ENT UK Spring Annual Meeting 2019 - Abstract submission (Poster Presentations)
Abstract Title: “Choose ENT” – A questionnaire based study to investigate factors influencing medical students and foundation doctors (FYs)” decision in considering a career in ENT

Main author: Ngan Hong Ta
Co-authors: Bhavesh Tailor, Caroline Anderson, Carl Philpott

Objectives
Influencing early career choice among students and foundation doctors (FYs) is challenging for ENT. Two main factors include positive “exposure” such as undergraduate ENT placement or mentorship, and perceptions of the speciality [1, 2]. Conferences provide an invaluable platform to promote ENT among junior trainees[3]. This project aimed to assess barriers to pursuing ENT training and the effectiveness of a 1 day regional conference in promoting ENT.

Methods
A pre-conference and post-conference questionnaire was completed by 105 delegates.

Results
Of the respondents, 15% reported having >1 week undergraduate ENT exposure with 8.7% considering this sufficient to prepare them as FYs. 14% had ENT surgeon mentors. The conference raised student and FYs awareness of the diversity of ENT (patients, sub-specialties, procedures) by 43%. There was a 14% increase in the perceptions of ENT as a simulating and rewarding career choice from 79% to 93%; and a 14% increase from 84% to 98%, in perception of ENTs positive impact on patient QoL. The misperception of ENT offering limited subspecialties, significantly declined from 18% to 8%. Overall, there was a 15% increase from 50% to 65%, in the likelihood of the delegates considering ENT as a future career.
All changes are statistically significant (p<0.05) using McNemar’s tests.

Conclusions
We have shown that a 1-day conference can change perceptions of ENT, and may inspire medical students and FYs to explore it as a career. Factors encouraging delegates to consider ENT included the variety of operative procedures, patients and subspecialties and its positive impact on patient QoL.

References
Abstract Title: A Comprehensive Assessment of Speech and Swallowing and Quality of Life post-radiotherapy following a free flap tongue reconstruction: A Case Series

Main author: Harry Spiers
Co-authors: Angelos Mantelakis, S Sapountiz

Objectives

Free flap tongue reconstruction following cancer resection, with or without radiotherapy, is the gold standard in patients diagnosed with tongue cancer. Evidence suggests radiotherapy worsens post-operative functional outcomes, but the degree to which it does is not well known[1,2]. Our aim was to comprehensively evaluate speech, swallowing and quality of life (QOL) following microsurgical tongue reconstruction, in patients with and without radiotherapy at least 1 year post-operatively.

Methods

Six patients (4 post-op radiotherapy, 2 without post-op radiotherapy) who had 1-2/3 of the tongue surface reconstructed, were formally assessed by a speech and language therapist in a one-hour session. Articulation skills, overall speech comprehensibility score, motor function of tongue and swallowing ability in all forms of food were assessed. QOL was formally assessed using the EORTC QLQ-C30 and H&N-35 questionnaires.

Results

Patients treated with post-op radiotherapy couldn't articulate the letters ‘r, l, z’, with some distortion of ‘delta, theta’ vowels, and had lower overall speech comprehensibility scores. This was the opposite of patients who did not have post-operative radiotherapy. All patients undergoing post-operative radiotherapy had incomplete swallowing function with puree and solid foods, which was intact in those not undergoing radiotherapy. Patients that did not undergo radiotherapy reported higher overall QOL and better social and sexual functioning. They reported less pain, swallowing problems, speech problems, trouble with social eating and dry mouth.

Conclusions

Post-operative radiotherapy resulted in poorer speech and swallowing 1-year post-operatively and reduced QOL in patients undergoing microsurgical tongue reconstruction. This should be considered when managing and counselling tongue cancer patients.

References

Abstract Title: A single-item screening question for fear of recurrence in head and neck cancer

Main author: Cyrus Talwar

Objectives
To design a simple screening question on fear of recurrence to be incorporated into the University of Washington Quality of Life Questionnaire (UW-QOLv4), for use in clinical practice.

Methods
A cross-sectional survey comprising 528 patients

Results
11% selected the two most severe FoR categories. FoR responses correlated strongly (Spearman rs=−0.82) with the mean score of the 7 items of the Fear of Recurrence Questionnaire. There was also a strong association with anxiety and mood dysfunction as measured from the UW-QOL, and with overall QOL. Patients more affected by FoR tended to be younger and post radiotherapy or chemotherapy.

Conclusions
The FoR screening question should be bolted on to the UW-QOLv4 in order to help identify patients with significant FoR might benefit from further intervention.
Abstract Title: A systematic review of factors affecting choice of ENT as a career in medical students and junior doctors.

Main Author: Alasdair Mayer
Co-authors: Kristine Smith, Sean Carrie

Objectives

There is growing concern over a future shortfall in UK otolaryngology Consultant workforce provision. This is mirrored by a declining rate of applications to otolaryngology speciality training in the UK. Similar trends have been observed in Canada and the United States in recent years. Although a number of studies have investigated factors influencing medical students’ and junior doctors’ decision to pursue a career in otolaryngology, no systematic review of the literature exists.

Methods

A literature search of PubMed, MEDLINE and EMBASE was completed to identify relevant studies exploring influential factors. Additional articles were identified from searching the references of retrieved articles. Studies were identified and screened according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).

Results

Of the 379 articles identified, a total of 11 were included in the review. Common factors that positively influenced the decision to pursue a career in otolaryngology were exposure to the specialty, positive role models, and good work-life balance. Lack of exposure was consistently the single largest deterrent from pursuing a career in otolaryngology.

Conclusions

This review reiterates the need for greater exposure to otolaryngology in the undergraduate curriculum. In addition, mentorship for students with an interest in otolaryngology should be a priority. In doing so this may help facilitate active recruitment of medical students and junior doctors into otolaryngology higher surgical training.

References

Abstract Title: A systematic review to examine the correlation between objective and patient-rated outcome measures (PROMs) in sinonasal disorders. Recommendations for use in research and clinical practice

Main author: Ngan Hong Ta
Co-author: Jack Gao, Carl Philpott

Objectives
Common sinonasal disorders include Chronic Rhinosinusitis (CRS), Allergic Rhinitis (AR) and Nasal septal deviation (NSD) [1-3]. These conditions share common symptoms including nasal obstruction, olfactory dysfunction, rhinorrhea and other symptoms [2] with an array of objective outcome measures and PROMs used to assess them [4]. There is limited evidence on the correlation between these outcome measures [5-18]. This systematic review examines the relationship between the two.

Methods
A search of MEDLINE and EMBASE identified studies quantifying correlations between objective outcome measures and PROMs for the sinonasal conditions using a narrative synthesis.

Results
In total 63 studies were included. Overall, objective outcome measures and PROMs assessing sinonasal symptoms are poorly correlated.
For nasal obstruction, rhinomanometry shows divergent evidence of correlation with PROMs. PNIF shows the strongest correlation with PROMs (r<0.5).
For olfactory dysfunction, the Sniffin’ stick test shows the strongest correlation with PROMs (r<0.5); UPSIT demonstrates a weak correlation (r<0.5).
For global CRS symptoms, CT sinus scores show little evidence of correlation with PROMs and nasal endoscopic ratings show a weak correlation (r<0.5).

Conclusions
PROMs for sinonosal symptoms. Rhinomanometry and acoustic rhinometry may be useful in research, but PNIF would be recommended for use in routine clinical practice for nasal obstruction. The Sniffin’ Sticks test is recommended for olfactory dysfunction with UPSIT as an alternative. CT sinus scorings should be excluded as a routine CRS outcome measure. Endoscopic scorings should be used with PROMs until further research is conducted.

References
Abstract Title: Are antibiotics necessary when operating on the external ear? A comparison of antibiotic usage and guidelines amongst Otolaryngologists and Dermatological surgeons.

Main author: Gregory Neal-Smith
Co-authors: Kimberlee Lee, Sarah Felton, Mark Felton, Julia Xerri, Bethan Swift

Objectives
There is a lack of evidence and guidelines on antibiotic prophylaxis in relation to ear surgery (1-4). Clinicians have tended to prescribe based on personal or institutional preferences (2). The objectives of this study were to determine the range in practice amongst Otolaryngologists and Dermatological surgeons in the use of antibiotics when operating on the external ear and whether there were local guidelines.

Methods
An online questionnaire survey including photographs of skin cancer lesions and differing surgical repairs of the external ear was disseminated to members of the British Society for Dermatological Surgery and ENT UK. It queried a) whether local antibiotic prophylaxis guidelines exist, and b) if they would prescribe antibiotics and, if so, pre- and/or post-operatively, and topical and/or oral.

Results
There was great variance in practice between and within specialties. Although no significant associations were found in antibiotic timing or route, dermatologists were significantly more likely to prescribe for an exophytic tumour on the pinna (39% v 23%, ¥2=3.90, df=1, p<0.05). Further to this, 80% (69/86) of Otolaryngologists had no protocols for antibiotic prophylaxis, compared to 64% (36/56) of Dermatological surgeons.

Conclusions
There are great differences in antibiotic prescriptions, likely attributable to lack of local and organisational guidelines which may be contributing to antibiotic overusage.

References
Abstract Title: Augmenting ENT outside the medical school curriculum: the role of a 1-day otolaryngology course

Main author: Harry Spiers  
Co-authors: Enyinnaya Ofo, Hanieh Enayati

Objectives

ENT is highly underrepresented in the saturated UK medical school curriculum; comprising less than 1% of the curriculum[1]. With an average of 8.4 days of ENT surgical training[2], and ten of the twenty-six UK medical schools not even offering an ENT placement, students do not gain exposure to the specialty. This can negatively impact future career choices and reinforce previous misconceptions of ENT. Our aim was to raise awareness of ENT among medical students, educate them in the specialty, and teach a basic skill, all through a one-day course.

Methods

The skills day comprised lectures by consultants followed by a consultant-led workshop teaching tracheostomy. Pre- and post-course questionnaires assessed perceptions of ENT, confidence performing tracheostomy and interest in ENT as a career.

Results

Perceptions of ENT as a specialty were improved by 80% (p < 0.01). Significant reductions were seen in the number of delegates believing ENT to be a hostile specialty and unfriendly to women. At the end of the course, 100% of delegates felt they understood what ENT surgery entails, a staggering 94% improvement from the pre-course 6% (p < 0.00). There was improved understanding of, and confidence performing, tracheostomies. Interest in a career in ENT was increased by 77% (p < 0.01).

Conclusions

Our study has shown how a 1-day course can expose students to ENT surgery, change their perceptions of the specialty, teach and improve confidence in an important ENT skill, all whilst inspiring an interest in ENT surgery as a career.

References

Abstract Title: Detecting extracochlear electrodes with Electric Field Imaging in Cochlear Implants: a human cadaver study

Main author: Simone de Rijk
Co-author: Patrick Boyle, Manohar Bance

Objectives
Extracochlear electrodes are not an uncommon phenomenon in cochlear implant (CI) patients, with an estimated prevalence of 13.4% on at least 1 electrode located extracochlearly.[1] and might influence speech perception.[2] Generally, extracochlear electrodes occur due to incomplete insertion or electrode migration.[1], [3] Around 40% of the extracochlear electrodes are not identified by objective measures such as contact impedances, evoked compound action potentials or hearing thresholds.[1] Although computed tomography can identify extracochlear electrodes, it is not part of the standard care for CI patients. We suggest Electric Field Imaging (EFI) as a detection tool for extracochlear electrodes based on cochlear implantation in human cadaveric heads.

Methods
Eight fresh-frozen human cadaveric heads were implanted with the Advanced Bionics (AB) HiFocus 1J lateral-wall electrode. The cochleae of the specimens were flushed with 1.0% saline prior to implantation. EFIs and contact impedances were measured with 1-5 extracochlear electrodes. Three conditions were measured: air or 1.0% saline in the middle ear, or soft tissue covering the extracochlear electrodes. Measurements were done with AB Volta software (v1.1.1).

Results
Extracochlear electrodes in air were easily identified by high contact impedances. Saline in the middle ear, mimicking intra- and post-operative conditions, and soft tissue, mimicking fibrotic tissue on the extracochlear electrodes, showed no evident alteration in contact impedances for extracochlear electrodes. For both conditions, EFIs lowered on the extracochlear electrodes and not only identified but also quantified the extracochlear electrodes.

Conclusions
Electric Field Imaging shows great potential as a non-invasive detection tool for extracochlear electrodes in cochlear implants.

References
Abstract Title: INTRA OPERATIVE FINDINGS IN MASTOID CAVITY IN CASES OF CHRONIC INACTIVE MUCOSAL OTITIS MEDIA UNDERGOING TYPE I TYMPANOPLASTY WITH CORTICAL MASTOIDECTOMY

Main author: Shama Shishodia
Co-author: Sourabh Chakraborty

Objectives
To assess the intra operative findings of mastoid bone, their prevalence in patients with chronic otitis media and their correlation with age, sex, duration of complaint and degree of hearing impairment

Methods
In this prospective study, 100 patients from age 11 to 74 years with chronic otitis media without cholesteatoma were included. All the patients underwent type I tympanoplasty with cortical mastoidectomy. All the Intraoperative findings of middle ear & mastoid bone, namely tympanosclerosis, polypoidal or edematous mucosa, granulations, aditus patency, integrity and mobility of ossicular chain, and presence of round window reflex were recorded and analyzed statistically.

Results
Intra operatively antral patency had to be established in 72%, granulations in the middle ear cleft were found in 27%, edematous mucosa and tympanosclerosis each were present in 17 and 22% respectively. Kakkar 1 noticed the similar finding in his study which showed blocked aditus in 75% of the patients. Da Costa also found tympanosclerosis in 20% of the human temporal bones of chronic otitis media patients2. A direct correlation was found between tympanosclerosis, granulations in middle ear cleft, aditus blockage with duration of the primary symptoms with a p value of 0.016, 0.036, and 0.033 respectively. A positive correlation was also noted between degree of hearing impairment and tympanosclerosis in the middle ear cleft

Conclusions
In our study we recommend to perform cortical mastoidectomy with tympanoplasty, in patients with chronic mucosal disease who presents with long duration of symptoms and high degree of hearing loss.

References
Abstract Title: The Prevalence and Management of Otitis Externa in Rural Primary Care

Main author: Nicholas Savage
Co-author: Jessica Green

Objectives
The aims of the audit were firstly to understand the prevalence of Otitis Externa and secondly, to assess the extent to which management in primary care was compliant with NICE guidance.

In addition, it was hypothesised that symptom recording and thus diagnostic accuracy, treatment and safetynetting could be improved by the development of an EMIS template and, therefore, a re-audit was conducted to test this hypothesis.

Methods
An initial wide-ranging search of practice records was undertaken so as to ensure the broadest possible coverage of presentations of external auditory disease.

The EMIS terms of “Otitis Externa NOS”, “Acute Infection of Pinna”, “Infective Otitis Externa”, “Other Otitis Externa”, and “Malignant Otitis Externa” were searched with the duration limited to one month.

Records were analysed for consistency of symptom recording, diagnostic rationale and appropriateness of treatment. Initial results were used to design an EMIS template and a subsequent re-audit was conducted six months later.

Results
The initial audit identified inconsistencies in symptom recording and diagnostic coding.

Re-audit demonstrated that, despite this, clinicians eschewed the EMIS template format of documentation and continued to use free text entries for symptom recording, case management and safetynetting despite recognising the theoretical benefits of standardisation.

Conclusions
This audit shows how use of an EMIS template built on presenting symptoms such as “pain”, “discharge”, and “itch” was unsuccessful in promoting diagnostic consistency or compliance with NICE guidance.

It is speculated that reasons for this include “template fatigue” amongst experienced clinicians and, a fear of appearing to record a generic as opposed to an individual patient assessment.

In the future, such templates could be developed to monitor antibiotic use and improve antimicrobial stewardship.
Abstract Title: Outcomes from a novel local anaesthetic outpatient endonasal procedures clinic - a one year single centre experience.

Main author: Matthew Coates
Co-author: Sean Carrie

Objectives
In November 2017, we commenced a working feasibility analysis of a local anaesthetic endonasal procedures outpatient clinic service at the Freeman Hospital, Newcastle-Upon-Tyne. The purpose of this clinic is to provide a range of endoscopic nasal procedures, such as nasal polypectomies, division of adhesions, endonasal biopsies and inferior turbinate surgery, with an aim of producing a similar patient experience to visiting the dentist, whilst maintaining good clinical outcomes. Suitable patients have their procedures performed in an ambulatory fashion, in a modified outpatient clinic environment, with no routine need for a hospital bed or ward facilities.

Methods
Here we present an outline and evaluation of the local anaesthetic outpatient endonasal procedures service, including our one year experience data, focusing on patient recorded outcome and experience measures (PROMs/PREMs), staff experience and cost analysis. PROMs/PREMs data, including SNOT-22 scores, has been collected using a series of patient postal questionnaires at 6 weeks and 3 months post treatment, and staff experience has been analysed using text from the ‘debrief’ section of our purpose designed LocSSIP.

Results
Overall we have found that patients and staff generally report a positive experience of the service, which for patients also includes improved SNOT-22 scores. Equally relevant are the results of microcosting analysis demonstrating savings of almost two thirds in comparison to equivalent procedures under general anaesthesia.

Conclusions
With adequate patient selection criteria, local anaesthetic outpatient endonasal procedures are well liked by patients and staff, maintain high quality patient outcomes and can produce significant cost savings.
Abstract Title: Outpatient Biopsy in Head and Neck Practice

Main author: Katarzyna Milto
Co-authors: Kok Kiong Ang, Iain Nixon

Objectives
With increasing focus on the time from referral to diagnosis and treatment, outpatient biopsy under local anaesthetic (OPB) provides a potential way to reduce diagnostic times in selected patients with accessible lesions. The aim of this study was to report outcomes from a 3-year period of outpatient biopsy in a single tertiary referral ENT unit.

Methods
Review of a prospectively held record of OPB between January 2016 and November 2018 in NHS Lothian. A comparison of times from clinic appointment to diagnosis was made using the T-Test.

Results
51 patients underwent OPB. Of these, 20 were male (39%). The median age was 46 years (range 22-83). The site was oropharynx in 40 (78%) patients, sinonasal tract in 9 (18%) and oral cavity 2 (4%). The diagnosis was benign in 42 (82%) and malignant in 9 (18%). No patients were found to be benign on initial biopsy but subsequently diagnosed with cancer. There were 0 complications. We compared this group to 10 patients, who underwent an inpatient biopsy for head and neck cancer (sites= oropharynx 60%, larynx 30% sinonasal tract 10%). The mean time from OPB to diagnosis was 8 days (SD=4.5d) compared with 18.9 days (SD=6.8d) for inpatient biopsy (p=0.001).

Conclusions
Outpatient biopsy from the head and neck is safe and effective. It has the potential to reduce the time from referral to presentation in both a statistically and clinically significant manner (in our hands by 10 days) and should be considered in properly selected patients.

References
Abstract Title: Paper vs. Electronic Operation Notes in ENT

Main author: Elliot Heward
Co-author: Sadie Khwaja

Objectives
The Royal College of Surgeon's guidance is clear on how operation records must be produced. Paper operation records have been linked with poor adherence to these guidelines. The benefits of electronic operation notes are numerous and with more widely accessible electronic systems, should departments adopt electronic operation notes more readily? Within ENT departments in the UK 60% reported to still using paper operation notes in 2017. The aim was to identify current practice in the North West of England.

Methods
Hospitals with ENT departments in the North West of England were contacted to identify current operation note practice (n=11).

Results
Paper operation notes are completed in 7 of the 11 hospitals in the North West of England. Of the hospitals completing paper operation notes, 2 hospitals electronically upload their paper records.

Conclusions
Paper operation notes remain the mainstay of practice in ENT departments in the North West of England. The most common barriers to electronic records are their time-consuming nature and inability to draw surgical diagrams. However, these factors are being overcome with easy to use templates in other specialities. Electronic notes increase legibility, accessibility, and reduce secretarial demand and lost paperwork. In addition, there is a concerning delay when paper operation notes are uploaded electronically subsequently affecting patient care. Significant improvement needs to be made in modernising practice within ENT departments in the North West of England and nationwide. Standardised electronic operation note templates may be an answer to increase uptake.

References
Abstract Title: Parotid gland cytology: useful or not?

Main Author: Ashraf Mahmood
Co-author: Somiah Siddiq

Objectives
It is to compare the different used techniques in the investigation of parotid lesion patients, trying to identify the ones with the highest diagnostic rates and create an unified approach that have the most accurate results with highest sensitivity and specificity.
That includes comparing US vs. hands free FNA, size of the used needles, preparation of the slides and individual variations among different pathologists and radiologists,

Methods
1-Retrospective review of all operated patients with parotid lesion over 2 years period (1/9/2015-15/12/2017)
2-Determine correlation of Ultrasonography features, FNA results and final histopathological results

Results
FNA accuracy: 71% (49/69)
FNA sensitivity: 75% (3/4)
FNA specificity: 95% (65/68)
USS results accuracy
-80%Significant individual variations US guided FNA is more accurate
-Needle size 22 is better and have higher diagnostic yield
-Cytolyte + Slides have higher diagnostic rate
-Most common cause for non diagnostic FNA is poor cellularity of the sample

Conclusions
1-Free hand FNA should be avoided
2-Preparation should include slides and cytolyte
3-Concordant cytology reporting (2nd pathologist)
4-Role of core biopsy in:
   -equivocal/non-diagnostic
   -potentially first line investigation
   -appropriate counselling/consent

References
Abstract Title: Pre-Operative Prediction of Cholesteatoma from Radiology: A Retrospective Cohort of 106 cases

Main author: David Selwyn
Co-authors: James Howard, Patrick Cuddihy

Objectives
Cholesteatomas have potential for serious complications such as hearing loss and intra-cranial extension. Pre-operative imaging is often sought to predict the extent of the disease process and anatomical variation to plan for surgery. We aim to measure the predictive accuracy of computed tomography (CT).

Methods
Retrospective cohort study in a single centre District General Hospital
Participants
All patients undergoing mastoid surgery in a consecutive 12 month period that had CT scans prior to operative intervention.
Main outcome measures
We measured the key findings between pre-operative CT imaging and compared it to the intraoperative findings included in the operation note. Specifically, we compared presence of cholesteatoma in three anatomical locations; the mesotympanum, attic and mastoid. Complications of disease were defined as erosion of ossicles, facial nerve, lateral semi-circular canal or tegmen.

Results
106 patients were eligible to be included in the study. The sensitivity for predicting cholesteatoma in any of the three anatomical locations was 79%, and the specificity was 81%. The positive predictive value (PPV) was 90% and the negative predictive value (NPV) lower at 65%. In terms of predicting complications of cholesteatomas, the sensitivity was 70%, whereas the specificity at predicting complications was 91%. PPV and NPV were calculated at 88% and 76% respectively.

Conclusions
CT imaging in the pre-operative period for mastoid surgery has high PPV for both predicting cholesteatomas and complications (90% and 88% respectively). However, given the wide variation of correlation between other studies, this prompts further discussion as to whether imaging, particularly ionising radiation, should be for all patients undergoing surgery.

References
Abstract Title: Student and foundation doctor perspectives on promoting entry to ENT specialist training

Main author: Bhavesh Tailor
Co-authors: Ngan Hong Ta, Matthew Smith

Objectives
The majority of medical students and foundation doctors have a limited exposure to ENT during undergraduate medical training, and this is known to have a negative impact on junior doctors considering on pursuing ENT training. This study aimed to identify and address the barriers and disincentives to a career in ENT, and then facilitate students and junior doctors to develop solutions to these problems.

Methods
A questionnaire was completed by individuals who had registered to attend a national ENT conference for medical students and foundation year doctors. Perceived barriers were condensed to common themes, and during a dedicated session at the conference, two rounds of live voting were used to 1) identify the key barriers, and 2) rank potential solutions to these issues. The top two solutions were then developed by the attendees.

Results
109 questionnaire responses were analysed (88% student and 12% foundation doctor) and 77 conference attendees participated in the live voting session. The top two barriers to pursuing ENT training were 1) a poor understanding of the specialty, and 2) inaccessibility of clinical experience beyond very limited exposure at medical school. The top two solutions were 1) greater coordination of student surgical/ENT societies, and 2) a regular newsletter to explore and promote all surgical specialties.

Conclusions
Our structured approach has identified key barriers to considering or entering ENT training, and the systematic selection and development of solutions by a sample of students and foundation doctors, has ensured these interventions are relevant, and more likely to be effective.

References
Abstract Title: Systematic review of Head and Neck Antibiotic Prophylaxis in clean and clean-contaminated head and neck procedures – an update

Main author: Matthew Coates
Co-author: David Hamilton

Objectives
Using antibiotic prophylaxis in surgery aims to balance a reduction in the risk of surgical site infection (SSI) with risks of inducing antibiotic related infections and side effects, or causing unnecessary formation of antibiotic resistant strains. We aim to establish where this balance lies in clean (CHNP) and clean-contaminated (ConNHP) head and neck surgical procedures.

Methods
An Embase and Medline search was performed over a 10 year period from 2008 to present, with Medline search being for review articles only. There were 1026 results, with 50 papers included after abstract and title screening, and 20 papers included after full text review.

Results
Of the twenty papers included in the review, seven were review papers, one was an RCT and twelve were observational studies. Consensus that SSI rate not significantly different in CHNP regardless of antibiotic use. Ten studies (62.5% ConHNP studies) reported increased SSI rate associated with Clindamycin use, which was felt due to lack of gram negative cover. Consensus among all ConHNP studies that prolonged courses of antibiotics were not beneficial in reducing SSI rate, with five studies (31.25% ConHNP studies) suggesting no benefit in >24 hours prophylaxis.

Conclusions
Antibiotic prophylaxis should be used in ConHNP intraoperatively and for no longer than 24 hours post operatively. Antibiotics should not be used in CHNP. Clindamycin should not be used, as it increases SSI rate.
Abstract Title: The immunotherapeutic role of indoleamine 2,3-dioxygenase (IDO) in head and neck squamous cell carcinoma: a systematic review.

Main author: Daniel Lin
Co-authors: James CK Ng, Lei Huang, Max Robinson, James O’Hara, Janet Wilson, Andrew Mellor

Objectives
Novel cancer immunotherapy seeks to harness the body’s own immune system and tip the balance in favour of antitumour activity. The intracellular enzyme IDO is a critical regulator of the tumour microenvironment (TME) via tryptophan metabolism. The immune checkpoint, IDO1, breaks down tryptophan into its metabolites which results in TME immunosuppression. We aim to assess the evidence on IDO in head and neck squamous cell carcinoma (HNSCC).

Methods
A systematic review of literature and clinical trials databases.

Results
We included 32 studies. Of those, 5 involved cell lines, 7 assessed tumour immunohistochemistry, 6 measured IDO gene transcription, and 14 reported on clinical trials. IDO expression and activation by the Stimulator of Interferon Genes (STING) pathway played a central role in the human cell lines studied (SCC4, SCC15 and SCC25). Retrospective immunohistochemistry studies of lip, oral cavity, tonsil and larynx found that relatively high IDO expression correlated with worse survival1-3. Gene transcription studies showed increased IDO in tumours that expressed programmed death-ligand 1 (PD-L1) and harboured human papillomavirus (HPV). Phase I/II clinical trials showed 1) overall responses (34%) and disease control rates (62%) for IDO1 inhibitor in combination therapy, 2) consistent safety profile and 3) IDO gene expression as a predictive biomarker for response to therapy.

Conclusions
Retrospective studies of IDO presence in the TME suggests a link to HNSCC treatment outcome. However, IDO-driven immune modulation in the TME remains unclear. We now require prospective longitudinal studies on IDO activity and expression throughout treatment, thence optimise IDO-based immunotherapy.

References
Abstract Title: Thyroid surgery in a Large District General Hospital: Our experience in 230 consecutive patients.

Main Author: Ashleigh Ivy
Co-author: Helen Cocks

Objectives
Understanding post-operative complications is central to improving patient care. This audit was to establish thyroid surgery complication rates and predictors, focusing on hypocalcaemia and vocal cord palsy, in a large DGH.

Methods
Prospective data from all patients undergoing thyroid surgery under a single surgeon between 2012-2017, included thyroid status at presentation, vocal cord (VC) assessments, pathology, post-operative hypocalcaemia.

Results
The 230 patients had a mean age of 49 (17-85); 84% female; 82% euthyroid. Most frequent pathologies included colloid goitre (28%), Graves' disease (11%) and malignancy (22%). 53% were hemithyroidectomies, 30% total and 11% completion; 70% consultant performed.
There were no reoperations for haemorrhage; early post-operative hypocalcaemia was seen in 13.2% which fell to 7.4% at 6 months. Early VC palsy rate 10.2%, 1.7% at 6 months.
Consistent with previous studies, higher hypocalcaemia rates were seen in patients with hyperthyroidism or Graves' at presentation, malignancy or associated neck dissection1, however only the latter was statistically significant (p=0.005). Neck dissection (p= 0.038) and higher T-stage (p=0.028) was associated with increased risk of early VC palsy but this significance was lost at 6 months.

Conclusions
Hypocalcaemia and persistent VC palsy rates in keeping with BAETS standards, 5-10% and 1-2% respectively. Hypocalcaemia rates are to the higher end of range, this may be due to greater proportions of malignancies, compressive goitre and total thyroidectomies seen in this cohort compared to the BAETS national audit2. Vocal cord palsy rates will reflect high take-up of laryngoscopy immediately post op and in clinic at follow up.

References
Abstract Title: Utility of 2 phase 4D-CT in parathyroid localisation

Main author: Harry Spiers
Co-authors: Grace Pike, Annette Antony, Dominic Jaikaransingh, Enyinnaya Ofo

Objectives
Targeted invasive parathyroidectomy is an accepted treatment for primary hyperparathyroidism. Success with the targeted approach relies on accurate pre-operative localisation of the adenoma(s) and the use of intra-operative PTH testing. Combination ultrasound and sestamibi scanning is common for pre-operative parathyroid adenoma localisation. There are disadvantages associated with sestamibi compared to 4D-computed tomography (CT), which is more sensitive at anatomical localisation compared to sestamibi[1]. However, sestamibi provides better functional information on adenoma activity compared to CT[2]. Aims: to determine the success of 4D-CT for parathyroid adenoma localisation in patients undergoing focused parathyroidectomy compared to sestamibi and ultrasound.

Methods
Retrospective analysis of literature surrounding parathyroid adenoma localisation focusing on gold standard techniques for adenoma localisation. Bias was minimised by collecting data for a single Consultant Head and Neck Surgeon's practice, and most patients' 4D-CT findings were reported by a single radiologist. Operative outcomes, pre-operative and 6-month post-operative PTH and adjusted calcium levels, and radiological results of 89 patients who underwent parathyroidectomy at a large District General Hospital were reviewed and compared against the literature.

Results
Sestamibi - Sensitivity 91.3%; Specificity 50%. 4D-CT - Sensitivity 87.3%; Specificity 100%. Ultrasound - Sensitivity 67.3%; Specificity 100%. 100% of patients were biochemically proven to be cured 6-months post-operatively.

Conclusions
4D-CT parathyroid adenoma localisation had high sensitivity and specificity compared to sestamibi and ultrasound. Consideration should be given to 4D-CT and ultrasound as localisation imaging modalities to permit targeted parathyroidectomy, with sestamibi reserved for difficult cases where more functional information may be required.

References
Abstract Title: What can ENT UK do to improve care in the developing world?

Main Author: Chang Woo Lee

Objectives
The developing world constitutes the majority of the world's landmass, are home to more than 50% of its people, and they harbour the greatest burden of ENT disease. What can ENT UK do to improve care in the developing world?

Methods
Review of the literatures

Results
Raising the global awareness through highlighting the epidemiology, the disease implications, and lobbying is crucial as demonstrated by the success of Millennium Development Goals (MDGs). Experiences from previous humanitarian activities and MDGs demonstrate that a 'win-win' partnership must be forged with not only the charitable organisations, but also a) healthcare professions and allied specialties; b) the UK government, the NHS and the local NHS trusts; and c) the host country and the local community. All parties involved should benefit from the humanitarian activities, and this benefit demonstrated to promote and incentivise involvement. Humanitarian activities should be carefully planned with well-defined short-term and long-term objectives. The delivery of care should be diagonal to harness the advantages of both vertical and horizontal deliveries of care. The future generation should be engaged for sustainability.

Conclusions
Improving care in the developing world is a very challenging task. However, with the suggested conceptual framework, the efforts should positively feedback on itself to allow ENT UK to continuously and successfully improve care in the developing world with more support in the future. Furthermore, it is a task that should be encouraged as it brings benefits to both the developing and the developed worlds, and to the individuals involved.

References
Abstract Title: Why are Academic ENT surgeons a rare species? – A questionnaire based study of medical students and foundation doctors (FYs)’s perceptions of Academic ENT training

Main author: Ngan Hong Ta
Co-authors: Bhavesh Tailor, Caroline Anderson, Carl Philpott

Objectives
Academic ENT surgeons are still a rare species in the UK despite the active national research groups including BOARS[1] and INTEGRATE [2]. Conferences provide a platform to promote academic training pathways and research among junior trainees[3]. This project assessed perceptions of academic ENT as a career, and the impact of an ENT conference with workshops and talks focusing on academic training pathways.

Methods
A pre- and post-conference questionnaire was completed by 105 delegates.

Results
Of the respondents, only 8% indicated that information on academic ENT training is easily accessible/available to them.
Before the conference, only 20% reported being likely to consider academic ENT training, improving to 40% after the conference, with 43% agreeing that “being an academic ENT surgeon/trainee is more challenging”.
The conference addressed key misconceptions of academic training; from 45% of the delegates agreeing “being an academic ENT surgeon/trainee makes one less surgically able” before the conference, 76% disagreed after the conference. Among the delegates, the perception of academic ENT being an attractive training pathway increased from 48% to 69%.
All changes are statistically significant (p&lt;0.05) using McNemar’s tests.

Conclusions
The main barriers for the delegates to consider academic ENT included the inaccessibility of training pathways information and misperceptions of being an academic ENT surgeon/trainee. Our study has shown that a 1-day conference can promote academic ENT, and may inspire medical students and FYs to explore an academic ENT career.

References
Abstract Title: Otitis externa – bugs, budgets, and bad prescribing

Main author: Hassan Mohammed
Co-authors: Michael Mather, Joanna Lumb, Janet Wilson

Objectives
Excessive antimicrobial consumption drives antimicrobial resistance. The impact of ototopical agents remains poorly investigated. Our aim is to compare national OE antimicrobial prescribing with local trends in antimicrobial resistance.

Method
Review of:
1- 162 microbiological results from consecutive OE outpatients
2- English ototopical prescription cost analysis in community
3- Local, national, and international OE prescribing guidelines

Results
1- Of 128 Pseudomonas species, 18 (14%) were gentamicin resistant and 7 (5.5%) were ciprofloxacin resistant. One isolate was resistant to all antibiotics tested.

2- In 2006 the cost of prescriptions of topical ear preparations in community was £7,410,440 as compared to £11,325,241 in 2016. Ciprofloxacin drops has increased significantly. Nonantimicrobials (flumetasone clioquinol, aluminium acetate) are currently almost unobtainable

3- Guidelines were inconsistent and lacked detail in ototopical recommendations.

Conclusion
Many organisms are drug-resistant, but unavailability of more appropriate preparations constrains good prescribing. This is exacerbated by poor guidelines. The ototopical bill has increased by 52.8% in a decade. Potential dissemination of ciprofloxacin resistance is concerning.

References (Not included in the total 250 word count) 2 required as a minimum


Please specify your word count below: maximum is 250 (not including references)
Abstract Title: Implementing a guideline for acute tonsillitis using a ambulatory medical unit

Main author: Clare Perkins
Co-authors: Freya Ray Brown, Keith Pohl, Oliver McLaren, James Powles, Richard Thorley

Objectives
Acute tonsillitis represents a significant proportion of admissions to Ear, Nose and Throat (ENT) departments nationally. Perhaps due to tighter rationing of antibiotics and tonsillectomy surgery, numbers of admissions for acute tonsillitis and its complications are increasing year on year. With current hospital pressures it is vital to look for safe alternatives to admission. We aim to safely manage patients in an ambulatory medical unit (AMU) with need for admission.

Method
A retrospective review of notes for 48 patients was carried out. A management algorithm was developed according to current best evidence and Trust policy. Following the development and implementation of the guideline, a prospective re-audit of 41 patients was undertaken measuring length of stay, overnight admissions and readmissions.

Results
The rate of overnight admission following implementation of the guideline fell from 0.75 to 0.29 with an absolute rate reduction of 0.46 (95% CI 0.25 – 0.67, P<0.001). Mean length of stay dropped from 19.2 to 9.5 hours. There were two re-admissions in each cycle of the audit which represents a non-significant increase.

Conclusion
The tonsillitis guideline has significantly reduced admissions and length of stay with re-admissions remaining low, proving this a safe and cost-effective intervention. The use of the AMU improves patient flow through Emergency Departments and means bed spaces are not used unnecessarily. We feel this guideline helps to provide a potential remedy to the problem of the increasing burden of acute tonsillitis on NHS trusts.

References (Not included in the total 250 word count) 2 required as a minimum

Please specify your word count below: maximum is 250 (not including references)
234 words