

# NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

## GUIDANCE EXECUTIVE (GE)

### Review of TA1; Guidance on the extraction of wisdom teeth

#### Final recommendation post consultation

A review of TA1 should be scheduled into the technology appraisals programme.

#### 1. Background

This guidance was issued in March 2000.

At the GE meeting of 14 October 2014 it was agreed that we would consult on the recommendations made in the GE proposal paper. A four week consultation has been conducted with consultees and commentators and the responses are presented below.

#### 2. Proposal put to consultees and commentators

TA1 should remain on the 'static guidance list'.

#### 3. Rationale for selecting this proposal

The review found no new evidence that would warrant a review of the recommendations in TA1. However, there was some evidence to suggest that the recommendations of TA1 are controversial. It was therefore proposed to consult on the decision to keep this guidance on the static list to allow those who believe a review is required to provide evidence in support of that view.

#### 4. Summary of consultee and commentator responses

Comments received in the course of consultations carried out by NICE are published in the interests of openness and transparency, and to promote understanding of how recommendations are developed. The comments are published as a record of the submissions that NICE has received, and are not endorsed by NICE, its officers or advisory committees.

<p><b>Respondent:</b> British Association of Oral Surgeons</p> <p><b>Response to proposal:</b> Disagree</p> <p>We disagree with the Institute’s proposal and would wish to see the Guidance updated. The evidence in support of our response is presented in the two attached papers. BAOS endorses the views expressed in the recent BDJ publication by Professor P. Coulthard and also the response submitted on behalf of FDS England.</p>	<p><b>Comment from Technology Appraisals</b></p> <p>Comments noted. An update of TA1 will be scheduled to consider the evidence that has been highlighted.</p>
<p><b>Respondent:</b> Faculty of Dental Surgery</p> <p><b>Response to proposal:</b> Disagree</p> <p><b>Executive summary</b></p> <p>Based upon the critique provided below on this NICE 2014 review, we strongly disagree with the assessment that the NICE 2000 M3M Guidelines should not be revisited. In particular, we are concerned that the additional evidence published since 2000 and the evidence provided in Appendices I, II and III were not considered in this NICE assessment.</p> <p>We strongly recommend that NICE re appraise the need to amend the 2000 version of M3M Guidelines in the light of evidence concerning;</p> <ul style="list-style-type: none"><li>• harm to patients occurring due to retention of M3Ms,</li><li>• that surgery in younger patients has significantly less morbidity</li><li>• and that the majority of M3Ms are removed prior to the age of 40 years</li></ul> <p>This evidence is sufficient for international Guidelines (Scandinavian, German and US) to have been amended in the last 12 months.</p> <p>Our response takes the form of comments in <i>italics</i> to each paragraph of section 7 of NICE’s</p>	<p><b>Comment from Technology Appraisals</b></p> <p>Comments noted. An update of TA1 will be scheduled to consider the evidence that has been highlighted.</p>

*review proposal, the 'Summary of evidence and implications for review'*

The recommendations for future research in TA1 highlighted 2 ongoing randomised controlled trials (in the United States and in Denmark) comparing prophylactic extraction of wisdom teeth with management by deliberate retention. Full information on the Danish randomised control trial remains unavailable and the review proposal in 2003 considered the information available from the conference abstract (Vondeling et al. 1999).

*This paragraph confuses work undertaken in Denmark with a large body of work completed by Professor Irja Venta's team in Finland. In Denmark, Professor Andreasen started a follow-up study in the early 1990s but it was never finished. The reference to the work of Vondeling et al. 1999 is in no way related to the work of Professor Irja Venta's team in Finland which is referenced in Appendix I of this response. The Finnish third molar surgery (M3M) guidelines have recently been published supporting interventional surgery as most M3Ms end up being extracted and surgery in patients aged under 25 years has considerably less risk of morbidity.*

At 38 years of age only 31% of wisdom teeth remain ([Ventä I<sup>1</sup>](#), [Ylipaavalniemi P](#), [Turtola L](#). Clinical outcome of third molars in adults followed during 18 years. [J Oral Maxillofac Surg.](#) 2004 Feb;62(2):182-5.).

In dentate Finns the prevalence of partially erupted or erupted wisdom teeth, from ages 30 to 65 of decreases from 30 % to less than 5 % in [Suominen - Taipale L and others. Edentulousness and the number of teeth . In: Suominen – Taipale L et al. Finnish adult oral health . The Health 2000 survey. National Public Health Institute B16 / 2004 . Helsinki 2004 ; p. 65-72].

Therefore by 38 years 70% of M3Ms are missing and by the age of 65 years 95% of M3Ms are missing. On this basis the Finnish M3M guidelines recommend an interventional approach to M3M extraction to minimise risks of retention and the associated risks of surgery in older patients.

A recent study reports that in 293 patients over 79 years evaluation of their DPTs revealed that 21% had one or more maxillary and mandibular M3Ms. All M3Ms were associated with disease, carious (82%), periodontal disease (67%) or in relation to cysts or tumours (2%).Vent Irja, Kylatie Eeva, Hiltumen Katja. Pathology related to third molars in elderly

persons. Clinical Oral Investigations 2014 *in press*.

*The Finnish guidelines emphasise preventive removals in selected cases and this is summarised in the article: Ventä I. How often do asymptomatic, disease-free third molars need to be removed? J Oral Maxillofac Surg 2012;70, Suppl 1:41-47. The background and references of the four selected cases for preventive removals are very well explained in the Finnish third molar guideline*

*<http://www.kaypahoito.fi/web/kh/suosituksset/suositus?id=hoi50074> The English version of the guidelines have not yet been released from the technical secretaries. The Finnish M3M Guidelines are adopted as the Scandinavian group Guidelines (Norway, Sweden, Iceland, Finland and Denmark).*

The trial based in the United States has resulted in several published papers examining the 329 patients in this trial who had at least 1 asymptomatic wisdom tooth visible. Based on these analyses, the American Association of Oral and Maxillofacial Surgeons (AAOMS) recommended that wisdom teeth be removed by the time the patient is a young adult in order to prevent future problems and to ensure optimal healing. However, these recommendations faced criticism and the American Association of Public Health issued a policy in 2008 in which they opposed prophylactic removal of third molars, stating that it subjects individuals and society to unnecessary costs, avoidable morbidity, and the risks of permanent injury. The AAOMS published another white paper in 2011 stating that the decision regarding the why, when or how to treat third molar teeth is extremely complex and the risks of complications involved with early treatment of third molar teeth that are likely to cause problems versus the morbidity caused by retained *third molar teeth and subsequent treatment in an older patient must be considered*.

*There is missing evidence regarding AAOMS M3M guidance and recommendations in the NICE document.*

*Since the AAOMS paper in 2011 an international Consortium met at the end of 2011 and a series of 12 papers were published revisiting the AAOMS guidelines in the light of the criticism by the American Public Health Association (See attached PDF files and summary-Task Force for Third Molar Summary [of the Third Molar Clinical Trials: report of the AAOMS Task Force for Third Molar Summary](#). J Oral Maxillofac Surg. 2012*

Sep;70(9):2238-48)(Appendix II).

*In response to the criticism by the American Association of Public Health, AAOMS re-evaluated the evidence and recommended routine extraction of all wisdom teeth erupted/partially erupted impacted wisdom teeth with pathology and at risk of developing pathology. Active surveillance of unerupted wisdom teeth bone impacted with no pathology would be regularly clinically and radiographically reviewed annually (23% of wisdom teeth at under 25 years). The key messages abstracted from the Third Molar Clinical Trials by Task Force members **include**:*

- 1 An absence of symptoms should not be equated with the absence of disease.*
- 2 During the clinical examination, clinicians should include periodontal probing to determine if nonvisible M3s are communicating with the oral cavity and to measure PDs. This information is valuable in assessing and documenting the disease status of M3s, especially in the absence of symptoms.*
- 3 Absent symptoms, retained M3s commonly develop disease, erupt, or change position over time. These changes are unpredictable. As such, monitoring retained M3s for the development of disease seems a prudent recommendation for patients electing to retain their M3s.*
- 4 Removal of M3s generally causes no more significant discomfort than a single multiday episode of mild pericoronitis. Individuals who have even mild symptoms of pericoronitis usually seek to have M3s removed rather than experience these symptoms again.*
- 5 Removal of M3s with periodontal pathology improves the periodontal status on adjacent M2s and on teeth more anterior whether or not the M3s were symptomatic.*
- 6 In most patients who retain M3s with periodontal pathology, the periodontal disease affecting the M3 and adjacent M2 worsens.*
- 7 If caries is present on M1s or M2s, it is highly likely that M3s will be affected with caries over time. Conversely, if M1s or M2s are not affected by caries, M3s are very unlikely to develop caries over time.*
- 8 Older age predicts a delayed recovery from pain and disruption of lifestyle and oral*

*function of about 2 days after M3 removal.*

*9 Adjunct measures such as corticosteroids, topical or short-term IV antibiotics, and continuous use of cold therapy decrease symptoms and improve quality of life after M3 removal.*

The largest UK-based study assessed X-rays for 420 patients (776 third molars) who were referred over a five month period. Thirty-four percent of third molars were mesioangular and there was radiographic evidence of distal second molar caries in 42% of these. The study concluded that distal caries in lower second molars related to a mesioangular third molar is common especially if the third molar is fully or partially erupted. The authors also stated that if such third molars are left in situ, close monitoring and regular 'bitewing' radiographs (which provide an image of the crowns of the top and bottom teeth on a single film) are recommended.

[Allen RT](#), [Witherow H](#), [Collyer J](#), [Roper-Hall R](#), [Nazir MA](#), [Mathew G](#). *The mesioangular third molar--to extract or not to extract? Analysis of 776 consecutive third molars.* [Br Dent J](#). 2009 Jun 13;206(11):E23; discussion 586-7. doi: 10.1038/sj.bdj.2009.517. Epub 2009 Jun 5. Concluded using the analysis of OPG X-rays for 420 consecutive patients (776 third molars) referred to three maxillofacial centres over a five month period. Results Thirty-four percent of third molars were mesioangular. There was radiographic evidence of distal second molar caries in 42% of these. When unerupted mesioangular third molars were excluded this increased to 54%. There was no difference in age or dental health of these patients compared to the whole group. There was no angulation of the mesioangular third molar for which distal caries in the second molar was more likely. Conclusion -Distal caries in lower second molars related to a mesioangular third molar is a common finding in oral and maxillofacial patients in secondary care.

*If interventional extractions were undertaken on erupted or partially erupted M3Ms, in this patient cohort, little no distocervical caries would develop in M2Ms.* Nunn et al ([Nunn ME](#)<sup>1</sup>, [Fish MD](#), [Garcia RI](#), [Kaye EK](#), [Figueroa R](#), [Gohel A](#), [Ito M](#), [Lee HJ](#), [Williams DE](#), [Miyamoto T](#). Retained asymptomatic third molars and risk for second molar pathology. [J Dent Res](#). 2013 Dec;92(12):1095-9. doi: 10.1177/0022034513509281. Epub 2013 Oct 16.). *Illustrated in a prospective study that second molars adjacent to erupted third molars were*

at greater risk of incident distal caries (RR = 2.53) and incident distal probing depth > 4 mm (RR = 1.87) than were second molars adjacent to absent third molars.

As long as the partially erupted tooth remains in situ, trapping food and making cleaning distal to the M2M impossible caries is likely to develop. Taking sequential LCPAs (which in practice is very difficult to do in patients due to discomfort and sectional panorams are often indicated resulting in increased radiation dose). Detection of M2M distocervical caries is difficult and late in presentation when diagnosed. This results in poor prognosis of the M2Ms and unnecessary loss of a second molar tooth in the quadrant. Thus the NICE M3M guidelines have 'condoned' supervised neglect resulting in harm in 48% of the patients in this study.

A Turkish study was identified which retrospectively reviewed clinical records and panoramic radiographs to evaluate the prevalence of second molar distal caries (in a Turkish population) and found that the prevalence rose from 20% to 47% when the third molar had an angulation of 31-70 degrees and 43% at 70-90 degrees. The authors concluded that these results justify the prophylactic removal of third molars erupted third molars that have an angulation of 30-90 degrees. However, the study did not study the effect of prophylactic removal itself.

[Ozeç I, Hergüner Siso S, Taşdemir U, Ezirganlı S, Göktolğa G.](#) Prevalence and factors affecting the formation of second molar distal caries in a Turkish population. [Int J Oral Maxillofac Surg.](#) 2009 Dec;38(12):1279-82. doi: 10.1016/j.ijom.2009.07.007. Epub 2009 Aug 7. Thus the non-interventional M3M guidelines have 'condoned' supervised neglect resulting in harm in 43-47% of the patients in this study.

Another study retrospectively assessed the records of 786 patients in South Korea who had their mandibular third molars removed over a 5 year period. The authors noted that among the 883 mandibular second molars, 152 (17.2%) had distal caries. Of these, 79.6% had mesial angulation of the third molars between 40 and 80 degrees.

[Chang SW, Shin SY, Kum KY, Hong J.](#) Correlation study between distal caries in the mandibular second molar and the eruption status of the mandibular third molar in the Korean population. [Oral Surg Oral Med Oral Pathol Oral Radiol Endod.](#) 2009 Dec;108(6):838-43. doi: 10.1016/j.tripleo.2009.07.025. Epub 2009 Oct 20. Among 883

*M2Ms, 152 had distal caries (17.2%, caries group). In the caries group, 79.6% of M3Ms exhibited mesial angulation between 40 degrees and 80 degrees and 82.2% of M3Ms exhibited an impaction level in which the most coronal aspect of the M3M was located superior to the occlusal surface of the M2M. The distance between M2M and M3M (between cemento enamel junctions) was 7-9 mm for 57.2% of the caries group. In conclusion 152/883 M2Ms displayed second molar caries due the mesioangular impaction of the M3M and 7-9mm distance between M3M and M2M cemento dentinal providing factors for consideration in preventive extractions.*

A Cochrane review evaluated the effects of prophylactic removal of asymptomatic impacted wisdom teeth in adolescents and adults compared with the retention (conservative management) of these wisdom teeth (Mettes et al., 2012). No randomised controlled trials were identified that compared the removal of asymptomatic wisdom teeth with retention and reported quality of life. Although it did not specifically assess the available evidence relating to mesioangulation or horizontal partially erupted third molars in compromising the prognosis of the adjacent second molar, the review concluded that there is insufficient evidence to support or refute prophylactic removal of impacted wisdom teeth in adults and that watchful monitoring might be a more prudent strategy.

*Mettes TD, Ghaeminia H, Nienhuijs ME, Perry J, van der Sanden WJ, Plasschaert A. Surgical removal versus retention for the management of asymptomatic impacted wisdom teeth. Cochrane Database Syst Rev. 2012 Jun 13;6:CD003879. doi: 10.1002/14651858.CD003879.pub3. Highlight the insufficient evidence to support either prophylactic, interventional or therapeutic extractions for M3Ms.*

*Gaining sufficient evidence will remain a problem as NIHR is unlikely to fund prospective randomised studies in this area when other health priorities (such as cancer, stroke and diabetes take precedence). So realistically the evidence base for this area of work will remain a challenge similar to resuscitation and many other common areas of dentistry and medicine.*

In 2012 the Faculty of Dental Surgery (the Royal College of Surgeons of England) wrote to NICE indicating that they were considering a review of their own 2004 clinical guideline on the management of patients with third molar teeth (this review is now ongoing). They noted



that several members of their Clinical Standards Committee believe that there is increasing pressure for TA1 to be reviewed on the basis of evidence that retention of wisdom teeth (with or without pathology of the tooth itself) may result in second molar caries with subsequent additional treatment and loss of the second molar. They were also concerned that the guidance resulted in people undergoing surgery at a later age than was previously the case, resulting in additional complications.

The studies highlighted by the Faculty of Dental Surgery were relatively small and of a retrospective observational nature. Although the studies might suggest a link between mesioangulation (and/or level of impaction) and distal caries in the second molar, the studies do not directly assess outcomes associated with prophylactic removal of wisdom teeth itself.

*The Faculty of Dental Surgery at the Royal College of Surgeons of England has established a working group to review the “Current Clinical Practice and Parameters of Care for Patients with Third Molar Teeth (draft attached). As Chair of the working group, I can confirm that based upon minimising harm to patients, we recommend interventional extractions based upon the evidence base similar to the Finnish and AAOMS M3M guidelines. We believe the new evidence supports the following;*

- *Over 80% of mandibular M3Ms require removal before the age of 38 years*
- *Removing low risk (of Inferior alveolar nerve injury) erupted or partially erupted impacted M3Ms to prevent damage to adjacent teeth (either due to caries or periodontal disease)*
- *Surgery undertaken on patients under the age of 25 years causes significantly lower morbidity (including; pain, nerve injury, jaw fractures, dry socket and infections) compared with surgery on patients over 25 years of age.*
- *Active surveillance of*
  - *Erupted or partially erupted impacted M3Ms crossing the Inferior dental canal*
  - *Unerupted mandibular M3Ms (estimated 20-23%) with no associated pathology.*

A recent publication in the British Dental Journal explored the effects of NICE TA1 on the management of third molar teeth (McArdle LW and Renton T, 2012). This study analysed

data obtained from several NHS databases and explored the age of patients requiring third molar removal, the number of patients having third molars removed and the clinical indications for third molar surgery activity in secondary care between 1989 and 2009. The mean age of patients increased from 25 years in 2000 to 32 years in 2010. During the 1990s, the number of patients who had been admitted to hospital for either a day-case or in-patient procedure under general anaesthetic or intravenous sedation in England and Wales averaged approximately 60,000 patients per year for the whole of the decade. In the first half of the 2000s patient numbers started to decline and by 2003, the data suggested less than 40,000 patients per annum were having third molar treatment. Over the latter 5 years of the 2000s, the number of patients having their third molar removed increased to approximately 77,000 patients per annum (2009/10). The authors hypothesise 2 potential reasons for the increase in secondary care activity:

- The possible influence of the new General Dental Services contract in England and Wales in 2005 (which the authors suggest may incentivise dentists to refer patients requiring some of the more complex treatment items to other providers)
- A link between the increasing age of patients and the increasing incidence of caries related to third molars (which increased from 10% in 1995 to 30% by 2009 as the main clinical indication at diagnosis)

The authors concluded that the management of patients with third molars has been influenced by NICE TA1 but this has not resulted in reducing the number of patients requiring third molar removal. However, the authors acknowledged that coding and data collection for third molars is not uniform which may lead to potential misrepresentation of the data. Similar to the conclusion of the review of the studies highlighted by the Faculty of Dental Surgery, this publication may suggest a link between mesioangulation (and/or level of impaction) and distal caries, but does not directly assess outcomes associated with prophylactic removal of wisdom teeth itself.

*As an author of this paper (McArdle LW, Renton T. [The effects of NICE guidelines on the management of third molar teeth](#). Br Dent J. 2012 Sep;213(5):E8. doi: 10.1038/sj.bdj.2012.780. Erratum in: Br Dent J. 2012 Oct;213(8):394), I am concerned that the NICE reviewers have misinterpreted the findings of this study and have also not*

evaluated another study (Renton T, Al-Haboubi M, Pau A, Shepherd J, Gallagher JE. [What has been the United Kingdom's experience with retention of third molars?](#) J Oral Maxillofac Surg. 2012 Sep;70(9 Suppl 1):S48-57. doi: 10.1016/j.joms.2012.04.040. Epub 2012 Jul 3).

The evidence provided by both papers illustrates that NICE guidelines

- have only delayed necessary surgery with the average age of patient at surgery rising from 23 years to-32 years
- have not reduced the prevalence of M3M surgery (only delayed it)
- have resulted in significant damage to second molars due to caries (and resultant patient harm). The prognosis of M2Ms affected by distocervical caries is poor due to the proximity of the lesion to the dental pulp and resultant high frequency of subsequent root canal therapy and/or extraction of the M2M. Observations on this problem have been published 'This common finding of distal caries in this pre-selected population would suggest long-term close monitoring and informed consent as to the risks of leaving erupted mesioangular wisdom teeth in situ. This should be undertaken if the patient is to avoid the unnecessary loss of a functional second molar tooth. I agree with the authors that disease or potential disease in the adjacent second molar teeth is an oversight of the NICE guidelines'. Banks R.J. Summary of: The mesioangular third molar – to extract or not to extract? Analysis of 776 consecutive third molars British Dental Journal **206**, 586 - 587 (2009)

The significant limitation of the epidemiological study was the inadequate and disparate coding systems for M3M surgical activity; this cannot be utilised by NICE to refute these findings.

As there are no codes to separate the need for surgery (diagnosis) for;

Caries in M2M

Pericoronitis (having to use a code for chronic periodontal disease

It is impossible to accurately assess the need for surgery.

Thus there is non-alignment and discordance between the diagnostic ICDN 10 coding to

*NICE indications for surgery preventing accurate natural experimental assessment of ongoing surgical activity need and outcomes. We hope this will be addressed in intelligent commissioning guidance future NHS care.*

*Secondly secondary care activity coding and primary care activity coding are different systems and the UDA system has made assessment of specific activity impossible.*

*The finding that caries being the increasing and predominant cause for indication for M3M surgery in an older patient cohort confirms the findings of many of the studies alluded to in the NICE technical review, that M2M caries is a problem and should be prevented.*

A recent opinion piece by Mansoor et al (2013) highlighted that there may be growing evidence of people developing caries in an adjacent tooth the treatment of which is not being met because of the existing NICE guideline.

*This report alludes to many reservations shared by dental professionals regarding the existing NICE guidelines. They report an incidence of need for M3M surgery due to M2M distocervical caries in 38% of cases at Manchester dental Hospital.*

*Our recent Audit indicates that M2M distocervical caries is the cause for 36% of cases at Kings College Hospital (unpublished) A previous study (Ayse Nazli Ozgun, Martyn Sherriff, Tara Renton An assessment of lower third molar treatment needs. BAOS Poster Abstract J Oral Surg J Oral Surgery 2011) reported that risk factors for M2M caries in relation to M3Ms included all impaction types of M3Ms but particularly horizontal and mesial. In this audit of 1000 patients the prevalence of M3Ms presented with distal decay was:*

- *70% of M2Ms adjacent to horizontally angulated M3Ms*
- *45.29% of M2Ms adjacent to mesially angulated*
- *20.63% of M2Ms adjacent to distally angulated M3Ms*
- *19.67% of M2Ms adjacent to vertically aligned M3Ms*

However, Fernandes et al (2013) that although the research base for what happens if third molars are left may not be strong, we do know that taking out asymptomatic wisdom teeth is often associated with some fairly unpleasant side effects.

We have not been able to find a reference for Fernandes et al 2013 pertaining to wisdom teeth. The references that this NICE review section may refer to is the 2 following papers

1. Fernandes MJ, Ogden GR, Pitts NB, Ogston SA, Ruta DA. [Actuarial life-table analysis of lower impacted wisdom teeth in general dental practice](#). *Community Dent Oral Epidemiol.* 2010 Feb;38(1):58-67

Prospective review of 573 patients attending 21 dentists in primary care in UK. 83.13% wisdom teeth survived 1 year review. The reason for extraction was unknown in 46% of cases 3% M2M caries 27% pain (a clinical sign not an indication) and 5.5% caries in M3M. In conclusion older patients are less likely to complain of symptoms related to M3Ms but this may in part be related to loss of M3Ms with time.

2. Fernandes MJ, Ogden GR, Pitts NB, Ogston SA, Ruta DA. [Incidence of symptoms in previously symptom-free impacted lower third molars assessed in general dental practice](#). *Br Dent J.* 2009 Sep 12;207(5):E10; discussion 218-9

A prospective primary care patient cohort review, over 7 years, regarding symptoms related to M3Ms in 421 patients. Significantly distal impacted M3Ms were more likely to become symptomatic (31%). 23% of partially erupted and 11% of unerupted M3Ms became symptomatic and required removal over the period. Significantly 23% of patients aged 18-34 years are more likely to suffer symptoms related to M3Ms.

These prospective patient cohort studies confirm that the majority of M3Ms require removal during the patient's life. We are concerned that both of these studies depend on patients to report symptoms from M3Ms or adjacent dentition to dictate intervention. Most pathology (caries, periodontal disease and cysts) are asymptomatic in the main until late disease. This study weakness significantly undermines the study conclusion quoted in the NICE document 'that further research is clearly still required to improve the evidence base from which to make the conclusion that asymptomatic third molars should be left alone.'

#### **NICE conclusion from 2014 review**

Overall, there does not appear to be any strong or robust evidence since publication of the original guidance to warrant a review of the recommendations in TA1, under the current methods that underpin the technology appraisals process. *Based upon the critique provided*

*about the NICE 2014 review, we strongly disagree with this assessment. In particular, we are concerned that the additional evidence published since 2000 and the evidence provided in Appendix III were not considered in the NICE assessment. We strongly recommend that NICE re appraise the need to amend the 2000 version of M3M Guidelines.*

It is important to note that the NICE Guide to the Methods of Technology Appraisal 2013 states that:

*“Section 2.1 The Appraisal Committee makes recommendations to the Institute regarding the clinical and cost effectiveness of treatments for use within the NHS. It also notes the role of the Appraisal Committee is not to recommend treatments if the benefits to patients are unproven.”*

*We suggest this statement is counterintuitive as currently TA1 does recommend treatment on an unproven basis. Since 2000 the evidence has emerged that all NICE M3M guidelines achieve is delaying surgery for 8 years in which time the adjacent molar is jeopardised.*

Therefore the guidance should remain static, but it is acknowledged that there are some articles expressing disagreement with the guidance.

*We strongly disagree that the guidance should remain static and urge NICE to consider the evidence provided in Appendix III.*

**Respondent:** Association of British Academic Oral and Maxillofacial Surgeons

**Response to proposal:** Disagree

I do believe that the guidelines need to be reviewed.

Work by my group showed (Fernandes et al ), albeit over a short timeline of only 1 year, that something like 10% of previously asymptomatic 3rd molars required removal a year later (ethics c/t wouldn't allow us to re X-ray people hence the study concentrated on development of symptoms and removal over the 1 year period).

Whilst our group were one of the 1st to highlight the significant effect 3rd molar removal has on quality of life (Savin & Ogden 1997), we do believe that greater knowledge needs to be gleaned to identify the risk factors that predict which 3rd molars will need to be removed in the future e.g. factors predicting the development of caries in the distal aspect of the 2nd molar adjacent to an impacted 3rd molar.

Both NICE and SIGN guidelines concentrated on what was actually evident at the time the patient presented but it is clear to many of us that a substantial number are, for example, developing caries in the distal aspect of the adjacent 2nd molar, requiring greater intervention and increased morbidity.

Time constraints preclude me from writing a more in depth critique , but i would urge you and the c/t to reconsider the verdict that the NICE guideline should remain static.

We do not wish to encourage the needless removal of 3rd molars however we owe it to our patients to give them the best advice .I now fear that retention of impacted 3rd molars lacking NICE reasons for removal, in some situations, might be a precursor for increased burden on the healthcare system.

**Comment from Technology Appraisals**

Comments noted. An update of TA1 will be scheduled to consider the evidence that has been highlighted.

**Respondent:** British Dental Association

**Response to proposal:** Disagree

The guidance on extraction of wisdom teeth should be reviewed. There may be some evidence to support anecdotal observations of morbidity for some patients as a result of the existing guidance. If the widely-held view that the retention of many more wisdom teeth has led to the eventual loss of wisdom teeth and adjacent molars is not substantiated by the evidence, a review would at least help to allay criticisms of the existing guidance.

**Comment from Technology Appraisals**

Comments noted.



**Respondent:** Faculty of General Dental Practice

**Response to proposal:** Agree, with caveat

The FGDP(UK) believes that NICE's proposal to keep the Guidance on the extraction of wisdom teeth on the static list is appropriate. We are aware of little evidence that would justify review of the current guidance at present. We also support NICE's view on the conclusions of various research papers noted on pages 3 and 4 of the document.

However, we are aware that some general dental practitioners with oral surgery expertise are reporting a growing concern regarding the number of lower second molars that have been damaged or lost due to caries as a consequence of difficulties cleaning the areas mesial to an impacted third molar. Further research in this area is needed, and resulting data may necessitate a review of the guidelines.

We would also highlight a view held by some that the patient's overall oral health should be taken into account when considering an extraction of the lower third molar. For instance, a dentist may consider the prophylactic removal of the third molar in patients with a medium or high risk of caries risk (demonstrated by poor oral health, diet and caries elsewhere in the mouth) if the 8 is erupted and horizontal or mesio-angular impacted. However, in most cases, we would support a focus on the delivery of effective preventative advice to lower the patient's risk of caries rather than advocating for the removal of the third molar.

Clearly, dental professionals should be mindful that these are guidelines to aid in decision-making. Clinical judgment should always be exercised, particularly with respect to high-risk patients, while ensuring that any deviation from the guidelines can be justified.

**Comment from Technology Appraisals**

Comments noted. It is acknowledged that there are some articles expressing disagreement with the guidance.

**Paper signed off by:** Janet Robertson, 24th February 2015

**Contributors to this paper:**

Technical Lead: Christian Griffiths

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