2014

Commissioning guide:

Temporomandibular joint disorders

Sponsoring Organisation: **British Association of Oral and Maxillofacial Surgeons**
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Glossary

Term	Definition
TMJ	Temporomandibular (jaw) joint: the articulation between the lower jaw and the base of the skull.
Degenerative joint disease	Degeneration of a joint usually due to arthritis
Maxillofacial technical support	Support/work provided by a Maxillofacial Technologist e.g. bite splints/bite guards.

Introduction

Temporomandibular joint disorders (TMD)

The aim of this guidance is to provide clarity to commissioning organisations as to the services which should be available to patients with TMD. This guidance aims to address problems that have arisen in recent years with regard to over referral to secondary care of patients with simple problems that could be treated in the community and with others who suffer from a post code lottery with regard to funding of more complex procedures.

The temporomandibular joint (Jaw Joint) is prone to a range of disorders that vary from minor discomfort to those requiring replacement of the joint.

This document is intended to provide guidance relating to those aspects of TMD that are commissioned in the secondary care setting, acknowledging that many patients will be managed predominantly in primary care.

DIAGRAM TO SHOW THE TEMPOROMANDIBULAR JOINT AND RELATED STRUCTURES

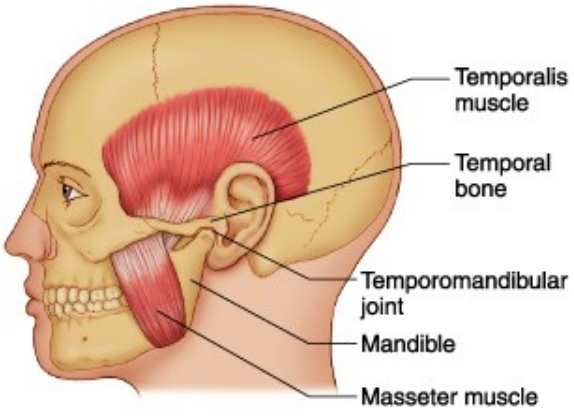

Image from *YOUR SMILE*, the Dental Patients Magazine

Of these disorders the most common is a painful muscular disorder that affects up to 30% of adults at some time of life. Most patients get better without intervention, although many seek help from primary care (doctors or

dentists). Some conditions may require further treatment if they fail to improve.[1, 2]

A smaller number of cases require surgery. This can range from simple injections into the joint, to replacement of the joint itself.[3] Prior to finalising a treatment plan these patients require investigations such as MRI scanning.[4, 5] The investigations and surgery should be carried out by, an appropriately trained oral &maxillofacial surgeon with a specialist interest in TMJ surgery.[3]

Appropriate commissioning of services for TMD is important because:

- Currently there is a perception that geographical differences of secondary care treatments and referral rates exist across the country.
- Patients should be able to access high quality appropriate care regardless of where they live
- Many patients improve with limited or no treatment (which can be provided in primary care).
- Approximately 75% of patients requesting treatment will improve over 3-6 months with simple outpatient management.

This guide has used the best available evidence to outline the optimal patient pathway. Where evidence was lacking a consensus of opinion was gathered from a wide array of stakeholders.

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1 High Value Care Pathway for TMD

This pathway accepts that the majority of patients presenting with TMD can be managed in Primary Care, but some will require access to Secondary Care Services. Only a small minority will require surgical management.[1, 11,12]

1.1 Primary Care

Patients with TMJ disorders may present either to a dentist or their general medical practitioner. This difference may influence their initial management.

General Dental Practitioner (GDP)

- Patients presenting to their dentist with pain, clicking or reduced function in the jaw should be assessed by the dentist and a diagnosis made.
- Initially they should receive simple measures such as advice about habits (Clenching/grinding of the teeth) Analgesic advice and or bite splints where appropriate.
- If resolution of symptoms does not occur within approximately six months consideration should be given to referral to a specialist for further advice/management. If there is concern that symptoms indicate a more serious condition referral should be made for specialist assessment.
- The vast majority of patients with clicks require reassurance that the condition is not serious and is usually

self-limiting. A few benefit from simple exercises; a small proportion may need occlusal coverage (bite splint), less than 20%require referral.[1]

General Medical Practitioner (GP)

- Presenting to their GP should be referred to their dentist in the first instance for analgesic advice and bite splints where required.
- Those patients with a pre-existing history of e.g. Inflammatory joint disease however, should be referred direct to an appropriate secondary care specialist for investigation/ management.

Accident and Emergency Department (A/E)

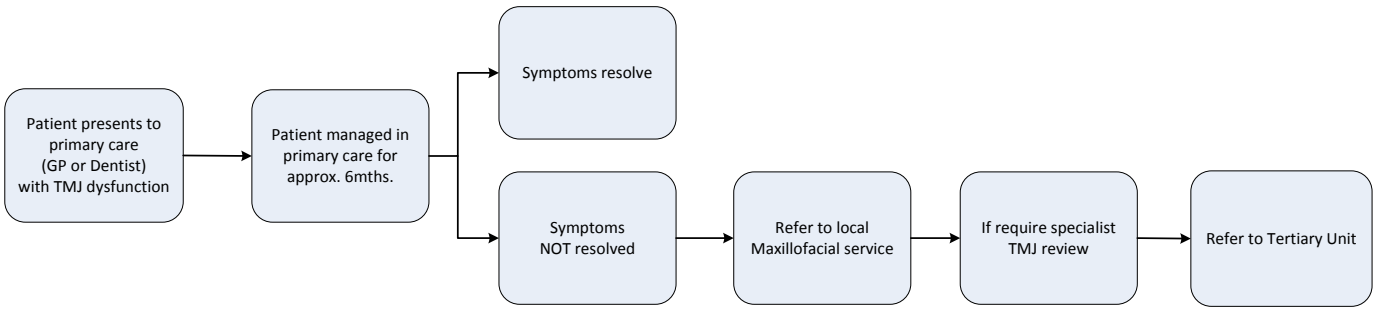
- A small number of patients will present to Accident & Emergency departments, with acute pain, TMJ fractures or dislocation of the joint.
- Most of these patients will require trauma services which are not within the scope of the document.
- Patient with TMJ problems which are not traumatic in origin should be directed to their dentist, general practitioner or to a specialist for advice/management.

Criteria for referral of patients with TMJ dysfunction to Secondary care

Consideration should be given to referring a patient to the local Oral & Maxillofacial services if they meet any of the following criteria:

- Refractory TMJ dysfunction- defined as dysfunction that has failed to respond to conservative or primary care measures after 6 months
- Limitation or progressive difficulty in mouth opening
- Persistent inability to manage a normal diet
- Pain or reduced jaw function in patients with known rheumatic joint disease
- Recurrent dislocation of TMJ and or associated syndromes (e.g. Ehlers-Danlos)

Proposed referral/ management pathway



[1] This data is at present an approximation and there is limited accurate data available at present. This data will be made possible in the near future through the care.data work being carried out by The Health and Social Care Information Centre (HSCIC)

1.2 Secondary care services

Patients referred to specialist services for management of their jaw joint disorder should be able to expect a high quality service from an appropriately trained surgeon. For most patients this can be provided by the local Oral & Maxillofacial service.

A very small number of patients may benefit from onward referral to a centre with a special interest, which may include joint replacement surgery.

1.3 Specialised Oral & Maxillofacial services

Currently there are approximately 16 oral & maxillofacial surgeons in the UK who undertake the range of more complex surgical interventions. These specialists have been through the conventional UK training pathway in Oral & Maxillofacial surgery and will have sub specialised with an interest in TMJ disorders. This level of provision is probably appropriate to meet current demand while maintaining the skills and experience of individual surgeons.[6,7]

Some patients with complex TMJ cases should be optimally managed via a multidisciplinary specialist service, which has defined access to an appropriately trained surgeon as well as restorative dentistry, chronic pain management and psychological support.

What resources do those providing specialist services need?

The specialist management of TMJ disorders requires a range of diagnostic investigations such as MRI scanning; fine cut computerised tomography (CT scan) & stereo lithographic modelling.
Specialist procedures range from outpatient joint injections to complex operations requiring several days in hospital.
Patch testing for allergy to common metals should be carried out prior to deciding the type of prosthesis in replacement of the temporomandibular joint [13]

Where is that specialist service to be provided?

The number of patients who need the more complex interventions are relatively small. In order to make most efficient use of the services required and to maintain the level of experience and skill necessary to provide good quality surgical care for his small group of patients regionally based services should be commissioned. Not all surgeons will necessarily deliver all of the components of the service in the same location e.g. within the same city, one surgeon may specialise in arthroscopy while another performs joint replacement surgery.[3]
Patients may therefore need to travel, in order to access the high quality specialist care. This is similar to the system already in place for the management of e.g. cleft lip & palate services.[10]

Specialist services specification

Personnel

- Oral & Maxillofacial surgeon with a demonstrable sub-specialty interest in TMJ disorders.

- The service should have access to restorative dentistry, rheumatology, psychology, psychiatry, chronic pain service, neurology, ENT, physiotherapy, ideally in a multi-disciplinary setting.
- It is recognised that not all aspects of treatment are necessarily delivered by the same individual; in the same centre (e.g. Surgery/ arthroscopy) and that centres will probably be regionally based, to ensure access.

Facilities

- Access to imaging services, CT, MRI, maxillofacial technical support to provide modelling facilities and model surgery.
- Access to a multi-disciplinary clinic with representatives of the above specialities
- In-patient facilities

Data Collection

- Units providing this service will be expected to undertake data collection and contribute to a relevant national database[8]
- Calculation of tariff may need to incorporate audit/ data collection costs to facilitate surgeon-level data provision
- Standard data should include surgical complications and revision rates as well as length of stay, etc.

2 Procedures explorer for TMD

Outcome data will be made available for those patients undergoing more complex procedures (e.g. joint replacement) – ***This data is not yet published***

Users can access further procedure information based on the data available in the quality dashboard to see how individual providers are performing against the indicators. This will enable commissioners to start a conversation with providers who appear to be 'outliers' from the indicators of quality that have been selected.

The Procedures Explorer Tool is available via the Royal College of Surgeons website.

3 Quality dashboard for TMD

The quality dashboard provides an overview of commissioned specialist activity commissioned from the relevant pathways, and indicators of the quality of care provided by surgical units – ***This data is not yet published***

The quality dashboard is available via the Royal College of Surgeons website.

4 Levers for implementation

4.1 Audit and peer review measures

The following measures and standards are those expected at primary and secondary care. Data should be able to be made available to commissioners if requested.

Prospective data for TMJ surgery are collected by a Subgroup of BAOMS. This data collection and its statistical analysis are currently funded by BAOMS. These data measure patient outcomes at surgeon level. Equivalent data are not currently collected by the NHS reporting systems. BAOMS can make this data available to commissioners for a cost.[8, 9]

	Measure	Standard
Primary Care	% inappropriate referrals	Adherence to referral criteria
Secondary Care	Patient outcomes	Provider must submit data to British Association of TMJ Surgeons (BATS)
	NICE TMJ replacement guidelines	Provider must show adherence to these guidelines and completion of the NICE audit tool for a proportion of cases
	Outlier policy	BAOMS / BATS to develop and promote

4.2 Quality Specification/CQUIN

Measure	Description	Data specification (if required)
Length of stay for TMJ Joint Replacement	Provider demonstrates a mean LOS of 3 days	Data available from BATS database
Revision rates for TMJ Joint replacement within 5 years of surgery	<10% revision rate Monitor for outliers	Data available from BATS database

Due to the range and nature of procedures it is difficult to identify standard LOS across all procedures.

There is an aspiration to develop surgeon level data, which is dependant of funding.

5 Directory

5.1 Patient Information for TMD

Name	Publisher	Link
Temporomandibular (jaw) joint disorder	NHS Choices	www.nhs.uk/conditions/temporomandibular-joint-disorder/Pages/Introduction.aspx
Struggling with headaches?	British Dental Health Foundation	www.dentalhealth.org/news/details/473
Jaw Tension in Migraine and Headaches	The Migraine Trust	www.migrainetrust.org/factsheet-jaw-tension-in-migraine-and-headaches-10889
Artificial total temporomandibular joint replacement: information for people who use NHS services	NICE	www.nice.org.uk/nicemedia/live/12136/46673/46673.pdf
Relaxation tips to relieve stress	NHS Choices	www.nhs.uk/Conditions/stress-anxiety-depression/Pages/ways-relieve-stress.aspx
TMJ Surgery Procedures	eHow Health	www.ehow.com/way_5635991_tmj-surgery-procedures.html
Shared decision making	NHS Right Care	www.sdm.rightcare.nhs.uk
Patient.co.uk	Ben Foster, Operations Director, Patient Services, EMIS	www.patient.co.uk/doctor/temporomandibular-joint-dysfunction-and-pain-syndromes
NHS dental services from 1 April 2014	Department of Health	www.gov.uk/government/uploads/system/uploads/attachment_data/file/299467/Dental_Flyer.pdf

5.2 Clinician information for TMD

Name	Publisher	Link
Guidelines for the replacement of temporomandibular joints in the United Kingdom	British Journal of Oral and Maxillofacial Surgery	http://www.bjoms.com/article/S0266-4356%2806%2900273-7/abstract
Total prosthetic replacement of the temporomandibular joint (IPG500)	NICE	http://guidance.nice.org.uk/IPG500

5.3 NHS Evidence Case Studies for TMD

Name	Publisher	Link
TMJ	John Wiley & Sons, Ltd.	http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD006541.pub2/full
TMJ	HAYES Inc.	http://www.hayesinc.com/hayes/crd/?crd=4833
TMJ	NICE	http://www.nice.org.uk/research/index.jsp?action=research&o=1408

6 Benefits and risks of implementing this guide

Consideration	Benefit	Risk
Patient outcome	Equitable access to effective high quality conservative, medical and surgical therapy	Unrecognised deterioration on conservative therapy, Inability to investigate in Primary care.
Patient safety	Reduce risk of inappropriate / unnecessary intervention; reduce prolonged analgesic usage, reduce costs	
Patient experience	Improve access to patient information; more timely intervention to relieve / manage symptoms. Earlier return to work	Interference with work, social life and daily living
Equity of Access	Improve access to effective procedures	
Resource impact	Reduce unnecessary referral and intervention	Additional resource in secondary care (multi-disciplinary clinic)

7 Further information

7.1 Research recommendations

- Randomised controlled trial (non-surgical intervention)
- On-going long-term outcome data for TMJ replacement
- Creation of additional national databases for other surgical interventions

7.2 Other recommendations

- Development of outlier policy
- There is a need to develop a proper funding stream to measure surgical outcomes for complex low volume procedures. This is often not possible at Trust/ Regional level and therefore requires commissioner level input to achieve the appropriate level of data collection to develop patient centred outcome measures.
- There is a need for national evidence-based referral criteria to support the pathway
- There is a need to develop a national policy regarding the clinical coding of these hospital based procedures. This is currently highly variable and often inaccurate.

7.3 Evidence base

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7.4 Guide development group for TMD

A commissioning guide development group was established to review and advise on the content of the commissioning guide. This group met once, with additional interaction taking place via email.

Name	Job Title/Role	Affiliation
Mr Peter Revington	Co-Chair	BAOMS
Mr Bernard Speculand	Co-Chair	BAOMS
Ms Heather McKinney RN JP	Patient Representative	
Ms Lindsay Mitchell	Patient Representative	RCSPLG
Mr Vernon Holt	General Dental Practitioner	FGDP(UK)
Ms Anna Ireland	Consultant in Dental Public Health	Public Health England
Dr Steve Lloyd MBChB BDS FDSRCSEdin MRCGP FRGS FRAS	Commissioner	Chair NHS Hardwick CCG , Derbyshire

Referencing of this guide was carried out by Mr Alan A. Attard BChD, MD, MFDS, and FRCS (OMFS) Post-CCT OMFS Fellow in TMJ Surgery

7.5 Funding statement

The development of this commissioning guidance has been funded by the following sources:

- DH Right Care funded the costs of the guide development group, literature searches and contributed towards administrative costs.
- The Royal College of Surgeons of England and the British Association of Oral and Maxillofacial Surgeons provided staff to support the guideline development.

7.6 Conflict of Interest Statement

Individuals involved in the development and formal peer review of commissioning guides are asked to complete a conflict of interest declaration. It is noted that declaring a conflict of interest does not imply that the individual has been influenced by his or her secondary interest. It is intended to make interests (financial or otherwise) more transparent and to allow others to have knowledge of the interest.
No interests were declared by group members.