



## **A Graduated Return to Elective ENT Within the COVID-19 Pandemic**

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## Foreword

As we emerge from the first peak of the pandemic and consider delivery of healthcare, we as otolaryngologists seek appropriate guidance and principles which we can adapt locally depending on resources, and the needs of our patients. ENT UK, with the collaboration of the sub-specialist societies, has developed recommendations for a graduated return to practice that are being presented in three parts. [Part One](#), released on 29 April contained comprehensive general guidance including on triage of patients and management of emergencies with prioritisation of less urgent surgery. [Part Two](#), released on 5 May, provided specific advice on consenting and testing of patients in the preoperative assessment.

This document (Part Three) contains more elaborate and specific recommendations encompassing all our areas of practice, including outpatient work, procedures and surgery in all specialty areas. These will be "real-time documents" that will have to be updated on an ongoing basis as new information becomes available and in the various phases of the pandemic almost as a "surfer cresting the waves and hoping that this was the biggest".

These documents were prepared by the ENT UK working group with input from sub-specialty councils including the BSO, BRS, BSFPS, H&N society, BLA, BAPO, AOT and the SAC for otolaryngology. We are delighted with the voluntary contributions of many individuals who offered their time and expertise mainly out of hours and with a true collegiate spirit – that we are all in this together and for the benefit of our patients does not seem hollow in this context.

Nirmal Kumar  
President, ENT UK

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## Introduction

The aim of this guidance document is to support ENT departments and colleagues as discussions and action plans are developed regarding resumption of elective activity.

The COVID-19 pandemic led to many changes in elective ENT care in order to ensure sufficient staff and resources were available to manage the expected number of cases and to protect the population. The changes included:

- I) Outpatient clinics were cancelled where possible or changed to telephone or video consultations.
- II) Cancellation of all routine elective activity and deferment of many urgent and/or cancer cases that could be safely delayed.
- III) Cancellation of routine imaging, undertaking only urgent suspected or confirmed cancer cases.
- IV) Re-deployment of staff to support ITU, critical care areas and management of COVID cases.

[ENT UK](#) supported colleagues by producing a range of guidance across a range of topics.

As the number of COVID-19 cases has started to plateau across the UK, restarting non-COVID-19 related activity is being discussed as the NHS moves into the [phase 2 response](#). Currently there remains no cure or vaccine for COVID-19 and it is anticipated that there will be further peaks within the next weeks to months<sup>1</sup>.

The continuing presence of COVID-19 in the population will prevent the return to pre-COVID-19 pandemic activity. Adaptations to traditional ways of working will need to be made to ensure the safety of patients and staff.

An ENT UK working group, including representation from sub-specialty associations and involving trainee representation has prepared this document based on current evidence and best practice. This is a “live” document and will be updated and edited as evidence on COVID-19 develops.

## National Guidance

The [NHS Chief Executive and Chief Operating Officer](#) have written to all Chief Executives of NHS Trusts and Foundation Trusts regarding stepping up Non-COVID-19 urgent activity as well as determining capacity to undertake routine elective activity.

Both the [Royal College of Surgeons of England](#) (RCSEng) and The [Royal College of Anaesthetists](#) (RCoA) have published guidance (see [Appendix 1](#)) to support departments and surgeons. The guidance provides principles, recommendations and key considerations, applicable to all surgical specialties.

# Outpatients

ENT outpatient services have largely been restricted to urgent, emergent and triaged two-week wait referrals during the COVID-19 pandemic.

With evolving clarity on public health guidance and review of infection control procedures, this guidance provides a framework on how to deliver care safely and effectively when ENT outpatient clinics gradually resume. Application of this guidance must be done in conjunction with employer risk assessment, safeguarding, and local priority guidelines.

Three broad objectives will determine how ENT Outpatients will be provided:

- A. Reduce outpatient footfall and community transmission during travel to and from outpatient appointment
- B. Reducing transmission within outpatient department (OPD)
- C. Minimise risk of infection during outpatient procedures or tests

## A. Reduce outpatient footfall by pathway redesign

### Triage

Enhanced triage or vetting of new referrals and current patients is required to ensure that resources are appropriately used and ensuring safety of patients and staff. Sufficient time must be identified in a consultant's job plan to undertake triage and vetting, taking into account the average number of referrals each clinician is required to triage. Recommended triage outcomes include:

- New referrals:
  - 1) Arrange telephone or video consultation
  - 2) Arrange face-to-face consultation
  - 3) Arrange appropriate investigations prior to first consultation
  - 4) Request further information from GP
  - 5) Return to GP with advice regarding medical/non-surgical management
  - 6) Reject or re-direct referral to more appropriate specialty
- Current patients:
  - 1) Arrange telephone or video consultation
  - 2) Arrange face-to-face consultation
  - 3) Arrange appropriate investigations prior to consultation
  - 4) Discharge to GP with advice regarding medical/non-surgical management
  - 5) Request patient to confirm an outpatient appointment is still required.

Please see subspecialty guidance ([Appendix 3](#)) regarding triage of specific conditions.

## Face to Face vs Remote Consultation

The [GMC flow chart](#) may help doctors apply a structured approach to manage patient safety risks and decide when it is usually safe to treat patients remotely.

Face to face consultations appointments should be reserved for those cases where there is a specific need to bring the patient to hospital for a specific examination, procedure or investigation.

If imaging is required, then aim to organise this prior to the appointment or on the same day. The aspiration is to move to a “one-stop” model to include consultation, relevant outpatient procedures, relevant investigations, pre-operative assessment etc.

Remote (telephone or video) consultations are suitable to help triage new referrals and initiate treatment, when possible. Follow-up consultations to discuss results or when examination is not required are also suitable.

Differences in local population demographics and conditions may mean that the guidance is adapted for Local Needs.

Remote consultations may be difficult in the following situations

- i. English is not the patient’s first language and an Interpreter is required
- ii. The patient has difficulty hearing
- iii. The patient has other co-morbidities (e.g. dementia, learning difficulties)

## B. Reducing risk of transmission within OPD

1. Patients should be advised to come alone or bring only one relative/carer if essential (or as per the hospital’s local policy).
2. Patients and staff should be requested to wear a cloth face covering or mask or cover their face whenever possible or practical.
3. Emergency clinics should be held in a separate area to elective clinics where possible as emergency patients with tonsillitis, quinsy, or neck space infections can often present with symptoms mimicking COVID (fever, upper respiratory tract symptoms).
4. Patients do not require COVID testing prior to their OPD appointment.
5. Screening at entry into OPD for symptoms/signs of COVID:  
Non-touch temperature check (standardized conditions) at front door and greeting staff to ask list of questions (as per local policy).
6. Social distancing:

Waiting rooms, reception areas and other public areas must have measures in place to implement social distancing. New seating arrangements and signage (including floor markings) will help enforce social distancing measures.

7. Minimising transmission to vulnerable and shielded Groups  
Patients in a vulnerable or shielded group should be allocated appointments at the start of the F2F clinics.
8. Minimise duration of F2F consultation.
9. Clinician to wear scrubs or “bare below the elbow” as per local infection control guidance.
10. Children are less likely to be tolerant of wearing a mask when seen in outpatients or on the ward. They are more likely to cough and sneeze uncontrollably. They may not maintain a 2m distance from others and may not be able to be fully controlled by their parents or carers. This increases risk of viral transmission to others in the outpatient and ward environment. Availability of PPE should take this into consideration. Non-essential objects, such as toys, should be removed.



## C. Minimise risk when undertaking Outpatient Procedures or Tests

### Flexible Nasoendoscopy (FNE)

FNE is a potentially aerosol generating procedure (AGP), which requires specific consideration and preparation both when undertaken in an outpatient clinic or when undertaken as part of an assessment out-of-hours for non-elective patients.

A recent study has shown that normal speech and FNE generates a similar amount of aerosol. However, both produce significantly less aerosol than sneezing<sup>2</sup>. Therefore, full PPE precautions are still required for the doctor performing FNE, as sneezing can occur during FNE but otherwise it is of a similar risk as a face to face consultation. Whilst still present, the use of a surgical mask, ideally a FFP2 (N95) mask, with a small hole for the endoscope worn by the patient, can attenuate airborne aerosol generation<sup>2</sup>.

If the patient sneezes the room should be cleaned as per government and local policy after an AGP

The key aspects when performing a potential AGP is wearing adequate PPE (FFP3 mask, full-face shield or visor, a long-sleeved disposable fluid repellent gown covering the arms and body) preventing air-borne aerosolisation and ensuring adequate ventilation.

#### Location

- i. FNE should be conducted in a well ventilated room (natural and/or mechanical). If the room is poorly ventilated (no natural or mechanical ventilation) please ensure that the room meets the ventilation requirements recommended for performing an AGP. Work with local Infection Control Departments to ensure that proposed rooms are suitable.
- ii. The room set up should facilitate easy cleaning between patients and at the end of the session as per current National and Local infection control guidance.
- iii. The time between each patient can be the same as for face-to-face consultation but if the patient sneezes during FNE then sufficient time will be needed for the clearance of any aerosol from the room and appropriate decontamination.
- iv. Any PPE worn must be properly put on (donning) and removed (doffing) and disposed of in line with relevant clinical waste guidance.
- v. Ensure adequate time for safe donning and doffing of PPE in a dedicated area separate to where the AGP is performed.
- vi. Departments may consider conducting AGPs in alternative environments with defined increased airflow to reduce the time between AGPs. PPE requirement remain unchanged.
- vii. In view of the risk of an AGP occurring we recommend that FNE is undertaken in a separate room to the usual consultation room.

## Competence

FNE should be performed by a competent individual to minimise risk of cough or sneeze.

## Minimising transmission of aerosols:

- i. **Barrier methods:** Patients wearing a simple or modified surgical mask or other suitable face covering during consultation. A number of options have been proposed and developed. These must receive relevant national and local approval before being used on patients.
- ii. **Increase physical distance** from patient's face and your face by using a camera system when performing FNE.
  - The increased physical distance minimizes the chance of inhalation of aerosols or droplets.
  - Improved visualisation as no impairment of image via eyepiece due to PPE and magnification by camera system.
- iii. **Disposable nasoendoscopes** should be considered for use out of hours to ensure safety and minimise risk of cross-infection.
- iv. **Cleaning and Storage-** Ensure cleaning (between patients and at the end of a clinic or session) and storage of scopes is compliant with National ([Decontamination of Endoscopes ENT UK Guidance document](#)) and Local guidance.

## Microsuction

The external ear canal is not virus bearing. Micro-suction of the external ear canal therefore should not generate risk of COVID-19 transmission from the *ear canal* if the tympanic membrane is intact, and it is not considered an AGP with respect to COVID-19 transmission.

The middle ear and mastoid mucosa may be virus bearing. There is no direct evidence as yet with respect to COVID-19 infection, but there is evidence from previous coronavirus studies<sup>3,4</sup>. Microsuction of the middle ear or its contents could therefore in *theory* risk viral transmission in infected patients.

BSO, consistent with the advice from [UK's audiology professional bodies](#), recommend asking the patient to wear a fluid resistant mask during microsuction to reduce aerosol in the clinic room. Concern has been raised about air venting laterally from the mask if a patient coughs. Consideration may be given to using a fan behind the physician to blow any droplets away. This has been adopted for a number of years in centres previously subject to pandemics (personal communication).

When undertaking micro-suction or dewaxing in the presence of an intact tympanic membrane the 2-metre social distancing guideline will be breached. Appropriate PPE is required (fluid resistant mask, disposable gloves and apron) and to maintain reasonable

distance the use of an operating microscope, or video-endoscope with remote screen is likely to be safest.

In the presence of a dry tympanic membrane perforation it is reasonable to follow the same recommendations as for an intact tympanic membrane. If the middle ear is wet intuitively the risk of contamination with virus seems higher. In this situation BSO recommends the use of a filtering face piece respirator (FFP2 or FFP3).

Avoidance of fenestrated suction is recommended in the presence of a wet ear in order to minimize aerosolization through the fenestration, and contamination of the surgeon's glove.

Care should be taken when undertaking microsuction that the suction machine in your department has an adequate filter, and that aerosol is not generated from the vents of the machine itself

## Audiology and Audiovestibular Testing

Provision of audiology and audiovestibular services has been guided by [NHS England](#) and guidance produced by [UK's audiology professional bodies](#). Both guidance documents are being regularly updated.

Based on the current guidance BSO has made the following recommendations:

Audiovestibular testing should only be undertaken in patients who are asymptomatic for COVID-19 and have not had contact with anyone known to be COVID-19 positive in the last 2 weeks. Again, consideration of additional risk to older patients and those with other COVID-19 risk factors, is required.

There is no reason to undertake audiovestibular testing in suspected or confirmed COVID-19 positive patients at the present time.

Testing is likely to take longer due to the longer periods required for cleaning between cases and numbers tested will be reduced. Local discussions regarding staffing factors and the test environment will need exploring.

Urgent testing for sudden sensorineural hearing loss should continue to be provided in all circumstances. Testing of patients undergoing aminoglycoside or chemotherapy regimens that may induce audio-vestibular injury should not be delayed.

To ensure appropriate triage we recommend testing is requested only by senior clinical staff.

We recommend that the following procedures can now be restarted when individual units have appropriate infection control policies in place, and where clear need is present:

Audiometry, tympanometry, stapedial reflexes, ABR, CERA, VNG testing, caloric testing in the presence of intact tympanic membranes, posturography, rotating chair, vHIT and VEMPS. Consideration is required on whether or not to undertake Trans-tympanic electrocochleography because it involves piercing the tympanic membrane and may risk exposure to middle ear mucosa.

## Outpatient Laryngology procedures (British Laryngology Association recommendations)

Procedures (e.g. VC medialisation, botulinum toxin injections, pharyngeal balloon dilatation post laryngectomy etc), previously performed in outpatients, should only be performed in the operating theatre, unless negative pressure ventilated rooms, are available in OPD, fit for purpose with safeguards.

FNE (including stroboscopy) and transnasal oesophagoscopy are potentially AGP and therefore require that full PPE is worn. Joint ENT-SLT Voice and / or Swallow clinics when these procedures are usually undertaken, will require all team members to wear full PPE

Tracheostomy tube changes and troubleshooting of developing complications for community patients require similar considerations for the OPD environment and reduction of AGP risk (often these patients are in wheelchairs or on trolleys which further impact on available space for safety). Therefore, full PPE is required.

## Remote Consultations

### Equipment and setting

Quiet room,

Appropriate phone +/- head set or speakerphone

Suitable computer hardware with suitable video platform (NHS or Locally approved software), access to all medical records and relevant hospital systems for ordering tests, reviewing results (including imaging reports and images), dictation etc.

Systems available to assist patients with disabilities, requiring interpreter etc. If not available, then patients will require face to face consultation

### Clinic

[ENT UK Telephone Triage guidance](#) can assist with structuring and documenting the consultation including recording outcomes of individual consultations.

[ENT UK Outpatient Guidance](#) includes indicative numbers of patients that can be safely seen. Telephone and video consultations can take longer than traditional face to face consultations, including the consent process. Therefore, departments should consider the number of consultations per session.

## Face to Face

In order to ensure safety of patients and staff it is vital that patients are suitable for face to face appointments. All patients that are triaged for face to face appointment should receive communication from the hospital as detailed below, which can be as a letter, email or text message as per local policy.

### Appointment Communication to patient

Request that the adult patient attends alone. Only one companion is allowed if required

Request that the paediatric patient attends with only one parent/guardian.

Patient and parent/companion wear a face-covering or mask.

Question on COVID-19 symptoms – if yes to any of the below, defer contact appointment until safe to do so (unless urgent/time-critical or an emergency):

- a. Do you or anyone in household have coronavirus?
- b. Do you have a new continuous cough
- c. Do you have a high temperature (over 37.8C)
- d. Does anyone in your household have a new, continuous cough or high temperature?
- e. Have you or anyone in your household recently experienced a sudden loss of smell or taste.

Provide instructions to the patient on which entrance to use and where to wait on arrival. Patients should be advised that they will be questioned on arrival with regard to their wellness and may have their temperature checked. Patients should be advised that social distancing is being observed and to sit where indicated and not to move furniture.

## Clinic Scheduling

Appointments should be scheduled to meet the adaptations in social distancing within the outpatient waiting room.

Appointments for the elderly, shielded or vulnerable groups may be scheduled in the earlier part of the day or clinic.

Ensure sufficient time between appointments to allow equipment and surfaces to be cleaned.

Appointment lengths should be adjusted to account for PPE requirements for consultations and outpatient procedures and tests.

[ENT UK Outpatient Guidance](#) includes indicative numbers of patients that could be safely seen prior to COVID-19 restrictions. However, consultations will likely take longer, especially if a procedure or additional protection is required, and therefore departments should consider the number of realistically feasible consultations per session.

## Waiting area

Set-up as per local guidance to ensure social distancing.

## Consultation

Provision should be made for the assessment to be conducted in a space that allows for privacy and optimises physical distancing ideally at 2m.

The duration of appointments should be minimized where possible.

Clinician to wear scrubs or “bare below the elbow” as per local infection control guidance. Speech can generate aerosol thus wearing a full-face visor and FFP3 mask when examining the throat or nose (via anterior rhinoscopy) and maintaining a 2m distance during history taking would minimise exposure.

## Training

There are [short podcasts by the Royal College of General practitioners \(RCGP\)](#) on telephone consultations as useful guidance.

Telephone/Video consultation is different to traditional face-to-face consultation and trainees (including Fellows, MTI and locums) and SAS doctors must be sufficiently experienced and trained prior to undertaking telephone or video consultation with appropriate supervision.

The number of clinics per week (face to face and telephone/video) should consider on-call duties and mirror current SAC guidelines where possible (e.g. include a specialist clinic per week).

Trainees should not undertake a clinic without a designated available consultant and must always have direct or remote access to a supervising consultant for telephone/video consultations.

Having a pre-discussion or debrief session with a consultant will be beneficial and encourage clinical based discussions necessary for learning. A video consultation is better from a training perspective to assess and feedback on consultation style, management and communication.

Trainees should not triage new clinic referrals if this is not already part of their usual activity in the department without suitable training and support.

## Emergency ENT

The overarching principle is that the provision of safe emergency care should take priority over elective care when resources are restricted. Consideration should be given to the centralisation of emergency services if this may reduce admissions.

In some units the first on-call may not be an ENT trainee but a surgical nurse practitioner, so it is essential that this guidance is available to all healthcare professionals who are managing the patients who are presenting as ENT emergencies.

The majority of the [guidance produced by ENT UK](#) regarding the management of emergency conditions during the pandemic will remain, as COVID-19 will persist in the population. The management of all ENT Emergencies will require:

- i) Consultant leadership to minimise unnecessary admissions, minimise length of stay and manage the majority in an ambulatory setting.
- ii) Changes to job plans and timetables for consultants, SAS doctors and trainees.
- iii) Departments to ensure facilities and equipment are suitable to deliver safe and effective care, following PHE guidance for all aerosol generating procedures.

Considerations for emergency patient review, if not taking place in the outpatient clinic:

- Room considerations:
  - Dedicated facility ideal for AGP
  - Consider deep clean requirements
  - Ventilation and air exchange needed
- Equipment:
  - Consider dedicated equipment to minimise transfer of dirty scopes
  - Consider how and where scopes are cleaned to prevent transfer of used scopes via 'clean' areas
- Staff:
  - Consider dedicated nursing team who are able to nurse potential COVID 19 carriers
  - Consider competency of any trainee involved in providing emergency care

## Testing for COVID-19

Currently rapid, accurate testing for COVID-19 is not available in the timeframe required for most ENT emergency surgery (Priority 1a or 1b), so full PPE must be worn as per previous guidelines.



If rapid testing is available or becomes available, then results can help determine the PPE required to keep staff and patients safe.

## Admission

When considering if a patient is to be admitted there will be a balance of risk. Availability of COVID-19 testing, National and Local guidance will determine appropriate location to admit an emergency admission.

## Management of common ENT emergencies

Please see [Appendix 2](#)

## Training

Trainees should be involved in emergency management under consultant supervision, taking into consideration local COVID 19 prevalence, trainee experience and the stratified risk of the individual trainee.

Trainees must be considered as part of the emergency theatre team whilst respecting local guidelines regarding the number of persons in theatre and local infection control guidelines. Opportunities for work- based assessment of trainees who are involved in the emergency management of patients should proceed as under normal circumstances. A clear discussion with the trainee is recommended to manage expectations prior to involvement in all emergency surgical procedures.

For high risk, COVID 19 positive patients undergoing aerosol generating procedure such as tracheostomy, local COVID 19 emergency guidance should be followed, for lower risk tracheostomy in a COVID 19 negative patient consider more active trainee involvement.

## Research

The INTEGRATE research collaboration are currently collecting data on ENT emergencies during the pandemic.

A joint study by BAPO and BSO - Observational study of conservative vs surgical management of acute mastoiditis, and COVID-19 status.

# Surgery Prioritisation

The guidance from the RCS England and the RCoA detailed earlier provides a framework to determine a safe level activity which can be undertaken. Departments and individual consultants will have started to prioritise their current surgical waiting list using [ENT UK prioritisation recommendations](#). A step wise approach is advocated to resuming elective surgery aiming to undertake priority 1 and 2 cases initially. Over the next few months it is likely that departments will be undertaking priority 3 cases as well.

Priority 1A-Emergency (24hrs)	Priority 1B Urgent (72hrs)	Priority 2- Up to 1 month	Priority 3- Up to 3 months	Priority 4
<p>Airway obstruction including Foreign Body and thyroid pathology</p> <p>Neck trauma with vascular/visceral/airway injury</p> <p>Nasal/Ear/oesophageal button battery or other corrosive foreign body removal</p> <p>Post tonsillectomy Bleed</p> <p>Oesophagoscopy for food bolus/ foreign body – (consider OGD to avoid GA)</p>	<p>Lymph node biopsy for lymphoma when core is not adequate</p> <p>Head and neck sepsis not responding to conservative management</p> <p>Bronchoscopy for Possible Foreign Body</p> <p>Adenotonsillectomy for severe obstruction causing imminent cardiopulmonary compromise of intubation</p>	<p>Panendoscopy/ Microlaryngoscopy for suspected malignancy</p> <p>MDT directed nasopharyngeal/oropharyngeal surgery for malignancy</p> <p>MDT directed surgery of small salivary gland tumour</p> <p>MDT Directed treatment of sinus cancers threatening sight</p> <p>Skin cancer – Melanoma and SCC.</p> <p>Thyroid cancer with metastatic nodal disease</p> <p>Medullary thyroid cancer</p> <p>Patient with sight threatening thyroid eye disease.</p> <p>Thyroidectomy for uncontrolled thyrotoxicosis when medical treatment or radioactive iodine not suitable</p> <p>Uncontrolled Graves in pregnancy</p> <p>Tumour or goitre causing mild/moderate stridor</p> <p>Hyperparathyroidism with corrected calcium &gt;3.0 who cannot be controlled with medical management</p>	<p>Other thyroid cancers including diagnostic lobectomy.</p> <p>Patient with recurrent renal stones +/- associated sepsis</p> <p>Management of some benign laryngeal pathologies</p> <p>Endoscopic treatment of pharyngeal pouch with severe aspiration</p> <p>Parotid surgery for benign conditions</p> <p>Skin cancer – BCC</p> <p>Prophylactic Thyroidectomy in medium and lower risk MEN2 patients</p> <p>Paediatric Microlaryngoscopy for progressive airway conditions incl. RRP, subglottic stenosis.</p>	<p>Surgery for uncomplicated benign thyroid disease</p> <p>Other parathyroid surgery</p> <p>Management of other benign laryngeal pathologies</p> <p>Laryngeal framework surgery</p> <p>Routine procedures on pharyngeal pouch</p> <p>Transnasal Oesophagoscopy</p> <p>Laryngotracheal reconstruction</p> <p>Adenotonsillectomy- OSA and Recurrent tonsillitis</p> <p>Paediatric Neck surgery for Benign and Congenital neck lesions not causing airway obstruction.</p>

		<p>Repeated Hospital admissions for medical treatment of hypercalcaemia.</p> <p>Pregnant women with adjusted calcium &gt;2.85 (ideally 2<sup>nd</sup> trimester)</p> <p>Post-transplant hypercalcaemia with deteriorating renal function</p> <p>Endoscopic and open treatment of airway lesion and oesophageal stricture</p> <p>Vocal cord medialisation for severe aspiration</p> <p>Tracheostomy for weaning purposes on PICU where all other options for progression have been exhausted.</p>		
<p>Orbital cellulitis</p> <p>Sinus surgery for impending catastrophe or failure to respond to medical therapy</p> <p>Uncontrolled Epistaxis</p>	<p>Foreign bodies nose</p> <p>Compound or complex fractures of nose and sinuses</p> <p>Orbital decompression</p> <p>External draining of orbital abscess not responding to medical treatment or showing visual compromise</p>	<p>EUA and biopsy suspected malignancy</p> <p>Mucocele with recurrent infection or visual disturbance</p> <p>Complete nasal obstruction associated with severe sleep disordered breathing</p>	<p>CSF fistula repair</p> <p>Expanding mucocele without infection</p> <p>Sinus surgery with previous complication of infection</p>	<p>All other rhinology (septoplasty, septorhinoplasty, sinus surgery, turbinate surgery)</p>
<p>Life threatening middle ear conditions</p> <p>Posterior cranial fossa/lateral skull base pathology if there is life-threatening brainstem compression/hydrocephalus (can be 1a, 1b or 2). Liaise with neurosurgeon</p>	<p>Acute mastoiditis and other middle ear conditions not responding to Conservative treatment.</p> <p>Traumatic/cholesteatoma related facial nerve palsy</p> <p>Traumatic injury to the pinna</p> <p>Removal of infected Cochlear implant</p> <p>Posterior cranial fossa/lateral skull base pathology if there is life-threatening brainstem compression/hydrocephalus (can be 1a, 1b or 2). Liaise with neurosurgeon</p>	<p>Cochlear implantation post meningitis and children who are pre-lingual.</p> <p>Cochlear implant device failure leaving user without hearing</p> <p>Mastoid exploration-cholesteatoma with complications including labyrinthine fistula.</p> <p>Baro-trauma Perilymph fistula</p> <p>Organic foreign body in ear</p> <p>Posterior cranial fossa/lateral skull base pathology if there is life-threatening brainstem</p>		<p>Cholesteatoma uncomplicated</p> <p>Chronic suppurative otitis media</p> <p>All ossicular surgery/middle ear implants</p> <p>Tympanoplasty</p> <p>Grommets</p> <p>Meatoplasty</p> <p>Vestibular surgery</p> <p>Non-organic foreign bodies (except button)</p>

		compression/hydrocephalus (can be 1a, 1b or 2). Liaise with neurosurgeon		batteries/corrosive foreign body)
		Vestibular schwannoma if there is life-threatening brainstem compression.		Other cochlear implants

Table 1: updated priority list with guidance received from sub-specialty groups (BRS, BSO, BLA, BAPO, BAETS, Head & Neck Section)

As services resume, it is likely that theatre capacity will be significantly reduced compared to before the pandemic. Reasons include availability of staff and the need to separate COVID-19 and non-COVID 19 activity. There will therefore be a need to further prioritise patients within category 3 and eventually category 4.

MeNTS (Medically Necessary Time Sensitive) scoring system<sup>6</sup> can assist in determining priority within the broad categories (1-4) advised above. The scoring system, supported by the American College of Surgeons, assesses 21 factors, scoring between 1 and 5, to give a total score between 21-105.

The higher score reflects greater risk to the patient, greater utilisation of healthcare resources and greater risk of virus transmission to the surgical team.

	1	2	3	4	5
<b>Operating time</b>	<30	30-60mins	60-120mins	120-180mins	>180mins
<b>Length of Stay</b>	Daycase	23hour stay	24-48hours	<3 days	>4 days
<b>Post-Op ICU need</b>	Very Unlikely	<5%	5-10%	10-25%	>25%
<b>Anticipated Blood loss</b>	<100ml	100-250ml	250-500ml	500-750ml	>750ml
<b>Surgical Team size</b>	1	2	3	4	>4
<b>Intubation probability</b>	<1%	1-5%	5-10%	10-25%	GA
<b>Surgical Site</b>	None of the following	Abdominopelvic Minimally Invasive Surgery	Abdominopelvic, Open surgery Infraumbilical	Abdominopelvic, open surgery Supraumbilical	OHNS/ Upper GI/Thoracic

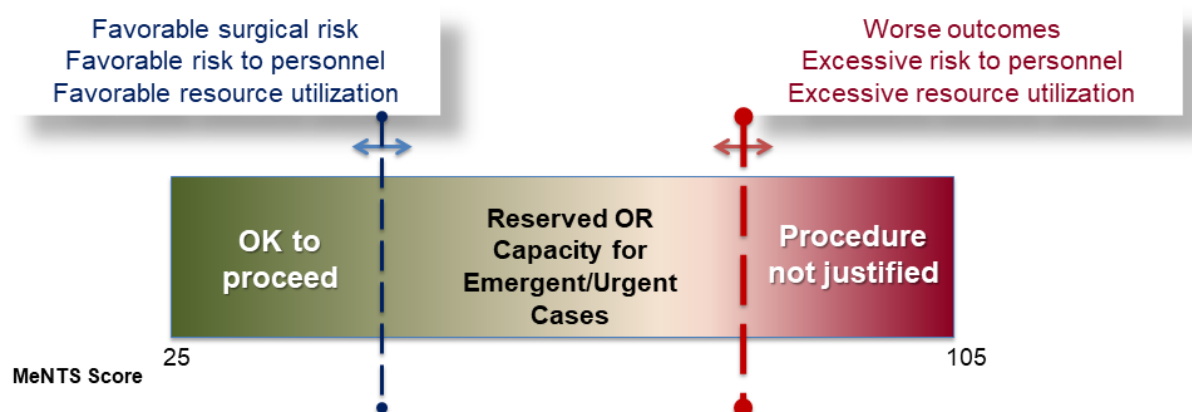
Table 2a: Procedure Factors

	1	2	3	4	5
<b>Non-Operative Treatment option EFFECTIVENESS</b>	None Available	Available, <40% effective as surgery	Available, 40-60% effective as surgery	Available, 60%-95% effective as surgery	Available, equally effective
<b>Non-Operative Treatment option resource/exposure</b>	significantly worse	somewhat worse	Equivalent	Somewhat better	Significantly better
<b>Impact of 2 week delay in DISEASE Outcome</b>	Significantly worse	Worse	Moderately worse	Slightly worse	No worse
<b>Impact of 2 week delay in SURGICAL difficulty/risk</b>	Significantly worse	Worse	Moderately worse	Slightly worse	No worse
<b>Impact of 6week delay in DISEASE Outcome</b>	Significantly worse	Worse	Moderately worse	Slightly worse	No worse
<b>Impact of 6 week delay in SURGICAL difficulty/risk</b>	Significantly worse	Worse	Moderately worse	Slightly worse	No worse

Table 2b: Disease factors

	1	2	3	4	5
<b>Age</b>	<20	21-40	41-50	51-65	>65
<b>Lung disease</b>	None			Minimal (rare inhaler)	>minimal
<b>OSA</b>	Not present			Mild/Moderate No CPAP	On CPAP
<b>CV disease</b>	None	Minimal (no meds)	Mild (1 med)	Moderate (2 meds)	Severe (>3meds)
<b>Diabetes</b>	None		Mild (No Meds)	Moderate (oral meds only)	>moderate (insulin)
<b>Immunocompromised</b>	No			Moderate	Severe
<b>Infective Symptoms (fever, cough, sore throat, body aches, diarrhoea)</b>	None (asymptomatic)				Yes
<b>Exposure to known COVID +ve patient in last 14 days</b>	No	Probably not	Possibly	Probably	Yes

Table 2c: Patient factors



The upper and lower threshold scores are dynamic and can be set locally dependant on theatre capacity, staff and healthcare resources.

# Informed Consent and Pre-Operative Testing

Please see [Consent and Pre-Operative Assessment for ENT surgery- A Graduated Return to Elective ENT within the COVID-19 Pandemic](#).

## Surgery- General Considerations

### Staffing

In many departments staff have been redeployed to help manage patients unwell with COVID-19 and increased their hours to cope with demand. In order to resume non-urgent elective activity staff must have been returned to their normal roles and resume normal activity. Out-of-hours staffing must have returned to pre-pandemic level before non-urgent elective activity can resume.

### Theatre

Patients should observe 14 days of self-isolation (including at least one parent in the case of children) plus swabs at 7 days and 48 hours prior to surgery. The exact duration and timing should be in line with local COVID-19 policies.

Surgery should be undertaken in “cold” (COVID-19 Negative) sites or as a minimum in a “cold” section of the hospital.

Procedure times will significantly increase due PPE requirements, set-up time and turnaround requirements between cases. This must be taken into account when planning lists. 2 or 3 session lists may be a more efficient use of theatre capacity.

The number of staff in theatre should be kept to a minimum.

Theatre staff familiar with the procedure being undertaken is critical in order to maintain efficiency.

Safe, fast and efficient surgery is important in order to minimise the risk of exposure and optimise the use of PPE

The theatre needs to be appropriately cleaned post-operatively to ensure minimisation of residual particulate material on surfaces. Similarly, optimisation of theatre ventilation is critical in order to clear aerosolised material as promptly as possible.

### PPE Requirements

Not all ENT procedures will generate significant aerosol. Nevertheless, we recommend the following PPE as a minimum:

- FFP3 mask or powered air-purifying respirator (PAPR) or equivalent
- Goggles or Visor
- Water-proof gown
- Double gloving
- Non-fenestrated suction

Working for prolonged periods wearing PPE can be difficult due to discomfort, claustrophobia and CO2 build up. Therefore, it is vital that breaks are planned during long procedures.

Standard donning and doffing procedures should be adhered to.

## Anaesthetic Considerations

The Royal College of Anaesthetists have a [COVID-19 website](#) that can be referred to for specific anaesthetic advice.

- We would recommend that patients having general anaesthesia are woken in the operating theatre.
- All appropriate steps to avoid coughing on waking should be taken. Similarly, precautions to minimise aerosolisation with coughing should be taken. This should be discussed with the anaesthetic team.
- Local Anaesthetic may be preferred in some procedures to reduce aerosol generation and to reduce patient risk from general anaesthesia.
- Surgery should be carried out in a designated COVID-19 free area wherever practical to avoid exposure to potentially COVID-19 positive areas of the hospital.
- Procedures should be undertaken as a day case, where possible, in order to minimise the duration of time in hospital.

See [Appendix 3](#) for specific Sub-Specialty Guidance

## Training

We acknowledge the ongoing need for training and with appropriate protection, trainees are no more at risk of COVID-19 infection than their consultant. It is therefore recommended that trainees should be allowed to carry out sections or full operations under close consultant supervision within time constraints and appropriate to the trainee's experience. Timely completion of surgery should be a priority, and this may result in a reduction in the overall operating time for the trainee. Ideally discussion regarding trainee involvement should be discussed during brief prior to surgery. The aim should be to focus the component or components of the operation where the trainees individual training

requirements can be met. Areas where competence are already proven could be done by the Consultant to allow focus on these other areas. This will vary depending on competency, seniority, COVID-19 status and will have to be taken on a case by case basis.

Limiting observation within the operating theatre during AGPs may be necessary where the trainee cannot benefit from any hands-on component. Facilities should be made available, with patient consent for live streaming outside the theatre and the use of pre-recorded and edited operative videos or simulation are safer alternatives to direct observation. Operative simulation training is a good adjunct to operative training, but ultimately one cannot substitute for the other and a lack of operative training will need to be addressed in time.

The effects on training of the reduced operating time that trainees are likely to experience in the near future will need to be reviewed on an ongoing basis. Recommendations may change dependent on both local and national prevalence, but also as knowledge develops on infectivity and immunity.

As this period of a relative embargo on operative surgical training may extend for a considerable period, there should be active investment in the development of wet lab and cadaveric facilities locally and regionally for regular dissection training and the practice of surgical procedures within the confines of the Anatomy Act.

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## Links

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19. <https://www.rcsed.ac.uk/media/681117/protocol-for-pre-op-ct-during-covid-19-pandemic-2.pdf>
20. <https://icmanaesthesiacovid-19.org>

# Appendix 1

RCS(Eng) 9 Key themes

1. **Considerations before resuming elective services.**
  - a. **Timing**- sustained reduction in new cases of COVID-19
  - b. **Testing**-Each Organisation to have sufficient capacity to test patients and staff.
  - c. **PPE**-
  - d. **Availability of Core Interdependent Services**- Imaging, anaesthesia, critical care and for ENT services- Audiology.
2. **Developing cohesive leadership and frequent communications.**
  - a. **Decisions**- Prioritisation of patients, referral process, COVID-19 testing, protection.
  - b. **Wider use of virtual meetings**-for team communication but also for consultations and patient communication.
3. **Assessing Surgical workload and patient population**
  - a. **Record of deferred cases** -include new and current (waiting for surgery or on a stalled pathway).
  - b. **Patient prioritisation**- use current [ENT UK guidance](#)
4. **Ensuring adequate hospital capacity and facilities**
  - a. **Increased length of procedures**
  - b. **Scheduling modifications**- may include evening and weekend sessions
  - c. **Revising clinician job plans.**
5. **Enhancing workforce capacity**
6. **Reconfiguring services**
  - a. **COVID-19 Positive Patients**-try to physically separate COVID-19 positive and negative patients. Develop specific pathways with dedicated team members. If surgery is required keep staff to a minimum and aim to minimise duration of surgery and hospital stay.
  - b. **Wider use of virtual clinics** – need to ensure sufficient IT hardware, technical and administrative support available.
  - c. **Triage, referrals and service reconfigurations.**
7. **Supporting the Surgical Workforce.**
  - a. **PPE** – must be adequate to protect patients and member of the surgical team.
  - b. **COVID- 19 Testing**- staff must have access to adequate testing at an appropriate frequency.
  - c. **Training**- available to all team members to prepare for new ways of working.
  - d. **Well-Being**- consider stress and fatigue especially if staff have been re-deployed during phase one. Access to coaching and mentoring support. Clear communication of changing ways of working and service reconfiguration.
8. **Patient Communication**
9. **Support Training**
  - a. **Robust plan on delivering training as service resume.**
  - b. **Online resources**
  - c. **Simulation**
  - d. **Mentoring**

Category	Red	Amber	Green
Space	<ul style="list-style-type: none"> <li>- Critical care capacity close to expanded capacity.</li> <li>- Patients in Temporary ICU required for surgical pathway (e.g. theatres).</li> <li>- No planning for physical separation of COVID-19 positive and negative patients in critical care facilities.</li> </ul>	<ul style="list-style-type: none"> <li>-Critical Care Occupancy reduced from expanded occupancy.</li> <li>- Other hospitals in regional ICU network still using temporary ICU facilities including use of paediatric ICU for adult patients.</li> <li>- Plans for COVID-19 positive and negative critical care beds and pathways in development but not complete.</li> </ul>	<ul style="list-style-type: none"> <li>- Critical care capacity close to 85% of baseline capacity.</li> <li>- COVID-19 positive and negative critical care beds and pathways enacted and effective.</li> </ul>
Staff	<ul style="list-style-type: none"> <li>- Staff still committed to critical care duties.</li> <li>- Critical care staffing ratios significantly higher than pre-pandemic levels and reliant on non-ICU staff.</li> <li>-Out-of-hours resident on call duties being undertaken by consultants and SAS anaesthetists.</li> <li>-Shielded and higher-risk anaesthetists not performing patient - facing activities.</li> </ul>	<ul style="list-style-type: none"> <li>-Working patterns of staff significantly impacted by pandemic surge conditions.</li> <li>- Critical care staffing ratios above pre-pandemic level or reliant on non-ITU staff.</li> <li>Trainee on-call rotas restored but less than normal numbers available.</li> <li>- plans in place for sufficient number or consultant and SAS anaesthetists to be able to cover planned surgery but not yet in place.</li> <li>- plans for adequate staff numbers to restart non-theatre anaesthetic work (e.g. pre op assessment)</li> <li>- Planning for returning higher-risk anaesthetists to patients-facing activity after risk assessments but not yet implemented.</li> </ul>	<ul style="list-style-type: none"> <li>-Elective surgical pathways fully staffed</li> <li>- critical care staffing ratios at or near pre-pandemic levels.</li> <li>- trainee on-call rotas restored with normal number of trainees.</li> <li>- Sufficient number of consultant and SAS anaesthetists to provide normal staffing levels required to deliver planned surgical activity.</li> <li>- non-theatre activities to restart.</li> <li>- Higher risk anaesthetists returned to patient-facing activities</li> </ul>
Stuff	<ul style="list-style-type: none"> <li>-Equipment required for surgical pathway still in extensive use by critical care.</li> <li>- Shortage of PPE and other equipment required for safe effective infection control.</li> </ul>	<ul style="list-style-type: none"> <li>- Adequate numbers of equipment available but inadequate number in reserve in case of damage/breakdown.</li> <li>- Availability of PPE and other equipment required for effective infection control but supply chain not assured</li> </ul>	<ul style="list-style-type: none"> <li>-Adequate numbers of equipment available and adequate number in reserve in case of damage/breakdown.</li> <li>- Availability of PPE and other equipment required for effective infection control with assured supply chain</li> </ul>

	<ul style="list-style-type: none"> <li>- Non-availability or low stock levels of key drugs.</li> <li>- Non-availability of post-operative critical care equipment.</li> </ul>	<ul style="list-style-type: none"> <li>- Stocks of key drugs available but supply chain not assured.</li> <li>- Postoperative critical care capacity limited.</li> </ul>	<ul style="list-style-type: none"> <li>- Stocks of key drugs available and supply chain assured.</li> <li>- Good availability Postoperative critical care capacity I</li> </ul>
System	<ul style="list-style-type: none"> <li>- COVID Positive and Negative pathways for surgical activity not yet developed.</li> <li>- Sufficient COVID-19 testing for staff and patients not available.</li> <li>- Non-theatre Anaesthetic services still closed.</li> </ul>	<ul style="list-style-type: none"> <li>- COVID Positive and Negative pathways for surgical activity developed but not implemented.</li> <li>- Sufficient COVID-19 testing for staff and patients available and clear policies in development for how testing can protect staff and patients.</li> <li>- staffing and facilities for non-theatre Anaesthetic services available.</li> <li>- Policies in development for rational prioritisation of surgical patients as theatre and critical care capacity becomes available but does not yet fully match demand.</li> </ul>	<ul style="list-style-type: none"> <li>- COVID Positive and Negative pathways for surgical activity fully implemented.</li> <li>- Sufficient COVID-19 testing for staff and patients' available clear policies in place.</li> <li>- Non-theatre Anaesthetic services functioning well.</li> <li>- Policies implemented for rational prioritisation of surgical patients as theatre and critical care capacity becomes available.</li> </ul>

Table 1: RCoA RAG rating for resuming elective services

If any of the categories are **RED**- planned surgery should not restart

If any of the categories are **AMBER**- may not be possible to undertake normal levels of planned surgical activity and may not be able to do any.

If all four categories are **GREEN** – planned surgery can re-start and aim towards normal activity.

## Appendix 2

### Management of common ENT emergencies

#### Epistaxis

The continued presence of COVID-19 as services resume requires continued use of [ENT UK Epistaxis Guidance](#)

#### Nasal Fracture

Consider undertaking procedure under local anaesthetic (LA) rather than general anaesthetic (GA).

Ensure full PPE is used during procedure, whether under GA or LA.

Ensure patients are aware that access to septorhinoplasty may be limited and/or delayed due to the COVID-19 pandemic.

#### Tonsillitis/Quinsy

Continue to use [ENT UK Adult Tonsillitis Guidance](#).

Ensure appropriate PPE for examination and especially for drainage of quinsy, which must be undertaken in an appropriate setting.

#### Post tonsillectomy haemorrhage

Post-tonsillectomy bleeds will need to be managed as per traditional guidance and pathways including CEPOD theatre if required.

Ensure full PPE is used during examination.

#### Otitis externa

Virtual consultations may reasonably request a culture swab of the ear be taken in the community and treated appropriately.

Severe pain or failure to settle will need clinic review as described above.

Dry mopping a wet ear to look for a perforation prior to, or in place of, microsuction may be helpful.

#### Necrotising otitis externa (NOE)

This should be managed as per local protocol and should not be significantly impacted by COVID-19.

Where practical, we would recommend an increased and early use of intra-venous therapy at home, via a peripherally inserted central catheter (PICC), for as much of the duration of treatment as possible.

### **Sudden sensorineural hearing loss**

Urgent assessment should not be delayed.

Clinical examination including tuning fork tests are vital, until audiology support is again available.

The evidence for detrimental effects of high dose systemic steroid use is under review and opinion is changing. We therefore recommend that high dose oral steroids are used cautiously in the treatment of Sudden Sensorineural Hearing Loss (SSNHL) and should only be used after full discussion of the risks and benefits of this type of treatment.

The systemic dose of steroid following intra-tympanic treatment is significantly lower than that of oral treatment, and it is therefore likely that the impact on COVID-19 outcomes will be less. It may therefore be preferable to use intra-tympanic steroid to treat these conditions. There is, however, no evidence base for this assumption.

### **Acute Mastoiditis**

Conservative management as per current guidance with consideration given to needle aspiration<sup>5</sup>.

If not responsive to conservative management will require surgery (Priority 1b).

As per current [ENT UK/BSO guidance](#), drilling kept to a minimum, at low speed with reduced irrigation, and subsequent curettage to reduce generation of bone dust aerosol.

### **Foreign Bodies**

#### Nose:

Remove in A&E or Rapid Access Clinic if possible

If unable to remove, admit with view to next CEPOD (Priority 1a)

#### Ear:

Remove in A&E or Rapid Access Clinic if possible

If unable to remove arrange to place on next available list (Priority 2 or 3 depending on nature of foreign body).

#### Airway:

Assess severity and airway compromise as usual including FNE in appropriate setting.

Admit and arrange to remove on CEPOD list (Priority 1a) with required PPE

#### Oesophagus:

Assess severity and airway compromise as usual including FNE in appropriate setting.

Admit and arrange to remove on CEPOD list (Priority 1a) with required PPE

Liaise with general surgery consider OGD if possible, to avoid GA



### **Periorbital Cellulitis**

Admission and conservative management as per local guidelines including infection disease/microbiology recommendations

Failure to respond to conservative management or impending catastrophe will require surgical intervention (Priority 1a)

Endoscopic or open approach depending on expertise.

### **Deep space Neck Abscess**

Record/Document FNE findings in effort to decrease number of endoscopic examinations

Consider drainage under local anaesthetic if possible, otherwise under general anaesthetic (Priority 1b)

### **Head & Neck Trauma:**

Manage as per Pre-COVID-19 National and Local guidance.

If imaging required, then consider CT chest as well.

If surgery required (Priority 1a), ensure appropriate PPE available for theatre team.

### **Tracheostomy**

Tracheostomy insertion is an aerosol generating procedure and therefore full PPE and relevant precautions are mandatory.

[ENT UK](#) and [British Laryngological Association \(BLA\)](#) guidance regarding locations, personnel required and technique is available and regularly updated.

## Appendix 3

### Sub-specialty Guidance

Please use the links below to access the sub-specialty guidance developed to support this document. These contain a more detailed analysis relevant to each sub-speciality:

[British Society of Otolaryngology \(BSO\)](#), including '[A graduated return to the provision of elective ENT services during the COVID-19 pandemic](#)'

[British Rhinology Society \(BRS\)](#)

[Head and Neck Society \(HNSOC\)](#)

[British Laryngological Association \(BLA\)](#)

[British Association of Paediatric Otorhinolaryngology \(BAPO\)](#), including '[A Graduated Return to Elective Paediatric ENT within the COVID-19 Pandemic](#)'

[British Association of Endocrine and Thyroid Surgeons \(BAETS\)](#)

[British Association of Head and Neck Oncologists \(BAHNO\)](#)

Also available is the guidance previously published by ENT UK:

[Exiting the pandemic: guidance for resuming ENT services](#)

[Consent and Pre-operative Assessment for ENT surgery: A Graduated Return to Elective ENT within the COVID-19 Pandemic](#)