



## Remote Retainer Fabrication Using Teledentistry

**T**eledentistry involves the provision of dental care by sharing digital information through communications technology, often when distance separates the patient from the clinician.<sup>1</sup> Although the concept has gained some notoriety with the emergence of do-it-yourself aligners, teledentistry offers many positive applications for orthodontists, including remote consultation, treatment monitoring, and even appliance fabrication.

As an example, a 39-year-old female patient with an open bite presented to my office in Virginia for treatment that included the extraction of an ankylosed incisor. Retention consisted of a 3-2-1-2-3 bonded lingual wire and an overlay plastic\* flipper with a pontic tooth. After debonding, the patient left to attend a family wedding in Arizona.

She e-mailed weeks later in distress because the flipper was cracking. I located an orthodontist in Arizona who scanned her teeth with an iTero\*\* digital scanner (A) and transferred the stereolithographic file (STL) to my laboratory.\*\*\* I resubmitted the digital prescription for a new flipper, and the 3D-printed model with the flipper was made by the lab (B), mailed to my office, and forwarded to the patient in time for the wedding (C).

### Procedure

If the remote office is using an iTero digital scanner, contact iTero support and have a representative connect the scanner with the destination laboratory. Within 24 hours, the lab will be listed as a choice on the iTero dropdown menu (Ship To: Choose Lab). The orthodontic technician selects

the appropriate scan type (Case Type: iRecord) and the lab to receive the file. If a scan is made without selecting a destination lab, the STL file must be exported manually into OrthoCAD\*\* (Export Type: Open Shell) through myaligntech.com.

This Pearl can easily be applied to distant Invisalign\*\* patients in need of refinement aligners. Essentially, a remote office provides the refinement scan to import into your ClinCheck.\*\* Both offices must have iTero scanners. Call iTero support to request the transfer, and be prepared with the patient name, remote orthodontist practice name, and iTero scan ID number (provided by the remote office). The scan will be transferred to your myaligntech.com account.

### REFERENCES

1. Kravitz, N.D.; Burris, B.; Butler, D.; and Dabney, C.W.: Teledentistry, do-it-yourself orthodontics, and remote treatment monitoring, *J. Clin. Orthod.* 50:718-726, 2016.



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\*\*\*AOA Orthodontic Appliances, Sturtevant, WI; www.aoaaccess.com.

