THE READERS' CORNER

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(Editor's Note: The Readers' Corner is a quarterly feature of JCO in which orthodontists share their experiences and opinions about treatment and practice management. Pairs of questions are mailed periodically to JCO subscribers selected at random, and the responses are summarized in this column.)

Have you treated any patients with the Invisalign System?

More than a third of the respondents reported that they had treated patients with the Invisalign System, and many others indicated that they intended to try the appliances in the future.

If you are doing Invisalign treatment, how many cases have you started, and how many have you finished?

The majority of clinicians reported that they had started fewer than seven cases. Of those who had treated any Invisalign cases, 57% had started one to three patients, 18% had started four to six, 6% had started seven to nine, and 18% had started more than 10 cases. Ten percent had started only one case; at the other extreme, one clinician reported starting 56 cases.

Of the clinicians who had started Invisalign cases, 78% had not finished any, 11% had finished one, and 11% had finished more than one case. No one reported completing more than four cases.

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What is the average age of your Invisalign patients?

It was apparent from the responses that orthodontists are restricting Invisalign treatment to adults. Only one respondent reported treating a patient under 20 years of age. The preponderance of patients were between 30 and 45 years old, with the oldest being 48.

What is the average number of aligners you are using per case?

Thirty-nine percent used between 13 and 19 aligners per case, 36% used between 20 and 29, 22% used between 30 and 39, and one clinician reported using 40 appliances on a single case.

How would you compare the procedure with other methods you might have used in terms of treatment results?

No respondent believed the Invisalign System was yielding better results than other methods, while 54% indicated that the results were the same or worse. The remainder of the sample felt that it was too early to tell—that there were not enough finished cases to give a fair evaluation. Their misgivings centered around the observations that Invisalign cases could not be detailed to the clinician's standards and that the treatment objectives were necessarily limited.

Dr. Paul Serrano of Chandler, Arizona, thought the most important aspect of Invisalign technology was "to offer the mild to moderate normocephalic Class I patients, with less than 4mm crowding, a chance for alignment without showing braces and with significantly less side effects than resorting to lingual appliances".

How would you evaluate the Invisalign concept in terms of patient acceptance, treatment time, and expected stability?

In terms of patient acceptance, 77% of the clinicians who were using the Invisalign System believed it was better, 11% thought it was the same, and only one clinician believed it to be worse than conventional appliances. A few respondents had not yet formed an opinion.

In terms of treatment time, the responses were more variable. Nineteen percent thought the Invisalign System was faster, 33% thought it was slower, and 36% felt it was about the same; 11% had not formed an opinion.

In terms of predicted stability, the majority thought the stability of results would be about the same. This was followed in order of frequency by those who were not sure because not enough cases are in retention. No clinician expected stability to be better.

How long do you expect to retain Invisalign results?

Ninety-two percent would retain the Invisalign results indefinitely, while 8% would retain these cases for one to two years. No clinician favored retention for less than a year.

How do your case presentation and informed consent differ for Invisalign patients compared to other patients?

The responses to this question were diverse, but the most prominent difference was in the use of Invisalign's consent form. The next most common response was that the Invisalign case presentation and informed-consent protocols were about the same as in routine cases. Less frequently mentioned differences in the case presentation included the caveats that conventional appliances might have to be used, that conventional appliances would produce a better result, that treatment objectives could be limited, that the results might be somewhat unpredictable, that the biomechanics were more complex, that more interproximal stripping could be involved, and that patient cooperation was mandatory.

A typical comment was from Dr. John Ford of Winnetka, Illinois: "I temper expectations. If Invisalign finish is not up to standards, I will finish with conventional appliances."

What has been the best aspect of Invisalign treatment from your perspective?

Eighty-nine percent of the respondents said the best aspect was that the Invisalign concept has attracted adult patients who otherwise would not have been interested in treatment or were given a more attractive option due to the esthetic appearance of the Invisalign appliances. Others noted that there was less clinician time involved, cooperation was better, there were fewer emergency visits (no poking wires or loose brackets), and the appliances were more hygienic.

What have been any negative aspects?

The most frequently mentioned drawbacks were that the referrals, generated by national advertising, often failed to show for their initial appointments or did not follow up on treatment. This was followed, in decreasing order of frequency, by the difficult impression technique, the cost of the procedure, the limited applicability, the slow turnaround from impressions to appliance delivery, and the "earn-while-you-learn" concept of treating cases.

What has been your experience with service from the company?

Thirty-seven percent thought the customer service was excellent or good—a few more than those who thought service was bad. Again, the slow turnaround time from receipt of the impressions to delivery of the appliances was frequently mentioned.

Dr. Jose M. Arango of Pueblo, Colorado, gave a typical response: "Invisalign needs to increase their work force to meet the demand. Patients get tired of waiting for the initial aligners."

Will you continue to treat cases using Invisalign technology?

Ninety-one percent of those using the

Invisalign System indicated that they will continue to treat cases with these appliances. Only one clinician indicated that he would not, and two were not sure. There were many comments, however, to the effect that while the appliances would be used, the application would be limited.

If you do not treat cases with Invisalign technology, why not?

The most frequent responses were that the clinician had not yet taken the training course and that case selection was limited. These objections were followed by the technique's inefficiency compared to other methods, the expense of the procedure, lack of long- or short-term studies, extended treatment time for minor or moderate problems, the quality of occlusion, and the Invisalign marketing campaign's leaving the impression that the technique was applicable to all malocclusions.

Have you taken the Invisalign course?

Fifty-one percent of the respondents had taken the Invisalign course, 26% had signed up for it, and another 6% were planning to take it. Twenty-one percent had taken the course, but had not started any treatment.

Do you think you will be interested in using Invisalign technology in the future? Why or why not?

Of those not currently using the Invisalign System, 75% said they would be interested in using it in the future, 19% thought they would not, and 5% were not sure. Those who were interested usually noted that it would be for limited applications and that case selection was of paramount importance. Those who did not wish to use the technique commonly said they would wait for more data.

What other technique(s) do you use to treat cases that would qualify for Invisalign treatment?

The majority of respondents indicated they would treat with conventional fixed appliances. This was followed, in decreasing order of frequency, by spring retainers, Hawleys, plastic or porcelain brackets, other plastic appliances such as TruTain or Essix, positioners, and lingual appliances.

Has Invisalign advertising to the general public generated inquiries in your office?

An overwhelming majority—96%—reported that Invisalign advertising had indeed generated inquiries in their practices. Responses included:

• "Marketing and practice growth have resulted from the marketing. A lot of people who were previously not interested in orthodontic treatment are coming in" (Dr. Tom Rosenbarger, Portland, Oregon).

• "The AAO and ADA should use similar public relations. The public relations for Invisalign is top-notch, better than the product" (Dr. Howard Dimond, Edison, New Jersey).

• "I feel the Invisalign advertising has done a great disservice to the orthodontic profession, since part of their message is to convey the idea that conventional brackets are ugly and undesirable. Yet it is my understanding that the Invisalign technique can only be used on non-growing patients with relatively minor dental alignment problems. The vast majority of patients seeking treatment in my office are growing teenagers who may have no viable option for treatment other than wearing conventional brackets for 18-24 months" (Dr. Barry McNew, Greenville, Texas).

Do you find that patients who may have been stimulated by Invisalign advertising are accepting alternative treatments?

About three-fourths of the respondents believed that patients were accepting alternative treatments, while 16% did not believe so. Only a few respondents were not sure.

Do you feel the cost of Invisalign treatment is a deterrent to patient acceptance?

Eighty-one percent believed the cost of treatment was a deterrent to case acceptance, but 18% thought it was not. One respondent was unsure.

Dr. Frank Bailey from Poland, Ohio, believed that "the up-front costs to the orthodontist will limit its use". Dr. Larry Layfield of New Braunfels, Texas, noted, "The cost of Invisalign is a deterrent to some patients, but many of these patients then consider traditional treatment more seriously."

Additional remarks included:

• "I think the technology is an excellent alternative for those patients with mild malocclusions who do not desire fixed appliances. It's a fine alternative for the mature, informed decision maker" (Dr. Louis Taloumis, San Antonio, Texas).

• "Many of the patients referred for Invisalign are not candidates for the process due to severe crowding, severe overjet, and skeletal discrepancies. More information should be provided to these referrals by Align Technologies so that these patients don't feel we are just pushing them into alternative treatment" (Dr. Michael A. Beim, Lake Mary, Florida).

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