



Al Technology and Its Impact

What types of AI technology are used in cavity detection, and how do they work?

Overjet AI Co-Pilot is an FDA-cleared AI platform that helps dental professionals detect caries. It uses extractive AI models to analyze dental X-rays, integrating with digital imaging and practice management systems. It can be accessed remotely and can help clinicians identify problems such as decay. The AI vendor will provide the research team via secure data bridge with a dataset of AI-generated caries findings to permit comparing to faculty-approved student diagnoses from the electronic health records.



How does Al affect your overall diagnostic process during a dental exam?

The AI technology used in this study is designed to assist in understanding its potential benefits and limitations in dentistry within a research context. It will not directly impact or alter any diagnosis or treatment you receive during your dental exam. The AI system provides preliminary predictions for research purposes, but your diagnosis and treatment decisions will be made by your dental professionals based on their expertise and your individual needs.

Will Al affect the frequency of dental visits or the recommended treatment plan?

The AI technology used in this study will not influence your recommended treatment plan. While you may be asked to attend a follow-up appointment within 24 months for research purposes, this is for the study's data collection and does not impact your treatment plan or the timing of your regular dental care. Your treatment will continue to be based solely on your dentist's professional assessment.

How was the AI technology chosen for this study evaluated or validated?

The AI technology chosen for this study underwent a rigorous evaluation process before being selected. It was assessed based on its technical capabilities, performance in preliminary trials, and adherence to data privacy standards. However, please note that this study is focused on research and exploring the potential of AI in dentistry rather than validating the AI technology for clinical use. The findings will help inform future advancements in the field.

Are there any risks associated with AI in diagnosing cavities?

Since the AI technology's predictions are not used to make clinical decisions or influence your treatment in this study, there are no direct risks associated with the AI technology for you as a patient. The AI's role is purely for evaluating its effectiveness and potential in a research setting. Your diagnosis and treatment will be based on your dentist's professional judgment and will not be impacted by AI's input.



Study Participation

Will my participation in this study affect the cost of my dental care or treatment?

No, your participation in this study will not affect the cost of your dental care or treatment. Your regular dental care and treatment, including any costs associated with it, will remain unchanged by study participation and will continue to be managed according to your insurance coverage and/or existing payment arrangements.

Will participating in the study require extra time or visits to the dental office?

Yes, participating in the study will involve additional follow-up visits, if you are randomly selected. In addition to this initial recruitment visit, you will be asked to return for a follow-up appointment within the next 24 months. This follow-up visit is important for collecting data and ensuring the study's objectives are met. We will work to schedule these visits at your convenience to minimize any disruption to your routine.

Will I receive any compensation or incentives for participating in the study?

Yes, you will receive compensation for your participation in the study. You will be given a \$20 gift card for attending the initial visit. For the follow-up visit, you may receive up to \$120 in incentives, depending on your participation and completion of study requirements. We appreciate your involvement and want to acknowledge your contribution to the research.

Will participating in the study affect my insurance coverage?

No, participating in the study will not affect your insurance coverage. The study is designed to be separate from your regular dental care and insurance policies. Your participation will not impact your existing insurance benefits or claims. The AI technology used in this study will not affect your dental treatment, so there will be no changes to your plan of care, insurance coverage, or costs associated with your regular dental care. \



Privacy and Confidentiality

How does Al protect my privacy and the confidentiality of my dental records?

The AI technology utilized in this study is designed with strong privacy protections. We will utilize encryption to safeguard your data, ensuring that only authorized personnel can access it and adhere to strict patient data privacy regulations and standards covered by HIPAA (Health Insurance Portability and Accountability Act), to protect your personal information.

How will my privacy and confidentiality be protected during the study?

During the study, your privacy and confidentiality will be carefully monitored protected. All data collected will be anonymized or de-identified to ensure that personal identifiers are not linked to the information. Access to your data will be restricted to authorized research staff only, and any reports or publications resulting from the study will not include identifying details. Additionally, the study will comply with relevant privacy regulations and ethical guidelines to maintain the confidentiality of your information.



Study Procedures

What specific procedures or tests will be involved in the study process?

You do not need to do anything extra to be in the study. We would use the information from your normal dental exam including x-ray in last 12 months. X-rays at any visit (baseline, intermediate follow-ups, 2-year follow-up) will only be from your regular dental care, not research procedures, so only taken if clinically indicated. Any x-rays in the year before the baseline visit will be okay for the study.

How much time will participation in the study require from me?

Most people (89%) in the study will have just one study visit during their regular comprehensive exam or periodic exam. About one in nine people (11%) will be invited to be in this study for about 2 years. Those people will be chosen at random to return for the second visit.

Are there any specific instructions or precautions I need to follow as a study participant?

No. This study exposes you to radiation as part of your routine clinical care. You will not receive additional radiation as a result of participating in this study. If you have any questions regarding the use of radiation or the risks involved, please consult the physician conducting the study. Participation in this study is voluntary. You have the right to say "No" to this study at any point without penalty.

What happens if the AI diagnosis during the study conflicts with the diagnosis of my regular dentist?

If the AI diagnosis during the study conflicts with your dentist's diagnosis, please rest assured that the we will not let this affect your treatment since this AI technology is not yet validated for clinical use. The AI technology is being used solely for research purposes to explore its usability and potential in dentistry. It is not intended to influence or replace your current diagnosis or treatment plan. Your dentist's diagnosis and recommendations remain the primary basis for your dental care. The study's goal is to gather insights on how AI might be used in the future, but your health and treatment decisions will strictly be guided by your trusted dental professionals at UCSF.

Can I opt out of the study at any time, and if so, how will it affect my dental care?

Yes, you can opt out of the study at any time. Your decision to withdraw will not affect your ongoing dental care or the quality of the treatment you receive from your dental professionals at UCSF. Opting out simply means that you will no longer be part of the study, but your regular dental care and treatment plan will proceed as usual, guided by your dentist's recommendations.

What happens if I choose to withdraw from the study before it is completed?

If you choose to withdraw from the study before it is completed, your participation will end, and any data collected up to that point will be securely handled according to privacy guidelines. Your withdrawal will not impact your dental care or the treatment you receive. Your regular dental care will continue as planned, with no changes to your treatment based on the study's progress or findings.

Can I ask questions or seek clarification about the study at any time during my participation?

Absolutely. You are encouraged to ask questions or seek clarification about the study at any time during your participation. If you have additional questions after speaking with your recruiting dental provider, research study coordinators can be contacted at 415-514-8594 and are available to provide you with additional information and address any concerns you may have. Ensuring that you fully understand the study and feel comfortable with your participation is a priority.