Health Education England

Evidence Brief: Ear, Nose and Throat Workforce

Contents

Produced by the HEE Knowledge Management team Evidence Briefs offer a quick overview of the published reports, research, and evidence on a workforce-related topic.

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Key publications – the big picture

Transforming elective care services ear, nose and throat (ENT) April 2019, NHS England
This handbook is for commissioners, providers and those leading the local transformation of ear, nose and throat (ENT) elective care services. It describes what local health and care systems can do to transform ENT elective care services at pace, why this is necessary and how the impact of this transformation can be measured. It contains practical guidance for implementing and adopting a range of interventions to ensure patients see the right person, in the right place, first time.

Case Studies

Helping nurses in the community diagnose and treat nasal blockages using a smart nose camera NHSX
Diagnosing nasal blockages generally sits within secondary care due to the tools and expertise needed. This can result in longer wait times for ear, nose and throat (ENT) patients and put pressure on the workforce. Around 70% of ENT patients do not need surgery but instead could be medically treated within their community.

HEE National Data Programme

HEE staff can look at the National Data Warehouse (NDL) SharePoint site to find out more about datasets and Tableau products.

Published Peer Reviewed Research

Workforce planning

National ENT workforce planning in the United Kingdom; An increasing cause for concern? May 2019, Clinical Otolaryngology (Abstract only*)
Workforce planning is essential to ensure enough doctors, with the necessary skills and training, are available to meet the demands on the health service. This task is challenging within the NHS due to the time period over which forecasts are made and the complexity of healthcare delivery. The aim of this study was to identify the number of Ear, Nose and Throat (ENT) consultants, trainees, non-consultant grade doctors and vacancies across England, Scotland and Wales compared with previous data from England recorded in 2014 and 2010.

New roles

Evaluation of a new patient consultation initiative in community pharmacy for ear, nose and throat and eye conditions May 2019, BMC Health Services Research
Community pharmacy Common Ailments Services can ease the considerable workload pressures on primary and secondary care services. However, evidence is needed to determine whether there are benefits of extending such services beyond their typically limited scope. This study therefore aimed to evaluate a new community pharmacy model of a service for patients with ear, nose and throat (ENT) and eye conditions who would otherwise have had to seek primary care appointments or emergency care. Methods: People with specified ENT or eye conditions registered with General Practitioners in Staffordshire or Shropshire who presented at participating community pharmacies were offered a consultation

with a pharmacist trained to provide the service. The service included provision of relevant self-care advice and, where clinically appropriate, supply of non-prescription medicines or specified prescription-only medicines (POMs), including antibiotics, under Patient Group Directions. Patients received a follow up telephone call from the pharmacist five days later. Data were collected on the characteristics of patients accessing the service, the proportion of those who were treated by the pharmacist without subsequently seeing another health professional about the same condition, and patient reported satisfaction from a questionnaire survey. Results: A total of 408 patients accessed the service, of whom 61% received a POM, 15% received advice and medicine supplied under the common ailments service, 9% received advice and purchased a medicine, 10% received advice only and 5% were referred onwards. Sore throat accounted for 45% of diagnoses where a POM was supplied, 32% were diagnosed with acute otitis media and 15% were diagnosed with acute bacterial conjunctivitis. The number of patients successfully followed up was 309 (76%), of whom 264 (85%) had not seen another health professional for the same symptoms, whilst 45 (15%) had seen another health professional, usually their GP. The questionnaire was completed by 259 patients (response rate 63%) of whom 96% reported being very satisfied or satisfied with the service. Conclusions: The study demonstrates that pharmacists can effectively diagnose and treat these conditions, with a high degree of patient satisfaction. Wider adoption of such service models could substantially benefit primary care and emergency care services.

New ways of working

[Scoping opinion: Speech and language therapists' views on extending their role to the urgent ear, nose and throat pathway]

July 2021, International Journal of Language & Communication Disorders

BACKGROUND: In the UK, there is increasing pressure on ear, nose and throat (ENT) clinicians and departments, which is anticipated to amplify in the coming months and years due to the coronavirus disease 2019 pandemic and other workforce pressures. In the context of a national drive to advance practice of Allied Health Professionals to address some key challenges facing the National Health Service, we explored whether UK speech and language therapists (SLTs) felt it is possible to utilize and extend their existing skills to patients on the urgent 2-week wait (2ww) ENT pathway. AIMS: To explore SLTs' views of extending their role to work with patients referred on the ENT 2ww pathway. METHODS & PROCEDURES: Two separate focus groups were conducted using nominal group technique to generate and rank benefits and challenges of the proposed extension of role. Participants were invited to take part through Clinical Excellence Networks relevant to head and neck cancer and voice sub-specialties. Participants were competent in performing nasendscopy in at least a highly specialist role in voice or head and neck subspecialties. OUTCOMES & RESULTS: Nine SLTs from England, Wales and Northern Ireland attended two focus groups. All were employed in band 8 roles in head and neck and/or voice. Eight were competent to Royal College of Speech and Language Therapists' scoping level 3. Important benefits of the proposed novel service delivery model were generated and ranked by participants, with both groups identifying improved quality and efficiency of service for patients among the most important. Disadvantages were then generated and ranked across the two groups with potential for misdiagnosis ranked as the most important by both. CONCLUSIONS & IMPLICATIONS: Participants responded that extending the SLT role into assessment of 2ww patients would provide benefits for quality of care, healthcare efficiency and the SLT workforce. The

identified disadvantages require addressing if the proposed SLT-led model of service delivery is piloted in the UK. These include practical matters such as referral and prescribing rights, alongside wider implications such as support, governance, indemnity, acknowledgement and remuneration for the extended role. Nationally agreed competencies and training for the role are required if this model is to be successful.

Innovations in ENT surgery during the COVID-19 pandemic
May 2021, British Journal of Surgery
Severe acute respiratory syndrome coronavirus 2 (SARSCOV-2), is responsible for the coronavirus disease 2019 (COVID -19) global pandemic. Similar coronavirus epidemics over the past years affected healthcare workers significantly. Aerosol generating procedures (AGPs) presented a unique risk to ear, nose and throat (ENT) Surgeons. We introduce various methods of reducing risk in ENT AGPs. Recommendations: During trachesostomies we advocate the adoption of a specialist checklist based on ENT UK guidelines. We also advise the use of a clear drape to create a clear barrier between the patient and staff. For ear surgery we advise suturing 2 microscope pieces together endto- end so that a clear drape can sperate the patient from surgeon. During nasal and sinus surgery, we advise attaching a clear drape to the sterile camera drape used in rigid nasal endoscopy to create a barrier between patient and surgeon. Discussion(s): Our recommendations will create an extra barrier between the patient and the rest of healthcare team. This should reduce the risks to theatre staff from AGPs. Conclusion(s): COVID 19 is a serious health issue affecting healthcare workers, especially during AGPs in ENT surgery. We recommend several techniques to reduce risk. These can also be used during future epidemics.

COVID-19 and ENT SLT services, workforce and research in the UK: A discussion paper September 2020, International Journal of Language & Communication disorders
The COVID-19 pandemic and the UK government's subsequent coronavirus action plan have fundamentally impacted on every aspect of healthcare. One area that is severely affected is ear, nose and throat (ENT)/laryngology where speech and language therapists (SLTs) engage in a diverse range of practice with patients with a range of conditions, including voice disorders, airway problems, and head and neck cancers (HNCs). A large majority of these patients are in high-risk categories, and many specialized clinical practices are vulnerable. In addition, workforce and research issues are challenged in both the immediate context and the future. AIMS: To discuss the threats and opportunities from the COVID-19 pandemic for SLTs in ENT/laryngology with specific reference to clinical practice, workforce and research leadership. METHODS & PROCEDURES: The relevant sections of the World Health Organisation's (WHO) health systems building blocks framework (2007) were used to structure the study. Expert agreement was determined by an iterative process of multiple-group discussions, the use of all recent relevant policy documentation, and other literature and shared documentation/writing. The final paper was verified and agreed by all authors. MAIN CONTRIBUTION: The main threats to ENT/laryngology SLT clinical services include increased patient complexity related to COVID-19 voice and airway problems, delayed HNC diagnosis, reduced access to instrumental procedures and inequitable care provision. The main clinical opportunities include the potential for new modes of service delivery and collaborations, and harnessing SLT expertise in non-instrumental assessment. There are several workforce issues, including redeployment (and impact on current services), training implications and psychological impact on staff. Workforce opportunities exist for service innovation and

potential extended ENT/SLT practice roles. Research is threatened by a reduction in immediate funding calls and high competition. Current research is affected by very limited access to participants and the ability to conduct face-to-face and instrumental assessments. However, research opportunities may result in greater collaboration, and changes in service delivery necessitate robust investigation and evaluation. A new national set of research priorities is likely to emerge. CONCLUSIONS & IMPLICATIONS: The immediate impact of the pandemic has resulted in major disruption to all aspects of clinical delivery, workforce and research for ENT/laryngology SLT. It is unclear when any of these areas will resume operations and whether permanent changes to clinical practice, professional remits and research priorities will follow. However, significant opportunity exists in the post-COVID era to re-evaluate current practice, embrace opportunities and evaluate new ways of working. What this paper adds What is already known on the subject ENT/laryngology SLTs manage patients with a range of conditions, including voice disorders, airway problems and HNCs. The diverse scope of clinical practice involves highly specialized assessment and treatment practices in patients in high-risk categories. A large majority of active research projects in this field are patient focused and involve instrumental assessment. The COVID-19 pandemic has created both opportunities and threats for ENT SLT clinical services, workforce and research. What this paper adds to existing knowledge This study provides a discussion of the threats and opportunities from the COVID-19 pandemic for ENT/laryngology SLT with specific reference to clinical practice, workforce and research leadership. What are the potential or actual clinical implications of this work? The COVID-19 pandemic has resulted in major disruption to all aspects of clinical delivery, workforce and research for ENT/laryngology SLT. Changes to clinical practice, professional remits and research priorities are of indeterminant duration at this time, and some components could be permanent. Significant clinical practice, workforce and research opportunities may exist in the post-COVID era.

How to save 165,000 a year in ENT outpatients: The importance of clinical coding and good administrative support
June 2020, British Journal of Surgery (see page 63 of the linked document)
Outpatient commitments contribute significantly to ENT department workload. Clear documentation of patient consultations is clinical best practice, and departmental income is determined by correct use of coding terms. The most common ENT outpatient procedures are microsuction and flexible nasendoscopy, and the tariffs for these procedures are 99 and 164. Aim(s): To audit departmental outpatient workload, coding practices, and documentation of consultations. Method(s): Retrospective audit of all ENT outpatient clinic appointments at one trust, during the week 6-12th June 2018. Clinic letters, coding forms, and electronic coding records were compared. A total of 301 appointments were booked into 37 clinics, of which 10% (n = 30) were DNA'd. Result(s): 3% (n = 9) patients were inappropriately booked into clinics with no audiology support and required another appointment. 71 nasendoscopies were documented in clinic letters, of which 24% (n = 17) were not coded on coding form or electronically. 27 microsuctions were done, of which 15% (n = 4) were not coded. By accurately coding all procedures the department could have claimed an additional 3184. Over a year, this would amount to 165,568. Procedures were clearly documented in clinic letters, and improving clinician use of coding forms or employing dedicated staff to review OPD coding would be financially expedient.

The Difficult Airway Response Team (DART): 18 months on
February 2020, Trends in Anaesthesia and Critical Care (Abstract only*)
As one of the England's largest trusts, University College London Hospitals provide healthcare to 2 million people across 4 separate sites, and is one of the largest airway centres in the UK. In 2017 UCLH adopted an innovative cross-specialty rapid response team to attend airway emergencies; the Difficult Airway Response Team (DART)1. This team, consisting of Anaesthetists, ENT/Head and Neck surgeons, outreach nurses and an Operating Department Practitioner (ODP), is activated by a 2222 emergency call and facilitates the cohesive response of clinicians, support staff and equipment to airway emergencies with the aim of optimising patient safety and outcomes across our trust2. The service was rolled out in September 2017, and we conducted an interim analysis to assess how the service was running. Between September 2017 and April 2019, 65 DART calls were put out, equating to between 3 and 4 a month. All but one came from the UCLH main site. Looking at the data further 48% of the calls were being made from the Intensive Care Unit, and 28% from the Head and Neck ward. We also audited the reasons the call was put out, those that attended, and what treatment was required, showing that tracheostomy laryngectomy patients accounted for over half of the calls put out. There have been some problems with attendance, although Anaesthetists attended every call, a member of the surgical team attended only 78% of the time, and crucially an ODP attended only 21% of calls - due to the lack of a designated ODP for emergency calls. This unreliable attendance rate can lead to delays in access to specialist equipment and is something that we are trying to address. The introduction of the Difficult Airway Response Team at UCLH has been an overall success, with a number of patients benefitting from timely expert intervention to address their airway related problems. We believe that this service is something other airway centres consider adopting.

Up-skilling

Delivering consultant-led teaching during a global pandemic
September 2021, British Journal of Surgery
Providing high quality teaching has become increasingly difficult as social distancing and disrupted schedules caused by the COVID-19 pandemic make large in-person gatherings impractical. Yet the need and demand for this has only increased. We sought to use an innovative virtual + in-person format to facilitate delivery. Method(s): We designed a 6-session ENT teaching programme for GP trainees over 3 evenings. Each session was consultant-led, delivered in-person in a large lecture theatre, and simultaneously broadcast on Microsoft Teams. The in-person element was intended to permit practical demonstrations, e.g., of the Dix-Hallpike test, to supplement presenter's videos. Attendees could attend in-person or virtually. Sessions were timed to allow staff from the nearby hospital to join immediately after work. Result(s): All attendees attended virtually. And all felt that the video demonstrations were sufficient, and that in-person replication was unnecessary. Course delivery was rated 'very good' or 'excellent' by 88% (n=17), and the course overall was rated similarly by 94%. Several comments suggested that in future we focus on virtual delivery by shifting the starting time later to 'allow a natural break after work'. Conclusion(s): The COVID-19 pandemic has altered many aspects of our lives, and teaching delivery is not immune to this. The overwhelming preference for virtual attendance amongst our cohort suggests that many doctors are comfortable with, and even enthusiastic for, this change, and that teaching can still be effective. Future iterations

of this course will likely emphasise the virtual element and record the sessions to allow for time-shifted viewing.

Emergency management of neck stoma patients during the coronavirus pandemic: a national nurse survey June 2021, British Journal of Nursing
Neck stoma patient care involves significant clinical complexity. Inadequate staff training, equipment provision and infrastructure have all been highlighted as causes for avoidable patient harm. AIMS: To establish the perception of knowledge and confidence levels relating to the emergency management of neck stomas among UK nurses during the COVID-19 pandemic. METHOD(S): A nationwide prospective electronic survey of both primary and secondary care nurses via the Royal College of Nursing and social media. FINDINGS: 402 responses were collated: 81 primary care and 321 secondary care; the majority (n=130) were band 5. Forty-nine per cent could differentiate between a laryngectomy and a tracheostomy; ENT nurses scored highest (1.56; range 0-2) on knowledge. Fifty-seven per cent could oxygenate a tracheostomy stoma correctly and 54% could oxygenate a laryngectomy stoma correctly. Sixty-five per cent cited inadequate neck stoma training and 91% felt inclusion of neck stoma training was essential within the nursing curriculum. CONCLUSION(S): Clinical deficiencies of management identified by nurses can be attributed to a lack of confidence secondary to reduced clinical exposure and education.

Introducing formal Emergency Airway Management training to our ICU induction program February 2020, Trends in Anaesthesia and Critical Care (Abstract only*)
It is well recognised that airway management in the intensive care unit has a higher rate of adverse events compared to routine airway management in the theatre complex. This includes the potential for emergency front of neck access. We identified a deficit in the induction program of our trainees and low rates of confidence in the management of these scenarios. Following this a comprehensive induction program was designed around emergency airway management. This included management of displaced tracheostomies following the national tracheostomy safety project guidelines, how to manage bleeding tracheostomy and teaching of a standardised approach to emergency front of neck access in line with Difficult airway society guidelines.1 Along side this we also introduced the SCOOP protocol for management of bleeding following thyroid surgery. We chose to focus our training on events that although rare have potentially devastating effects for patients and were also source of anxiety for junior trainees. All training was done in situ on our unit with the same equipment that is available at the bedside and on our airway trolleys. Although it is unlikely that these trainees would have to use these skills without senior support we thought it was important all staff involved shared the same mental model and approach. We adopted a structured approach with didactic teaching followed by hands on training and simulated patient scenarios. This was consultant lead and delivered teaching with multi-disciplinary involvement including medical and nursing staff from the intensive care unit, anaesthesia and ENT teams. To measure the effectiveness of our intervention we surveyed the trainees before hand to look at their prior training experience and confidence in management of these scenarios. We were then able to repeat this same survey after the training program and towards the end of the trainees rotation to show skill acquisition and retention. This program is now embedded in our Critical Care induction for all rotating medical staff and we hope in the future to replicate a similar program across other ICUs in our region.

ENT and airways in the emergency department: national survey of junior doctors' knowledge and skills February 2016, Journal of Laryngology & Otology (NHS OpenAthens required*)
Given the urgent nature of ENT emergencies, appropriate knowledge is required amongst front-line staff. Junior doctors account for almost one quarter of emergency department doctors. It has been shown that undergraduate coverage of ENT is variable. This study therefore aimed to determine whether emergency department junior doctors were confident in dealing with ENT emergencies, with special focus on the airway. Method: An online survey was circulated to junior doctors working in emergency medicine, at the discretion of their training co-ordinators. Results: A total of 104 responses were received. Junior doctors were not confident in managing patients who have undergone tracheostomy or laryngectomy. Management of stridor varied, with 51 per cent giving oxygen and only 77 per cent referring such patients as an emergency to ENT. Most training on the management of airway emergencies was not provided through hospital induction. Conclusion: Training should be provided to junior doctors starting work in the emergency department. We suggest mandatory multidisciplinary induction training for such staff.

COVID-19

A multicentre retrospective cohort study on COVID-19-related physical interventions and adult hospital admissions for ENT infections November 2021, Eur Arch Otorhinolaryngol.
Purpose: To report changes in adult hospital admission rates for acute ENT infections following the introduction of COVID-19-related physical interventions such as hand washing, use of face masks and social distancing of 2-m in the United Kingdom. Methods: Retrospective cohort study comparing adult admissions with acute tonsillitis, peritonsillar abscess, epiglottitis, glandular fever, peri-orbital cellulitis, acute otitis media, acute mastoiditis, retropharyngeal abscess and parapharyngeal abscess in the 1-year period after the introduction of COVID-related physical interventions (2020–2021) with a 1-year period before this (2019–2020) in three UK secondary care ENT departments. Results: In total, there were significantly fewer admissions for ENT infections (n = 1073, 57.56%, $p < 0.001$; RR 2.36, 95% CI [2.17, 2.56]) in the 2020–2021 period than in the 2019–2020 period. There were significant reductions in admissions for tonsillitis (64.4%; $p < 0.001$), peritonsillar abscess (60.68%; $p < 0.001$), epiglottitis (66.67%; $p < 0.001$), glandular fever (38.79%; $p = 0.001$), acute otitis media (26.85%; $p = 0.01$) and retropharyngeal and/or parapharyngeal abscesses (45.45%; $p = 0.04$). Conclusion: Our study demonstrates a sizeable reduction in adult admissions for ENT infections since the introduction of COVID-19-related physical interventions. There is evidence to support the use of physical interventions in the prevention of viral transmission of respiratory disease. Preventing ENT infections requiring admission through simple physical interventions could be of great benefit to the quality of life of patients and economical benefit to healthcare systems.

Timing and volume of information produced for the Otolaryngologist during the COVID-19 pandemic in the UK: A review of the volume of online literature March 2021, Clinical Otolaryngology
The SARS-CoV-2 was first reported in December 2019 in Wuhan, China and has been declared a pandemic in March 2020. COVID-19 has caused unprecedented and lasting biopsychosocial effects worldwide. All healthcare professionals have faced life-threatening risks by attending their daily jobs. The daily emergence of advice and guidelines was necessary to ensure the safety of patients and staff. To this effect, all elective services came to a halt to preserve hospitals' capacity for dealing with the sickest. This retrospective, descriptive

review aims to assess the volume and timing of the advice released specifically relevant to UK ENT specialists. METHODS: Two separate searches were performed. One involved online advice published in English by international, national and ENT-specific organisations between January 1 and May 31. The date, title, source, type of advice and link to the advice were recorded in Excel. The resources were analysed per week of publication. A second separate search for peer-reviewed publications was conducted using PubMed Central and Cochrane databases. FINDINGS: COVID-19-related guidance was considered, of which 175 were identified. 52/175 (29.7%) articles were published by international organisations. 56/175 (32%) were produced by national organisations, and 67/175 (38.28%) were produced by ENT specific organisations. The peak guidance production took place in the third and fourth week of March (16/03/2020-29/03/2020) with 72/175 publications. Of these, 27/70 came from the international category, 17/70 from national bodies and 26/70 from ENT-specific organisations. 13 863 total publications relating to COVID-19 were found using PubMed and Cochrane search strategies; 76% were relevant to ENT. CONCLUSION: The challenges faced by ENT relate to the unprecedented, sudden and daily changes to clinical practice. Multiple bodies interpreted the guidance, giving an opportunity for confusion and delay in treatments for patients. Implementing a system with clear lines of communication and dissemination of information will improve our response to future pandemic events whilst maintaining a commercial awareness to better use the human and financial resources of an already financially restricted NHS.

ENT activity during COVID19 pandemic November 2020, Archives of Disease in Childhood
During COVID19 pandemic all ENT registrars and SHOs were re-deployed to other specialties and senior clinical fellows were upgraded to consultants. The aim of this project is to analyse ENT clinical activity during the COVID19 pandemic in order to assess appropriateness of ENT staffing level and contribute in preparation for future similar events. Methods Retrospective data collection was performed via Epic from 23/3/20 until 21/6/20. ENT admission and procedural data were collected and compared to other paediatric surgical subspecialties. Finally, a case study has been incorporated into our presentation to demonstrate the additional difficulties encountered in the care of complex airway patients during the COVID19 pandemic. Results 143 patients were admitted under ENT. In total, 220 ENT operations were performed on ENT patients as well as patients admitted under other teams. 52.4% of these cases were airway procedures. When considering relative workload during this period, SNAPS performed 251 cases while ENT and Cardiothoracics both performed 220 operations. The case report studied was an eight months girl with tracheal stenosis who required multiple admissions due to acute airway compromise. This case demonstrated that adversities encountered during the COVID19 pandemic included difficult access to local hospitals, challenging patient transfer, limited medical staff and theatre resources. Conclusion During the COVID19 pandemic ENT continued to have a high workload of complex patients, especially relating to airway issues. This was on a background of restricted access to paediatric inpatient facilities and resources at other hospitals in North Central London. Following the re-deployment of all ENT junior doctors, ENT at GOSH became a consultant only service whilst SNAPS and cardiac surgery kept their full complement of juniors. The results of this study have helped in planning for a potential COVID19 second wave response, particularly around operating theatre allocation and in surgical junior workforce deployment.

Restructuring ENT out-patient services during the coronavirus disease 2019 pandemic – an iterative approach August 2020, Journal of Laryngology & Otology
Coronavirus disease 2019 has demanded enormous adjustments to National Health Service provisions. Non-urgent out-patient work was initially postponed or performed virtually, but is now being re-established. In ENT surgery, aerosol-generating procedures pose a particular challenge in out-patient settings. Objective: A rapid restructuring of ENT out-patient services is required, to safely accommodate aerosol-generating procedures and increase in-person attendances, whilst coronavirus disease 2019 persists. Methods: Data were collected prospectively over four consecutive cycles. Two surveys were conducted. Results were analysed and disseminated, with recommendations for service restructuring implemented at cycle end-points. Results: Out-patient activity increased four-fold, associated with a significant rise in aerosol-generating procedures during the study period. Mean aerosol-generating procedure duration dropped weekly, implying a learning curve. Service restructuring occurred at cycle end-points. Conclusion: Iterative data gathering, results analysis and outcome dissemination enabled a swift, data-driven approach to the restructuring of ENT out-patient services. Patient and staff safety was ensured, whilst out-patient capacity was optimised.

COVID-19: Protecting our ENT Workforce May 2020, Clinical Otolaryngology
As we write at the end of March 2020, the coronavirus disease 19 (COVID-19) pandemic is posing an urgent and significant threat to global health. It has become clear that the healthcare worker army that forms the front line are also at increased risk of exposure to the SARS-CoV-2 virus that causes this disease. In China, 3.8% of all cases of COVID-19 were in healthcare workers, but 14.8% of those had severe or critical disease1 The SARS-CoV-2 virus predominantly resides in the airway, with high viral titres demonstrated in the nasal cavity and oral cavity. Pathological studies have shown that the SARS-CoV-1 virus, which caused the SARS outbreak between 2002 and 2003, can infect other areas of the head and neck, including the distal airway (lung, trachea and bronchus),3 parathyroid (but not thyroid) gland salivary ducts, brain and pituitary gland. These are therefore the likely sites of infection with SARS-CoV-2. Unspecified coronaviruses have been demonstrated in the middle ear of patients with acute otitis media. Clinical experience shows that the virus can cause inflammation or even ulceration of respiratory epithelium (Figure 1). ENT specialists are particularly at risk of exposure, due to the wide range of examination and operative procedures they perform in the airway, each with the potential for generation of aerosols or droplets laden with viral particles.

Health and Wellbeing

A systematic review of interventions to prevent work-related musculoskeletal disorders in ENT surgeons June 2020, British Journal of Surgery (Abstract only*)
Work-related musculoskeletal disorders (WRMDs) in ENT surgeons are extremely common, result in time off work, and may lead to early retirement. Few surgeons are aware of how to prevent musculoskeletal injury at work.We aim to evaluate the evidence for interventions to prevent WRMDs in ENT surgeons. Method(s): A systematic review using PRISMA guidelines for any intervention to preventWRMDs. Result(s): Eight studies with a total of 50 subjects were included. Prospective cohort studies were most common (n = 5). Equipment-based interventions (n = 3) included a head-mountedmicroscope and supportive chairs. Other interventions involved patient positioning (n = 2), clinician positioning (n = 2), and operative technique (n = 1). Five studies reported Rapid Upper Limb

Assessment (RULA) scores as outcome measures of musculoskeletal strain, with higher scores equating to more strain. Factors reducing RULA scores included changing patient positioning from sitting to supine during clinic procedures, adopting a favourable operating posture, and use of a supportive operating chair. Conclusion(s): There is a paucity of evidence for interventions to prevent WRMDs amongst ENT surgeons, although available evidence suggests that modifiable risk factors exist. Awareness and education on safe and appropriate positioning is essential to improve ergonomics and prevent detrimental effects on the surgical workforce.

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