Referral Criteria for Tier 2 Endodontic care

Level 1 Complexity – Routine

Level 1 complexity is the expected scope of all General Dental Practitioners. Referrals will NOT be accepted for referral triage.

Diagnosis and management of patients with uncomplicated Endodontic treatment need, including but not limited to:

- Root canals with a curvature <30^{o} to root axis and considered negotiable (i.e., canal(s) not sclerosed or 25+mm long) from radiographic evidence, through their entire length
- No root canal obstruction or damaged access, e.g. (near)perforation
- Previously treated teeth with a poorly compacted root filling, short of the optimal working length, with evidence of likely canal patency beyond the root filling
- Pulp extirpation or incision and drainage as an emergency treatment
- Straightforward retreatment of poorly compacted and retrievable root fillings

Tier 2 Complexity – Moderately Difficult

The management of Endodontic problems under the following circumstances are suitable for referral to the Tier 2 Endodontic Service:

- Root canal curvature >30º but <45º
- Locating and negotiating canals NOT radiographically evident (sclerosed) in the coronal 1/3 but appears patent thereafter
- Treatment may include the removal of short posts / fractured posts (less than 8mm in length) with bypass restricted only to the coronal portion of the root canal.
- Correction of *moderately complex* iatrogenic technical problems in location, negotiation, instrumentation, disinfection (persistent infection/symptoms) and obturation
- Teeth with anticipated working length > 25mm when accompanied by narrowness and curvature <30°
- Incomplete root development requiring regenerative and apexification treatment.
- Molar tooth Endodontic treatment is accompanied by limitation of mouth opening (between 25mm and 35mm inter-incisal opening)
- Incomplete root development and management of dental trauma
- Endodontic management of complex “cracked tooth syndrome” dilemmas

Level 3 Complexity - Complex

The management of Endodontic problems under the following circumstances are not suitable for Level 2 pilot service. Please use the appropriate level 3 form if available in your region.

- Root canal curvatures >45^{o}, particularly when accompanied by narrowness and length greater than 21mm
- Root canals with multiple curves (in same or opposite directions e.g., S-shaped)
- Where roots are located within or in contact with anatomical structures such as maxillary Antrum, Inferior Dental Canal.
- Root canals NOT radiographically evident through their entire length based on a good quality, normally incident radiograph (horizontally angled views will obscure canal systems)
- Root canal systems with anatomical complexities other than curvatures; e.g., complex developmental tooth anomalies, additional roots, bifid apices, complex branching of root canal(s*),* invaginations such as dens in dente, gemination, C-shaped canals, etc.
- Assessment and planning the long-term management of severely traumatised teeth where severity extends beyond enamel & dentine; usually involving multiple teeth and alveolus
- The management of saveable and restorable teeth with structural damage of iatrogenic or pathological origin (resorption)
- Severe limitation of mouth opening (inter-incisal opening less than 25mm)

  Complex root canal retreatments involving removal of well-fitting posts longer than 8mm; associated perforations; carrier-based, resin or silver point root-fillings; fractured instruments; well-compacted root fillings to length; overfilled roots with apical lesions, persistent infections or pain not resolved by guideline-quality root canal treatment.
- Correction of *complex* iatrogenic technical problems in location, negotiation, instrumentation, disinfection (persistent infection/symptoms) and obturation, e.g. difficult but potentially rectifiable ledges, blocked canals, perforations, etc
- Peri-radicular surgery

Risk screening & acceptance Criteria

- Stable oral environment will have been achieved and all caries managed.
- Patient is informed and understands that the treatment may involve multiple long appointments and that success cannot be guaranteed.
- Tooth / teeth will be predictably restorable and made functional after removal of disease with supragingival sound coronal tooth tissue distributed circumferentially with a minimum height of 3 mm and thickness of 2 mm, together with intact axial pulp chamber walls. (For many teeth this will only be possible after removal of existing restoration(s) and the placement of a sound and well-fitting provisional restoration prior to referral).
- Where the referred tooth has a de-cemented bridge retainer or caries is evident at the restoration margin, the restoration will be removed by the referring practitioner for caries removal and restorability assessment before referral. The tooth will only be referred with a sound well-fitting temporary restoration in place.
- Patient is informed and understands that the referring practitioner is responsible for the provision of all restorative phases after completion of Endodontic treatment (and not to do so would risk both Endodontic failure and tooth loss).
- Patient is motivated and compliant with satisfactory periodontal health. There will be clarification that supra/sub gingival debridement has been performed using local anaesthetic and periodontal control achieved prior to referral.
- Referral must be accompanied by a periapical radiograph of diagnostic quality (please see notes on radiographs accompanying referral below)
- Referral request must fall into either level II or 3 complexity as described in the acceptance criteria.
- Patient must be informed and understand that referral for treatment is preceded by a consultation and does not guarantee acceptance for treatment, if deemed unsuitable

  Tooth must be in functional occlusion

- Tooth/teeth will be Strategically important. This will include for example, if the tooth contributes to the maintenance of a functional dentition (normally a shortened dental arch of 10 occluding pairs). It could also include molars which are the only suitable abutments. Cases accepted for treatment will be taken to a point where the referring practitioner will be able to complete treatment.
- A complete restorative plan is available for the remaining dentition

- No more than 30% bone loss
- Absence of a furcation involvement
- A complete restorative plan is available for the remaining dentition

Radiographs accompanying referral

- All referrals must be accompanied by a current, dated and diagnostically acceptable parallel view periapical radiograph(s) of the tooth (teeth) referred. Radiographs must show the full length of the tooth in question, and 2-3mm of the periapical region.
- Radiographs (and thus the referral) will be rejected by the triager if the diagnostic quality is unsafe for decision making (radiographs fall into either IR(ME)R2000 grade 1 or 2).

Rejection Criteria

- Failed local analgesia following primary injection(s) and a supplemental injection (intraligamental / intraosseous) or where Sedation/GA will be required.
- Patients with severe limitation of mouth opening (inter-incisal opening < 25 mm) who need root treatment in posterior teeth, where access is not possible. Patients need referral for treatment of trismus/poor mouth opening or possibly extraction.
- Gagging patients - refer to an appropriate service to treat the gagging.
- Caries/ new carious lesions every year.
- Poor attendance history /compliance history/ poorly maintained dentition/ consistently demonstrate poor OH >20% plaque score/poor motivation
- Where loss of this tooth will render the patient with less than 8 occluding pairs of teeth
- Where multiple teeth require Level 2 Endodontic treatment due to dental neglect.
- Patients appropriate for Level 1 treatment management
- Those with active periodontal disease who have not received the expected initial periodontal treatment.
- Patients unwilling to meet NHS charges

- Patients who have untreated primary dental disease
- Those who have poor oral hygiene and have refused to consider other types of toothbrushing techniques including electric toothbrush, and interproximal brushes.
- Where the teeth affected are 7s and 8s' unless these are the only teeth maintaining OVD and are of strategic importance
- Patients desire to give treatment ago in an otherwise poor prognosis case
- Greater than 30% bone loss