists can use the AI findings to help determine whether hygiene or restorative treatment may be necessary before the patient can start orthodontic treatment.



Building the Schedule

One of the benefits of artificial intelligence is that it can quickly analyze large amounts of information and derive actionable insights.

Overjet not only integrates with the digital imaging system, but also with the practice management system.

It can identify patients that may need X-rays or periodontal charting. It can also review 18 months of radiographs from prior appointments and cross-reference the findings with the information in the practice management system to identify potential decay or bone loss that has not been diagnosed.

“We have morning huddles. **We go over Overjet’s dashboards and identify who may need perio treatment and who may have undiagnosed caries.** It gives us a better picture to prepare for the day,” said Dr. Khakhar.

It’s also helpful in filling holes that may be caused by patient no-shows and cancellations. These are the leading reasons why dental practice schedules aren’t full, according to the ADA Health Policy Institute study in September 2022.

But the greatest benefit is to the patient. When the providers have the information about potential oral health problems in advance, they know where to direct their attention. And if they’re able to schedule treatment during the same visit, then it saves the patient from having to return on another day.

Increasing Insurance Claim Approvals

Jefferson Dental's team discovered that Overjet's AI findings increased efficiency in another area, too: claim processing.

The team will include X-rays with the AI annotations in their claim submissions as additional documentation to support their diagnosis and treatment plan.

Overjet's AI can also identify potential periodontal coding mistakes and missing documentation such as perio charting that could impact insurance reimbursement. This helps the Jefferson Dental team reduce the number of claims that are rejected for insufficient information.

Many of the largest dental payers are using Overjet's AI to automatically review claims for medical necessity. Reviews that meet the requirements are automatically approved, which speeds up the claim processing time. Only the claims that require additional clinical review before adjudication are routed to the payer review team.

Recruiting, Training and Mentoring

One of the unexpected benefits of adding Overjet's AI to the group's diagnostic workflow has been the value it's added for recruiting, training and mentoring.

The Jefferson Dental team showcases the technology at recruiting events, and says it provides a big competitive advantage. People are interested in working with practices that invest in tools that help their providers deliver optimal patient care.

It also helps with training and mentoring - and not just with younger associates.

"New graduates and experienced doctors are more confident in their diagnosis and presentation has become very easy," said Dr. Raina. "One doctor has been with us for over 12 years and said that Overjet has helped tremendously with crown conversion. She said that having Overjet's AI findings support what she is recommending helps patients trust the treatment plan more."

Less experienced doctors may question what they're seeing on grayscale radiographs or lack the confidence to present a comprehensive treatment plan to patients. Overjet's objective analysis helps overcome both concerns, said Dr. Raina.

"It's a phenomenal tool for patient education and for provider experience," said Dr. Raina.

"It improves the dentistry, the clinical alignment, and the quality of the conversations with patients about their oral health," she continued. "Once the team saw that, it was easy to gain adoption."

Ready to see how AI will help you?

Schedule a demo to see how Overjet will help your practice grow.

www.overjet.com