1. How often do you offer limited treatment?

The substantial majority of respondents reported that they occasionally offered limited treatment to their patients. Fourteen percent frequently offered this treatment option, and 10% rarely or never provided limited treatment.

What types of limited treatment do you offer?

Most limited treatment was confined to the esthetic alignment of anterior teeth. This was followed by treatment of relapse, uprighting of teeth for future restorations, closure of diastemas, extrusion of fractured teeth, and redistribution of space for subsequent restorations. Many clinicians also said they offered a limited first phase as a part of comprehensive treatment of younger patients.

Comments included:

• “With children: space maintenance/management, crossbites with midline deviation and functional shift, and severe growth discrepancies. With adults: limited realignment with fixed or removable appliances, adjunctive treatment to facilitate restorative procedures, and in multidisciplinary orthodontic, periodontal, and prosthetic treatment.”
• “The most frequent seem to be aligning maxillary teeth and accepting some protrusion, extracting a lower incisor, and redistributing maxillary spaces to assist in cosmetic restorative work.”
• “Aligning anterior teeth without correcting Class II, Class III, overbite, etc. I am much more likely to do limited treatment with Invisalign than I am with fixed appliances.”

Are you reluctant to offer limited treatment to certain patients and, if so, for what reasons?

Eighty-two percent of the respondents were reluctant to offer limited treatment to some patients. The most common reason was that the clinician felt uncomfortable with the compromise involved in not finishing a case to the level that could be attained with full treatment—particularly in regard to anterior relationships and posterior occlusion. Some were also disinclined to initiate treatment in patients whose expectations were much greater than the results that could be achieved with limited treatment, and in those with preexisting periodontal problems.

Some individual responses:

• “I am reluctant to use removable appliances because of the compliance issues. Some cases tend to reinvent themselves and become more difficult than I anticipated.”
• “It seems just the opposite. Very often the patients to whom limited treatment is offered are the patients to whom I am reluctant to offer comprehensive treatment.”
• “I will not offer limited treatment when multiple other complex and medical factors are involved. Also, when the patient has unrealistic expectations—e.g., they want to pay for limited..."
treatment and yet expect a complete resolution of their problems.”

Are you more likely to offer limited treatment to adults or to child/adolescent patients?

The vast majority of respondents confined their partial treatment to adults. Only 13% indicated that they would offer limited treatment to children, typically as the first of two phases.

How do you calculate fees for limited treatment?

The most common method of determining a fee was a percentage of the fee that would be charged for full treatment—generally 50-75%. Many practitioners noted that their fees were figured on a case-by-case basis, depending on the time and effort involved, the patient’s expectations, and the degree to which the clinician would accept compromise.

Specific comments were:
• “Take into consideration the length of treatment (estimated number of months) and complexity of the problem. I routinely find that I don’t charge enough.”
• “By the estimated length of treatment time. The actual placing of the brackets doesn’t take significantly less time, so our full-treatment fee and limited-treatment fee are not that far apart. Our fee structure in effect also discourages partial treatment when, for not much more expense, they can get full treatment.”

Are there any differences in your informed consent compared to full treatment?

Ninety percent of the respondents said there were no differences in their informed-consent statements. Many of them indicated, however, that an addendum would be made for limited treatment, usually focusing on the esthetic alignment of anterior teeth. The major concern was that the patient would fully realize that limited treatment is not a substitute for full treatment.

Comments were:
• “My informed consent is exactly the same for limited and full treatment. Both forms stress the limitations of treatment.”
• “You need to cover all treatment options along with their benefits and risks. If the patient agrees to limited treatment only, include this in the consent form and have the patient sign it.”
• “The patient must sign a letter acknowledging their desire to limit treatment, with an understanding that additional problems exist which may cause problems if left untreated.”

In general, how would you compare your limited-treatment patients’ satisfaction with their results to that of full-treatment patients?

More than 90% of the respondents said the satisfaction of limited-treatment patients appeared to be the same as or better than that of full-treatment patients. Only about 5% believed their patients were less satisfied with limited treatment.

Specific remarks included:
• “Most patients are very pleased, because they are fully informed of the compromises and restrictions before beginning treatment.”
• “My limited-treatment patients are usually satisfied, but not always. But then full-treatment patients are not always satisfied.”
• “Usually, they are similar. However, many limited-treatment patients find that they want more comprehensive treatment once the initial correction is observed. For this reason, informed consent stresses that the fee quoted is precisely for the limited treatment. Should the patient request more extensive work, there will be additional fees.”

What problems do you find with limited treatment?

Only 12% of the clinicians found no problems with limited treatment. For the other respondents, the most common issue involved compromising on arch coordination or on incisal and occlusal relationships. Many clinicians had difficulty resisting the temptation to keep treating once the patient’s chief complaint was satisfied. Another observation was that when some patients’ initial problems were resolved, they wanted further corrections—in other words, the results of full treatment with the time and expense of partial treatment. There were also some con-
cerns about the stability of limited treatment and about the reaction of the referral sources to compromised results.

Some individual comments:
• “Occasionally the side effects from attempting limited treatment result in transitioning into comprehensive treatment, usually without charging the comprehensive fee.”
• “Sometimes it’s difficult knowing when to stop treatment, depending on the problem. As a professional, I want to correct as much as possible, so I have to remind myself that we are only trying to obtain a limited correction.”
• “I must reluctantly accept the limited treatment outcome, even though the patient usually readily accepts it.”
• “In spite of two consultations, a written contract outlining the objectives of treatment, and twice-written informed consent, many patients really want more.”

2. What is your usual appointment interval?

The most popular appointment interval was five to six weeks, closely followed by seven to eight weeks. Fewer clinicians used four-week scheduling periods, and only about 10% reported nine-to-10-week intervals. Only one respondent scheduled patients at more than 10 weeks, and none at three weeks or less.

How have appointment intervals changed in your practice over the past 10 years? Over the past five years?

There was a strong move toward longer appointment intervals over the past 10 years. Most respondents said they had increased the time between appointments by two to four weeks. On the other hand, 10% of the respondents indicated that they had not increased their appointment intervals over the past 10 years. About 60% of the respondents reported no change in scheduling over the past five years; apparently, the major shift toward longer appointments occurred between five and 10 years ago.

A typical comment:
• “Previously, I saw patients every four weeks.

Now, with the advent of new technologies, many patients are seen at six-to-eight-week intervals. There are, of course, exceptions. For instance, out-of-town patients who travel long distances can often be managed every 12 weeks or more.”

What has caused the changes?

The trend toward longer appointment intervals was associated with the introduction of highly resilient wires, constant-force springs, and self-ligating brackets. Also mentioned were the use of “non-compliance” fixed devices such as the Herbst and Pendulum; the demands of working parents; and the burgeoning after-school schedules of young patients.

One pertinent response was:
• “New knowledge and technologies have significantly altered orthodontic diagnosis and treatment modalities. Self-ligating brackets, indirect bonding, new metallurgy, smaller, more easily cleaned brackets, new springs, elastics, and modules, to name a few.”

How does the type of treatment affect your appointment intervals?

Clearly, appointment intervals were highly correlated with the stage of treatment. For instance, during leveling and alignment with highly resilient wires, visits were typically scheduled at six to eight weeks or longer to allow time for these wires to express their potential. When finishing cases with edgewise wires, appointment intervals were shortened to four or five weeks. Shorter intervals were also associated with palatal expansion, hygiene and periodontal problems, and impacted canines. There was a tendency to see adult patients at shorter intervals as well.

Specific remarks were:
• “Periodontally compromised patients require many more appointments at shorter intervals. Also, the more complex the treatment, the shorter treatment intervals are required. Patients with mental or physical disorders often require individualized treatment intervals.”
• “We keep closer appointment intervals to control cooperation with hygiene, elastics, and headgear.”
What are the benefits and drawbacks of longer appointment intervals?

The benefits mentioned generally centered around practice efficiency: clinicians spent less time at the chair, their schedules were freed up, more patients could be seen, and overhead was reduced. With the efficiency of contemporary materials such as resilient wires and self-ligating brackets, the respondents said, their treatment plans did not have to be compromised. The advantage to the patients and their parents was that less time would be missed from school and work. Another frequently mentioned benefit of extended appointment intervals was that the orthodontists could have more time off to enjoy the fruits of their labors.

The drawbacks of longer appointment intervals focused on case management. The most common concerns were that cases might get out of control when adverse side effects were not caught in time, that overcorrection might occur, and that poor hygiene could not be closely monitored. Other problems were that treatment times could be appreciably extended, with or without missed appointments, and that traditional monthly payment plans were difficult to administer.

Comments included:
• “The benefits are that many patients and parents are very busy with school, extracurricular activities, and work. Most families have both parents working, and schools limit giving time off for orthodontic appointments.”
• “The benefit is spreading the patient load to lighten daily schedules. The drawback is the opportunity for longer treatment times if the patients are not monitored closely, especially with broken appointments.”
• “To control certain problems associated with extended appointments, selected patients can still visit the office on days when the orthodontist is not present for oral hygiene instruction, motivation, and selective monitoring.”

Do you intentionally search out new techniques and products that will extend appointment intervals? Describe any that have been particularly successful or particularly disappointing.

Sixty percent of the respondents indicated that they did not intentionally seek out new technology to extend their appointment intervals. For the remainder, the most successful materials and methods were highly resilient wires such as copper nickel titanium; self-ligating brackets; Pendulum, Herbst, and MARA appliances; and indirect bonding. Only a few clinicians listed unsuccessful techniques and products associated with extended treatment intervals: two mentioned that conventional Class II appliances were disappointing, and one did not appreciate the bulk of the Damon bracket.

A representative response:
• “Successful: nickel and beta titanium wires, self-ligating programmed brackets, modular chains with silicone impregnation, non-latex elastics without force degradation, and digital models with corrected visual treatment objectives. The most disappointing appliances were the removable or fixed functional appliances that attempt to propel or force the mandible forward in an attempt to stimulate growth.”
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