

4 EASY STEPS

TO PROVIDE
ALIGNER
THERAPY





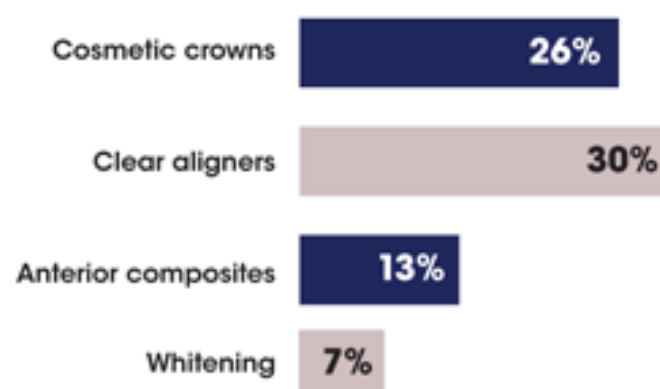
INTRODUCTION

Why Offer Clear Aligners?

Clear aligner treatments are another valuable service you can offer to your patients and increase revenue in your practice. According to our clinical consultants at Dental Advisor, our dentists have seen a 30% increase in demand for clear aligners over the last two years.

Why might this be? In a post-COVID world, its possible that our social distancing efforts affected how we see ourselves. The increased use of video conferencing over the past few years may have caused something called “The Zoom Effect,” an increased awareness of and dissatisfaction with your appearance due to watching yourself on camera for extended periods.

In the last 2 years, which of the following services have you seen the **biggest increase** in demand?



Another reason could be that there is a backlog of people looking for orthodontic treatment who put it off because of COVID. Yet another possibility could be that a reduction of spending during the pandemic, paired with the stimulus checks, gave patients enough extra income to afford the treatment.

“Our dentists have seen a 30% increase in demand for clear aligners over the last two years”

Adding clear aligners to your treatments is simple. The workflow is incredibly similar to that of indirect restorations, making this an easy choice for the average dentist.

WORKFLOW COMPARISON

Step	Indirect Restoration	Clear Aligners
1	Records	Records
2	Diagnosis	On-boarding & Treatment Plan
3	Treat	Delivery
4	Finish & Prevent	Finish & Retain

STEP 1

Records

- 1a. Taking Impressions
- 1b. Photo Series
- 1c. X-rays

The first step in submitting an aligner case is taking records. This includes taking impressions, (either digitally or with VPS material), taking a series of photographs, and x-rays, (a panorex or full-mouth).

Before you start, make sure that your records will be compatible with your chosen clear aligner partner.

While some services are open platform and will accept any digital or traditional impression, others have exclusive partnerships with specific digital scanner companies. Some providers may require images taken with a professional camera, whereas others allow you to upload them straight from your smartphone.





1a. TAKING IMPRESSIONS

DIGITAL vs. VPS

Your first decision is how to capture your patient's impression. Many people assume that you have to have a digital scanner to offer clear aligners but that's far from true. Many platforms accept VPS impressions.

An important note: Whichever clear aligner system you're using, make sure to check their list of compatible hardware and scanners. Most clear aligners systems are open platform, but others have exclusive partnerships with specific scanners.

DIGITAL SCANNERS

Acquiring the image is a very similar process with most digital scanning systems where you scan the mouth to capture the digital impression. What differentiates digital scanning systems from each other is the software and its additional features, and this is largely up to personal preference.

DEXIS™ IS 3800 (DEXIS)



- Fast and fluid scanning
- Ultra-lightweight with only 240g including battery
- Slim, compact and ergonomic design by Studio FA Porsche
- Wireless freedom: scan for up to an hour
- Extended field of view and increased depth of field
- Open system – no license fees

iTero Element® 5D (Align Technology)



- 3D Digital Impressions
- Enhanced aid for Interproximal Caries Detection w/ Near-Infrared Imaging (NIRI)
- Occlusalgram shows areas of stress
- **Invisalign** Outcome Simulator
- Optimal **Invisalign** connectivity
- Intraoral Camera

Primescan (Dentsply Sirona)



- Easy scanning of all dental materials and hard to access areas
- Up to 20mm measuring depth with perfect sharpness
- More than 1 million 3D points processed per second
- More than 50,000 consolidated images per second

IMPRESSION MATERIALS



Alginate alternative, **Silginat®** from Kettenbach

Even if you don't have a digital scanner, you can still offer clear aligners but by using traditional full-mouth VPS impression. Most dentists are already familiar with impression materials, and you may even have a favorite material to work with. In fact, using VPS or A-silicone VPS impressions can be great way to try out offering clear aligner therapy without committing to purchasing a scanner right away.

The key here is to capture an accurate impression of every single tooth so that the clear aligners fit as intended. The ideal impression has distinct color contrast, no drags or pulls, and you should be able to see the distal sides of the molars.

When using a VPS impression, you may need to include a bite registration to achieve the most precise representation of the patient's occlusion.

3M™ Imprint™ 4 VPS Impression Material



Exceptional Detail:

3M™ Imprint™ 4 provides crisp and color contrasted impressions. Even in subgingival areas where impressions can be difficult, the hydrophilic nature of this impression material delivers a quality impression each and every time.

Unique Setting Feature: The self-warming feature of this impression material once placed in the mouth is an advantage and offers more comfort for the patient than traditional materials.

Silginat® A-silicone, VPS Impression Material



Silginat® from Kettenbach is an A-silicone, VPS material with low tear resistance and high dimensional stability Thixotropic properties that allow it to flow well under pressure. The low-tear resistance makes it a great option for situations where there are concerns about loose restorations or teeth that could inadvertently be removed along with the impression. **Silginat®** is also a good option around orthodontics where using a stiff material could dislodge orthodontic brackets, wires, or buttons.

Futar® Fast Bite Registration



Futar® Fast from Kettenbach is an elastomeric, addition silicone, bite registration material with a working time of 15 seconds and an intraoral setting time of 45 seconds.

Due to the shorter working time, **Futar® Fast** is indicated for "small application" myofunctional bite registrations and applications requiring a hard bite registration.

1b. PHOTO SERIES

When it comes to taking a photo series for a clear aligner case, the main goal is to capture all teeth clearly from every angle and each tooth should be in focus in every photo. Capturing these photos requires some ancillary equipment, such as retractors and mirrors.

Anyone in your office can be trained to take a photo series for your records, from dentists, to hygienists, to the dental assistants.

While you can definitely utilize a high-resolution DSLR camera for these photos, a standard dental camera (such as the **EyeSpecial C-III Camera**) works well for these purposes. There are also some aligner companies that allow your team to take and upload photos straight from their smartphones.



Intraoral mirror



Cheek retractors



Photos courtesy of Dr. Sabiha Bunek



EyeSpecial C-III Camera

The **EyeSpecial C-III Camera** from Shofu offers auto-cropping, focus, zoom, an automatic flash adjustment for true color reproduction. It is lightweight for comfort and comes with a touch screen that is pressure activated. It features 8 pre-set dental shooting modes: standard, surgery, mirror, face, low glare, whitening (for shade comparison), tele-macro (close up anterior), and isolate shade mode which grays out gingival tissue for optimal shade matching. The **EyeSpecial C-III Camera** has wireless capabilities, enables HIPAA compliance and can be quickly disinfected with a disinfecting wipe.

1c. X-RAYS



Most aligner systems will recommend or require that you provide x-rays along with your impression and photo series. This can be done using a Panorex or full-mouth x-rays.

EXTRAORAL IMAGING SYSTEM

CS 9600
(Carestream Dental)



CS 9600
(Carestream Dental)

REQUEST A DEMO



Digital impression scans only reveal surface-level data, but orthodontic treatment does more than just move the crown of a tooth. Complement your clear aligner therapy with a cone beam computed tomography scan from the **CS 9600** to make sure you're getting the full picture.

Easy-to-Use: As the most intelligent CBCT unit in its category, the **CS 9600** features breakthrough innovations that enable users to produce high-quality images, whatever their level of experience.

Guided Assistance: Easily capture scans correctly on the first try thanks to video cameras and other positioning tools that provide live feedback on a built-in SmartPad.

Intuitive Software: Compare live images with and without a metal artifact reduction filter for better image quality and more confident diagnoses.

Accessible Images: Easily access all your case images in one place, including intraoral scans, with IO Scanner Link.*

**CS Imaging version 8 software connects to multiple intraoral scanner acquisition software not developed by Carestream Dental and permits the delivery of intraoral scans from third-party software to CS Imaging.*

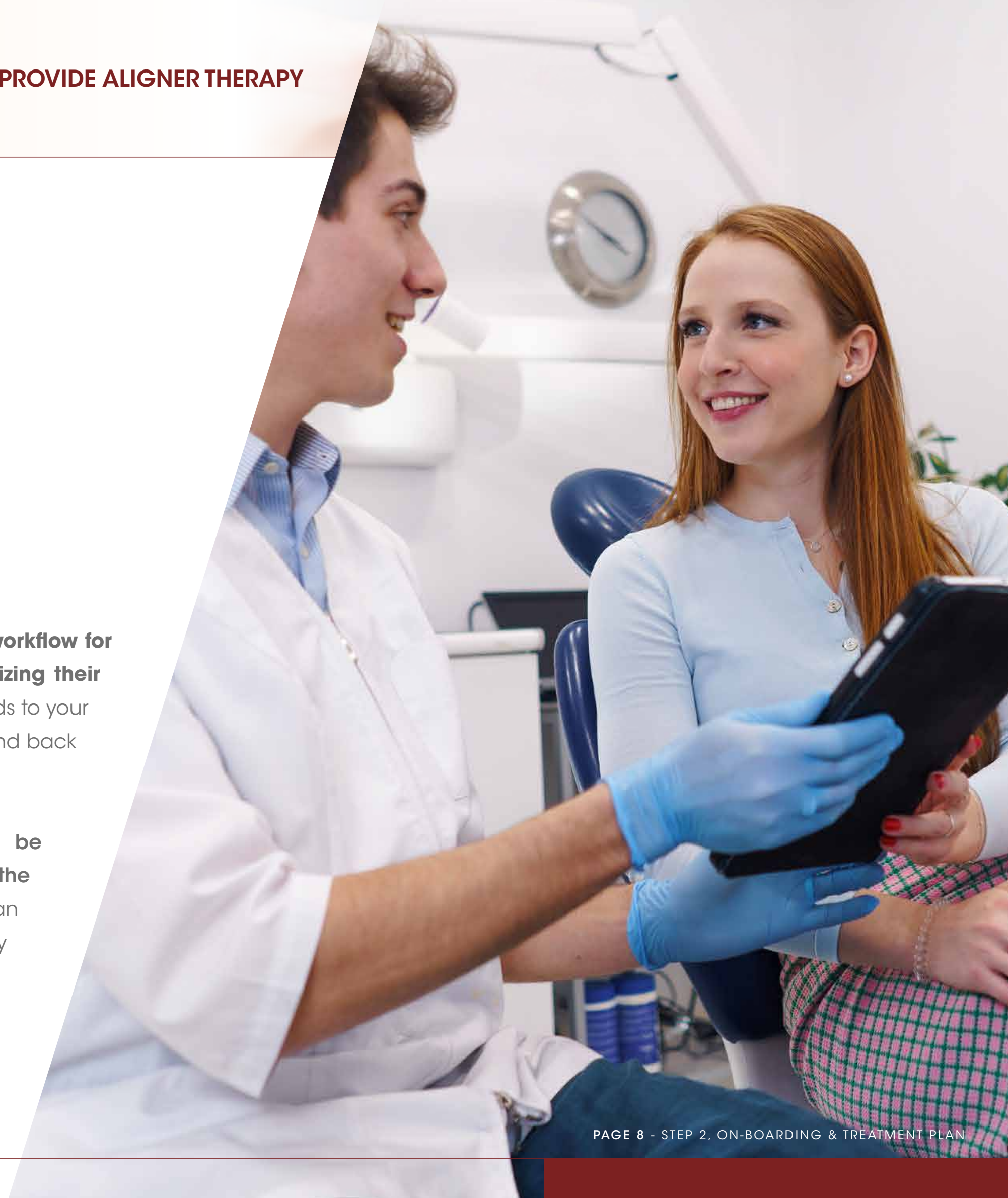
STEP 2

Onboarding & Treatment Plan

- 2a. Patient On-boarding
- 2b. Review Tx Plan

Nearly all clear aligner systems follow the same workflow for onboarding your patient and reviewing and finalizing their treatment plan. After you've submitted all your records to your aligner company, they will review the records and send back a treatment proposal.

Depending on the aligner company, there can be flexibility when it comes to creating and adjusting the treatment plan. If you're just getting started, you can allow the aligner company to do most of the heavy lifting, and for the more experienced or hands-on dentists, you can enjoy the full customizability of these treatment plans.



2a. PATIENT ON-BOARDING

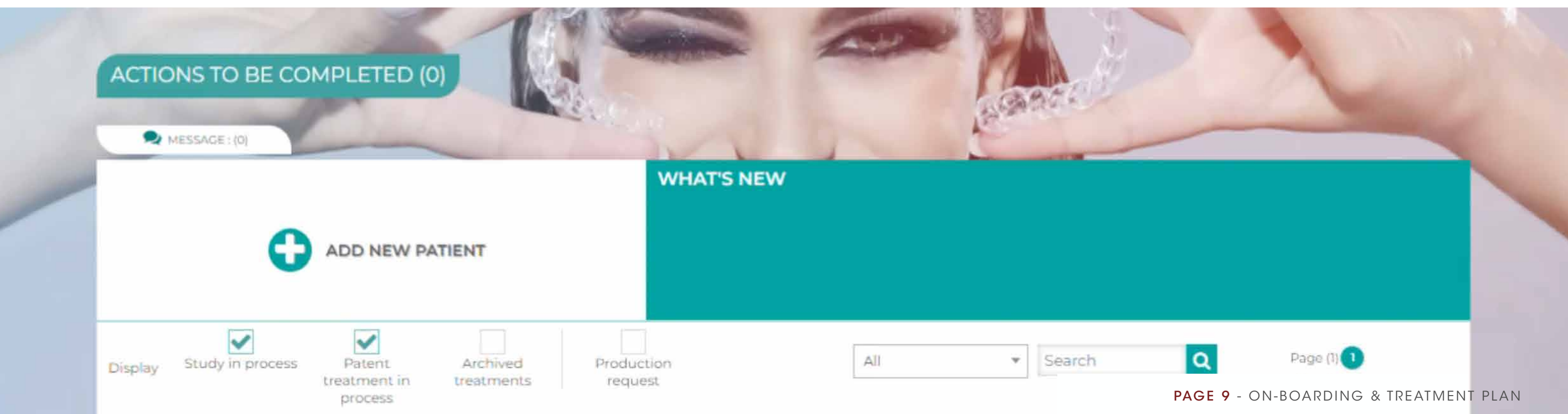
Now that the records have been sent off to your clear aligner partner, you need to onboard your patient. Depending on the platform set up, there typically is an “Add New Patient” button, where you will be prompted to enter basic patient information, such as gender, name, and date of birth. You will also get to select whether you’re treating the patient’s upper, lower, or both arches. There can be additional options such as aligner thickness, and estimated aligner wear time.

When determining wear time, the options range from one to three weeks, and you can determine this based on compliance. If the patient has a history of compliance issues, it may take a longer wear time for the teeth to adjust completely.

2b. REVIEW TREATMENT PLAN

After you have successfully onboarded your patient, the next step is to review the treatment plan and make any needed modifications. Once the clear aligner company has received your records, it may take one to two weeks to receive the treatment proposal.

You’ll want to carefully review the proposal, because not every company is the same. The proposal you receive may be completely computer-generated, meaning it may not have been reviewed by an orthodontist. However, some companies have an orthodontist on staff reviewing every proposal, allowing you to feel secure in your treatment plan. Every dentist has a different level of experience and comfort working with clear aligners, and these aligner systems allow you to be as hands-on or hands-off as you want.



STEP 3

Delivery

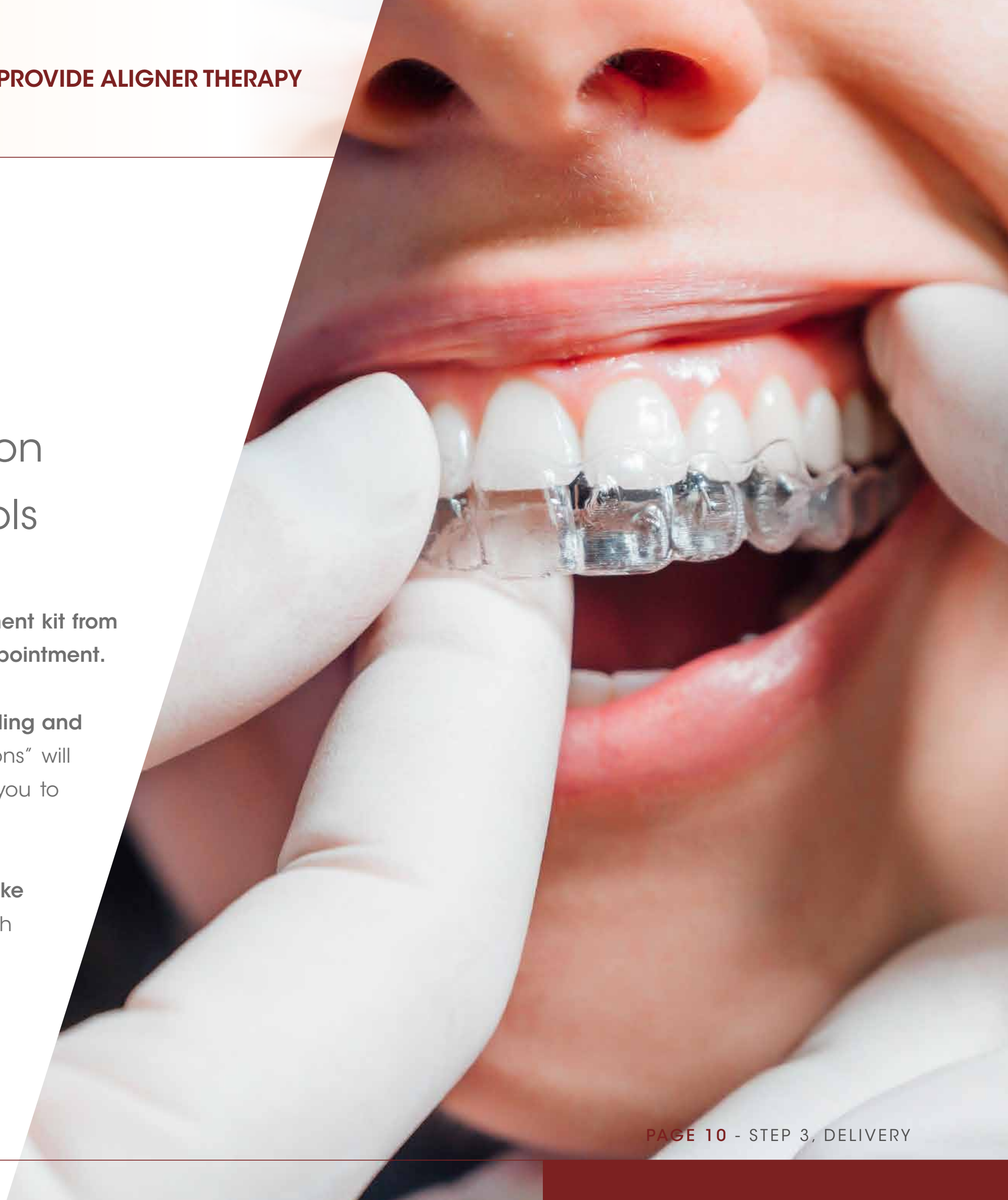
- 3a. Attachments
- 3b. Interproximal Reduction
- 3c. Patient Take-Home Tools

Once you receive the patient's personalized treatment kit from your clear aligner company, it's time for the next appointment.

Prepping teeth for clear aligners is as easy as bonding and placing composite. Adding small composite "buttons" will give the aligners something to hold onto, allowing you to achieve optimal results.

This appointment is also the perfect time to make some minor corrections and adjustments to the teeth with interproximal reduction (IPR).

After getting their aligners, your patients will need some take-home tools to further help them throughout treatment.





3a. ATTACHMENTS/ BUTTONS



attachment

Attachments are an essential part of clear aligner therapy. These “buttons” created by composite act almost like orthodontic brackets to help anchor the aligners in place, allowing the aligners to work more effectively. Unlike brackets, attachments do not need to be placed on every tooth.

Some may argue that these attachments aren’t strictly necessary for clear aligner treatment; however, you may severely limit your movement options without them. There are two simple steps to create the perfect buttons for your patients, one directly on the teeth, and one in the aligner itself.

BONDING TO TOOTH

Since you will be placing attachments on the teeth, it’s always best practice to use a soft lip/cheek retractor. Your treatment plan will provide a chart to show you exactly where these attachments should be placed. First, you will etch the teeth and then perform your preferred bonding protocol to the teeth, indicated in the treatment plan.



3M™ Scotchbond™ Universal Plus Adhesive



3M™ Scotchbond™ Universal Plus Adhesive is a light-cured, single-component dental adhesive:

- The first radiopaque, universal adhesive available on the market
- Compatible with light-, dual-, and self-cured composite materials, cements, and core-build-up materials
- Can be used with self-etch, selective-etch, and total-etch techniques

Adhese® Universal (Ivoclar)



Adhese® Universal from Ivoclar is a single-component, light-cured adhesive for direct and indirect bonding procedures. It is compatible with self-etch, selective - enamel-etch, and total etch techniques. The **VivaPen** applicator has an internal locking mechanism and angled brush cannula to keep material fresh and minimize waste. Each pen contains 2 mL of liquid for up to 190 single-tooth applications.

BONDING TO CROWNS

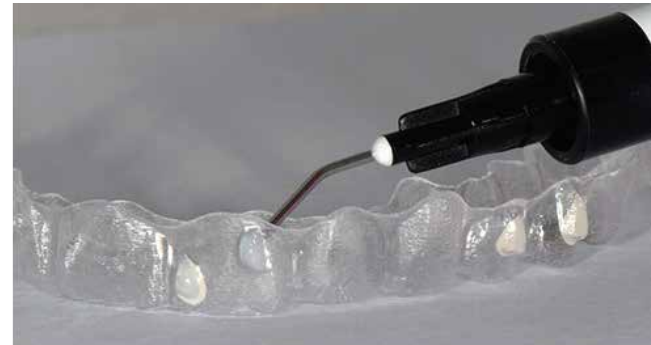
Your clear aligner treatment plan may occasionally require you to put attachments on a crowned tooth. This can cause some confusion, since the protocol isn't quite the same. In these circumstances, you will want to roughen up the surface of the crown to remove its gloss, and then apply a porcelain etch, then proceed with your bonding protocol.

Puldent Porcelain Etch Gel

A one-minute application etches porcelain crowns, veneers, inlays and fractured porcelain surfaces prior to bonding. This superior quality porcelain etch gel will not stain porcelain, composites or resin cements.



COMPOSITE IN ALIGNER



Once you have etched and applied bond to the teeth, dispense a packable or highly-filled flowable composite into the clear aligners. A single shade composite is a great selection for this, so you can reduce inventory while matching virtually any shade. Once the composite is place, put the aligners on the patient's teeth and light cure. Remove any flash and your patient is ready to go!

GrandioSO Heavy Flow

REQUEST A SAMPLE



VOCO's **GrandioSO Heavy Flow** is a radiopaque, light-cured, universal flowable composite that offers a high filler content and viscosity. Perfectly suited as an attachment material, with its reported ability to stay where placed even on the facial aspect of the tooth.

GrandioSO Heavy Flow's high filler rate provides reported superior physical properties for enhanced performance and longevity and comes in a patented NDT-syringe which allows for precise and easy application.



Tetric® Prime

REQUEST MORE INFO



Tetric® Prime is a universal composite system featuring prime handling and a simplified shade system. Tetric Prime T shade is 15% translucent and contains refractive index technology to match the optics of natural teeth, offering a single shade option for Class I and II restorations.





3b. INTERPROXIMAL STRIPPING (IPR)

Occasionally, your patient's teeth may have some issues that can't be fixed with aligner therapy alone. Sometimes there's a discrepancy between the upper arch and the lower arch where space needs to be created, or perhaps some of the lower teeth have an irregular shape that doesn't allow them to line up correctly.

These corrections are typically very small, often less than half a millimeter needs to be stripped away. Very fine burs or polishing strips are an excellent way to achieve these small but important adjustments.

QwikStrip



The innovative design of **QwikStrips** provides the right solution to these troubling outcomes. The ergonomics of the handle allows for precise tactile control, the depth limiting design helps eliminate soft tissue injury, while the floss tether holes provide an additional safety feature.

3c. PATIENT TAKE-HOME TOOLS

Every patient should leave your office with tools that engage the teeth and also stimulate the cells in their jaw bones that promote remodeling and reshaping. **Chewies** are a great option for stimulation and patients only need to use them for a few minutes a day.

Clear aligners should also be cleaned regularly, so you may also want to provide your patient with cleaning tablets or foams. Some foams, like **EverSmile**, also whiten the teeth during treatment. If you have a patient that struggles with removing their aligners, you can offer them with disposable removal devices, like **Pul**, which makes removal easier and more hygienic.

JES Orthodontics Green Chewies for Aligner Trays



EverSmile WhiteFoam



Pul Aligner Seating & Removal Tool



Crest Aligner Care



STEP 4

Retention

- 4a. Remove buttons
- 4b. Whitening
- 4c. Black triangles
- 4d. Retainment
- 4e. Prevention & Maintenance

Once your patient has finished their aligner therapy and their teeth are beautifully straight, it's time to finish the case and make any final aesthetic and occlusal adjustments.

You can begin by removing the attachments and smoothing and polishing the patient's teeth. If the patient experienced any discoloration during the process, or if they just want a brighter smile, now is a great time to do some supplementary whitening.

Last, but absolutely not least, is your retention & maintenance plan. After going through weeks of aligner therapy, your patient will want a straight smile that lasts!



4a. REMOVE BUTTONS

During attachment removal is the perfect time to **do some last-minute polishing work**. Using a fine bur or polishing wheel, you can easily remove the buttons you had placed previously and provide a little extra shine. **One great hack to make sure you only remove excess composite and not any tooth structure is to shine a small LED black-light on the teeth as you work.** The composite will light up and make it easier to differentiate.



Super-Snap X-Treme

Super-Snap X-Treme from Shofu is an enhanced version of the green (fine) and red (superfine) polishing disks included in the original **Super-Snap** polishing system. **Super-Snap** is a four-step disk system that includes black (coarse) and violet (medium) disks for contouring and finishing plus green and red disks for polishing composite restorations.



4b. WHITENING

You and your patient have both worked hard to achieve this new smile, and now it's time to show it off. Give your patients the greatest confidence in their smile by finishing your treatment with a whitening protocol. Not only will it look great on your patients, their brilliant smiles will make you look good too!



Pola Rapid

Pola Rapid from SDI is an in-office whitening system that is dispensed from a syringe utilizing a brush tip applicator which is applied directly on the teeth. The material provides for a rapid result, but does not require a light to accelerate whitening.



VivaStyle Whitening Strips

[REQUEST MORE INFO](#)



VivaStyle Whitening Strips from Ivoclar, is a take-home whitening treatment. It contains 6% hydrogen peroxide strips and offers a once per day treatment with a 30-minute wear time in which patients did not experience burning or sensitivity during use.



GLO Science Professional Dual Whitening System

GLO Science provides a professional strength 10% hydrogen peroxide whitening gel in a take-home kit, incorporating wireless technology with Bluetooth connectivity to the **GLO Whitening App**.

4c. BLACK TRIANGLES

A common result after aligner treatment is “black triangles,” little gaps between the teeth along the gumline that the patient may find unappealing. With the help of an anterior matrix system, this is an incredibly easy fix.



Bioclear Anterior Matrix Kit

The **Bioclear Anterior Matrix System** is a set of clear Mylar forms for use in placing anterior interproximal composite restorations. The system consists of anatomically shaped matrices that create a natural emergence profile while minimizing cervical flash. The Mylar shape is strong yet is only 50 microns thick.



4d. RETAINMENT

Now, it's time to make sure those teeth stay straight. Some clear aligner companies offer retainers and a 3D printed model for free as part of their package, while others offer these for a fee. Some dentists prefer to print their own retainers in-house. If a patient loses their retainer, you can easily use the 3D model to create a new one. Of course, there's always the tried and true lingual bar.

4e. PREVENTION & MAINTENANCE

Finally, you'll want to maintain that healthy, beautiful smile. Providing fluoride treatments to your patients will help treat sensitivity and prevent caries.



Profluorid® Varnish



Profluorid® Varnish from VOCO is a 5% sodium fluoride varnish in a non-messy, single-dose delivery system that includes the applicator brush. It has a transparent, tooth-shaded color - with no obvious appearance on patient's teeth. It sets quickly in seconds after contact with saliva and comes in five flavors: Melon, Cherry, Mint, Caramel, Bubblegum and Cola Lime.



FluoroDose®



FluoroDose® from Centrix is a fluoride varnish with Xylitol that contains 5% sodium fluoride (NaF) or 22,600 ppm of fluoride. Each unit contains one single dose plus one *Benda® Brush* applicator. **FluoroDose®** dries in seconds upon contact with saliva and remains on the tooth for 4 to 6 hours. It is FDA-cleared for treating dentinal sensitivity and is available in five flavors: Caramel, Bubble Gum, Mint, Cherry and Melon.

DA DENTAL ADVISOR



Since 1983, DENTAL ADVISOR has been a trusted expert to dental professionals worldwide with concise, accurate, and objective information. We combine clinical experience with laboratory data and report on long-term in-vivo performance of materials over time. The mission of DENTAL ADVISOR is to provide the dental profession with evidence-based and clinically relevant information on dental restorative products, infection control products and dental equipment. DENTAL ADVISOR reports objective clinical evaluations, product comparisons, comprehensive long-term clinical performance studies, and unbiased laboratory test results.