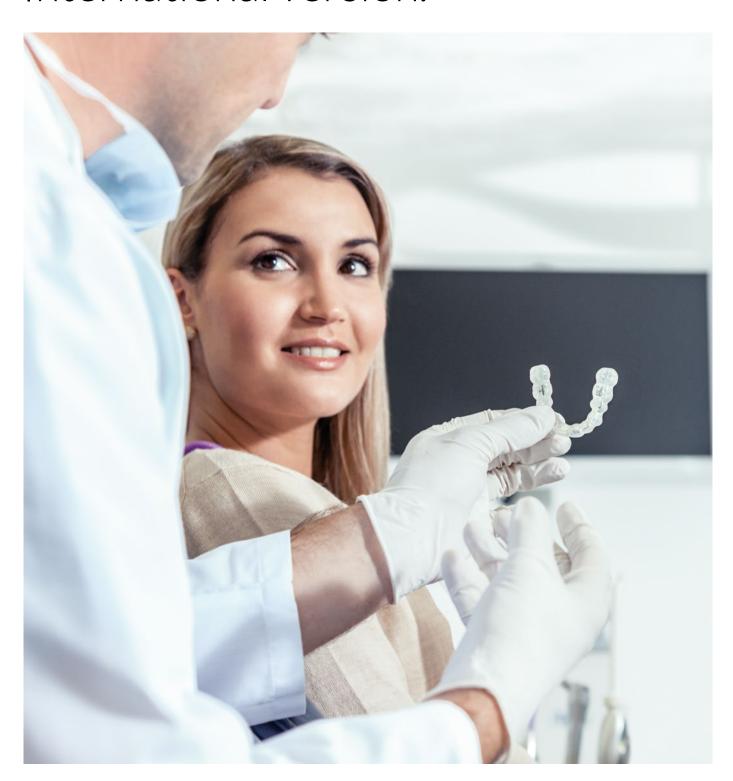
## The Invisalign glossary.

## International version.



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## Invisalign terms.

## Active aligner.

An aligner that moves teeth, in contrast to a Passive Aligner, which does not. Overcorrection aligners are also active aligners.

#### Origin.

Term specific to Align Technology.

#### Example.

"The patient wore an active aligner on her lower arch and a Passive Aligner on her upper arch."

- <u>Aligner.</u>
- Overcorrection.
- Passive Aligner.

## Active surface.

The portion of an Optimized Attachment that engages with an aligner to produce the force required for tooth movement.

#### Origin.

Term specific to Align Technology.

#### Example.

"The Optimized Rotation Attachment for the patient's upper right canine has an active surface that engages with the aligner to deliver the force to cause the tooth to rotate."

#### Replacement usage.

None.

- Aligner.
- Optimized Attachment.
- Invisalign System.

## Additional Aligners.

Additional Aligners is an option to order new aligners during treatment if further tooth movement is needed or if clinical results have deviated to such an extent that the aligner(s) no longer fit. Additional Aligners are included in the price,\* but must be received prior to the Treatment Expiration Date (TED).

#### Note.

For more information about Terms and Conditions for Additional Aligners, refer to "Pricing Terms and Conditions for Invisalign Products" available on your Invisalign Doctor Site (IDS).

#### Origin.

Term specific to Align Technology.

#### Example.

"The Invisalign Provider ordered Additional Aligners for treatment finishing improvements."

- Automated Refinement.
- Refinement.
- Replacement aligner.
- Treatment Expiration Date (TED).
- Warranty-defective aligner.
- Warranty-fit aligner.

## Aligner.

One of a series of Provider-prescribed, custom manufactured, clear plastic removable orthodontic appliances. As the core of the Invisalign System, aligners gently move the patient's teeth in small increments from their original state to achieve a more nearly optimal state specified in the Provider's Invisalign treatment plan.

#### Origin.

Term specific to Align Technology.

#### Example.

"When the patient wore his aligners to work, nobody noticed that he was wearing them."

- Invisalign® Full treatment option.
- Invisalign® i7 treatment option.
- Invisalign® Lite treatment option.
- Invisalign® Teen treatment option.
- Invisalign treatment options.
- Invisalign System.

## Aligner engagement.

Fit to teeth and attachments snugly and firmly.

#### Origin.

Term specific to Align Technology.

#### Example.

"The patient gently pushed the aligner into place so that the aligner engaged the attachments."

- Aligner.
- Attachment.
- Optimized Attachment.

## Aligner number.

The laser-marked identifier on each aligner that is part of a patient's Invisalign treatment. The inscription on each aligner has the following format:

#### Patient ID Arch ##Type

- Patient ID the unique identifier for the patient.
- Arch either U (for upper) or L (for lower).
- ## the ClinCheck® stage from which the aligner is manufactured. This number is represented by two digits, for example, 01, 02, 10, 20, and so on, up to 99.
- Type the type of device: N (normal aligner), T (template), or R (retainer).

#### Note.

If Additional Aligners are requested, the ClinCheck stage number (##) is reset to 01. The packaging is labelled with the aligner type to differentiate the Additional Aligners from the original aligners.

#### Origin.

Term specific to Align Technology.

#### Example.

"The patient found the aligner number inscribed on the first aligner for her upper arch."

- Aligner.
- Overcorrection.
- Passive Aligner.

## AlignTech Institute.

The part of the Invisalign Doctor Site (IDS) that contains educational information and opportunities for the Invisalign Provider. AlignTech Institute provides educational material, including online materials, webinars, clinical information, treatment galleries, clinical resources, and tips and techniques. Invisalign Providers can also obtain information on practice development.

#### Origin.

Term specific to Align Technology.

#### Example.

"Using the AlignTech Institute website, the Provider can learn more about placing and removal of attachments."

## Ancillary.

A supplementary device (such as wires, elastics, power arms), that can be used in conjunction with Invisalign treatments, to supplement tooth movement or control tooth movement or anchorage. An ancillary symbol appears in the treatment overview form if a power arm is used in treatment. Align will provide the trimmed receptacle in the aligner to allow the Provider make and bond the desired type of power arm.

#### Origin.

Term specific to Align Technology.

#### Example.

"Some ancillaries can be purchased via the WebStore on Invisaling Doctor Site (IDS)."

- Power arm.
- Anterior-posterior (A-P) elastic correction simulation.
- Precisicion Cuts.

## Anterior-posterior (A-P) elastic correction simulation.

A single-stage shift in the ClinCheck® model that simulates the anterior-posterior (A-P) bite correction with elastics. This term is also known as "A-P elastic correction simulation."

#### Origin.

Term specific to Align Technology.

#### Example.

"The Provider viewed the ClinCheck anterior-posterior elastic correction simulation to determine whether the patient's projected final occlusion met his specifications."

- Anterior-posterior (A-P) surgical correction simulation.
- Occlusion.

# Anterior-posterior (A-P) surgical correction simulation.

A single-stage shift in the ClinCheck® model that simulates the effect of a surgical procedure on the anterior-posterior (A-P) coordination of the arches. This term is also known as "A-P surgical correction simulation."

#### Origin.

Term specific to Align Technology.

#### Example.

"The Provider saw an abrupt change in the ClinCheck anterior-posterior surgical correction simulation that showed the effect of a planned surgical procedure on his patient's jaw."

- Anterior-posterior (A-P) elastic correction simulation.
- Arch.
- ClinCheck model.

## Approve.

To finalise a ClinCheck® treatment plan by clicking on the Approve button in the ClinCheck window. The Provider's approval initiates the process of manufacturing aligners, and constitutes an agreement by the Provider to pay for the aligners.

#### Origin.

Definition specific to Align Technology.

#### Example.

"The Provider clicks on the Approve button to sign off the final ClinCheck treatment plan."

#### See also.

• ClinCheck treatment plan.

### Attachment.

Attachments are essentially a material build-up on the surface of the teeth, consisting of a surface preparation using a bonding agent followed by the application of a dental composite. The use of a pre-formed template provided by Align on a customised basis with each aligner delivery ensures their dimensional and placement accuracy. Attachments engage with the Invisalign aligners to enhance aligner retention to enable the aligners to provide the optimal orthodontic tooth movement in cases of intrusion, extrusion, rotation, root control and translation. As part of the overall performance of Invisalign in the orthodontic correction of malocclusion, attachments contribute to improving the outcomes, predictability, and ease-of-use of the Invisalign System.

#### Origin.

Definition specific to Align Technology.

#### Example.

"The Provider bonded the attachment to the patient's molar."

- Aligner.
- Aligner engagement.
- Extrusion.
- Intrusion.
- Malocclusion.
- Optimized Attachment.
- Optimized Root Control Attachments.
- Outcome.
- Rotation.
- Translation.

### Automated Refinement.

Automated Refinement is an option to order extra aligners for Invisalign® i7 or Invisalign® Lite Partial treatments. Partial treatments are defined as Invisalign i7 or Invisalign Lite treatments where the clinical criteria for treatment completion could not be achieved within the stages allowed for the treatment option (i.e., 7 or 14 stages, respectively). The Order must be received prior to the Treatment Expiration Date (TED). Automated Refinement may only be utilized to achieve the originally approved Treatment Plan. A ClinCheck® treatment plan will be sent with the order, but there is no opportunity to approve or modify the ClinCheck Treatment Plan with Automated Refinement. Only one Automated Refinement may be ordered per treatment. The Automated Refinement may consist of one or two arches.

For more information about Automated Refinement see "Pricing, Terms, and Conditions for Invisalign Products" on the Invisalign Doctor Site (IDS).

#### Origin.

Term specific to Align Technology.

#### Example.

"During the patient's Invisalign Lite partial treatment, the patient's teeth were not tracking to the originally approved final position in the last 3 stages, so the Provider ordered an Automated Refinement."

- Additional Aligners.
- Invisalign Lite treatment option.
- Invisalign i7 treatment option.
- Invisalign System.
- Partial treatments.
- Refinement.
- Treatment Expiration Date (TED).

## Auxiliaries.

Adjuncts to the aligner to help in obtaining the final treatment outcome. Auxiliaries include elastics and buttons for treating Class II & III malocclusion.

#### Origin.

Definition specific to Align Technology.

#### Example.

"Using Class II/III elastics with the Invisalign System is an auxiliary technique that requires advanced clinical skill and is discussed at advanced Invisalign Continuing Education Courses."

- Class II malocclusion.
- Class III malocclusion.

## Button.

A knob-shaped structure that is bonded to the patient's tooth in order to anchor elastics for Class II/Class III sagittal correction during Invisalign treatment. Precision Cuts are designed to create space in the aligner to accommodate a button that has been bonded to a tooth.

#### Origin.

Definition specific to Align Technology.

#### Example.

"The patient's aligner had a Precision Cut in the targeted tooth area to accommodate a button bonded to a tooth."

- Aligner.
- Class II malocclusion.
- Class III malocclusion.
- <u>Invisalign treatment.</u>
- Precision Cut.

## Case.

A patient's clinical condition.

#### Origin.

Industry-standard definition.

#### Example.

"The patient has a case of Class II malocclusion."

- <u>Aligner.</u>
- Invisalign prescription form.

## Case selection.

Analysis of a patient's case to determine whether the case is suitable for Invisalign treatment and, if so, what skill sets or strategies may be required.

#### Origin.

Definition specific to Align Technology.

#### Example.

"With appropriate case selection, the Provider chose the optimum Invisalign treatment for the patient."

- Case.
- <u>Invisalign treatment.</u>

## Changes.

A Provider's change to the ClinCheck® treatment plan made before approving the plan. The Provider enters the changes in the Changes panel.

#### Origin.

Definition specific to Align Technology.

#### Example.

"The Provider entered a change to place attachments at ClinCheck stage 3."

- Attachment.
- ClinCheck software.
- ClinCheck stage.
- ClinCheck treatment plan.

## ClinCheck 3-D display area.

The area in the ClinCheck® window that shows the ClinCheck model.

#### Origin.

Term specific to Align Technology.

#### Example.

"The Provider rotated the ClinCheck model in the ClinCheck 3-D display area."

#### See also.

• ClinCheck model.

## ClinCheck file.

The 3-D animation file viewed using the ClinCheck® software. The file has a proprietary format. The file extension is .adf.

#### Origin.

Term specific to Align Technology.

#### Example.

"The ClinCheck software automatically opens the ClinCheck file and displays the 3-D model of the patient's teeth."

#### See also.

• ClinCheck software.

## ClinCheck model.

A 3-D image of the patient's teeth, which the Provider reviews with the ClinCheck® software.

#### Origin.

Term specific to Align Technology.

#### Example.

"The Provider viewed the ClinCheck model for each ClinCheck stage of the patient's Invisalign treatment."

- ClinCheck movie.
- ClinCheck software.
- ClinCheck stage.
- <u>Invisalign treatment.</u>

## ClinCheck movie.

A movie showing movement of the ClinCheck® model throughout the ClinCheck treatment plan. The Provider can view the movie using the various ClinCheck controls to see the position of the teeth and presence of attachments at any stage.

#### Origin.

Term specific to Align Technology.

#### Example.

"The Provider viewed the ClinCheck movie to see tooth movement from the initial position of the teeth to the final position in the ClinCheck treatment plan."

- Attachment.
- ClinCheck treatment plan.

## ClinCheck software.

A proprietary software application that displays a 3-D image for visualising tooth movement throughout Invisalign treatment. Through the software, the Provider and Align Technology can exchange information about changes to the Invisalign treatment before the Provider approves it.

#### Origin.

Term specific to Align Technology.

#### Example.

"The Provider used the ClinCheck® software to show the patient a 3-D animation of how her teeth will move throughout Invisalign treatment."

- ClinCheck 3-D display area.
- ClinCheck model.
- ClinCheck movie.

## ClinCheck stage.

A discrete step in a ClinCheck® treatment plan to accomplish a specified tooth movement for one or both arches.

#### Origin.

Term specific to Align Technology.

#### Example.

"IPR is specified for ClinCheck stage 3."

- Aligner.
- Attachment.
- ClinCheck treatment plan.
- Interproximal reduction (IPR).

## ClinCheck treatment plan.

Based on the Provider's Invisalign prescription, the ClinCheck® treatment plan includes the ClinCheck model, events such as placement of attachments or ridges, any IPR needed in the treatment, any information forms displayed to the Provider by the ClinCheck software, and comments sent from Align Technology. The Provider views the ClinCheck treatment plan with the ClinCheck software, and approves the plan by clicking on the Approve button.

#### Origin.

Term specific to Align Technology.

#### Example.

"The Provider reviewed the ClinCheck treatment plan and read comments from Align Technology."

- Approve.
- ClinCheck model.
- ClinCheck software.
- Interproximal reduction (IPR).

## Clinical preferences.

Instructions that Providers can specify on the Invisalign Doctor Site (IDS) that provide specific guidelines for creating ClinCheck® treatment plans consistently for all their patients.

#### Origin.

Definition specific to Align Technology.

#### Example.

"The Provider's clinical preferences include instructions to include IPR no earlier than stage 3 in ClinCheck treatment plans for all his patients."

- ClinCheck stage.
- ClinCheck treatment plan.
- Invisalign Doctor Site (IDS).

### Compliance.

The action that patients take to fulfil the compliance requirements for their Invisalign treatment. These actions include but are not limited to the following:

- Wearing aligners for the specified number of hours per day.
- Maintaining aligners.
- Caring for teeth and gingiva.
- Wearing elastics as instructed.
- Keeping appointments with the Provider.

### Origin.

Definition specific to Align Technology.

### Example.

"Compliance is the highest patient priority for Invisalign treatment."

### See also.

• Compliance Indicator.

## Compliance Indicator.

A blue dot on an aligner, designed to provide an approximate gauge of wear-time. The blue dot is designed to fade over a two-week period if the aligner is worn properly: 20 to 22 hours every day.

### Origin.

Term specific to Align Technology.

### Example.

"The patient's Compliance Indicators faded to clear to show that she had worn her aligners the amount of time required every day."

- Aligner.
- Compliance.
- Invisalign® Teen treatment option.

### Conventional bite ramps.

Prominences on the lingual surface of upper aligners (not filled with composite). They may be added, upon request, to disocclude the posterior teeth. The conventional bite ramps are static aligner features that will not be repositioned from stage to stage, for use in situations when the overjet on the incisors exceeds the reach of the Precision Bite Ramps.

Conventional bite ramps can be requested via the prescription form or via ClinCheck® comments on the upper canines. They may also be applied to incisors if the Precision Bite Ramps cannot be placed due to space limitations.

### See also.

• Precision Bite Ramps.

### Deep Bite Attachments.

SmartForce® attachments on the premolars, triggered automatically by the software when needed, designed to provide anchorage for anterior intrusion; can be activated to deliver extrusive forces to the premolars when needed.

### Origin.

Term specific to Align Technology.

### Example.

"The Deep Bite Attachments are triggered automatically by the software when anchorage for anterior intrusion is needed."

### How to get this feature.

The Deep Bite Attachments can be requested via the prescription form or via ClinCheck® comments. They can be placed on premolars following the below criteria:

- When no premolar extrusion is requested in conjunction with anterior intrusion: if no Optimized Attachments are triggered for other movements, Optimized Deep Bite Attachments will be placed for anchorage.
- When premolar extrusion is requested with anterior intrusion: Optimized Deep Bite Attachments will be placed and they will be activated for extrusion.

- Precision Bite Ramps.
- Pressure Areas.
- Optimized Attachments.

## Detail pliers.

An instrument used to create pressure-generating dimples on aligners for achieving minor tooth movements (less than 1 mm of movement).

### Origin.

Term specific to Align Technology.

### Example.

"The Provider used the detail pliers to create a dimple that helped tighten a light interproximal contact."

### See also.

• Aligner.

### Eruption compensation.

An Invisalign® Teen treatment option feature that is designed to prevent supra-eruption of partially-erupted or non-erupted permanent teeth while the patient is wearing aligners. Invisalign Teen treatment option also accommodates the natural eruption of cuspids and second bicuspids by allowing the Provider to prescribe the room necessary for the erupting teeth.

### Origin.

Term specific to Align Technology.

### Example.

"The Provider took advantage of eruption compensation to ensure that there was room for the teen patient's partially-erupted teeth during Invisalign Teen treatment option."

- Cusp.
- Invisalign Teen treatment option.
- Premolar.

### Eruption tab.

An aligner feature of the Invisalign® Teen treatment option that helps prevent supra-eruption of the terminal molars. The eruption tab extends over the first cusp of the terminal molar. The aligner material helps prevent the occlusal surface of the second molar from exceeding the height of the first molar.

### Origin.

Term specific to Align Technology.

### Example.

"The eruption tab on the first five aligners in the patient's Invisalign Teen treatment option ensured that the second molar erupted in normal alignment with the adjacent molar."

- Eruption compensation.
- Invisalign Teen treatment option.
- Molar.
- Occlusal.

## Estimated ship date.

The approximate date when the manufactured aligners ship to the Provider.

### Origin.

Term specific to Align Technology.

### Example.

"The Provider checked his Invisalign Doctor Home Page, opened a patient file, and found the estimated ship date for the patient's aligners."

- Invisalign Doctor Home Page.
- Refinement Fee Date.
- <u>Treatment Expiration Date (TED).</u>

## Ideal treatment goal.

Ideal alignment of the patient's teeth as shown in the ClinCheck® treatment plan.

### Origin.

Definition specific to Align Technology.

### Example.

"The Provider achieved an ideal treatment goal with aligners only."

- <u>Aligner.</u>
- ClinCheck treatment plan.

## Initial position.

The starting position of the teeth, before Invisalign treatment.

### Origin.

Definition specific to Align Technology.

### Example.

"When comparing the initial position with the patient's photos, the Provider saw that the bite was set incorrectly."

- Invisalign treatment.
- Photos.

# Invisalign clinical protocol.

The rules specifying the types of treatments, allowable tooth movement, and orthodontic procedures possible with each Invisalign treatment option.

### Origin.

Term specific to Align Technology.

### Example.

"The Invisalign clinical protocols limit the degree of difficulty for an Invisalign treatment."

## Invisalign Doctor Home Page.

For each Provider, a personalised home page providing a list of their patients and access to other Invisalign Doctor Site (IDS) features that enables them to manage their Invisalign Practice online. Providers can initiate and track orders for each patient, upload records, access ClinCheck® treatment plans, for example.

### Origin.

Term specific to Align Technology.

### Example.

"The Provider opened his Invisalign Doctor Home Page and saw that a ClinCheck treatment plan for his new patient was ready for him to review."

#### See also.

• Invisalign Doctor Site (IDS).

## Invisalign Doctor Site (IDS).

Part of the Invisalign website that enables Providers to manage their Invisalign Practice online. Each Provider has an individualised Invisalign Doctor Home Page. Providers can initiate and track orders for each patient, upload patient records, access ClinCheck® treatment plans, for example.

### Origin.

Term specific to Align Technology.

### Example.

"The Provider uploaded a patient's required records onto the Invisalign Doctor Site (IDS)."

- Order.
- Invisalign patient records.

# Invisalign i7 treatment option.

An aesthetic solution for minor orthodontic corrections, limited in movement from first premolar to first premolar, addressed in 7 stages or less.

### Origin.

Term specific to Align Technology.

### Example.

"The patient would like to have a minor tooth correction on the anterior teeth for cosmetic reasons, the Provider treatment plan included the Invisalign® i7 treatment option."

- Automated Refinement.
- Invisalign® Full treatment option.
- Invisalign® Lite treatment option.
- Invisalign® Teen treatment option.

## Invisalign Lite treatment option.

A short-term Invisalign treatment option for treatments that can be addressed in <14 stages of aligners or fewer per arch, and is ideal for cosmetic, crowding/spacing, or pre-restorative treatments.

### Origin.

Term specific to Align Technology.

### Example.

"The patient had a relapse from his previous orthodontic treatment because he did not wear his retainer. As a result, the Provider's treatment plan included the Invisalign® Lite treatment option."

- Aligner.
- <u>Automated Refinement.</u>
- Case.
- Invisalign® Full treatment option.
- Invisalign® i7 treatment option.
- Invisalign System.
- Invisalign® Teen treatment option.

## Invisalign Full treatment option.

The Invisalign treatment option that provides flexibility for the Provider, and can be used for treating complex cases.

### Origin.

Term specific to Align Technology.

### Example.

"The Provider chose the Invisalign® Full treatment option to treat a case of Class II division I malocclusion."

- <u>Case.</u>
- Class II division 1 malocclusion.
- Invisalign® i7 treatment option.
- Invisalign® Lite treatment option.
- Invisalign System.
- Invisalign® Teen treatment option.
- Invisalign treatment options.

# Invisalign patient records.

Photographs, PVS impressions or an intra-oral scan, and an Invisalign prescription form submitted by a Provider to initiate an order for a specific patient's Invisalign treatment.

### Origin.

Term specific to Align Technology.

### Examples.

- "Required Invisalign patient records were received from the Provider, so the order for the selected treatment was started."
- "Among the required Invisalign patient records, the Provider must submit the prescription form online and the photographs online. The PVS impressions must be submitted in a submission box."
- "The ClinCheck® treatment plan begins development only when all required Invisalign patient records have been received."

- Photos.
- Invisalign prescription form.
- PVS impressions.
- X-ray/radiograph.

### Invisalign Patients Viewer.

Invisalign software that enables Providers to view their patients' ClinCheck® treatment plans without navigating online to the Invisalign website. The viewer software installs at the same time as the ClinCheck software on the Provider's computer.

### Origin.

Term specific to Align Technology.

### Example.

"The Provider opened the Invisalign Patients Viewer off-line and reviewed the comments log for the patient's ClinCheck treatment plan."

- ClinCheck software.
- Invisalign software.

# Invisalign prescription form.

Clinical specifications for a patient's Invisalign treatment.

### Origin.

Term specific to Align Technology.

### Example.

"Only a licensed Provider can submit an Invisalign prescription form."

### See also.

• ClinCheck® treatment plan.

## Invisalign Provider.

A Provider who has completed training on the Invisalign System, and is active and in good standing.

### Origin.

Term specific to Align Technology.

### Example.

"The Provider completed the Invisalign Training Course to become an Invisalign Provider, and can now start treating his patients with the Invisalign System."

### See also.

• Invisalign System.

### Invisalign software.

The Invisalign software includes the following:

- ClinCheck® application enables Providers to evaluate a ClinCheck treatment plan.
- Invisalign Patients Viewer enables Providers to access patient information and the ClinCheck application off-line.
- Invisalign Doctor Site (IDS) helps Invisalign Providers to manage their Invisalign Practice.

### Origin.

Term specific to Align Technology.

### Example.

"The Provider takes advantage of Invisalign software to check order status, pay invoices, and view patient treatment plans."

- ClinCheck software.
- <u>ClinCheck treatment plan.</u>
- Invisalign Doctor Site (IDS).
- Invisalign System.

### Invisalign System.

A treatment delivery system based on a series of Provider-prescribed, custom manufactured, clear plastic removable orthodontic appliances (aligners). The Invisalign System offers a range of treatment options, specialised services, and proprietary software for treatment visualisation.

### Origin.

Term specific to Align Technology.

### Example.

"The Invisalign Provider chose the Invisalign System to implement the patient's orthodontic treatment."

- Aligner.
- ClinCheck® software.
- Invisalign® Full treatment option.
- Invisalign® Teen treatment option.
- Invisalign® Lite treatment option.
- Invisalign® i7 treatment option.
- Invisalign treatment options.

## Invisalign Teen treatment option.

The Invisalign treatment option designed specifically for teen patients. Special features include compensation for eruption of permanent teeth. The Invisalign® Teen treatment option also includes Compliance Indicators and up to 6 free individual arch replacement aligners.

### Origin.

Term specific to Align Technology.

### Example.

"With the Invisalign Teen treatment option, the patient told the Provider that people at school did not notice that she was wearing aligners."

- Aligner.
- Compliance Indicator.
- Eruption compensation.
- Eruption tab.
- Invisalign® Full treatment option.
- Invisalign® Lite treatment option.
- Invisalign® i7 treatment option.
- Invisalign System.
- Invisalign treatment options.

## Invisalign treatment.

The application of the Invisalign System for remediating a patient's orthodontic condition.

### Origin.

Term specific to Align Technology.

### Example.

"The Provider chose Invisalign treatment as part of the overall treatment for the patient."

### See also.

• Invisalign System.

# Invisalign treatment monitoring.

The process of ensuring that the patient's teeth are moving as planned. This includes but is not limited to the following:

- At appointments, checking the aligner and attachments, and performing IPR as required.
- Continuing to compare the ClinCheck® treatment plan with the patient's actual tooth movement.
- Using the ClinCheck software to educate patients about their treatment.
- Using techniques to keep the teeth tracking in the aligners in order to avoid the need to order Additional Aligners to recapture tooth movements.
- Reviewing the ClinCheck treatment plan when treatment is completed in order to learn from each treatment.

### Origin.

Term specific to Align Technology.

### Example.

"As part of the Provider's Invisalign treatment monitoring plan, the Provider compared the ClinCheck treatment plan to the patient's progress after every four aligners were used."

- Aligner.
- Attachment.
- ClinCheck treatment plan.
- Interproximal reduction (IPR).
- Refinement.

# Invisalign treatment options.

Orthodontic treatments offered as parts of the Invisalign System; Invisalign® Lite treatment option, Invisalign® Full treatment option, Invisalign® i7 treatment option and Invisalign® Teen treatment option.

### Origin.

Term specific to Align Technology.

### Example.

"The Provider offers all Invisalign treatment options in his practice."

- Invisalign Lite treatment option.
- Invisalign Full treatment option.
- Invisalign i7 treatment option.
- Invisalign System.
- Invisalign Teen treatment option.

### Multi-Tooth Unit.

This term has been specifically created for the Invisalign first premolar extraction solution. The Multi-Tooth Unit refers to the combined SmartForce® features Optimized Anchorage Attachments and Optimized Retraction Attachments, and their corresponding SmartStage™ aligner activations. They work as a unit to improve predictability for first premolar extraction treatment. There will be a symbol for Multi-Tooth Unit in the treatment overview form. With Multi-Tooth Unit features, no individual tooth feature can be placed or removed without placing or removing all the features of the entire Multi-Tooth Unit.

### Origin.

Term specific to Align Technology.

### Example.

"The Multi-Tooth Unit components Optimized Anchorage Attachments, Optimized Retraction Attachments, and SmartStage aligner activations, worked as a unit to close first premolar extraction space with Invisalign aligners."

- Optimized Anchorage Attachment.
- Optimized Retraction Attachment.
- Maximum anchorage.
- Extraction.

## Optimized Anchorage Attachment.

Optimized Anchorage Attachments are designed to work with SmartStage™ technology to maximise posterior anchorage during space closure after first premolar extraction. Optimized Anchorage Attachments are available on the second premolar and first and second molars with first premolar extraction treatments planned for maximum anchorage.

### Origin.

Term specific to Align Technology.

### Example.

"The ClinCheck® treatment plan included Optimized Anchorage Attachments and Optimized Retraction Attachments that worked together with SmartStage technology to provide vertical control and root parallelism for space closure after first premolar extraction planned for maximum anchorage."

- Extraction.
- SmartStage.
- Optimized Retraction Attachment.
- Optimized Attachments.

### Optimized Attachment.

Optimized Attachments are designed to engage with Invisalign aligners to enable the aligners to provide the optimal force for optimised individual and multiple tooth movements of upper and lower arch.

### Origin.

Term specific to Align Technology.

### Example.

"Providers have remarked that the new Optimized Attachments are tracking well with their patients' teeth."

- Aligner.
- Aligner engagement.
- SmartForce® features.
- Attachment.

## Optimized Multi-Plane Movement feature.

Optimized Multi-Plane Movement features are designed to improve control of upper laterals undergoing extrusion along with rotation and/or crown tip. The active surface of the Optimized Attachment on the buccal side is oriented to deliver extrvusive forces while simultaneously rotating and/or tipping the lateral. A Pressure Point feature on the lingual aspect of the aligner is positioned to apply a second force for control of the multi-plane movement.

### Origin.

Term specific to Align Technology.

### Example.

"The ClinCheck® treatment plan included Optimized Multi-Plane Movement features on the patient's upper right lateral incisor to address the rotation and extrusion that the tooth requires."

### Replacement usage.

None.

- Active surface.
- Crown tipping.
- Extrusion.
- Pressure Point feature.
- Rotation.

## Optimized Retraction Attachment.

Optimized Retraction Attachment for canine is designed to work with SmartStage™ technology for effective bodily movement during canine retraction with first premolar extraction treatments planned for maximum anchorage, with or without elastics.

### Origin.

Term specific to Align Technology.

### Example.

"The ClinCheck® treatment plan included Optimized Anchorage Attachments and Optimized Retraction Attachments that worked together with SmartStage technology to provide vertical control and root parallelism for space closure after first premolar extraction planned for maximum anchorage."

- Extraction.
- SmartStage.
- Optimized Anchorage Attachment.
- Optimized Attachments.

## Optimized Root Control Attachment.

Optimized Root Control Attachments are customised for each patient's tooth morphology and provide mesiodistal root tip control. Clinical applications include space closure, mesiodistal uprighting and bodily movement. Available for upper lateral and central incisors and for upper and lower canines and premolars.

### Origin.

Term specific to Align Technology.

### Example.

"The Optimized Root Control Attachments are being used for space closure after a second premolar extraction."

- <u>Aligner.</u>
- Aligner engagement.
- Anterior teeth.
- Attachment.
- Premolar.
- Canine.

### Order.

A request for treatment options or Additional Aligners that the Provider starts by submitting an Invisalign prescription form and (for the treatment options requiring record submission) patient records, and finalises by either approving the ClinCheck® treatment plan or, in case of Automated Refinement of Invisalign® i7 or Lite partial treatments, by reaching the status of All Materials Received (AMR).

### Origin.

Definition specific to Align Technology.

### Example.

"The Provider started an order by submitting patient records online and sending the PVS impressions in the Invisalign submission box."

- Aligner.
- ClinCheck treatment plan.
- Invisalign patient records.
- Invisalign prescription form.
- Product.

### Partial treatment.

Partial treatments are defined as Invisalign® i7 or Invisalign® Lite treatments where the clinical criteria for completion could not be achieved within the stages allowed for these treatment options.

### Origin.

Term specific to Align Technology.

### Example.

"The Provider opted to switch the Invisalign Lite partial treatment to Invisalign® Full because his treatment plan exceeded the criteria for the Invisalign Lite treatment option."

- Invisalign Lite treatment option.
- Invisalign Full treatment option.
- Invisalign i7 treatment option.
- Invisalign System.

## Passive Aligner.

An aligner that prevents the teeth on one arch from moving while the opposite arch receives active treatment.

### Origin.

Term specific to Align Technology.

### Example.

"The patient wore a Passive Aligner on her upper arch while the aligner on her lower arch was actively moving her teeth."

- Active aligner.
- Aligner.

### Photos.

The photographic patient records required to place an Invisalign treatment order. The following photos are required:

- Extra-oral profile repose photo.
- Extra-oral frontal repose photo.
- Extra-oral frontal smiling photo.
- Intra-oral anterior photo.
- Intra-oral buccal right photo.
- Intra-oral buccal left photo.
- Intra-oral occlusal mandibular photo.
- Intra-oral occlusal maxillary photo.

The photos should be uploaded onto the Invisalign Doctor Site (IDS).

### Origin.

Definition specific to Align Technology.

### Example.

"The Provider used a cheek retractor to help obtain precise photos for the required Invisalign patient records."

### See also.

• Invisalign patient records.

### Pontic.

A temporary false tooth that the Provider creates in an aligner to minimise the appearance of a missing tooth during Invisalign treatment. Before aligner fabrication, the ClinCheck® model shows a virtual pontic. When aligners are fabricated, space is allocated within the aligners to accommodate the pontics that the Provider creates.

#### Origin.

Definition specific to Align Technology.

#### Example.

"The Provider created a pontic for tooth 8 in all aligners in the patient's Invisalign® Full treatment option."

- <u>Aligner.</u>
- ClinCheck model.

# Power Ridge feature.

Aligner feature that helps deliver lingual root torque by optimising forces on the incisors. The buccal Power Ridge feature is automatically applied to treatments. In addition, a lingual Power Ridge feature is applied in combination with the (buccal) Power Ridge feature to optimise lingual root torque or during retraction of upper incisors.

#### Origin.

Term specific to Align Technology.

#### Example.

"The patient's treatment plan included the Power Ridge feature to straighten her upper incisors."

- Case.
- Class II division 2 malocclusion.
- Incisors.
- Lingual.
- Retroclination.
- Torque.

# Precision Bite Ramps.

Prominences on the lingual surface of upper aligners (not filled with composite), automatically customised for each patient and each aligner stage to maintain anterior contact throughout all stages of movement, designed to disocclude the posterior teeth.

#### Origin.

Term specific to Align Technology.

#### Example.

"The Provider requested Precision Bite Ramps on the upper incisors, that are designed to disocclude the posterior teeth, to treat a patient with a deep bite."

#### How to get this feature.

Provider can prescribe optional Precision Bite Ramps for his Invisalign treatment through the prescription form or via ClinCheck® comments.

On upper incisors: Precision Bite Ramps are automatically customised for each patient and each aligner stage. The bite ramp position is automatically adjusted to maintain anterior contact throughout all stages of movement.

On upper canines: conventional bite ramps are used, which consist of a horizontal rectangular feature placed on the lingual surfaces of these teeth and they are not staged.

#### Compatibility:

- Precision or conventional bite ramps are not compatible with lingual Power Ridge features or lingual attachments, nor are they compatible with Pressure Area on the upper arch.
- Precision Bite Ramps and/or conventional bite ramps are compatible with the Pressure Area on the lower arch.
- All buccal features, such as buccal Power Ridge features or buccal Optimized Attachments are compatible with Pressure Area feature for anterior intrusion.

- <u>Deep Bite Attachments.</u>
- Pressure Areas.
- Power Ridge.
- Optimized Attachments.

### Precision Cut.

Invisalign aligners with Precision Cuts enable Providers to use buttons and elastics without manual aligner modifications. Invisalign aligners with Precision Cuts are comfortable for patients to wear and make it easy to attach elastics to anchorage control for patients with Class II and Class III malocclusion.

#### Origin.

Term specific to Align Technology.

#### Example.

"Invisalign aligners have Precision Cuts so Providers don't have to make cuts in aligners to accommodate buttons and elastics."

- Aligner.
- Button.
- Class II malocclusion.
- Class III malocclusion.

### Pressure Areas.

SmartForce® aligner feature, triggered automatically by the software when needed, on the lingual surface of the aligners, designed to re-direct the intrusive force through the long axis of anterior teeth.

#### Origin.

Term specific to Align Technology.

#### Example.

"Pressure Areas were placed on the upper incisors for intrusion."

#### How to get this feature.

The Pressure Areas are available on incisors and lower canines.

They will be placed if there is at least 0.5 mm of pure intrusion (along the long axis), combined or not with other movements such as proclination or torque.

They won't be placed if:

- There is no pure intrusion, or less than 0.5 mm (in case of pure proclination for example).
- In a Class II division 2 during retraction phase of incisors, buccal and lingual Power Ridges will be placed. The Pressure Areas will be placed during the intrusion phase only.
- Precision Bite Ramps have been prescribed by the Provider.

#### Compatibility:

Pressure Areas for anterior intrusion are not compatible with lingual Power Ridge features or lingual attachments or bite ramps. All buccal features such as buccal Power Ridge or buccal Optimized Attachments are compatible.

- <u>Deep Bite Attachments.</u>
- Precision Bite Ramps.
- Power Ridge.
- Optimized Attachments.

### Pressure Point feature.

A Pressure Point is an aligner feature placed on the lingual or buccal aspect of the aligner, and works in conjunction with a buccal Optimized Attachment to apply a second force for the control of a multi-plane or root control movement. The Pressure Point feature is automatically applied to control upper lateral incisors undergoing extrusion along with rotation and/or crown tip, and for premolars undergoing root control movement when the clinical crown does not have enough buccal space to place two Optimized Root Control Attachments.

#### Origin.

Term specific to Align Technology.

#### Example.

"The ClinCheck® treatment plan included a lingual Pressure Point on the patient's upper right lateral incisor, which acts along with the buccal Optimized Attachment to address the rotation and extrusion that the tooth requires."

#### Replacement usage.

None.

- Crown tipping.
- Extrusion.
- Incisors.
- Lingual.
- Optimized Multi-Plane Movement feature.
- Optimized Root Control Attachments.
- Rotation.

### Product.

Provider-prescribed, custom-manufactured, clear plastic removable orthodontic appliances (aligners) used in the Invisalign System. Align Technology products include retainers as well as merchandise sold by the WebStore.

#### Origin.

Definition specific to Align Technology.

#### Example.

"Aligners and retainers are the key products sold by Align Technology."

- Aligner.
- Invisalign treatment options.
- Invisalign System.

### Refinement.

Refinement is an option to order extra aligners, either one or two arches, typically during the final few stages of treatment, if further tooth movement is needed in order to meet the original treatment goals. The Order must be received prior to the Treatment Expiration Date (TED). A fee will apply for the Refinement Order, except for the Invisalign® Lite treatment option, where one Refinement is included in the price if the Refinement Order is received before the Refinement Fee Date.

Refinement is only available for Invisalign® i7 and Invisalign® Lite Treatments that meet the clinical criteria for treatment completion within 7 and 14 stages, respectively. Limit one Refinement per treatment.

#### Note.

For more information, see the "Pricing, Terms, and Conditions for Invisalign Products" on the Invisalign Doctor Site (IDS).

#### Origin.

Definition specific to Align Technology.

#### Example.

"The Provider ordered Refinement aligners to obtain additional tooth movement near the end of the first set of aligners."

- Automated Refinement.
- Refinement Fee Date.
- Treatment Expiration Date (TED).

### Refinement Fee Date.

The Refinement Fee Date is calculated by adding two weeks per aligner change interval plus an additional 180 days to the date of shipment of the aligners. The Refinement Fee Date applies to Invisalign® i7 and Invisalign® Lite treatments only.

For more information see "Pricing, Terms, and Conditions for Invisalign Products" on Invisalign Doctor Site (IDS).

#### Origin.

Term specific to Align Technology.

#### Example.

"The Refinement Fee Date has passed, so the Provider must pay for any additional Refinements that are placed prior to Treatment Expiration Date (TED)."

- Aligner.
- <u>Automated Refinement.</u>
- Invisalign i7 treatment option.
- Invisalign Lite treatment option.
- Refinement.
- Treatment Expiration Date (TED).
- Warranty-defective aligner.
- Warranty-fit aligner.

# Replacement aligner.

A new aligner that replaces an aligner that has been lost or broken.

#### Origin.

Term specific to Align Technology.

#### Example.

"The patient lost his aligners at summer camp, so the Provider ordered replacement aligners."

#### See also.

• Aligner.

### SmartForce features.

Aligner features and attachments that are designed and tested to deliver the force systems needed to achieve predictable tooth movements. SmartForce® features are developed using Align's advanced development techniques, including virtual modelling and force measurement technologies.

#### Origin.

Term specific to Align Technology.

#### Example.

"SmartForce features include Optimized Attachments and ridges."

- Aligner.
- Attachment.

# SmartStage.

SmartStage™ programmed tooth movements are the optimised progression of movements designed to improve the predictability of Invisalign treatments. The SmartStage technology applied in the development of Invisalign treatments leads to more precise control of individual and multiple tooth movement, minimisation of intra-arch and inter-arch interferences, and fabrication of appliances that provide activations to optimise the force system for more predictable tooth movements.

#### Origin.

Term specific to Align Technology.

#### Example.

"SmartStage technology and SmartForce® features are engineered to work together in the optimisation of force systems for more precise tooth movement control and predictability."

- Aligner.
- SmartForce features.

### SmartTrack.

New standard aligner material for all treatment options in the international markets starting  $4^{th}$  February 2013 where regulatory clearance has been achieved. Technical name of the material is LE30.

#### Origin.

Term specific to Align Technology.

#### Example.

"SmartTrack® aligner material is fully compatible with SmartForce® features."

#### See also.

• Aligner.

# Stage number.

The number associated with a specific ClinCheck® stage. The aligner number contains the stage number from which the aligner was manufactured.

#### Origin.

Term specific to Align Technology.

#### Example.

"The patient's first aligner was manufactured from ClinCheck stage number 1."

- Aligner number.
- ClinCheck stage.

## Submission box.

A container designed for shipping required patient records to Align Technology. The submission box must contain PVS impressions of the patient's upper arch and/or lower arch and shipping form. The box can also contain a copy of the Invisalign prescription form and photos.

#### Origin.

Term specific to Align Technology.

#### Example.

"The Provider took PVS impressions and sent them in the Invisalign submission box to Align Technology."

#### See also.

• PVS impressions.

# Tooth movement assessment.

Tooth movement assessment visually highlights the more complex tooth movements where auxiliaries or additional orthodontic techniques might be needed. Complex movements are pointed out so that Providers can decide the best treatment plan and set the right expectations with their patients.

#### Origin.

Definition specific to Align Technology.

#### Example.

"Providers can use the tooth movement assessment as a means of verifying that they have not overlooked any unusually difficult movements within their patient's Invisalign treatment."

- Invisalign treatment.
- Treatment plan.

# Treatment Expiration Date (TED).

The Treatment Expiration Date (TED) is calculated as:

- i) 5 years from the date of shipment of the initial set of aligners for Invisalign® Full and Invisalign® Teen treatments; and
- ii) 365 days past the Refinement Fee Date for Invisalign® i7 and Invisalign® Lite treatments.

Upon reaching the Treatment Expiration Date, the treatment order shall be closed, and any extra aligner treatment for the patient shall be considered a new order and will incur an additional charge at the then current pricing for the Invisalign treatment option.

Vivera® Retainers and Replacement aligners may be ordered at any time prior to or after the Treatment Expiration Date, and will be charged at the then current pricing, and will not affect the Treatment Expiration Date.

Note: For more information see the "Pricing, Terms, and Conditions for Invisalign Products" on the Invisalign Doctor Site (IDS).

#### Origin.

Term specific to Align Technology.

#### Example.

"The Treatment Expiration Date has passed for the patient's Invisalign Lite treatment option, so the Provider started a new order for the Invisalign Lite treatment option."

- Invisalign Full treatment option.
- Invisalign i7 treatment option.
- <u>Invisalign Lite treatment option.</u>
- Invisalign Teen treatment option
- Refinement Fee Date.
- Replacement aligners.
- Vivera Retainers.

# Treatment goal.

The target outcome of a specific orthodontic procedure or group of procedures.

#### Origin.

Industry-standard definition.

#### Example.

"The treatment goal for the patient's Invisalign® Lite treatment option for his front teeth is to reduce crowding on the lower arch."

- Invisalign Lite treatment option.
- Outcome.
- Treatment plan.

# Treatment life cycle.

A series of events illustrated in the Patient File page on the Invisalign Doctor Site (IDS) that lets the Provider know the steps that have been completed in the Invisalign treatment, and the next step pending.

#### Origin.

Definition specific to Align Technology.

#### Example.

"The treatment life cycle showed that the next step was for the Provider to review the ClinCheck® treatment plan."

- ClinCheck treatment plan.
- Invisalign Doctor Site (IDS).

## Virtual c-chain.

Type of overcorrection oriented to tighten interproximal contact to fully close spaces.

#### Origin.

Definition specific to Align Technology.

#### Example.

"The Provider requested overcorrection of space closure by asking for virtual c-chain."

### Virtual extraction.

At the Provider's request, a ClinCheck® treatment plan developed to show tooth movement and final tooth position as if an existing tooth had been extracted. Often, this is used by a Provider to evaluate (and review with the patient) the different treatment plans and projected outcomes with and without an extraction being performed.

#### Origin.

Term specific to Align Technology.

#### Example.

"The Provider showed the patient two ClinCheck treatment plans – one with the tooth present and one with a virtual extraction – and they agreed that the best outcome could be achieved by extracting the tooth."

- ClinCheck treatment plan.
- Extraction.

### Vivera retainers.

Clear thermoplastic retainers designed to be used after completing orthodontic treatment. Made from a PVS impression (or the patient's last ClinCheck® stage), or intra-oral scan, the retainer can also be used with patients that were not treated with an Invisalign treatment option. Three sets of retainers are shipped directly to the Provider who can accommodate the patient's unique retention needs.

#### Origin.

Term specific to Align Technology.

#### Example.

"The Provider took PVS impressions of the patient's upper and lower arches and shipped the impressions to Align Technology when placing an order for Vivera® retainers."

- Aligner.
- ClinCheck stage.
- Invisalign System.
- PVS impressions.
- Retainer.

## Warranty.

The legal policy that governs the circumstances under which Align Technology will replace or repair defective aligners without charging a fee. For more information about the warranty, see the "Pricing, Terms, and Conditions for Invisalign Products" document on the Invisalign Doctor Site (IDS). Regardless of the treatment, the Provider can request new aligners if the first three do not fit, and the aligners are provided without a fee, subject to the "Pricing, Terms, and Conditions for Invisalign Products."

#### Origin.

Definition specific to Align Technology.

#### Example.

"In the warranty, Align Technology warrants that the retainers and aligners are free from defects in material and workmanship when used properly in the applications for which they were intended."

- Aligner.
- Retainer.
- Warranty-defective aligner.
- Warranty-fit aligner.

# Warranty-defective aligner.

An aligner provided to a Provider free of charge to replace a defective aligner. For more information about the warranty, see the "Pricing, Terms, and Conditions for Invisalign Products" document on the Invisalign Doctor Site (IDS).

#### Origin.

Definition specific to Align Technology.

#### Example.

"The first set of aligners in the patient's Invisalign treatment cracked after being worn for a week, so the Provider requested warranty-defective aligners."

- Aligner.
- Warranty.
- Warranty-fit aligner.

# Warranty-fit aligner.

An aligner provided to a Provider free of charge to replace an aligner that does not fit the patient within the first three aligners, at the beginning of treatment, Additional Aligners series, or Refinement. For more information about the warranty, refer to "Pricing, Terms, and Conditions for Invisalign Products" on the Invisalign Doctor Site (IDS).

#### Origin.

Definition specific to Align Technology.

#### Example.

"The first set of aligners in the patient's Invisalign treatment did not fit the patient's teeth, so the Provider requested warranty-fit aligners."

- Aligner.
- Warranty.
- Warranty-defective aligner.

# Clinical terms.

### Absolute extrusion.

Tooth movement in the incisal or occlusal direction of eruption along the long axis of the tooth.

#### Origin.

Industry-standard definition.

#### Example.

"The anterior teeth were levelled by absolute extrusion. This helped reduce the anterior open bite."

- Anterior teeth.
- Extrusion.
- Incisal.
- Occlusal.
- Open bite.

### Alveolus.

The socket in the bone into which a tooth is attached by means of the periodontal ligament.<sup>1</sup>

#### Origin.

Industry-standard definition.

#### Example.

"In extrusion, the tooth is displaced out of the alveolus."

#### See also.

• Extrusion.

# Anchorage.

Resistance to unwanted tooth movement caused by the reactive component of an orthodontic force; refers also to the intra- and extra-oral structures that supply the resistance.<sup>2</sup>

#### Origin.

Industry-standard definition.

#### Example.

"The molars will provide enough anchorage to move the canines distally."

- Canine.
- <u>Distal.</u>
- Molar.

# Angle classification.

Classification of malocclusion introduced by E.H. Angle, based on the anteroposterior relationship of the maxillary and mandibular first permanent molars.<sup>1</sup>

#### Origin.

Industry-standard definition.

#### Example.

"When performing the sagittal evaluation for the patient, Class II Angle malocclusion was diagnosed."

- Malocclusion.
- Mandibular.
- Maxillary.
- Saggital plane.

# Angulation.

The tilt of the long axis of a tooth in a mesial or distal direction.<sup>2</sup>

#### Origin.

Industry-standard definition.

#### Example.

"Closing the space between the upper central incisors will improve their crown angulation."

- Distal.
- Incisors.
- Inclination.
- Mesial.

# Ankylosis.

Abnormal immobility or fusion between the root and bone. An ankylosed tooth will not move orthodontically.

#### Origin.

Industry-standard definition.

#### Example.

"The tooth did not move because it was ankylosed."

#### See also.

• <u>TMJ.</u>

# Antagonist.

The tooth (or teeth) of the opposite arch, with which a tooth has occlusal contact in centric occlusion (CO).

#### Origin.

Industry-standard definition.

#### Example.

"The antagonist for the upper first molar is the lower first molar."

- Arch.
- Centric occlusion (CO).
- Occlusal.

# Anterior-posterior (A-P) discrepancy.

Variation from the norm in the sagittal plane.

#### Origin.

Industry-standard definition.

#### Example.

"This patient exhibits a Class II angle relationship based on the anterior-posterior (A-P) discrepancy the Provider found."

- Anterior-posterior (A-P) elastic correction simulation.
- Class II malocclusion.
- Sagittal plane.

### Anterior teeth.

The maxillary and mandibular primary and/or permanent incisors and canines.

#### Origin.

Industry-standard definition.

#### Example.

"A treatment consisting of moving only anterior teeth is usually for aesthetic purposes."

- Canine.
- <u>Incisors.</u>
- Mandibular.
- Maxillary.

### Arch.

The layout of the teeth in each jaw.

#### Origin.

Industry-standard definition.

#### Example.

"The patient's upper and lower arches exhibited crowding."

- Mandible.
- <u>Maxilla.</u>

## Arch form.

Shape of the dental arch.

#### Origin.

Industry-standard definition.

#### Example.

"The aligners were able to improve the arch form of the patient by expanding the arch and creating a rounder form."

- Aligner.
- Arch.

# Arch length discrepancy.

Difference between the available and required space within an arch to align the teeth.

#### Origin.

Industry-standard definition.

#### Example.

"The patient whom the Provider is planning to treat with the Invisalign System has an arch length deficiency. The Provider may need to use IPR or extract a tooth to create room for proper alignment of the teeth."

- Arch.
- Extraction.
- Interproximal reduction (IPR).

## Bilateral.

Applicable to both sides of the dental arch.

#### Origin.

Industry-standard definition.

#### Example.

"The Provider used bilateral expansion to create space for tooth alignment."

- Arch.
- Expansion.

# Bite registration.

Impression used to record a patient's occlusion.

#### Origin.

Industry-standard definition.

#### Example.

"A PVS bite registration is not required as an optional Invisalign patient record."

#### See also.

• PVS impressions.

### Bolton ratio.

The Bolton ratio (tooth size discrepancy) is defined by the proportion between the upper and the lower dentition.

Bolton determined that, in order to obtain the proper interdigitation and arch coordination with normal overjet and overbite and when the molars are in a Class I relationship, the sum of the mesiodistal dimension of the lower teeth must be equal to 91% of the sum of the mesiodistal dimension of the upper teeth.

More importantly, he also discovered that a satisfactory Class I canine occlusion was only possible if a specific proportion was present between the upper and lower anterior teeth. The sum of the size of the mesiodistal dimension of the lower anterior teeth must be 77% of the sum of the size of the mesiodistal dimension of the upper anterior teeth. The Bolton Analysis is now mainly used for the anterior region (canine to canine).

#### Origin.

Industry-standard definition.

#### Example.

"Based on the Bolton ratio for this patient, her lower anterior teeth are proportionally smaller than her upper anterior teeth. Because the patient has narrow incisors, lower IPR is needed."

- Anterior teeth.
- Arch.
- Bolton Analysis.
- Distal.
- Incisors.
- Interproximal reduction (IPR).
- Mesial.

## Buccal.

In the direction of the cheeks. Refers to the facial surface of posterior teeth.

#### Origin.

Industry-standard definition.

#### Example.

"Generally, expansion is performed by moving the teeth towards the buccal."

- Facial surface.
- Lingual.

### Canine.

One of four teeth having a thick conical crown and a long conical root, located between the lateral incisors and the first premolars. These teeth are adapted to tearing. Also known as "cuspids." In usage, pair "cuspid" with "bicuspid," and "canine" with "premolar."

#### Origin.

Industry-standard definition.

#### Example.

"With Invisalign® Teen, the patient can start treatment when the canines are not fully erupted."

- Cusp.
- Premolar.
- Incisors.

# Centre of tooth rotation.

The point about which a tooth rotates.

#### Origin.

Industry-standard definition.

#### Example.

"When lingual root torque is applied on a tooth, the centre of rotation is typically on the incisal edge."

- Crown tipping.
- Incisal.
- Lingual.
- Root tipping.
- Torque.

# Centric occlusion (CO).

The best fit of the teeth and the patient's most comfortable bite. In other words, the relationship between the jaws (maxilla and mandible) when the teeth are in occlusion in their maximum intercuspal position. In Invisalign treatment, the bite is usually set in centric occlusion (CO).

#### Origin.

Industry-standard definition.

#### Example.

"The bite registration was taken in centric occlusion (CO)."

- Bite registration.
- Centric relation (CR).
- Mandible.
- Maxilla.
- Occlusion.

# Centric relation (CR).

The relation of the mandible to maxilla when mandibular condyles are in a physiologically stable position, independent of tooth contact. The Provider manually manipulates the jaw to place it in centric relation (CR).

#### Origin.

Industry-standard definition.

#### Example.

"Some Providers prefer to treat their patients with the bite in centric relation (CR) instead of centric occlusion (CO)."

- Centric occlusion (CO).
- Mandible.
- Mandibular condyles.
- Maxilla.
- TMJ.

# Cephalometrics.

A series of 2-D angular and linear measurements of the relationships between cranial and facial references made on a lateral or posteroanterior x-ray of the head that is taken using a fixed reproducible position. A cephalometric tracing is created and used in the diagnosis and treatment planning in orthodontics.

Different sets of linear and angular measurements on bone and/or soft tissue comprise a specific cephalometric analysis.

#### Origin.

Industry-standard definition.

#### Example.

"The Provider uses the Ricketts and McNamara cephalometric analyses as tools in his orthodontic assessment of the patient's malocclusion."

- Malocclusion.
- X-ray/radiograph.

### Cheek retractor.

A medical instrument designed to pull the cheeks away from the mouth and hold them in place to leave the mouth exposed during a procedure.

#### Origin.

Industry-standard definition.

#### Example.

"The Provider used cheek retractors to fully expose the teeth before he took photos for Invisalign patient records."

- Invisalign patient records.
- Photos.

### Class I malocclusion.

A malocclusion in which the buccal groove of the mandibular first permanent molar occludes with the mesiobuccal cusp of the maxillary first permanent molar.<sup>1</sup>

#### Origin.

Industry-standard definition.

#### Example.

"In Class I malocclusions, there is a normal relationship of maxillary and mandibular first molars in the sagittal plane."

- Buccal.
- Class II malocclusion.
- Class III malocclusion.
- Cusp.
- Malocclusion.
- Mandibular.
- Maxillary.
- Mesial.
- Molar.
- Occlusion.
- Sagittal plane.

## Class II malocclusion.

Malocclusion in which the lower first permanent molar is positioned distally relative to the upper molar.<sup>2</sup>

#### Origin.

Industry-standard definition.

#### Example.

"There are two types of Class II malocclusions – division 1 or division 2 – based on the position of the anterior teeth."

- Class II division 1 malocclusion.
- Class II division 2 malocclusion.
- <u>Distal.</u>
- Molar.

# Class II division 1 malocclusion.

Type of Class II malocclusion in which the maxillary incisors are positioned forward in relation to the lowers, resulting in a marked overjet.<sup>2</sup>

#### Origin.

Industry-standard definition.

#### Example.

"Class II division 1 malocclusions are associated with trauma of the flared upper incisors, shorter upper lips and lack of muscle tone of the lower lip."

#### Replacement usage.

None.

- Class II malocclusion.
- <u>Incisors.</u>
- Malocclusion.
- Overjet.

# Class II division 2 malocclusion.

Type of Class II malocclusion in which the maxillary incisors are in close relation to the lowers, usually with a deep overbite.<sup>2</sup>

#### Origin.

Industry-standard definition.

#### Example.

"Class II division 2 patients usually have a normal profile, but present with a very tight lower lip, retroclined lower incisors and a deep bite."

- Class II malocclusion.
- Overjet.
- Retroclination.

## Class III malocclusion.

A malocclusion in which the lower first permanent molar is positioned mesially relative to the upper.<sup>2</sup>

#### Origin.

Industry-standard definition.

#### Example.

"Mild Class III malocclusions typically have anterior crossbites."

#### Replacement usage.

None.

- Anterior teeth.
- Class I malocclusion.
- Class II malocclusion.
- Crossbite.
- Malocclusion.
- Mesial.
- Molar.

# CR/CO discrepancy.

The difference between tooth position when the mandibular condyles are in centric relation (CR) and centric occlusion (CO).

#### Origin.

Industry-standard definition.

#### Example.

"Most people have a CR/CO discrepancy of 1 to 2 mm."

#### Replacement usage.

None.

- Centric occlusion (CO).
- Centric relation (CR).
- Mandibular condyles.
- <u>TMJ.</u>

# CR/CO shift.

A deflection of the mandible in an anterior, posterior and/or lateral direction that occurs as a result of the initial dental contact that takes place when the mandible is in centric relation (CR) and closes into centric occlusion (CO).

#### Origin.

Industry-standard definition.

#### Example.

"Occlusal adjustment can be used to eliminate or reduce an excessive CR/CO shift."

- Centric occlusion (CO).
- Centric relation (CR).
- Mandible.
- Occlusal.
- Occlusal interference.
- <u>TMJ.</u>

### Crossbite.

The incorrect transverse relationship between one or more teeth in one arch with their antagonist teeth in the opposite arch.

- Anterior crossbite one or more teeth in the maxillary anterior segment is lingual to one or more of the opposing teeth in the mandibular anterior segment in maximum intercuspation.<sup>2</sup>
- Posterior crossbite one or more teeth in the maxillary buccal segment is lingual to one or more of the opposing teeth in the mandibular buccal segment in maximum intercuspation.<sup>2</sup>

#### Origin.

Industry-standard definition.

#### Example.

"The patient who breathes through his mouth has a narrow palate and dual posterior crossbite. The Provider will treat the patient with bilateral expansion."

- Antagonist.
- Anterior teeth.
- Arch.
- Bilateral.
- Buccal.
- Expansion.
- Lingual.
- Mandibular.
- Posterior teeth.

# Crown tipping.

The tendency of a tooth to rotate in either the mesiodistal or buccolingual direction when a force is applied to the crown. Tipping can change either the inclination or angulation of a tooth.

#### Origin.

Industry-standard definition.

#### Example.

"Aligners perform particularly well for crown tipping."

- Angulation.
- <u>Buccal.</u>
- Distal.
- Inclination.
- Lingual.
- Mesial.

# Curve of Spee.

The extent to which the cusp tips of the lower dental arch describe a curve, concave upwards in the lateral view; some authors define this curve as extending only from the canine through the molars; others include the incisors.

#### Origin.

Industry-standard definition.

#### Example.

"Deep bite malocclusion presents a pronounced Curve of Spee."

- Cusp.
- Canine.
- Deep bite.
- Incisors.
- Malocclusion.
- Molar.

# Cusp.

The chewing or tearing points of the canines, premolars and molars.

#### Origin.

Industry-standard definition.

#### Example.

"In Class I canine malocclusion, the cusp of the upper canine tooth lies between the lower canines and the lower first premolar."

- Premolar.
- Class I malocclusion.
- Canine.
- Malocclusion.
- Molar.

# Deep bite.

An increase in the vertical overlap of the anterior teeth beyond the normal 1 to 2 mm of overbite.

#### Origin.

Industry-standard definition.

#### Example.

"Class II division 2 patients typically have a deep bite caused by the retroclination of the anterior teeth."

- Anterior teeth.
- Open bite.
- Overbite.
- Retroclination.

## Dentist.

A person licensed to practice dentistry.

#### Origin.

Industry-standard definition.

#### Example.

"After completing the Invisalign Training Course, an orthodontist or dentist becomes an Invisalign Provider."

- Invisalign Provider.
- Orthodontist.

## Dentition.

The natural teeth in the dental arch, which may be deciduous, permanent, or mixed (in which both deciduous and permanent teeth are present).

#### Origin.

Industry-standard definition.

#### Example.

"The teen patient had mixed dentition."

- Arch.
- Gingiva.

# Distal.

Away from the dental midline, along the dental arch.

#### Origin.

Industry-standard definition.

#### Example.

"Class II malocclusions can be treated with moving upper teeth to the distal."

#### See also.

• Mesial.

### Distalisation.

The movement of teeth away from the dental midline, along the dental arch.

#### Origin.

Industry-standard definition.

#### Example.

"In order to avoid extracting an upper premolar, the treatment plan for correcting Class II malocclusion includes distalisation of all upper posterior teeth and retraction of the anterior teeth."

- Anterior teeth.
- <u>Premolar.</u>
- Class II malocclusion.
- Distal.
- Extraction.
- Posterior teeth.
- Retraction.
- Treatment plan.

# Edge-to-edge occlusion.

An occlusion in which the anterior and/or posterior teeth of both jaws meet along their incisal and/or buccal cuspal edges. This condition is often associated with a Class III dental and/or skeletal relationship.

#### Origin.

Industry-standard definition.

#### Example.

"When the patient has an edge-to-edge occlusion, then a combination of aligners and Class III elastics can create positive overbite and overjet."

- Anterior teeth.
- Buccal.
- Class III malocclusion.
- <u>Incisal.</u>
- Occlusion.
- Overbite.
- Overjet.
- Posterior teeth.

# Embrasure.

The space next to the interproximal contact area that spreads toward the facial, gingival, lingual, occlusal, or incisal aspect.

#### Origin.

Industry-standard definition.

#### Example.

"The patient had a wide embrasure next to the interproximal contacts of two premolars."

#### See also.

• Intercuspation.

# Expansion.

Enlargement; increase in volume, surface, or extent. The term is often used to refer to the process of widening the dental arches.<sup>1</sup>

#### Origin.

Industry-standard definition.

#### Example.

"With expansion, the dental arch circumference can be changed significantly with aligners."

- Aligner.
- Arch.
- Buccal.
- <u>Labial.</u>

## Extraction.

Removal of teeth.

#### Origin.

Industry-standard definition.

#### Example.

"The patient's treatment included extraction of two teeth."

#### See also.

• Invisalign treatment.

## Extrusion.

Displacement of a tooth along its long axis out of alveolus; sometimes called forced eruption.<sup>2</sup>

#### Origin.

Industry-standard definition.

#### Example.

"The aligner prevented extrusion of tooth 12."

- Aligner.
- Alveolus.

# Facial surface.

Surface in the direction of the face. Includes all teeth.

#### Origin.

Industry-standard definition.

#### Example.

"Some restorations are placed on the facial surface of bicuspids."

- Buccal.
- <u>Labial.</u>

# FDI numbering system.

The Federation Dentaire Internationale numbering system (FDI). The two-digit system is used worldwide in every branch of dentistry. Each quadrant of the mouth is assigned a number. The maxillary right quadrant is assigned the number 1, the maxillary left quadrant is assigned the number 2, the mandibular left quadrant is assigned the number 3, and the mandibular right quadrant is assigned the number 4. Each tooth within each quadrant is assigned a number between 1 and 8, with 1 representing the central incisor and 8 representing the third molar. A full stop (punctuation mark) is used to separate the assigned quadrant number from the tooth number. The numbering system is typically used by Providers practicing outside the United States.

#### Origin.

Industry-standard definition.

#### Example.

"In the FDI tooth numbering system, the maxillary right central incisor is represented as 1.1."

- Incisors.
- Mandibular.
- Maxillary.
- Molar.
- Palmer notation numbering system.
- Universal numbering system.

## Fossa.

Hollow pit, concavity, or depression, especially on the surface of a bone or tooth.

#### Origin.

Industry-standard definition.

#### Example.

"In intercuspation, the cusps of the posterior teeth interlock in the fossae and embrasures of their antagonists."

#### See also.

• Intercuspation.

# Gingiva.

The gingiva (or gums), consists of the mucosal tissue that lies over the alveolar bone and surrounds the necks of the teeth.

# Origin.

Industry-standard definition.

# Example.

"The Invisalign manufacturing process helps to ensure that aligners do not hurt the gingiva."

- Aligner.
- <u>Dentition.</u>

# Incisal.

In the direction away from the root on the anterior teeth.

# Origin.

Industry-standard definition.

# Example.

"Extrusion is moving teeth in the incisal direction."

- Extrusion.
- Occlusal.

# Incisors.

Teeth adapted for cutting, located at the front of the mouth along the apex of the dental arch. The incisors are comprised of 2 incisors at the very centre, and 2 lateral incisors per arch.

# Origin.

Industry-standard definition.

# Example.

"The Power Ridge feature for lingual root torque is available in aligners for the upper and lower incisors."

- Anterior teeth.
- Power Ridge feature.

# Inclination.

The tilt of the long axis of a tooth in the buccolingual or faciolingual direction.<sup>2</sup>

### Origin.

Industry-standard definition.

# Example.

"Aligners can change the inclination of a tooth with retraction."

- Angulation.
- Buccal.
- Facial surface.
- Lingual.
- Retraction.

# Intercuspation.

The interlocking of the cusps of the posterior teeth in the fossae and embrasures of their antagonists.<sup>1</sup>

# Origin.

Industry-standard definition.

# Example.

"The patient's posterior teeth had good intercuspation."

- Antagonist.
- Embrasure.
- Fossa.
- Posterior teeth.

# Interproximal reduction (IPR).

The process of removing a small amount of a tooth's enamel between two adjacent teeth. With the Invisalign System, this procedure can be used in cases of crowding to create space for the patient's tooth alignment.

### Origin.

Definition specific to Align Technology.

### Example.

"The Provider used hand-held abrasive strips for IPR between two central incisors."

#### See also.

• Invisalign System.

# Intrusion.

Displacement of a tooth along its long axis into the alveolus.<sup>2</sup>

# Origin.

Industry-standard definition.

# Example.

"Proclining the incisors results in relative intrusions."

- Alveolus.
- <u>Incisors.</u>
- Proclination.

# Labial.

In the direction of the lips.

# Origin.

Industry-standard definition.

# Example.

"The lips touch the labial surface of the incisors."

- Buccal.
- Facial surface.
- Lingual.

# Lingual.

In the direction of the tongue. Pertains to the lower teeth.

# Origin.

Industry-standard definition.

# Example.

"The tongue touches the lingual surface of the mandibular teeth."

- Buccal.
- Facial surface.
- <u>Labial.</u>
- Palatal.

# Malocclusion.

Any deviation from the normal or ideal occlusion.<sup>1</sup>

# Origin.

Industry-standard definition.

# Example.

"The patient had a case of Class I malocclusion."

- Class I malocclusion.
- Class II malocclusion.
- Class III malocclusion.
- Occlusion.

# Mandible.

The lower jaw.

# Origin.

Industry-standard definition.

# Example.

"A dentist is licensed to treat diseases of the mandible."

### See also.

• Maxilla.

# Mandibular.

Pertaining to the lower jaw.

# Origin.

Industry-standard definition.

# Example.

"The mandibular teeth are in the lower jaw."

### See also.

• Maxillary.

# Mandibular condyle.

Part of the jaw that articulates with the cranium.

### Origin.

Industry-standard definition.

# Example.

"The mandibular condyles move when a person is chewing, for example."

#### See also.

• Mandibular.

# Maxilla.

The upper jaw.

# Origin.

Industry-standard definition.

# Example.

"A dentist is licensed to treat diseases of the maxilla."

# See also.

• Mandible.

# Maxillary.

Pertaining to the upper jaw.

# Origin.

Industry-standard definition.

# Example.

"The maxillary teeth are in the upper jaw."

# See also.

• Mandibular.

# Maximum anchorage.

Anchorage in orthodontics is the degree of resistance to movement offered by a device, anatomic unit or group of teeth, for the purpose of effecting the movement of other teeth.

Treatment objectives requiring little or no movement of the anchorage unit is termed maximum anchorage.

#### Origin.

Industry-standard definition.

#### Example.

"In first premolar extraction treatments, maximum anchorage refers to no or very little mesial movement of the posterior teeth during anterior retraction to close the extraction space."

- Extraction.
- Optimized Anchorage Attachment.
- Optimized Retraction Attachment.

# Mesial.

In the direction of the midline, along the dental arch.

# Origin.

Industry-standard definition.

# Example.

"Two adjacent mesial surfaces touch at the dental midline."

# See also.

• <u>Distal.</u>

# Molar.

One of 12 teeth (six in each jaw) located distal to the bicuspids. The first molars lie behind the premolars, the second molars after the first, and the third molars at the ends of arch. The third molars are sometimes called "wisdom teeth." Molars have 2 to 3 roots and 4 to 5 cusps, and are adapted for chewing.

# Origin.

Industry-standard definition.

### Example.

"The patient's third molars were extracted as part of her orthodontic treatment."

- Premolar.
- Cusp.

# Occlusal.

The direction away from the root of the posterior teeth. Pertains to the chewing surface of the posterior teeth.

# Origin.

Industry-standard definition.

# Example.

"In centric occlusion (CO), the occlusal surfaces of the upper and lower teeth touch."  $\,$ 

- Occlusion.
- Posterior teeth.

# Occlusal interference.

Any premature interocclusal tooth contact that inhibits the remaining occluding surfaces from achieving stable and harmonious contacts.

# Origin.

Industry-standard definition.

# Example.

"Treatment with aligners can be used in combination with occlusal adjustment."

- Aligner.
- Occlusal.

# Occlusal plane.

The plane created by the occlusal surfaces when the teeth meet.

# Origin.

Industry-standard definition.

# Example.

"In the normal position of the teeth, the occlusal plane has a forward slope."

### See also.

• Occlusal.

# Occlusion.

Manner in which the upper and lower teeth meet when the mouth is closed.

- Ideal occlusion is when no malocclusion is present.<sup>2</sup>
- Normal occlusion is optimal occlusion as it exists in real life; minor irregularities may be present.<sup>2</sup>

# Origin.

Industry-standard definition.

### Example.

"One of the goals of orthodontic treatment is to improve occlusion."

#### See also.

• Malocclusion.

# Open bite.

Malocclusion in which some teeth cannot be brought into contact with opposing teeth and no vertical overlap is present.<sup>2</sup>

A functional open bite is a failure to contact in maximum intercuspation even though vertical overlap is present.<sup>2</sup>

### Origin.

Industry-standard definition.

### Example.

"Treatment with aligners can help close a minor anterior open bite with posterior tooth intrusion."

- Anterior teeth.
- Intrusion.
- Intercuspation.
- Posterior teeth.

# Orthodontic appliance.

A device used by a Provider to move a patient's teeth and/or jaw during orthodontic treatment. In relation to the Invisalign System, aligners and retainers are types of orthodontic appliances.

### Origin.

Definition specific to Align Technology.

### Example.

"Invisalign aligners are patented orthodontic appliances."

- Aligner.
- Retainer.

# Orthodontic treatment.

Treatment for malocclusion: the misalignment of teeth and/or incorrect relationship between the teeth of the two dental arches. Treatment with the Invisalign System is a type of orthodontic treatment.

### Origin.

Definition specific to Align Technology.

#### Example.

"Invisalign orthodontic treatment uses thin, clear plastic aligners to straighten teeth."

- Aligner.
- Invisalign System.
- Malocclusion.

# Orthodontist.

A dentist whose licensed dental specialty includes the diagnosis, prevention, interception, and correction of malocclusion.

# Origin.

Industry-standard definition.

# Example.

"After completing the Invisalign Training Course, an orthodontist becomes an Invisalign Provider."

- <u>Dentist.</u>
- Malocclusion.

# Outcome.

The resultant movement of the teeth in orthodontic treatment.

# Origin.

Industry-standard definition.

# Example.

"The Provider achieved the outcome planned for the patient's Invisalign treatment."

# See also.

• Invisalign treatment.

# Overbite.

Vertical overlap of the upper teeth over the lower anterior teeth; usually refers to incisors.<sup>2</sup>

# Origin.

Industry-standard definition.

# Example.

"The patient's overbite was so deep that the palate had marks caused by the lower incisors."

- <u>Incisors.</u>
- Overjet.

# Overcorrection.

In traditional orthodontics, tooth movement beyond the ideal, final position to compensate for potential dental relapse. In terms of Invisalign, overcorrection is tooth movement beyond the ideal final position that is built into the aligner to compensate for the lag in tooth movement and ensure the tooth reaches its desired final position.

### Origin.

Definition specific to Align Technology.

#### Example.

"The Provider requested overcorrection for the rotation of the lower left canine during Refinement."

- Aligner.
- Canine.
- Refinement.
- Relapse.

# Overjet.

Horizontal overlap of the upper and lower teeth; usually refers to incisors; in Class III malocclusion incisor overjet may be recorded as negative.<sup>2</sup>

### Origin.

Industry-standard definition.

# Examples.

- "Children who suck their thumbs tend to develop flared upper teeth and retroclined lower teeth, which creates a large overjet. These children also tend to have an open bite (negative overbite)."
- "If a Class II molar relationship is not corrected during treatment, aligning the teeth in both arches results in a large overjet."

- Anterior teeth.
- Class III malocclusion.
- Incisors.
- Overbite.

# Palatal.

In the direction of the palate. Refers to the upper teeth only.

# Origin.

Industry-standard definition.

# Examples.

- "Fixed palatal expanders are commonly used to treat bilateral posterior crossbites."
- "Upper molars have 3 roots; one palatal root and two buccal roots."

- Molar.
- Retention.

# Palmer notation numbering system.

A tooth numbering system used by orthodontists, primarily in the United Kingdom and Japan. The mouth is divided into four quadrants. Numbers 1 through 8 identify each tooth within the quadrant, with 1 designating centrals moving distally with 8 designating the third molars. When charting, the numbers sit inside an L-shaped symbol to identify the quadrant where they belong – as you look into the patient's mouth. Primary teeth (20) follow the same format but are represented with letters A through E in each quadrant.

# Origin.

Industry-standard definition.

#### Example.

"On the Invisalign prescription form, the Provider requested no tooth movement for the UL4."

- Distal.
- FDI numbering system.
- Invisalign prescription form.
- <u>Universal numbering system.</u>

# Posterior crossbite.

One or more teeth in the maxillary buccal segment are lingual to one or more of the opposing teeth in the madibular buccal segment in maximum intercuspation.<sup>2</sup>

### Origin.

Industry-standard definition.

### Example.

"Molars in posterior crossbite are also typically supra-erupted. Correcting them is difficult because these molars must be intruded first."

- Buccal.
- Crossbite.
- Intercuspation.
- Intrusion.
- Lingual.
- Maxillary.
- Mandibular.
- Molar.

# Posterior teeth.

Maxillary and mandibular premolars and/or permanent and primary molars.

### Origin.

Industry-standard definition.

# Example.

"Generally, chewing occurs on the posterior teeth."

- Anterior teeth.
- Mandibular.
- Maxillary.

# Power arm.

A power arm is an orthodontic auxiliary which allows the specialist to determine and control the point of application of the force to the tooth. Usually a power arm extends vertically to the centre of resistance of the tooth. The elastic engaged on the power arm delivers force at the centre of resistance and produces a bodily movement of the tooth.

#### Origin.

Industry-standard definition.

#### Example.

"To facilitate the use of ancillaries, such as power arms, features in Invisalign aligners accommodate their placement without the need to trim aligners."

- Extraction.
- Optimized Anchorage Attachment.
- Optimized Retraction Attachment.
- Maximum anchorage.

# Premolar.

One of eight teeth (four in each jaw) between the canines and first molars, having 2 cusps. These teeth are adapted for chewing.

# Origin.

Industry-standard definition.

# Example.

"The patient's first premolars were extracted to address severe crowding."

- Cusp.
- Canine.
- Molar.

# Proclination.

A forward tipping of an incisor tooth, usually determined from a cephalometric analysis.<sup>2</sup>

# Origin.

Industry-standard definition.

# Example.

"Proclination helps relieve anterior crowding."

- Cephalometrics.
- Inclination.

# PVS.

Polyvinylsiloxane dental impression material.

# Origin.

Industry-standard definition.

# Example.

"PVS impressions or intra-oral scans are required for submitting orders for Invisalign treatment."

### See also.

• PVS impressions.

# PVS impressions.

Impressions of the patient's upper and lower arch, made using polyvinylsiloxane impression material.

# Origin.

Industry-standard definition.

# Example.

"The Provider took PVS impressions of the patient's arches and sent them in a submission box to Align Technology."

- Invisalign patient records.
- Submission box.

# Relapse.

A partial or full return of malocclusion following orthodontic treatment.

# Origin.

Industry-standard definition.

# Example.

"The patient's crowding condition relapsed when she stopped wearing her retainers."

- Retainer.
- Retention.

# Retainer.

An orthodontic appliance used to maintain tooth position and stabilise teeth following orthodontic treatment. Vivera® retainers are clear thermoplastic retainers designed to be used after completing orthodontic treatment with the Invisalign System or other orthodontic systems.

# Origin.

Industry-standard definition.

## Example.

"The patient wore Vivera retainers for one year after Invisalign treatment."

#### See also.

• Aligner.

# Retention.

Maintenance of corrected occlusion after orthodontic treatment.

# Origin.

Industry-standard definition.

# Example.

"The ultimate orthodontic goal is retention for the life of the patient."

- Occlusion.
- Relapse.
- Retainer.
- <u>Vivera® retainers.</u>

# Retraction.

Lingual bodily translation of the anterior teeth.

# Origin.

Industry-standard definition.

# Example.

"The Provider plans to retract the anterior teeth in order to preserve their torque."

- Anterior teeth.
- Retroclination.
- <u>Torque.</u>
- <u>Translation</u>.

# Retroclination.

A backward inclination of an incisor tooth, usually determined from a cephalometric analysis.<sup>2</sup>

# Origin.

Industry-standard definition.

# Example.

"Retroclination achieves relative extrusion in patients with flared teeth, and also closes the bite."

- Cephalometrics.
- Extrusion.
- Inclination.

# Root tipping.

Change in angulation only around the crown where the root moves more than the crown.

# Origin.

Industry-standard definition.

# Example.

"Attachments are needed to accomplish root tipping with Invisalign treatment."

- Angulation.
- Crown tipping.

# Root torque.

Change of inclination around the tooth crown buccolingually.

# Origin.

Industry-standard definition.

# Example.

"The Power Ridge feature is designed to apply lingual root torque on the upper and lower incisors."

- Buccal.
- Inclination.
- Lingual.

# Rotation.

Moving a tooth around the vertical axis.

# Origin.

Industry-standard definition.

# Example.

"Rotation of cylindrical teeth requires attachments."

# See also.

• Attachment.

# Saggital plane.

A vertical plane passing through the midline of the body, dividing the body into right and left halves.

# Origin.

Industry-standard definition.

## Example.

"Malocclusions are classified as Class I, II and III based on the molar relationship in the sagittal plane."

- Class I malocclusion.
- Class II malocclusion.
- Class III malocclusion.
- Molar.

# TMJ.

Temporomandibular joint.

# Origin.

Industry-standard definition.

# Example.

"Splints are used to alleviate TMJ pain."

# See also.

• Mandible.

# Torque.

The buccal lingual movement (inclination) of a root around a centre of rotation located on the crown or the incisal edge.

# Origin.

Industry-standard definition.

# Example.

"Lingual root torque must be added to improve the inclination of the anterior teeth."

- Anterior teeth.
- Buccal.
- Incisal.
- Inclination.
- Lingual.
- Power Ridge feature.

# Translation.

The type of tooth movement during which all points on a tooth move in the same direction by the same amount. During bodily movement, the centre of rotation can be assumed to lie at infinity.<sup>1</sup>

# Origin.

Industry-standard definition.

# Example.

"Ideally, to close extraction spaces, the teeth should translate bodily to achieve ideal crown and root parallelism."

- <u>Aligner.</u>
- Extraction.

# Treatment plan.

A Provider's overarching plan to treat the patient's malocclusion, which can include Invisalign treatment.

# Origin.

Definition specific to Align Technology.

# Example.

"The Provider's treatment plan included extracting two teeth and using the Invisalign® Full treatment option to straighten the patient's teeth."

- ClinCheck® treatment plan.
- Invisalign treatment.

# Universal numbering system.

A numbering system in which permanent teeth are numbered 1 to 32, starting with the upper right third molar, working around to the upper left third molar, then dropping down to the lower left third molar and working around to the lower right third molar. The 20 primary teeth are lettered, using capital letters A through T, following the same methodology as for the permanent teeth, starting with the upper right second primary molar and ending with the lower right second molar.

### Origin.

Industry-standard definition.

#### Example.

"The Universal numbering system is commonly used in the United States."

- FDI numbering system.
- Palmer notation numbering system.

# X-ray/radiograph.

Dental radiograph of a patient's mouth. Full-mouth series and/or panoramic x-ray of the patient's mouth are optional as part of the Invisalign patient records a Provider submits for an order.

## Origin.

Definition specific to Align Technology.

### Example.

"The Provider uploaded a full-mouth series of x-rays to the Invisalign Doctor Site (IDS) as part of his patient record submissions."

#### See also.

• Invisalign patient records.

# ClinCheck software terms.

#### 2-D tabbed panels.

The 2-D tabbed panels give you a 2-D view of the ClinCheck® treatment plan. They consist of the following four tabs: Changes, Comments, Treatment, and Staging.

#### Animation control bar.

A tool that enables you to play an animation of the ClinCheck treatment plan, showing tooth movement from the initial state to the final tooth position.

#### Approve.

A button on the ClinCheck interface that you click when you have reviewed the ClinCheck treatment plan and you are ready for the aligners to be manufactured.

#### Attachment button.

A basic button on the toolbar that enables you to hide or display attachments on the 3-D model.

#### Basic views.

Buttons on the toolbar that show the following views of the 3-D model:

- Upper button: Upper arch only.
- Lower button: Lower arch only.
- Maxil button: Occlusal maxillary view.
- Right button: Right buccal view.
- Anter button: Anterior view.
- Left button: Left buccal view.
- Mand button: Occlusal mandibular view.

### Bolton Analysis.

Bolton Analysis is located in the Tools section on the ClinCheck toolbar. The Bolton Analysis has been designed after recognising that tooth size was important to ideal occlusion. The Bolton Analysis provided in the ClinCheck software will indicate the deficiency or excess of the ratio for both the molar to molar proportion and also the canine to canine proportion.

#### Changes panel.

A 2-D panel that enables you to enter changes you want made in the ClinCheck® treatment plan. To revise treatment plans you can provide text comments, use 3-D Controls (turning on the 3-D Controls switch) to make adjustments directly on the 3-D model, or combine 3-D adjustments with text comments to Align technicians. Once Align receives your changes, a new ClinCheck treatment plan will soon be ready for your review.

#### ClinCheck 3-D Controls.

3-D Controls are activated by turning on the 3-D Controls switch on the Changes tab. 3-D Controls allow you to make adjustments to the position of individual teeth directly on the 3-D model, and visualise the effects on the whole dentition in real time.

#### ClinCheck 3-D Controls toolbar.

Includes four tools that allow you to make changes to the final tooth position on the 3-D model:

- Tooth adjustments: To make adjustments to the final position of individual teeth (extrusion/intrusion, rotation...).
- Attachments and Precision Cuts: To drag and drop attachments and Precision Cuts on the 3-D model.
- Posterior arch expansion and contraction: To adjust posterior expansion or contraction for upper and/or lower arches.
- IPR and space management: To manage interproximal reduction and spacing for specific contacts.

#### ClinCheck 3-D model.

A 3-D image of the patient's teeth, which you review with the ClinCheck software.

#### ClinCheck display area.

The area in the ClinCheck window that shows the ClinCheck model.

#### ClinCheck file.

The 3-D animation file viewed using the ClinCheck software. The file has a proprietary format. The file extension is .adf.

#### ClinCheck software.

A proprietary software application that displays a 3-D image for visualising tooth movement throughout Invisalign treatment. Through the software, the Provider and Align Technology can exchange information about changes to the Invisalign treatment before the Provider approves it.

#### ClinCheck stage.

A discrete step in a ClinCheck treatment plan to accomplish a specified tooth movement for one or both arches.

#### ClinCheck treatment plan.

Based on the Provider's Invisalign prescription, the ClinCheck treatment plan includes the ClinCheck model, events such as placement of attachments or ridges, any IPR needed in the treatment, any information forms displayed to the Provider by the ClinCheck software, and comments sent from Align. The Provider views the ClinCheck treatment plan with the ClinCheck software, and approves the plan by clicking on the Approve button.

#### ClinCheck window.

The graphical user interface (GUI) for the ClinCheck software, which enables Providers to review a ClinCheck treatment plan. For example, the window includes a 3-D display area that shows a 3-D ClinCheck model, 2-D panels, and a toolbar that aid in ClinCheck treatment plan review.

#### Comments panel.

The Comments panel contains the most recent communication from Align technicians regarding your ClinCheck treatment plan.

### Export.

The Export tab on the ClinCheck toolbar allows you to set up the view and settings of the ClinCheck movie and edit movie information before you export and save it. This feature also enables you to export and save the screenshot.

#### Gallery view.

A drop-down menu on the ClinCheck® toolbar that enables the display of the following views of the 3-D model:

- Single: Single view of the 3-D model.
- Occlusal: Simultaneous visualisation of the maxillary and mandibular occlusal views.
- Dual/Side by Side: Any modifications made using 3-D Controls may be compared side-by-side with the original set up from Align or initial malocclusion.
- Composite: Simultaneous view of left buccal, right buccal, anterior, maxillary occlusal, and mandibular occlusal views.

#### Grid.

Measurement tool in the ClinCheck 3-D display area that can be used to check the symmetry of the arch and perform simple orthodontic calculations. The grid does not provide the ability to measure angular movements such as rotation.

#### Grid button.

Displays the grid.

#### IPR button.

A button on the toolbar that enables you to hide or display IPR information.

#### Movie.

An animation of the treatment plan that you can save and share.

#### Num button.

The Num button enables you to show/hide the display of the tooth numbering on the ClinCheck 3-D model. The default tooth numbering system will change by country.

#### Occlusal Contacts button.

This button enables you to show/hide inter-arch occlusal contacts on the 3-D model. Normal inter-arch occlusal contacts are represented in green; heavy occlusal contacts are represented in red. If there are heavy occlusal contacts you can choose to get them automatically resolved by clicking on the drop-down menu of the Occlusal Contacts button. You can also choose to resolve the heavy contacts manually, using the 3-D Controls and making the adjustments directly on the 3-D model.

#### Overcorrection button.

A button on the toolbar that enables you to view overcorrection in the staging panel and in the 3-D model.

#### Pontic button.

The Pontic button enables you to view the pontics on the 3-D model of the ClinCheck® treatment plan.

#### Reset button.

Using this button, changes made using the 3-D Controls can be reset at any time. There are three options to reset changes: attachment modifications, Precision Cut modifications, and final position modifications. You can select which of these changes you want to reset.

#### Rotation/translation button.

A ClinCheck button that you can use to rotate the 3-D model in any direction or to translate (move) the model without rotating it.

#### Screenshot.

A picture of the 3-D model that you can capture with the Screenshot tool on the Export menu and save to a file.

#### Scrubber.

Tool on the animation control bar in the ClinCheck staging panel that can be moved to any stage in the ClinCheck treatment.

#### Secondary views.

Drop-down list in the View tab of the ClinCheck® toolbar, to show the following nine pre-set views of the 3-D model:

- Right buccal overjet.
- Anterior overjet.
- · Left buccal overjet.
- Right lingual.
- Right distal molar.
- · Lingual incisor.
- Left distal molar.
- Left lingual.
- Posterior.

#### Settings.

A feature in the File tab of the ClinCheck toolbar that enables Providers to adjust the default colours of the ClinCheck 3-D display area, and change movie display information settings.

### Staging panel.

A portion of the ClinCheck window dedicated to controlling the visualisation of the ClinCheck treatment plan per stage. The panel displays a 2-D view of the ClinCheck treatment plan per tooth. The panel shows the following events if they occur in the treatment plan:

- Use of active aligners.
- Use of Passive Aligners.
- IPR.
- · Overcorrection.
- Attachments.

#### Super button.

The Super button enables you to superimpose tooth position at any stage in relation to tooth position at any other stage. The two superimposed tooth positions appear on the ClinCheck model in different colours (blue and white) for a better visualisation between stages.

#### Switch button.

The Switch button is an upgrade functionality in the ClinCheck® software. It allows you to upgrade from Invisalign® i7 to an Invisalign® Lite or Full or Teen treatment option or from Invisalign Lite to an Invisalign® Full or Teen treatment option. This button can be found by opening the patient's ClinCheck file and clicking on the Other Actions button. If you click on the Switch button you are redirected to the Invisalign Doctor Site (IDS) page to finalise the new prescription for Invisalign Lite, Full or Teen treatment option.

#### Teen button.

Teen Virtual Geometry button enables you to view the position of erupting teeth in a treatment plan for an Invisalign® Teen patient.

#### Treatment panel.

One of the 2-D panels that show the following navigation links to areas in the treatment panel:

- Treatment Overview and aligner features overview for Invisalign treatments.
- Movement Assessment for Invisalign treatments.

#### Undo button.

The Undo button allows you to remove the last adjustment you made using the 3-D Controls. You can continue to go backwards on changes made.

#### Zoom.

Increase magnification quickly to see greater detail.

#### Zoom controller.

A tool that enables you to enlarge or reduce the size of the 3-D model in the ClinCheck display area.

# **Europe-specific** definitions.

#### Customer Care.

Dedicated local language telephone support for Invisalign Providers, available to help you and direct your calls within the Align organisation.

#### Clinical Speaker.

Invisalign Provider qualified to speak at Invisalign Training Courses, and/or Study Clubs, Invisalign Provider Workshops (IPW's), forums, Invisalign Summits, etc. Clinical Speakers are eligible to a special Find an Invisalign Provider annotation.

#### Clinical support.

Align professionals who are available for support to Invisalign Providers in regards to reviewing ClinCheck® treatment plans or other clinical questions on Invisalign treatment options.

#### European Advisory Board.

Group of Orthodontists who are considered "key opinion leaders" in their country. This group of Providers provide feedback about Invisalign initiatives related to innovations, education, universities, local societies, research topics and grants.

### Find an Invisalign Provider.

On-line search engine for potential Invisalign patients to find a suitable Invisalign Provider in their geographical region.

#### Find an Invisalign Provider annotation.

Recognition awarded to Providers when they commit to or submit a higher number of Invisalign treatments. Each annotation is marked with a matching symbol in Find an Invisalign Provider. The higher the commitment the higher the ranking and annotation awarded in Find an Invisalign Provider.

# Invisalign E-Connect session.

On-line interactive workshop coordinated by an Invisalign Clinical Advisor to share tips and techniques about the Invisalign Practice. To take the most out of its interactivity, E-Connects are conceived for a reduced number of Invisalign Providers (5 to 10 Providers per session).

### Invisalign European Summit.

2-3 day event including lectures as well as social activities, held for Invisalign Providers.

#### Invisalign Forum.

Advanced full-day workshop for experienced Invisalign Providers, focused on intermediate and complex orthodontic treatment types usually with multiple European Clinical Speakers.

#### Invisalign Study Club.

Advanced half-day workshop for Invisalign Providers, focus on simple to intermediate orthodontic treatment types.

#### Invisalign Training Course.

Seminar spread over 3 days which a Provider needs to attend in order to become an Invisalign Provider.

### Invisalign University Training Course.

1-day course, part of the 24-month Invisalign University Programme, which enables post-graduate orthodontic trainees to begin using the Invisalign System before completion of their university education.

#### Team Start.

Opportunity for the Territory Manager to visit newly trained Invisalign Providers (and their teams) to ensure they are fully informed of the Invisalign protocols, procedures and how to submit their first Invisalign treatment successfully.

### Technical support.

Align professionals who are available to support our customers resolve technical, software or hardware compatibility issues in conjunction with proprietary Align programmes.

# References.

- 1. Daskalogiannakis J. Glossary of Orthodontic Terms, 2000
- 2. University of Illinois at Chicago, UIC College of Dentistry. Glossary of Commonly-Used Terms in Orthodontics, 2010

