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BY EMAIL

29th March 2019

Dear colleague,

Pan-London Endodontic Referrals and Level 2 Service Provision

We write to you with comprehensive details of the new pan-London Level 2 endodontic service and referral process. A competitive procurement exercise took place in the 2018/19 financial year relating to the above service. Key drivers for the project were as follows:

- To implement a pan-London endodontic pathway using NHS England national commissioning standards
- Consultant-led triage of endodontic referrals
- The service will provide Level 2 endodontics for patients being referred by London Region General Dental Practitioners (GDPs) for patients residing in London or with a GP in London
- To recommission Level 2 endodontic contracts which were expiring on 31st March 2019

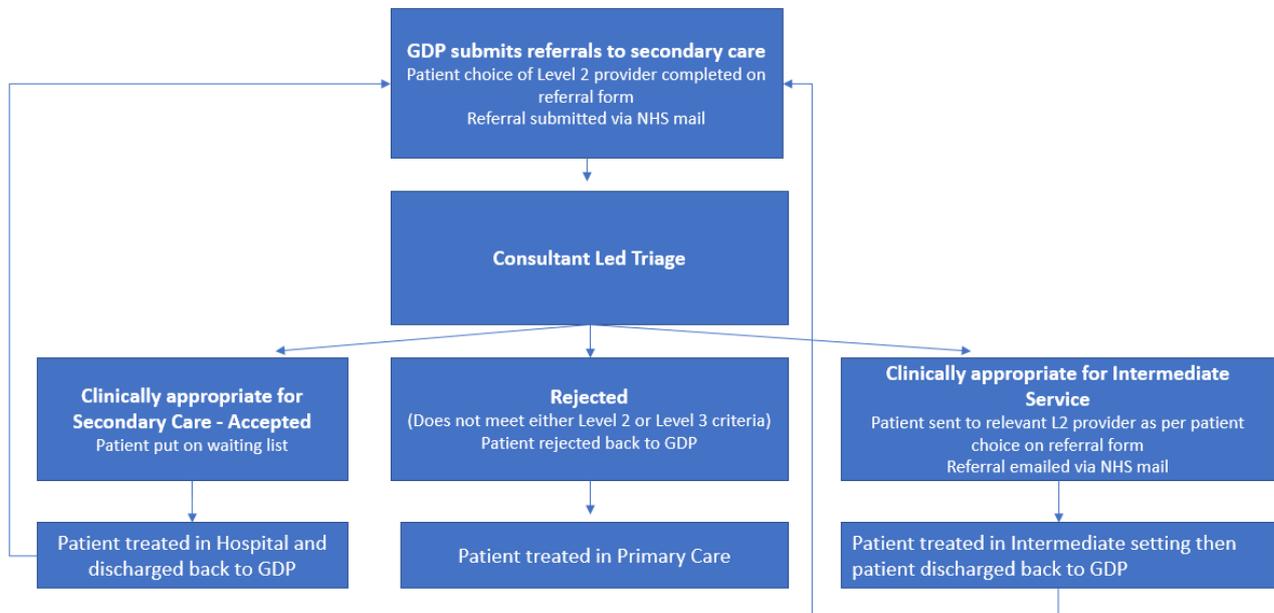
A wide range of stakeholders were consulted on the new pathway approach, including both primary and secondary care clinicians, Public Health England (PHE), the NHS England (London Region) Patient Leadership Board (PLB) and the London Local Dental Committees (LDCs). The work was underpinned by a sub-group of the NHS England (London Region) Local Dental Network (LDN) as well as an NHS England (London Region) restorative dentistry steering group.

The endodontic Levels of Complexity are based on the national Restorative Commissioning Standard. At the time of writing, this particular standard is still in draft format but this will be published shortly. The guidance that underpins the nationally-defined Levels of Complexity can be found here: <https://www.england.nhs.uk/dentistry/dental-commissioning/dental-specialities/>

Referrals will be made by General Dental Practitioners (GDPs) using the new pan-London endodontic referral form. Triage will be undertaken in an acute (hospital) setting, by the acute

providers commissioned by NHS England (London Region) to provide substantive consultant-led restorative dental services. The end destination for triaged referrals will be as follows:

- Level 1 – returned to the referring GDP
- Level 2 – sent on to one of the newly-commissioned Level 2 endodontic providers
- Level 3a/3b – retained by the acute trust for treatment by a consultant-led service



To ensure the safe transfer of referrals and radiographs, all referrals must be made electronically via NHS mail. This **free** service will ensure information governance-assured, appropriately encrypted communications and ensure that dental practices comply with General Dental Protection Regulations (GDPR). If you do not have an NHS mail account, you can set one up here: <https://portal.nhs.net/Help/joiningnhsmail>

We refer you to our correspondence of 1st February 2019 'Improving the Patient Pathway Through Electronic Referrals Using NHS mail' (attached). This details the correct pathway which NHS England (London Region) requires all referring GDPs to be utilising by 1st April 2019.

The Annex's to this correspondence are detailed below.

Please note: the referral form and the patient advice / GDP referrals guidance are also attached as Adobe Acrobat forms which can easily be populated on a computer:

- London Region agreed Levels of Complexity, including general information for making endodontic referrals to Levels 2 and 3 (ANNEX A)
- Measuring the angulation of root canals (ANNEX B)
- Pan-London endodontic referral form and protocol (ANNEX C)
- Patient advice and guidance (ANNEX D)
- Consultant-led triage centres with the relevant NHS mail address to securely send the referral and radiograph to (ANNEX E)
- List of Level 2 endodontic providers for you to offer your patient referral choice to (ANNEX F)

Thank you for taking the time to read through this correspondence and its attachments carefully. Please ensure that copies are cascaded to your wider dental team, and discussed in team meetings that you have over the coming weeks.

Kind regards,



Jeremy Wallman

Head of Primary Care – Dental, Optometry & Pharmacy Commissioning

- cc. Will Newport & Martin Skipper – London Federation of LDCs
Grish Malhotra – Outer NE London LDCs
Neil Hartington – East London & City LDC
Alan Ross – Barnet LDC
Roger Levy – Enfield & Haringey LDC
Katherine McNaughton – Acting Regional Lead for Acute Dentistry (NHS England London Region)
James Butcher – Regional Lead Dentistry, Optometry & Pharmacy Commissioning (NHS England London Region)

ANNEX A – LONDON REGION AGREED LEVELS OF COMPLEXITY

General Guidance for referral to endodontics for Levels 2 and 3:

- Please note that a single referral and triage process should only relate to a single tooth with the exception where more than one tooth (of Level 2 or 3 complexity) are damaged by the same traumatic incident.
- If a tooth can be classified under more than one level of complexity e.g. a root canal curvature of $< 30^\circ$ (Level 1) and a well compacted root filling (Level 2), then it should be graded under the higher complexity (Level 2 in this example).
- Any tooth with a unique/unusual problem, not covered in the criteria below, or which is borderline in terms of being classified into a higher level, will be graded by the complexity of the most similar and appropriate treatment in Levels 1, 2 and 3.

Complexity Guidelines:

Level 1

Routine treatment (root canal treatment and retreatment)

- Root canals with a curvatures $< 30^\circ$ to the root canal, following straight line access, not > 25 mm long and considered negotiable (i.e. canal(s) not sclerosed) through their entire length.
- Where previously root treated, root fillings should be poorly compacted (as evidenced by voids and gaps) and will be short of or at the optimal working length with radiographic evidence of likely canal patency beyond the root filling.

Emergency treatment

- The treatment of mild, acute trauma (including simple repositioning, re-implanting and splinting of teeth, repair of fractured teeth and root canal treatment when required, if designated Level 1 complexity).
- Pulp extirpation or incision and drainage, as an emergency treatment.

Level 2

Routine treatment (root canal treatment and retreatment)

- Root canals with:
 - Curvatures $> 30^\circ$ but $< 45^\circ$ to the root canal, following straight line access, not > 25 mm long and with root canals radiographically evident, but not for their entire length.
 - Moderately complex technical problems in location, negotiation, instrumentation, disinfection (persistent infection/symptoms) and obturation of root canals.
- Previously root treated - root fillings should be well-compacted and amenable to removal using conventional techniques and may be short of the optimal working length with radiographic evidence of likely canal patency beyond the root filling.
- Treatment may include the removal of short posts / fractured posts (less than ~ 8 mm in length) and not accompanied by other complications cited for Level 3 complexity.
- Molar tooth endodontic treatment accompanied by limitation of mouth opening (between 25mm and 35mm inter-incisal opening).

Emergency Treatment

- The treatment of teeth affected by dental trauma when root canal treatment is designated at Level 2 complexity, and including vital pulp therapy e.g. partial pulpotomy.

Specific to Level 2:

- Diagnosis of teeth with suspected “cracked tooth syndrome”. This includes examination, diagnosis and may involve placement of an orthodontic band etc if required. The permanent restoration will be provided in general dental practice.
- Teeth with incomplete root development, requiring root canal treatment.

Level 3

Routine treatment (root canal treatment and retreatment)

- Root canals with:
 - Curvatures $> 45^\circ$ to the root canal following straight line access, length > 25 mm and with root canals NOT radiographically evident through their entire length.
 - Multiple curves (in the same or opposite directions e.g. S-shaped).
 - Complex technical problems in location, negotiation, instrumentation, disinfection (persistent infection/symptoms) and obturation, e.g. difficult but potentially rectifiable ledges, blocked canals, perforations, etc.
 - Associated perforations.
 - Fractured instruments.
- Previously root treated:
 - Root fillings should be well-compacted and amenable to removal using conventional techniques, and may be short of the optimal working length with NO radiographic evidence of likely canal patency beyond the root filling.
 - Roots may be overfilled with clinical and radiographic signs of infection where standard techniques for removal are not possible.
 - Treatment may include the removal of well-fitting posts/fractured posts longer than 8mm and carrier-based, resin or silver point root-fillings.

Emergency treatment

- Assessment and planning the long-term multi-disciplinary management of severely traumatised teeth (including delayed reimplantation/non-reimplantation of avulsed teeth, intruded, laterally luxated and extruded teeth).

Specific to Level 3:

- 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, fused teeth, C-shaped canals, etc.
- The management of restorable teeth with structural damage due to iatrogenic causes, or resorption (excluding resorption at their root tips due to chronic infection).
- Periradicular surgery, when endodontic retreatment under any Level is not possible or when conventional root canal treatment has been completed to guideline quality standards (details of treatment to be given e.g. rubber dam isolation, sodium hypochlorite irrigant, restored with a restoration with no obvious signs of microleakage).
- Pain diagnosis, when a definitive diagnosis is unclear. Teeth must have been pulp tested (cold and electric pulp tester) and have been challenged with stimulating/exacerbating factors e.g. cold, hot and sweet prior to referral, and the results given. Cases where there

are obvious clinical and radiographic signs of infection from the referral will not be considered.

- Second opinions. This may not necessarily require an appointment if the information and/or the radiograph provided are sufficient to give a second opinion.

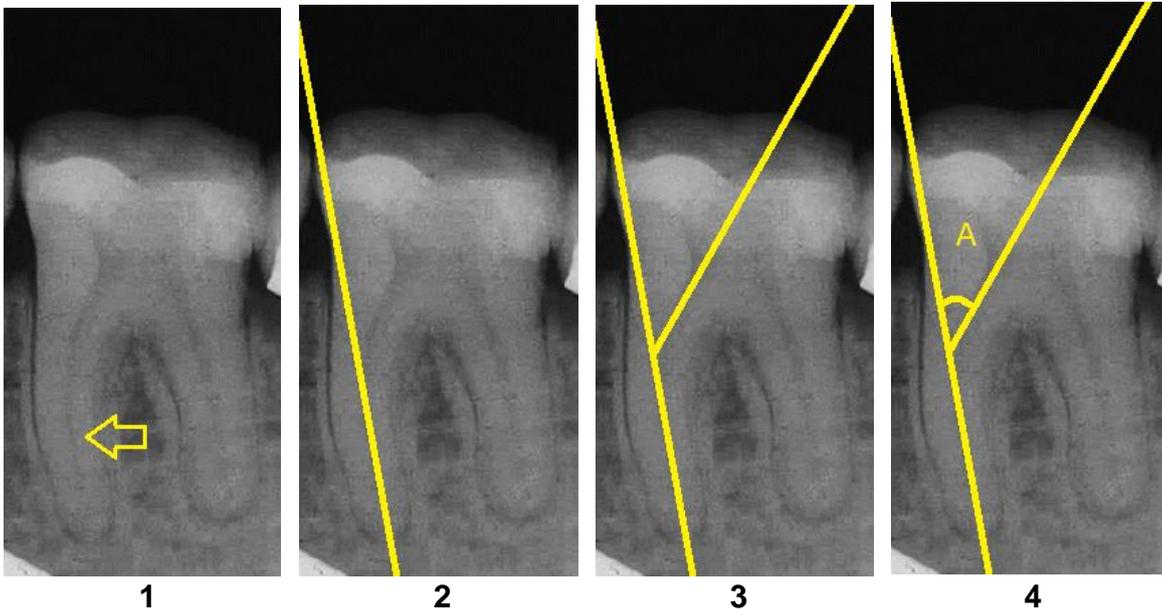
Cases not accepted

- Failed local analgesia following primary injection(s) and a supplemental injection (intra-ligamentary / intraosseous). 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.

ANNEX B – MEASURING THE ANGULATION OF ROOT CANALS

To measure the angulation of a root canal:

1. Firstly pick the most curved root.
2. Draw or imagine a straight line on the apical third of the root, following the course of the root canal in this region.
3. Draw or imagine a second line on the coronal part of the root, following the course of the root canal in this region.
4. The smaller angulation (A) between the two lines is the angulation of the root canal.



To measure this accurately, your digital radiography software can be used or alternatively an old-fashioned protractor can be used.

Digitizing conventional film radiographs

This is relatively easy to do using a smartphone. The normal camera may not allow you to get close enough to the film to focus on it. Most smartphones have a magnifier function which can be used to take photographs.

On an iPhone:

1. Press the Home key rapidly three times.
2. Place the film on a light box or radiograph viewer.
3. Take the photograph.



With a basic smartphone app, occasionally you will see banding or flickering in the image. This is because the frequency of the electrical supply of your light box is 50 Hz, so if your phone's shutter speed is faster than 1/50 second, a full cycle of light is not completed during the exposure and banding may appear. When the exposure of your phone is automatic, you do not have control of the shutter speed so this phenomenon can be unpredictable. If you have a more advanced camera app or use a digital camera, then choosing a shutter speed slower than 1/50 second eliminates this problem. This problem is more common with fluorescent than incandescent light sources.

(Guide kindly produced by Geoffrey St. George – Consultant in Restorative Dentistry, UCLH)

ANNEX C – PAN LONDON ENDODONTIC REFERRAL FORM

All London Level 1, 2 and 3 NHS endodontic referrals will be made by use of this pro-forma which is the agreed process of clinical triage for patients requiring endodontic services across the London Region.

Nature of referral	Please not referral cannot be accepted if both boxes ticked	
Opinion only (<i>tick</i>)	Yes	No
Request for treatment (<i>tick</i>)	Yes	No
Patient Preference for Level 2 Treatment	Please indicate by ticking the relevant provider in Annex F	

Details of the referral:																			
Details of Tooth/teeth being referred	(eg: UR6, UL1, LL5)																		
Reason for referral (please circle one of following):	<p>Advice only (including diagnostic or treatment planning challenges)</p> <p>Root canal treatment</p> <p>Root canal re-treatment (including correction of iatrogenic errors?)</p> <p>Periradicular surgery</p> <p>Other endodontic management (vital pulp therapy, complex sequelae of trauma, resorption, dental anomalies, systemic complications)</p>																		
Nature and history of presenting problem (to include present and/or past symptoms):																			
Medical history:																			
Medications:																			
Please provide details of treatment provided in primary care for this tooth/teeth (including any difficulties encountered) e.g. pulp extirpated, tooth opened to drain infection, incision & drainage, or restoration removed to assess restorability:																			
Current BPE scores:	<table border="1"> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>R</td> <td></td> <td></td> <td></td> <td></td> <td>L</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>							R					L						
R					L														
Has <u>all</u> treatment of primary dental disease (caries and periodontal disease) been completed?	<p>Yes <input type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>Please tick relevant box</p>																		
Details of primary disease treatment completed	_____																		

Patient details:	
Full name:	
NHS number (if known):	
Hospital number (if previously attended the hospital):	
Date of birth:	
Address (including postcode):	
Gender:	
E-mail:	Mobile phone number:

Details and Declarations of Referring Dental Practitioner:	
Name of referring dentist:	
GDC number:	
Practice address:	
Date of referral:	
E-mail:	
Telephone number:	
I confirm that appropriate radiograph(s) have been submitted with referral.	Yes No <i>tick</i>
I confirm that the tooth is restorable and is of strategic value for patient's oral health.	Yes No <i>tick</i>
I confirm that I will undertake any suggested pre-treatment restorative dismantling suggested by the specialist/consultant after consultation.	Yes No <i>tick</i>
I confirm that I will take on the responsibility of tooth restoration (core and cuspal-protection restoration) after endodontic therapy and that the patient understands the importance and risks of this not being done.	Yes No <i>tick</i>
If the referral is of level 1 complexity (routine), do you (the referrer) wish the patient to be considered for teaching and education?	Yes (referrer must accept that if there is no capacity the referral will be declined) No <i>tick</i>
Please confirm that your referral fulfils the London LPN triage requirements for Level 2 or 3 complexities?	Yes No <i>tick</i>
If the answer to the above question is NO then please outline another valid reason why the patient should be assessed.	

Pre-Referral checklist and entry criteria:

- Stable oral environment should 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 should be predictably restorable and made functional after removal of disease with supra-gingival 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 should be removed by the referring practitioner for caries removal and restorability assessment before referral. The tooth should 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).
- Endodontic treatment is not precluded by either patient cooperation or medical history.
- Patient is motivated with satisfactory periodontal health. For BPE codes 2, 3 and 4, there should 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 2 or 3 complexity as described in the acceptance criteria below.
- 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.

Radiographs accompanying referral (important information):

- All referrals must be accompanied by a current, dated and diagnostically acceptable parallel-view periapical radiograph(s) of the tooth (teeth) referred.
- 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).
- Where paper copies of conventional or digital radiographs accompany the referral the same quality standards will apply *e.g. the referral will not be accepted where the quality of the paper copy does not allow safe diagnostic assessment by the triager.*

ANNEX D – PATIENT ADVICE AND GUIDANCE FOR GENERAL DENTAL PRACTITIONERS

Patient information sheet for access to NHS specialist/secondary care endodontic treatment

Background

Under the NHS constitution, NHS treatment is available to all irrespective of gender, race, disability, age, sexual orientation, religion, belief, gender reassignment, pregnancy and maternity or marital or civil partnership status. The service is designed to improve, prevent, diagnose and treat both physical and mental health problems with equal regard. It has a duty to each and every individual that it serves and must respect their human rights. At the same time, it has a wider social duty to promote equality through the services it provides and to pay particular attention to groups or sections of society where improvements in health and life expectancy are not keeping pace with the rest of the population.

It is also committed to providing the most effective, fair and sustainable use of finite resources. Public funds for healthcare will be devoted solely to the benefit of the people that the NHS serves. Money spent on treatments that are ineffective or likely to produce no benefit is money wasted that could be allocated to other treatments.

It is vital that healthcare professional and patients discuss potential treatments and make decisions on what to recommend/accept based on clinical need and suitability.

In dentistry it is often complicated to discuss with patients why a treatment they want to be referred for may not be the clinically indicated treatment. There is the added complexity of providers offering private treatment as an alternative to the recommended NHS treatment.

Process

It is proposed that to ensure that the appropriate conversations take place with the patient prior to referral and to give the GDP a format for those discussions that the following patient sheet be completed when advising the patient. This sets out why NHS restorative treatment may not be recommended or referral to NHS specialist or secondary care is not recommended and records the discussion of options for other NHS treatment or private treatment.

The attached patient sheet is based on previously discussed complexity levels and referral form developed by the restorative LDN Steering Group. The example sheet sets out reasons for acceptance, delay or refusal and is signed by both the referring GDP and patient. The patient receives a copy. A copy could also be sent to a central body for recording or held by the dental practice for audit.

The patient must be informed and understand that referral for endodontic treatment is preceded by a consultation and does not guarantee acceptance for treatment, if deemed unsuitable.

General Eligibility for Level 2 or 3 Endodontic Referral:

- Stable oral environment should have been achieved and all caries managed.
- Patient informed and understands that the treatment may involve multiple long appointments and that success cannot be guaranteed.
- Tooth/teeth should be predictably restorable and made functional after removal of disease with supra-gingival 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 can only be assessed after removal of caries and restoration(s) and the placement of a sound and well-fitting provisional restoration prior to referral.
- Where the referred tooth is associated with a de-cemented bridge retainer, or caries is evident at the restoration margin - the restoration should be removed by the referring practitioner prior to referral for caries removal and restorability assessment before referral. The tooth should only be referred with a sound well-fitting temporary restoration in place.
- Patient informed of 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).
- Endodontic treatment is not precluded by either patient cooperation or medical history.
- Patient is motivated with satisfactory periodontal health. For BPE codes 2, 3 & 4, there should 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 Long cone periapical radiograph of diagnostic quality (*please see notes on radiographs accompanying referral below*).
- Referral request must fall into either Level 2 or 3 complexity as described in the acceptance criteria in the referral form

ANNEX E – ENDODONTIC TRIAGE CENTRES

Geographical Footprint	Boroughs Covered	Triage Centre
North West London (inner)	Hammersmith & Fulham Kensington & Chelsea Westminster	Central London Community Healthcare (CLCH) Email: CLCHT.specialistdental@nhs.net
North Central London (outer)	Barnet Enfield Camden Haringey Islington Brent Harrow Ealing Hillingdon	University College London Hospitals NHS Foundation Trust (UCLH) Email: uclh.referrals.edhappts@nhs.net
North East London (outer)	Redbridge Waltham Forest Barking & Dagenham Havering City & Hackney Newham Tower Hamlets	Barts Health NHS Trust Email: bhnt.restoratedentistry@nhs.net
South East London (outer)	Bexley Greenwich Bromley Lambeth Lewisham Southwark	Guy's & St. Thomas' NHS Foundation Trust Email: gst-tr.dentalreferrals@nhs.net OR King's College Hospital NHS Foundation Trust Email: kch-tr.dentalmaillist@nhs.net
South West London (outer)	Hounslow Croydon Sutton Kingston Merton Richmond Wandsworth	Croydon University Hospital NHS Trust (CUH) Email: ch-tr.hospitaldentistry@nhs.net OR St. George's Hospital NHS Foundation Trust (STG) Email: stgh-tr.referrals@nhs.net

		OR Kingston Hospital NHS Foundation Trust Email: khft.restoratedentistry@nhs.net
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ANNEX F – LEVEL 2 ENDODONTIC PROVIDERS

Geographical Footprint	Boroughs Covered	Level 2 Endodontic Provider	Please tick which Level 2 Endodontic Provider the patient would prefer to see
North West London (outer)	Hillingdon	Hillingdon Borough Endodontic Centre: Feelgood Dental 77 Belmont Road Uxbridge Middlesex UB8 1QU Yiewsley Dental Practice 2 Providence Road Yiewsley Middlesex UB7 8HJ	
North West London (outer)	Ealing Hounslow	<i>TBC</i>	
North West London (outer)	Brent Harrow	MOS Solutions Ltd Headstone Lane Dental Practice 197 Headstone Lane Harrow Middlesex HA2 6ND	
North West London (inner)	Hammersmith & Fulham Kensington & Chelsea Westminster	EndoBGD Bloom & Gonsai 29 Weymouth Street London W1G 7DB	
North East London (outer)	Redbridge Waltham Forest	MOS Solutions Ltd Dentaliving 161 Clayhall Avenue Ilford Essex IG5 0NZ	
North East London (outer)	Barking & Dagenham Havering	Newham Family Dental Care Ltd	

		Collier Row Dental Practice 21 Collier Row Romford Essex RM5 3NR	
North East London (inner)	City & Hackney Newham Tower Hamlets	Newham Family Dental Care Ltd Barbican Dental Centre 16-19 Goswell Road Barbican London EC1M 7AA Burgess Road Dental Practice 2 Burgess Road East Ham London E6 2BH	
North Central London (outer)	Barnet Enfield	MOS Solutions Ltd Hazelwood Dental Practice 1E Hazelwood Lane Palmers Green London N13 5EU	
North Central London (inner)	Camden Haringey Islington	MOS Solutions Ltd Smile Care 25 Junction Road Archway London N19 5QT	
South East London (outer)	Bexley Greenwich	Bexleyheath Dental Practice Ltd Bexleyheath Dental Practice 306 Broadway Bexleyheath Kent DA6 8AA	
South East London (outer)	Bromley	Bexleyheath Dental Practice Ltd	

		<p>Bexleyheath Dental Practice 306 Broadway Bexleyheath Kent DA6 8AA</p> <p>OR</p> <p>Dentistry For You Ltd</p> <p>Forest Hill Dental Surgery 3 Dartmouth Road Forest Hill London SE23 3HN</p>	
South East London (inner)	Lambeth Lewisham Southwark	<p>Dentistry For You Ltd</p> <p>Brixton Dental Practice 35 Gresham Road Brixton London SW9 7NU</p> <p>Forest Hill Dental Surgery 3 Dartmouth Road Forest Hill London SE23 3HN</p>	
South West London (outer)	Croydon Sutton	<p>Newham Family Dental Care Ltd</p> <p>Sutton Dental Practice MSA House London Road Hackbridge Surrey SM6 7BJ</p>	
South West London (inner)	Kingston Merton Richmond Wandsworth	<p>Shamila Ltd</p> <p>Green Dental Care 2-4 York Road Battersea London SW11 3QA</p>	