

Introduction

Handicapping malocclusion and/or handicapping dentofacial deformity are conditions that constitute a hazard to the maintenance of oral health and interfere with the well-being of the patient by adversely affecting dentofacial function or speech.

The Connecticut Dental Health Partnership uses the J.A. Salzmann, Handicapping Malocclusion Assessment Record to determine the severity of malocclusion. The completed assessment record is used to calculate an index number ("Salzmann Scoring Index") which is one criteria used in the evaluation of the orthodontic case.

Below are the Salzmann Index definitions as well as the handicapping definitions that are used when determining if a HUSKY Health client has a handicapping malocclusion. Each section described below relates to a section of the Salzmann Scoring Index Sheet (see figure 3).

Intra-arch Deviations, General Notes:

The number of teeth affected is entered in section "E. Intra-arch Deviations" on the Handicapping Malocclusion Assessment Record.

- Missing teeth are scored by the actual count of teeth. Any remaining roots are scored as missing.
- Crowded teeth mean insufficient space of alignment without moving other teeth in the arch. Crowded refers to tooth irregularities that interrupt the continuity of the dental arch when the space is insufficient for alignment.
- Rotated anterior tooth means that there is insufficient space for alignment of teeth so the teeth are maligned as to interrupt the continuity of the arc of the dental arch.
- Open spacing is when the crest of the interdental papilla or ridge is visible. Closed spacing means the space is insufficient for the complete eruption of a tooth.

Intra-arch Deviations, Maxillary & Mandibular Anterior Teeth:

- The maximum number of Maxillary or Mandibular Anterior teeth scored is 4 each.
- The maximum score for line one is 8 and for line three is 4.
- A tooth **cannot** be scored as both rotated and crowded.
- For open spacing, count spaces not teeth. A maximum of 3 spaces is allowed in each of the Maxillary and Mandibular Anterior scoring.

Intra-arch Deviations, Maxillary & Mandibular Posterior Teeth:

- A missing tooth must be congenitally missing. Remaining roots are scored as missing.
- Crowding is defined as insufficient space for alignment without moving other teeth in the arch. Crowded refers to tooth irregularities that interrupt the continuity of the dental arch when the space is insufficient for alignment. A tooth scored as crowded is not concomitantly scored as rotated. The maximum of 2 teeth per quadrant per arch can be counted.
- Rotation denotes the buccal or lingual surface of the tooth wholly or partially faces the proximal surface of adjacent teeth which is 45 degrees or greater.
- Closed spacing is defined as insufficient space for complete eruption of tooth.
- Rotated posterior teeth: the buccal or lingual surface of the tooth wholly or partially faces proximal surface of adjacent teeth which is 45 degrees or more;
- Open spacing: The crest of the interdental papilla is visible. Score each papilla in the incisor section; score the posterior teeth when both adjacent crests of the interproximal papillae are visible. The maximum of 2 teeth per quadrant per arch can be scored; and
- Closed spacing: The space is insufficient for complete eruption of a tooth. Cannot have closed spacing and crowding for the same teeth.

The top of Figure 1 shows an example of crowding, spacing and missing teeth. The bottom of Figure 1 shows anterior spacing.

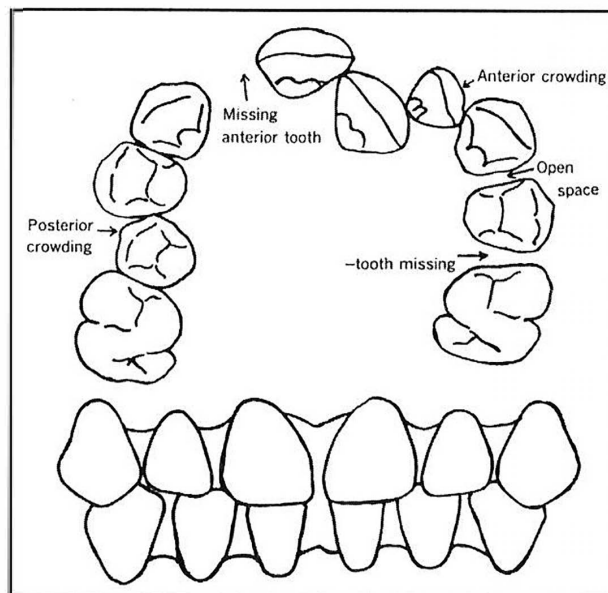


Figure 1

Inter-arch Deviations, Anterior Segment:

The number of teeth affected is entered in section "F. Inter-arch Deviations, 1. anterior Segment" on the Handicapping Malocclusion Assessment Record.

- Overjet is the labioaxial inclination of maxillary incisor teeth with mandibular incisors occluding on or over palatal mucosa. For an incisor to be scored as having excess overjet, any portion of the maxillary incisal edge must be at least 3mm ahead of the opposing lower incisor, measured from the labial of mandibular incisor to the lingual of the maxillary incisor.
- Overbite is when the maxillary incisors occlude on or opposite to the labiogingival mucosa or the mandibular incisors occlude **DIRECTLY** on the palatal mucosa. Overbite is scored with teeth 7, 8, 9, 10 that are in a Class II Div. 2 occlusion when these teeth touch the lower labial gingiva. Overbite can only have a maximum number of 4 teeth.
- Overjet and overbite will score both when the mandibular incisors occlude directly on the palatal mucosa and the maxillary incisors are in overjet.
- Open bite is the vertical separation between teeth in opposing dental arches when the rest of the teeth are in terminal occlusion. Edge-to-edge occlusion is not scored as open bite or a cross bite.

Figure 2 shows an example of A) Overjet, where the maxillary incisors are labially inclined to the mandibular incisors while the mandibular incisors are over the palatal mucosa, B) Overbite, where the mandibular incisors are on the palatal mucosa and C) Overjet with Overbite, where the maxillary incisors are labially inclined and the mandibular incisors are on the palatal mucosa.

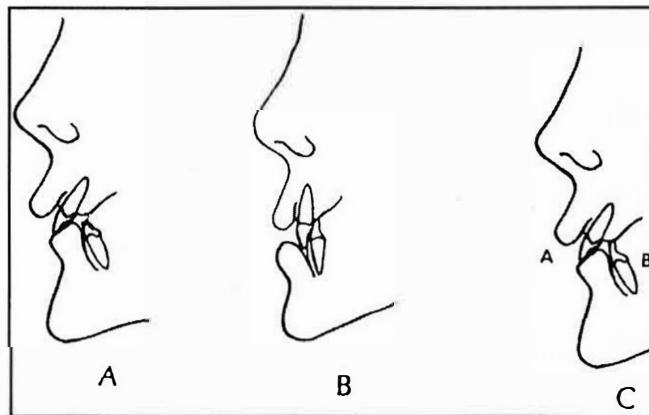


Figure 2

- Incisor Crossbite is when the maxillary incisors are lingual to the mandibular incisors when posterior teeth are in terminal occlusion.
- A cuspid is in crossbite when the buccal surface of the maxillary cuspid is lingual to the lingual surface of the mandibular cuspid. Premolars and molars are either buccally or lingually placed in relation to the opposing teeth. In buccal crossbite the palatal surface of the maxillary tooth must be buccal to the buccal surface of the mandibular tooth. In palatal crossbite the maxillary tooth must at least occlude in the central fossa of the mandibular tooth. Edge to edge is not considered to be in crossbite.
- Erupting teeth cannot be counted as an open bite. The tooth must be fully erupted.

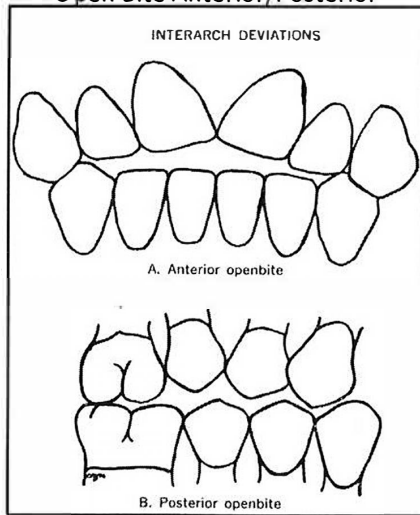
Inter-Arch Deviations, Posterior Segment:

The number of teeth affected is entered in section "F. Inter-arch Deviations, 2. Posterior Segment" on the Handicapping Malocclusion Assessment Record.

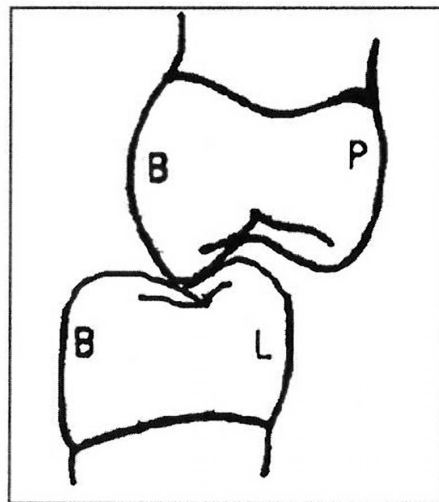
- Relate the mandibular teeth to the maxillary teeth.
 - A. Distal Category is for Class II
 - B. Mesial Category is for Class III
- A flush terminal plane neither Class II nor III.
- The opposing cusp must be past the tip of the cusp of the tooth in the opposing arch.

Inter-arch Deviations

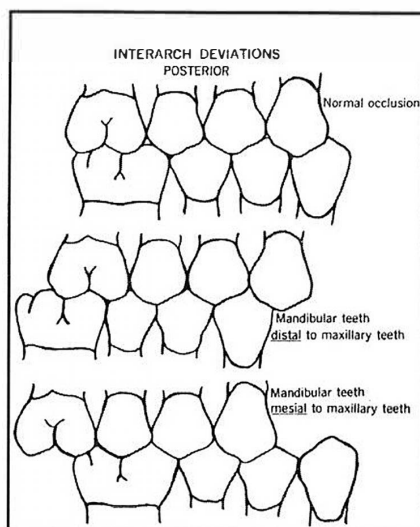
Open Bite Anterior/Posterior



Posterior Cross Bite



Mesio - Distal Deviations



Member Name :	ID#:	D.O.B.

PRELIMINARY HANDICAPPING MALOCCLUSION ASSESSMENT RECORD
 (Part III: Sections "E", "F" and "G" are completed by the orthodontist.
EARLY AND PERIODIC SCREENING DIAGNOSIS AND TREATMENT (EPSDT) PROGRAM
 Please mark the affected tooth numbers.)

E. INTRA-ARCH DEVIATION

SCORE TEETH AFFECTED ONLY	MISSING	CROWDED	ROTATED	SPACING		NO.	POINT VALUE	SCORE
				OPEN	CLOSED			
MAXILLA	Ant	7 8 9 10	7 8 9 10	7 8 9 10	7 8 9 10		X 2	
	Post	3 4 5 6 14 13 12 11	3 4 5 6 14 13 12 11	3 4 5 6 14 13 12 11	3 4 5 6 14 13 12 11		X 1	
MANDIBLE	Ant	23 24 25 26	23 24 25 26	23 24 25 26	23 24 25 26		X 1	
	Post	19 20 21 22 30 29 28 27	19 20 21 22 30 29 28 27	19 20 21 22 30 29 28 27	19 20 21 22 30 29 28 27		X 1	
Ant = anterior teeth (4 incisors). Post = posterior teeth (including canine, premolars, and first molar). No. = number of teeth affected.							SECTION SCORE	

F. INTER-ARCH DEVIATION

1. Anterior Segment

SCORE MAXILLARY TEETH AFFECTED ONLY EXCEPT OVERBITE*	OVERJET	OVERBITE(MAX 4 TEETH)	CROSSBITE	OPENBITE	NO.	POINT VALUE	SCORE	
	7 8 9 10	7 8 9 10 23 24 25 26	7 8 9 10	7 8 9 10				
*Score maxillary or mandibular incisors. No. = number of teeth affected.							SECTION SCORE	

2. Posterior Segments

SCORE TEETH AFFECTED ONLY	RELATE MANDIBULAR TO MAXILLARY TEETH				SCORE AFFECTED MAXILLARY TEETH ONLY				NO.	POINT VALUE	SCORE
	DISTAL		MESIAL		CROSSBITE		OPENBITE				
	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT			
Canine										X 1	
1 st Premolar										X 1	
2 nd Premolar										X 1	
1 st Molar										X 1	
SECTION SCORE											
GRAND TOTAL											

G. OTHER DEVIATIONS (use additional sheet if necessary)

The Department shall consider additional information of a substantial nature about the presence of other severe deviations affecting the mouth and underlying structures. Other deviations shall be considered severe if, left untreated; they would cause irreversible damage to the teeth and underlying structures. Is there presence of other severe deviations affecting the mouth and underlying structures? (If any, comment below). Y / N

CRITERIA FOR APPROVAL OF INTERCEPTIVE ORTHODONTIC TREATMENT

- Deep impinging overbite** (lower incisors hit palatal tissue behind upper incisors or upper incisors hit labial tissue of lower incisors) Y / N
- Functional Deviation** - Midline shift of at least a half lower incisor with unilateral crossbite Y / N
- Class III Malocclusion** - Lower jaw growth exceeds growth of upper jaw with a negative ANB difference and the 4 upper incisors are in crossbite Y / N
- Gingival Recession** - Anterior crossbite which causes gingival recession of 2 to 3 millimeters as compared to adjoining teeth as evidenced on study models Y / N
- Severe overjet** of more than 9 millimeters Y / N
- Open Bite** - Minimum of 5 millimeters, or severe protrusion of at least 6 millimeters with anterior spacing present Y / N
- Anterior impacted tooth or impacted canine present** Y / N

Records Submitted: FMS Panorex Models Photographs Clads Other: _____

Date of Records: _____

Comments: _____

ASSESSMENT RECORD Prepared by:

Signature of Reviewer

Date

Printed Name of Reviewer

Please submit your completed Assessment, diagnostic materials and claim form to:

Orthodontic Case Review
 C/O CT Dental Health Partnership
 195 Scott Swamp Road
 Farmington, CT 06032

Comments Section:

Any additional deviations should be entered in "G. Other Deviations, Comments" on the Handicapping Malocclusion Assessment Record.

A narrative only applies to additional clinical considerations to justify the case qualifying for treatment. An example is the patient is under therapy from a licensed child psychologist or psychiatrist for the malocclusion. Additional information, a standard set of eight photos, x-rays, etc. that support the narrative must be included. Do not send the treatment plan or mechanics to be employed as these do not alter the scoring of the case.

X-rays must be printed on photo quality paper. Copy paper prints will not be accepted. The panoramic radiograph must be of diagnostic quality and relevant time-wise in relation to the models submitted. All submitted models must be of diagnostic quality and trimmed in occlusion, with unattached wax bite, to ABO guidelines. Poorly trimmed models and models with broken teeth will be returned ungraded.

Criteria for Approval D8020 - Limited Orthodontic Treatment of the Transitional Dentition:

Code D8020 is to be used for limited treatment of the transitional dentition for appliances such as Bite Planes, Rapid Palatal Expanders (RPE), Face Mask treatment, and Class II correctors. In addition, removable appliances to correct a tooth in crossbite and removable devices to regain space lost from early extraction of a second primary molar. To qualify for approval the following should be met:

- Bite Planes: the patient must show evidence of deep impinging overbite.
- RPE: the submitting orthodontist must provide proof of functional deviation.
- Face Mask: must submit a lateral view radiograph showing the mandibular growth exceeding the growth of the upper jaw. Patient should have a negative ANB difference as determined by a cephalometric x-ray.
- Correction of tooth in crossbite: the crossbite must be causing gingival recession as evidenced on study models.
- Class II correctors: the study models should show severe overjet of more than 9 mm and a full Class II molar occlusion.

Criteria for Approval D8220 Fixed Appliance Therapy:

Code D8220 is for the use of fixed appliance therapy in order to correct habits such as tongue thrusting and thumb sucking. Approval is based on the following:

- For correction of thumb sucking habits, models should show evidence of open bite or severe protrusion.
- For correction of tongue thrusting habits, models should show evidence of severe open bite.

Note: Clients who complete Phase 1 treatment must meet sufficient points when submitting for Phase II treatment.

Approvals for Scores Under 26 Points:

It is possible for orthodontic treatment to be approved under 26 points if any of the following criteria are met:

- Impactions of incisors, premolars and second molars requiring a surgical exposure procedure.
Posterior impactions that are better off being extracted, such as totally blocked out or impacted second premolars caused by early loss of deciduous second molars will not be approved.
Impacted mandibular cuspids that cannot be brought into the dental arch will not be approved.
- Functional deviations affecting the mouth and underlying structures.
- A letter from a licensed child psychologist or psychiatrist stating that an on-going emotional problem is caused by patient's aesthetic appearance.
- A complete anterior crossbite causing gingival recession to the lower anterior teeth.
- Skeletal Class III malocclusion: a negative ANB difference greater than 3 degrees as determined by a cephalometric x-ray.

- Anterior Impactions including central incisors, lateral incisors and canines in the maxillary and mandibular arches. This condition is considered to be a handicapping malocclusion.
- An overjet greater than 9mm: this is recorded with the patient in the centric occlusion and measured from the labial of the lower incisor to the lingual of the upper incisor. The measurement could apply to a protruding single tooth as well as to the whole arch. The measurement is read and rounded off to the nearest millimeter and entered on the form. This condition is considered to be a handicapping malocclusion.
- Brodie bite malocclusions, either unilateral or bilateral, with the first bicuspid, second bicuspid, and first molar in total buccal crossbite will be considered to be a handicapping malocclusion.

The Orthodontic Qualifying Score:

In order to qualify for orthodontic coverage in the HUSKY Health Program, the minimum scoring for medical necessity will be 26 points and greater, which will make Connecticut consistent with other states' minimum scoring requirement.

A strict adherence to the Salzmann standard must be observed by dental providers. The mandatory standards are posted to the CTDHP Web site at www.CTDHP.com under the "Provider Partners" section.

Approval of cases may be denied or delayed if the following information is not included at the time of submission for case evaluation:

- Any medical/behavioral health conditions should be recorded on the Salzman scoring sheet *with supporting documentation* at the time of submission.
- Radiographs must be of diagnostic quality or they will not be reimbursed.
- Diagnostic casts must be properly trimmed or they will not be reimbursed.

Reimbursements for radiographs and the diagnostic casts of clients will only occur for properly scored Salzman Indices with scores **equal to or greater than 24 points**. If the score is **less than 24 points** as determined on the assessment done by the CTDHP orthodontic consultant, then reimbursement for the radiographs or diagnostic casts will be denied.

Cases may either be submitted electronically or in physical form. For information on how to submit orthodontic cases electronically, please contact CTDHP at 860-507-2329 or physical cases may be mailed to:

Orthodontic Case Review
c/o BeneCare Dental Plans
195 Scott Swamp Road, Suite 101
Farmington, CT 06032