

## Malocclusion Severity Assessment

Patient Name \_\_\_\_\_

ID# \_\_\_\_\_ Provider Name \_\_\_\_\_

### INTRA-ARCH DEVIATION

Score Teeth Affected Only		Missing	Crowded	Rotated	Spacing Open	Spacing Closed	No.	Point Value	Score
Maxilla	Ant							X2	
	Post							X1	
Mandible	Ant							X1	
	Post							X1	
Total Score									

Ant = Anterior teeth (4 incisors); Post = Posterior teeth = (Include canine, premolars and first molar). No. = number of teeth affected

### INTER-ARCH DEVIATION

#### *Anterior Segment*

Score Maxillary Teeth Affected Only Except Overbite*	Overjet	Overbite	Crossbite	Openbite	No.	P.V.	Score
						X2	
Total Score							

\*Score maxillary or mandibular incisors. No. = number of teeth affected; P.V. = point value 2.

#### *Posterior Segment*

Score Teeth Affected Only	Related Mandibular to Maxillary Teeth				Score Affected Maxillary Teeth Only				No.	P.V.	Score
	Distal		Mesial		Crossbite		Openbite				
	Right	Left	Right	Left	Right	Left	Right	Left			
Canine											
1st Premolar											
2nd Premolar											
1st Molar											
Total Score											
Grand Total											

No. = number; P.V. = point value;

# Orthodontics

## Malocclusion Severity Assessment

### Summary of Instructions

Score: 2 points for each maxillary anterior tooth affected. 1 point for each mandibular incisor and all posterior teeth affected.

1. Missing teeth. Count the teeth; remaining roots of teeth are scored as a missing tooth.
2. Crowding. Score the points when there is not sufficient space to align a tooth without moving other teeth in the same arch.
3. Rotation. Score the points when one or both proximal surfaces are seen in anterior teeth, or all or part of the buccal or lingual surface in posterior teeth are turned to a proximal surface of an adjacent tooth. The space needed for tooth alignment is sufficient in rotated teeth for their proper alignment.
4. Spacing. Score teeth, not spacing. Score the points when:
  - a. Open spacing. One or both interproximal tooth surfaces and adjacent papilla are visible in an anterior tooth; both interproximal surfaces and papilla are visible in a posterior tooth.
  - b. Closed spacing. Space is not sufficient to permit eruption of a tooth that is partially eruption.
5. Overjet. Score the points when the mandibular incisors occlude on or over the maxillary mucosa in back of the maxillary incisors, and the mandibular incisor crowns show labial axial inclination.
6. Overbite. Score the points when the maxillary incisors occlude on or opposite labial gingival mucosa of the mandibular incisor teeth.
7. Cross-bite. Score the points when the maxillary incisors occlude lingual to mandibular incisors, and the posterior teeth occlude entirely out of occlusal contact.
8. Open-bite. Score the points when the teeth occlude above the opposing incisal edges and above the opposing occlusal surfaces of posterior teeth.
9. Mesiodistal deviations. Relate mandibular to opposing maxillary teeth by full cusp for molars; buccal cusps of premolars and canines occlude mesial or distal to accepted normal interdental area of maxillary premolars.

## **Instruction for using the “Malocclusion Severity Assessment Record”**

### ***Introduction***

This record (not an examination) is intended to assess the severity of the malocclusion according to the criteria and weights (point values) assigned to them. The weights are based on tested clinical orthodontic values from the standpoint of the effect of the malocclusion on dental health and function. The assessment is not directed to ascertain the presence of occlusal deviations ordinarily included in epidemiological surveys of malocclusion. Etiology, diagnosis, planning, complexity of treatment, and prognosis are not factors in this assessment. Assessments can be made from casts or directly in the mouth. An additional assessment record form is provided for direct mouth assessment of mandibular function, facial asymmetry, and lower lip position.

### ***Intra-Arch Deviations***

The casts are placed, teeth upward, in direct view. When the assessment is made directly in the mouth, a mouth mirror is used. The number of teeth affected is entered as indicated in the “Malocclusion Severity Assessment Record.” The scoring can be entered later.

1. Anterior segment: A value of 2 points is scored for each tooth affected in the maxilla and 1 point in the mandible.
  - a. Missing teeth are assessed by actual count. A tooth with only the roots remaining is scored as missing.
  - b. Crowded refers to tooth irregularities that interrupt the continuity of the dental arch when the space is insufficient for alignment without moving other teeth in the arch. Crowded teeth may or may not also be rotated. A tooth scored as crowded is not scored also as rotated.
  - c. Rotated refers to tooth irregularities that interrupt the continuity of the dental arch but there is sufficient space for alignment. A tooth scored as rotated is not scored also as crowded or spaced.
  - d. Spacing
    - i. Open spacing refers to tooth separation that exposes to view the interdental papilla on the alveolar crest. Score the number of papilla visible (not teeth).
    - ii. Closed spacing refers to partial space closure that will not permit a tooth to complete its eruption without moving other teeth in the same arch. Score the number of teeth affected.
2. Posterior segment: A value of 1 point is scored of each tooth affected.
  - a. Missing teeth are assessed by actual count. A tooth with only the roots remaining is scored as missing.
  - b. Crowded refers to tooth irregularities that interrupt the continuity of the dental arch when the space is insufficient for alignment. Crowded teeth may or may not also be rotated. A tooth scored as crowded is not scored also as rotated.
  - c. Rotated refers to tooth irregularities that interrupt the continuity of the dental arch

and all or part of the lingual or buccal surface faces some part or all of the adjacent proximal tooth surfaces. There is sufficient space for alignment. A tooth scored as rotated is not scored also as crowded.

- d. Spacing
  - i. Open spacing refers to interproximal tooth separation that exposes to view the mesial and distal papilla of a tooth. Score the number of teeth affected (not the spaces).
  - ii. Closed spacing refers to partial space closure that will not permit a tooth to erupt without moving other teeth in the same arch. Score the number of teeth affected.

## **A. Inter-Arch Deviations**

When casts are assessed for inter-arch deviations, they first are approximated in terminal occlusion. Each side assessed is held in direct view. When the assessment is made in the mouth, terminal occlusion is obtained by bending the head backward as far as possible while the mouth is held wide open. The tongue is bent upward and backward on the palate and the teeth are quickly brought to terminal occlusion before the head is again brought downward. A mouth mirror is used to obtain a more direct view in the mouth.

1. Anterior segment: A value of 2 points is scored for each affected maxillary tooth only.
  - a. Overjet refers to labial axial inclination of the maxillary incisors in relation to the mandibular incisor, permitting the latter to occlude on or over the palatal mucosa. If the maxillary incisors are not in labial axial inclination, the condition is scored as overbite only.
  - b. Overbite refers to the occlusion of the maxillary incisors on or over the labial gingival mucosa of the mandibular incisors, while the mandibular incisors themselves occlude on or over the palatal mucosa in back of the maxillary incisors. When the maxillary incisors are in labial axial inclination, the deviation is scored also as overjet.
  - c. Cross-bite refers to maxillary incisors that occlude lingual to their opponents in the opposing jaw, when the teeth are in terminal occlusion.
  - d. Open-bite refers to vertical interarch dental separation between the upper and lower incisors when the posterior teeth are in terminal occlusion. Open-bite is scored in addition to overjet if the maxillary incisor teeth are above the incisal edges of the mandibular incisors when the posterior teeth are in terminal occlusion. Edge-to-edge occlusion is not assessed as open-bite.
2. Posterior segment: A value of 1 point is scored for each affected tooth.
  - a. Cross-bite refers to teeth in the buccal segment that are positioned lingually or buccally out of entire occlusal contact with the teeth in the opposing jaw when the dental arches are in terminal occlusion.