THE HOT SEAT

Clear Aligners

Contributor	What percentage of your patients are treated using clear aligners?	Do your patients seem to have realistic expectations regarding aligner therapy?	What are the advantages of aligners over fixed appliances?	What are the disadvantages of aligners over fixed appliances?
 **William R. Womack,** DDS Peoria, AZ	30%.	That depends on our first appointment orientation. It is my responsibility to make sure we understand how aligner treatment works and that we agree on expectations.	Some cases are treated better with aligners, especially when 60-70% of the occlusion is good. In these cases, fixed appliances will disrupt the "good", due to an iatrogenic malocclusion created by imperfect bracket placement.	From years of trying to treat "everything", we learned that some cases are beyond aligner treatment. The success in difficult cases is directly related to the skill and experience of the doctor.
 **Sam W. Daher,** DDS, MSC Vancouver, British Columbia	I have two Invisalign-only practices; a third office is about 75% Invisalign.	Patients' expectations start off realistic. Sometimes they grow greedy and unrealistic by the end of treatment.	Better hygiene and esthetics, no dietary restrictions, no more white spots, and fewer or no emergencies.	Compliance, appliance loss; extrusive movement is challenging.
 **Anil J. Idiculla,** DMD Denver, CO	Currently one out of four patients in our practice is in aligner therapy.	Yes, they do, the same as with fixed treatment. There are always outliers, though—and don't we love them.	Hygiene is not an issue; esthetics; front-loaded treatment planning; and patients come in asking for them.	Compliance, high lab fees, and a different set of biomechanical thinking to achieve excellent results.
 **Clark D. Colville,** DDS, MS Seguin, TX	30% of my patients are treated with Invisalign.	All my patients have the same expectations—a great result.	No white-spot lesions, more comfortable, no diet restrictions, fewer office visits, no emergency visits, therapeutic diagnosis, greater efficiency.	The outrageously high lab fees, compliance, inappropriateness for some malocclusions, and a steep learning curve.
 **Terry Carlyle,** DDS, MSC, FRCD(C) Edmonton, Alberta	In 2015, we will be at about 40% of our patients using clear aligners; this has grown from 12-15% just four years ago.	Yes; sometimes advertising triggers a call to the office, but they seem to know about aligners from online reviews. We spend a great deal of time educating our patients and let them choose what they think will work best for their lifestyle.	Control of tooth movement, once a good diagnosis and treatment plan is devised; treatment of many types of open bite without the negative effects of fixed appliances on posterior teeth; new attachment protocols; deep-bite treatment.	Mixed-dentition treatment where one needs "partial braces" is just more effective with braces. Compliance has been an issue for both adolescents and adults, just as with fixed appliances and elastics or headgear.

This regular column is compiled by JCO Contributing Editor John W. Graham, DDS, MD. Selected participants are asked for brief replies to a series of questions on a single topic. Your suggestions for future Hot Seat topics or participants are welcome.

Beyond Class I crowded treatment, what malocclusions are ideally suited for clear aligners?	Do you treat teen patients with clear aligners? If so, how has your experience been?	What are your thoughts regarding the new "at home/no office visit" aligner treatment options?	What has been the biggest "game changer" in aligner therapy for you in the last several years?	Given the higher cost of aligner therapy compared to fixed appliances, do you feel this treatment option has helped grow your practice?
Upper extraction-only cases are predictable if no forward movement of the posterior teeth is required. I treated and published (in JCO) a four-bicuspid-extraction case and a surgical advancement case using only aligner treatment.	Teens need to be selected carefully. A frank discussion at the initial visit is critical; some teens tell me they would not keep up with removable appliances. We always state that braces may be needed to finish, and that is an additional cost.	This is a dream—mad and misleading to the public. Participate at your own risk.	Enhancements to the ClinCheck software and the SmartTrack aligner material changed the game for everyone.	Several years ago, we raised our fixed fee to match our aligner fee. It did not hurt our practice or the demand for aligner treatment.
All malocclusions can be treated with aligners, especially anterior open bite.	Surprisingly, teen patients show more compliance than adults (and generally faster and better results).	A sad day for our specialty. Trusting patients to assess progress and modify their aligners at home?	Improvement in the plastic material and three-dimensional software, as well as the attachment design.	Absolutely. With shorter chairtime and a reduced number of visits, the cost is comparable.
Open bites are a slam dunk. Also, many adult patients who want independent alignment of the jaws.	Yes, I do, but as a younger practitioner I do not yet have the best cases for teenage aligner therapy (Phase II, Class I crowded, etc.). The ones we have treated have loved it and have done incredibly well.	This should be viewed as an eye-opening reality that patients undervalue what we can do for them. There might be a place for this in very limited treatment.	The introduction of scanners for aligner therapy has been amazing: the speed of trays arriving from the manufacturer, outcome simulators, patient happiness, the fit of trays, and the ease of scheduling many of these scans on non-doctor days.	Without a doubt, yes. It is a niche market here, and adults come in every week asking for aligners. The higher cost is definitely offset by the higher treatment fee. There is no need to discount aligner therapy by keeping it at the same price as your fixed treatment.
Anterior open-bite treatment and mild Class II treatment in growing patients.	About 50% of my aligner patients are adolescents. I see mostly great results with intermittent complete failures.	Sad, but fools and their money often go separate ways.	The ability to move the teeth in ClinCheck now puts the doctor in complete control of the aligner treatment.	Absolutely, in every category: production, collection, overhead, and net profits. For me, it works.
I utilize aligners for almost all malocclusions except palatally impacted maxillary canines. Mild Class II or III cases with elastics are now very predictable; open-bite cases with no severe skeletal problems are handily treated with aligners.	Absolutely. I give my patients a choice, explaining the advantages or disadvantages of each appliance system. They are great ambassadors, just like adults, for our use of aligners.	Patients think of tooth movement as a purchasable commodity to fix their problems. This is a great disservice to the orthodontic profession and just reflects greed by some "entrepreneurial" types.	New materials, attachment designs, and treatment protocols have given me the confidence to routinely recommend aligner therapy. In 10 years, I believe close to 50% of all comprehensive orthodontics will be provided through aligner therapy.	Our clinical visits are eight weeks apart—they are efficient and short, and we do not have broken brackets or wires or other fixed-appliance headaches. I do not charge extra for the aligner therapy; our costs are virtually the same.

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 **Jonathan Nicozisis,** DMD, MS Princeton, NJ	60-65%. Clearly (pun intended), braces are in the minority for me. I attribute this not only to my increased confidence in what I can routinely do, but also to the marketing that has been done over the years.	They are easily managed by showing them similar cases treated with aligners. If I know a movement will be challenging, I explain that to them and then explain how we might get around that challenge (refinements, elastics, Propel, etc.).	Greatly reduced chairtime, no emergency appointments, quicker appointments, happier patients, results as good as fixed appliances, and often faster treatment.	The expense, and I suppose sometimes compliance, but those are 2003 conversations—I'm way past that.
 **Greg Nalchajian,** DDS Fresno, CA	27% overall, with 75% of adults and about 17% of teens wearing aligners.	Uh, that would be no. Do any patients ever have realistic expectations?	Removable, esthetic, more comfortable, more forgiving, and a magic bullet for open bites.	Removable, not great for deep bites, and reliant on patient cooperation, which is never a good idea.
 **Robert L. Boyd,** DDS, MED San Francisco, CA	I have used clear aligners (primarily Invisalign) at an increasing rate over the past 15 years and have been treating more than 85% of my patients with clear aligners during the past 10 years.	Not always, so it is necessary to first get them familiar with the goals that are possible and focus primarily on their responsibilities for compliance during treatment.	For adults, they are comfort and esthetics. But patients also experience other advantages like better hygiene and, for some patients who have had myofascial pain, relief in muscle soreness due to the double-splint effect of clear aligners.	The biggest problem with any removable appliance is compliance. If our patient does not give the required compliance, he or she will be asked to choose between making a new commitment, changing to fixed appliances, or stopping treatment.
 **Orhan C. Tuncay,** DMD, FCPP Philadelphia, PA	70%.	Yes, but not before explaining the treatment to them.	For periodontally involved cases, it's the appliance of choice. It's also better for long-distance patients.	Cooperation, as well as the need for several weeks of fixed appliances in premolar-extraction cases.
 **Willy Dayan,** DDS, DOrtho Toronto, Ontario	My practice is still 100% orthodontics! But 70% of my patients are using clear aligners as the main modality of treatment.	Often in orthodontics, patient expectations are unrealistic. Our job is to educate ourselves first; then we can educate our patients properly.	Great vertical control in high-angle and long-lower-face-height cases. Even when using Class II or III elastics, the vertical side effects are negated, and sagittal corrections are faster.	The constant presence of the aligners over posterior surfaces makes posterior tooth eruption slow and difficult, especially in short-lower-face-height and overclosed cases.
Commentary by Dr. Graham	Very punny, Jonathan. It's clear where the trend is headed.	Nailed it, Greg!	Starting with the end in mind is always key. Love Anil's "front-loaded treatment planning".	The "3 Cs": Cost, Cooperation, Cost.

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We're working on extraction protocols, so we can soon check that off the list of things once thought of as impossible with aligners. A skeletal discrepancy still needs to be handled properly but can be done in conjunction with aligners.	Treating teens is a no-brainer—it's un-teen-lievable! I was treating teens before there was a product and simply lying about the year of birth on the submission form.	Competition is good for everyone! I'm sure there is a market for it. Like most things in life, you get what you pay for; we will see what happens. Express or limited cases do not make up a large portion of my practice.	Early on, I realized that I am the doctor who should know how teeth respond to forces with a pushing plastic appliance. So I took responsibility for the ClinCheck. Some might say the beveled gingival attachment changed my life!	Yes, the lab fee is high; I think it is too expensive. I'm sure competition will drive that down in the future. I consider it part lab fee, part marketing fee, as no other company helps drive people into my practice—and this has for sure!
Open bites, arch development, Class II or III cases correctable by elastics, and pre-restorative treatment.	In general, teens are better with aligners than adults. I'm not making this up—I have the data to prove it.	Are you kidding me? There's a sucker born every minute.	Better, more resilient aligner material and attachment protocols, as well as changing my "stinking thinking" (if you can't beat them, join them).	Without question. Follow the KISS rule to achieve profitability and good treatment outcomes. Don't try to be a hero.
Numerous case reports have shown the treatment of Class II and III as well as open- and deep-bite malocclusions. Even reports of orthognathic surgery with no fixed appliances for the pre- or postsurgical orthodontics have recently appeared.	Among the first patients I treated with Invisalign in 1998 were teens. Several reports in the literature suggest that teeth move faster in growing patients than in adults.	Diagnosis, treatment planning, and treatment cannot ever be delegated to a "Popular Science" approach. I believe this product will fail, like so many other "solutions" devised by business to solve complex medical and dental problems.	The new, smaller attachment has "active" surfaces, developed by computer-based algorithms, which push the tooth in a specific direction. The newer materials have lower load values for improved comfort when aligners are changed.	Several surveys have found lower doctor time with clear aligners compared to fixed appliances. Since doctor time is the most expensive single cost in orthodontic treatment, I have found I can charge the same fee but be more profitable overall.
Just about everything, with the use of auxiliaries.	Yes, excellent experience.	None. It sounds more scary than useful.	Software improvements.	Of course—I charge higher fees.
Mild, moderate, and even severe open bites; mild-to-moderate crowding and spacing; half-cusp Class II and III discrepancies; mild or deep overbites in normal or long-lower-face-height patients; and orthodontic decompensation in surgical cases.	I do treat many teens with clear aligners. My experience has been the same as with fixed braces: with good case selection, well-thought-out treatment plans, and good cooperation, results are excellent.	Technology will always develop new ways of producing just "straight teeth". What we as orthodontists do is different, and it is our responsibility to make that difference for our patients.	The answer is in the question: "aligner therapy" itself is the game changer in 70% of my patient base. With constant and rapid development in the industry, the game keeps changing.	Aligner therapy has helped me work smarter, not harder. It is not a "plug and play" system, but it is a great place to practice our profession.
Just like Grandma said at the pool, "Stay away from the deep end."	Fan-teen-stick!	Orthodontists screaming, "We're different! We're better!" is problematic in a day where patient perception is everything.	The "3 Ss": Software, Scanners, plaStic.	Agree with all—not to mention families I get because the parents sought aligners.