

# Software can make dental implants faster and cheaper

September 24 2015, by Jacob Frese

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There are several ways to manage a patient who is missing teeth, but some are better than others. Dental implants are high on the list of solutions, but they can be expensive and difficult to install. If those issues could be solved, millions of patients could benefit from dental implants.

An article in the current issue of the Journal of Oral Implantology looked at how to cut the cost of [dental implants](#), as well as how to make it easier for the dental team to handle the procedure. Digital technology is the proposed solution, with software speeding up the process from the initial scans to the creation of the actual implants.

Implant dentistry has become a common treatment, but few patients missing [teeth](#) can afford the time or money required for the procedure. In addition, few dental surgeons place such implants; learning to do so is difficult and time consuming, and the tools needed for the procedure are complex and expensive. As a result, a 2008 American Dental Association survey showed that only 15.9% of U.S. dentists are placing implants.

The procedure suggested in this article was tested on a 32-year-old male patient. It requires only two visits. The first visit consists of a consultation, diagnosis, and digital scans. The scans are then manipulated using open 3-D software and sent electronically to the production facility, where the models and crowns are printed and created digitally. When the patient returns for the second visit, the implants are

immediately inserted and restored.

The authors found that implant treatment today requires years of manual skill development by the surgeon, the restorative dentist, and the technician, as well as several visits by the patient. But with [digital technology](#), implants can be placed in two visits, without the need for impressions, lab procedures, or advanced manual skills.

The proposed procedure thus reduces the time the patient needs to spend in surgery and the dental team needs to spend learning how to perform the procedure, cutting costs on both ends. Further improvements to and integration of various digital technologies used in the test procedure could make the process even smoother.

The authors concluded that the new approach reduces the learning curve and the need for extensive manual skill development. Open digital software would allow more dental professionals to provide implants earlier in their careers and, as a result, benefit many more [patients](#).

**More information:** "Completely Digital Two-Visit Immediately Loaded Implants: Proof of Concept." *Journal of Oral Implantology*: August 2015, Vol. 41, No. 4, pp. 429-436. doi: [dx.doi.org/10.1563/aid-joi-D-15-00060](https://doi.org/10.1563/aid-joi-D-15-00060)

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