

Need some help with IOTN?

The Index of Orthodontic Treatment Need (IOTN) is a scoring system designed to indicate different levels of need for orthodontic treatment. It is made up of two components.

1. A Dental Health Component (DHC) which identifies the specific element of the occlusion which may require treatment. This scores from 1 (no need for treatment) through to 5 (greatest need for treatment).
2. An aesthetic component (AC) which grades the anterior teeth on their dental 'attractiveness'.

The basic rule is to offer referral for all the IOTN 4's and 5's. The 3's are the borderline area and this is where it can be tricky.

You will need

- a list identifying the different categories
- an aesthetic component chart
- a ruler

Remember you are only looking to identify the single **worst** occlusal trait in order to score it. What is the worst aspect (to your eye) of the occlusion that makes you think your patient needs an orthodontic referral?

Is it: **M**issing teeth
Overjet
Crossbite
Displacement of contact points (crowding)
Overbite

This list of five traits is the hierarchy of the scoring system. Remember the acronym!!

MOCDO

When you examine the patient, think **MOCDO** and that will help you check the occlusion methodically in a way that will pick up any key IOTN scoring trait.

1. Is there a **Missing tooth**?
 Any missing tooth will automatically qualify IOTN 5 (if unerupted/impacted). Is there hypodontia? That's a 4.
2. No missing teeth? Then your next job is to look at and measure the **Overjet**.
 Is it more than 6mm? Up to and including 6mm won't count unless the lips are incompetent (then it's a 3 – see below). Any overjet over 6mm will be IOTN 4 (up to and including 9mm) or IOTN 5 if above 9mm.
3. No significant overjet? Then is there a **Crossbite**? Either anterior or posterior, it will only score IOTN 4 if it causes a functional shift (displacement) on closing, of more than 2mm between ICP and RCP.

4. No crossbite? Then look at the crowding (**Displacement** in **MOCDO**). Measure the distance between the contact points on the two most displaced adjacent teeth. More than 4mm? IOTN 4.

Between 2 and 4mm? IOTN 3.

Now, there are two approaches to IOTN 3 cases. The strictly accurate one is that you then need to score the aesthetic index and only if it scores 6 or more can you refer. A possibly more pragmatic approach might be to refer all 3's for a specialist assessment and let the orthodontist make that judgement.

5. Carrying on with your assessment, what if there are no missing teeth, marked overjet, crossbite or displacement of contact points (crowding)? The final main category is **Overbite**. This will only score IOTN 4 if it's deep and complete, with actual trauma to the palatal or labial tissues.

The full DHC list also gives a number of other minor categories. If you can't find the particular trait that concerns you in the basic list above, then check the full spec.

In most if not all cases your local specialist orthodontist will be happy to help with any queries you have and help you with IOTN scoring if necessary.

[With grateful thanks to Alison Newlyn for the original text the above guide was derived from]

	M	O	C	D	O
IOTN 5	Cleft lip & Palate Impacted / Ectopic teeth Hypodontia >4 missing teeth	> 9mm Overjet > - 3.5mm reverse Overjet			
IOTN 4	Supernumeraries Hypodontia <4 missing teeth	>6mm Overjet -2mm to -3.5mm reverse Overjet	Crossbite with >2mm displacement between RCP and ICP	> 4mm contact point displacement	Deep Overbite + Trauma >4mm Anterior Open Bite
IOTN 3		>4mm Overjet <-2mm reverse Overjet	Crossbite with >1mm displacement between RCP and ICP	<4mm contact point displacement	Deep Overbite (no trauma) <4mm Anterior Open Bite
IOTN 2		>2mm Overjet		<2mm contact point displacement	
IOTN 1				Minimal irregularity	