

**G I R F T**

GETTING IT RIGHT FIRST TIME

# Ear, Nose and Throat Surgery

## GIRFT Programme National Specialty Report

by **Andrew Marshall** *BSC MBBS FRCS*

GIRFT clinical lead for Ear, Nose and Throat Surgery

November 2019



## Foreword from Professor Tim Briggs GIRFT Programme Chair

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I am delighted to recommend this Getting it Right First Time review of Ear, Nose and Throat Surgery (ENT) by Andrew Marshall. Andrew's report brings the GIRFT approach to his own clinical specialty, combining a data-led view of outcomes and costs with real insight into what is and is not working. I firmly believe that, with the support of clinicians and managers, it can lead to the redesign of services to improve care and patient outcomes – as well as saving the NHS millions of pounds.

GIRFT and the other Carter programmes, together with the Evidence Based Interventions programme, are already demonstrating that transforming provider services and investing to save can bring huge gains in stabilising trusts, and healthcare systems, financially and improving care for patients.

The programme began following my review of orthopaedic surgery in 2012. That review was driven by a desire to ensure better care and outcomes for patients and to fix the issues faced by colleagues in my own specialty. With a small team, we visited more than 200 sites, meeting more than 2,000 surgeons, clinicians, support staff and trust managers. Almost everybody acknowledged that the NHS must review all unwarranted variation in the quality and efficiency of the services we deliver.

Together we set out to understand the impact of that variation by reviewing data, discussing challenges and debating solutions. At the end of the process we were able to make evidence-based recommendations and to share the good practice we found. Today, with the support of my fellow clinicians and the British Orthopaedic Association, those recommendations are helping to improve care and patient outcomes, as well as saving the NHS millions of pounds.

That support is crucial. GIRFT cannot succeed without the backing of clinicians, managers and all of us involved in delivering care. So I am most heartened to hear how supportive people have been as Andrew has been carrying out his review.

My greatest hope is that GIRFT will provide further impetus for all those involved in the delivery of ENT surgery to work together, shoulder to shoulder, to create solutions and improvements that have appeared out of reach for too long.



### **GIRFT programme Chair and National Director of Clinical Improvement for the NHS**

*Professor Tim Briggs is Consultant Orthopaedic Surgeon at the Royal National Orthopaedic Hospital NHS Trust, where he is also Director of Strategy and External Affairs. He led the first review of orthopaedic surgery that became the pilot for the GIRFT programme, which he now chairs.*

*Professor Briggs is also National Director of Clinical Improvement for the NHS.*

**Professor Tim Briggs** CBE

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# Introduction from Andrew Marshall

## GIRFT National Clinical Lead for ENT surgery

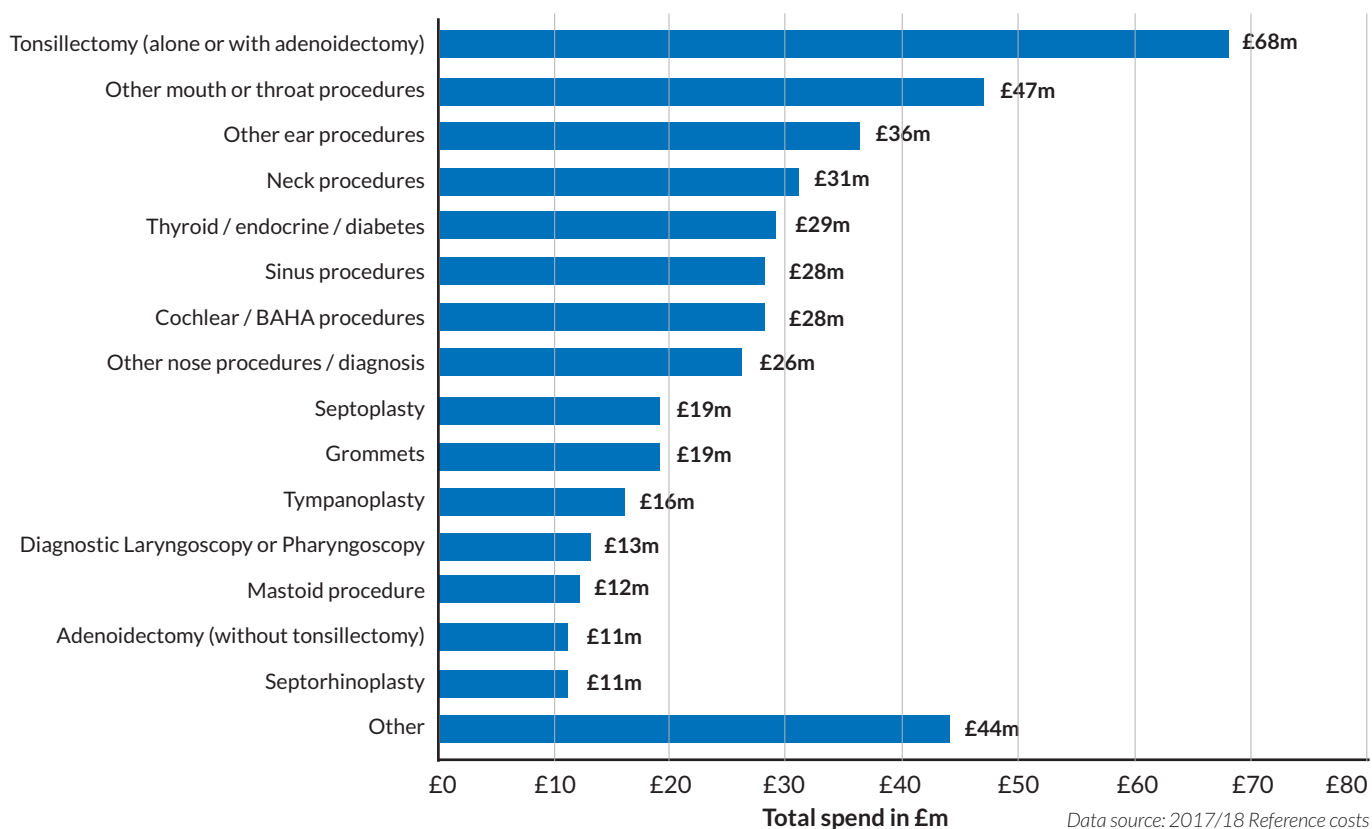
It has been a privilege to visit so many of my colleagues in our specialty over the past months and I would like to thank all who have taken part for being so engaged in the process.

As I have stressed during the visits, GIRFT is not an inspection. It is about allowing all of us in the specialty to discuss what our data tells us about where we sit in relation to our colleagues in other units. There may be clear reasons why a unit's data suggests it is an outlier. We have found institutional factors, such as day case settings closing at 6pm, and the obvious equipment and resourcing factors. Some units have felt the presence of differences in generational practice, while others are shaped by geographical considerations, such as the distances patients need to travel. All of these are factors for a number of units across the country. The important point is to identify the situations where a unit is an outlier, the reasons why, and establish ways of working that can mitigate potential negative consequences.

This report recommends how the many examples of good practice in the delivery of ENT services could be adopted in order to improve patient care and outcomes. We have been careful not to prescribe how ENT in the UK must be delivered.

I would also like to stress that this is a review of all of ENT. Although tonsillectomy is only one area of ENT work, it accounts for 17% of the total elective workload and around £68m, almost 8%, of the total ENT budget. This means the opportunities to improve patient care by reducing variation in this area are significant. For this reason, we have chosen to treat tonsillectomy as a distinct theme. All of the general findings and recommendations in the other themes apply to tonsillectomy just as they do to other procedures.

**Figure 1: ENT elective in-patient and day case reference costs by procedure**



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A lack of national data of any quality has made it impossible to look at head and neck cancer and draw any meaningful conclusions. Our review touches on head and neck cancer findings where we have sufficient data, but it is not the main focus of this review. Other GIRFT reviews consider head and neck cancer where they can, as will the National Clinical Improvement Programme (NCIP).

I was delighted to have the opportunity to lead this GIRFT ENT review. I sincerely hope the recommendations will promote the ability of our specialty to deliver the best outcomes for our patients.



**Andrew Marshall**

BSC MBBS FRCS

***GIRFT National Clinical Lead for ENT surgery***

*Andrew has been a consultant ENT surgeon at Nottingham University Hospitals since 2007.*

*An expert in implantation otology and paediatric ENT, Andrew has an interest in medical management and service improvement. He has been both head of service and clinical director for head and neck services in his trust.*

*Andrew sits on the Council of the section of Otology at the Royal Society of Medicine, is past treasurer of the British Cochlear Implant Group, and has sat on the CRG for specialised ear surgery.*

*After specialist training on the South Trent ENT rotation, Andrew undertook a skull base and cochlear implant fellowship at Sunnybrook Hospital in Toronto.*

ENT UK welcomes the publication of this ENT GIRFT report and supports the wide-ranging, sensible recommendations.

In Andrew Marshall, the GIRFT programme has a practising and experienced clinician at the heart of a programme of measurement and improvement. We hope this publication will set the agenda in the delivery of improved ENT care in England over the coming years.

I am pleased at the support Andrew has reported from his many visits to ENT units across the country. There are many centres of excellence and good practice in ENT in England. It is vital that such good practice is shared and that change is instituted in those units where practice needs updating and improving.

I have been very impressed by the efforts of Andrew Marshall and the GIRFT team in producing their report and recommendations. I am sure that our members and the wider ENT community will respond to the recommendations with commitment to "Improve ENT Care for Patients". That, of course, is also the mission statement of ENT UK.

ENT UK will continue to work with the GIRFT programme and play a full part in ensuring that the recommendations are successfully implemented.



**Professor  
Nirmal Kumar**

*President of ENT UK*



**Mr Brian Bingham**

*Former president of ENT UK*

# Recommendations

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In this report, we make the following recommendations.

Details of owners and timelines for each recommendation are given in the body of the report. We would like to highlight our recommendations referencing the evidence based interventions programme.

## Day case treatment

### 1. Increase the use of day case across ENT.

- a Explore ways to ensure that procedures suitable to be a day case are routinely completed as a day case. Actions to include:
  - reviewing administrative processes to ensure they enable patients to be listed as day cases
  - prioritising cases to morning or early afternoon lists
  - having a dedicated day case unit/bed, where possible
  - carrying out capacity planning.
- b Review day case practice across ENT. The desire to increase day case rates is emerging as a recurring theme across a number of specialties. Review the cross-cutting practices, processes, models and estate factors that are found to support and promote day case treatment, as well as any barriers.
- c Review existing guidance and target rates for day cases. Consider whether current guidance should be updated and whether targets should be introduced for additional procedures. Where targets already exist, consider readjusting them if they are set too conservatively.
- d Review best practice tariffs for day cases.

## Non-elective cases

### 2. Reduce the number of non-elective spells (admissions) where no procedure takes place.

- a Carry out a local audit of trusts that are shown by GIRFT data to have a high rate of non-elective spells (admissions) where no procedure takes place. Report results to GIRFT.
- b Analyse causes of non-elective spells (admissions) where no procedure takes place at a national level. Develop recommendations to reduce the number.
- c Where alternative settings currently exist, assess their impact in reducing the number of non-elective spells (admissions) where no procedure takes place.
- d Following evaluation in 2c, where appropriate, develop alternative observation and treatment settings, such as a dedicated observation unit, ambulatory care or rapid-access ENT unit.

### 3. Formalise networks for out-of-hours provision.

- a Develop guidance on setting up formal hub and spoke models. The guidance should be based on best practice found in effective existing ENT arrangements that feature an emergency hub with spokes that carry out routine ENT activity.  
The guidance should specify that:
  - spokes contribute staff resources to the on-call services of the hub
  - the model provides appropriate levels of senior out-of-hours cover
  - a minimum level of induction and training is given to staff providing on-call cover.
- b Model the financial arrangements for a hub and spoke network, taking into account the new blended payment approach and ensuring that the tariff accurately reflects the cost of providing ENT services within hubs and spokes.
- c Ensure that financial arrangements support the optimal model of care, as described in the outputs of a and b above. Where local pathways are agreed, ensure that local prices reflect the costs of the pathway and that the appropriate section of the national tariff is followed when setting and agreeing prices.
- d Review existing out-of-hours provision and network (hub and spoke) arrangements. Implement or, where arrangements already exist, formalise according to the guidance developed in 3a.
- e GIRFT regional hubs to use HEE guidance with providers to ensure compliance with training standards within network arrangements. GIRFT regional hubs to refer to HEE for any action required.



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## Tonsil surgery

**4. Increase the day case target for paediatric tonsillectomy to 80% - the top quartile rate of GIRFT providers.**  
**Providers to see recommendation 1a.**

**5. Develop guidance on day case treatment of obstructive sleep apnoea (OSA).**  
**Providers to see recommendation 1a.**

- a BAPO (British Association of Paediatric Otolaryngology) to establish a working group to develop guidance on which cases are appropriate to be managed as a day case.

**6. Reduce readmission rates following tonsillectomy.**

- a Develop and share a more robust methodology for accurately capturing data on readmissions following tonsillectomy.
- b Audit reason for readmission using the methodology developed in 6a.
- c Adopt standard patient information that provides:
  - clear post-operative information on expected recovery
  - instructions for managing the early signs of complications.
- d Review and standardise protocols for post-operative pain control. Provide patients, parents and children with standard patient information.
- e Where there is appropriate clinical expertise, training and resource, consider intracapsular tonsillectomy for paediatric patients with obstructive or infective symptoms.
- f Revise the coding system to enable coders to more accurately capture the variety of surgical technique within HES (Hospital Episode Statistics) data.\*

## Cancellations

**7. Reduce day of surgery cancellations.**

- a Review and adapt existing pre-assessment processes, to ensure they are timely and appropriate to the timing of the surgery.
- b Review the delivery setting for activity and increase use of day case where appropriate in order to reduce the impact of cancellations for reasons such as winter pressures. (See recommendation 1a.)
- c Collect examples of best practice and share with providers through GIRFT regional hubs.

\*See Appendix 2 for details on giving commissioners notice of changes in the way you record activity.

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## Making best use of consultant out-patient time

### **8. Maximise the use of appropriate aural care services for the post-operative care of ear surgery and in chronic disease management.**

- a Define activity that can be completed by aural care services and the resources required.
- b Identify, review and share existing effective best practice that demonstrates the cost benefits of using aural care services.
- c Review and increase use of aural care services in line with outputs of 8a and 8b.

### **9. Maximise the use of appropriate audiology services for follow-up after grommet insertion.**

- a Identify, review and share existing effective best practice that demonstrates the cost benefits of using audiology services for follow-up after grommet insertion.
- b Review and increase use of audiology services for follow-up after grommet insertion in line with the output of 9a.

### **10. Reduce new to follow-up ratios, making optimal use of clinical out-patient resource.**

- a Carry out local audits in trusts that are shown to have high follow-up rates in the GIRFT data.
- b Maximise opportunity for one-stop services where possible.
- c Reduce unnecessary consultant-led follow-ups.

### **11. Enable reporting of patients who are waiting for a date for their follow-up appointment so this can be considered alongside follow-up data.**

- a Report on the number of patients who are waiting for a date for their follow-up appointment using data from patient administration systems.

## Access and commissioning

### **12. Commissioners, GPs and providers to work collaboratively to ensure that the Evidence Based Interventions guidance is implemented.**

- a Follow national commissioning guidance where available, including policies developed through the Evidence-Based Interventions Programme (published November 2018).

### **13. Prior-approval policies should be implemented proportionately and only audited retrospectively.**

- a Where commissioners wish to use prior approval policies, they should use a retrospective audit approach.
- b Commissioners to share prior approval policies with GIRFT regional hubs for review by GIRFT clinical leads.

### **14. Review the implications and validity of referral restrictions, such as those imposed on pinnaplasty referrals by some commissioners.**

- a The Evidence-Based Interventions programme should consider whether further ENT procedures should be included and in so doing consider the evidence presented by GIRFT (e.g. pinnaplasty).

## Procurement

### **15. Improve procurement of devices and consumables through cost and pricing transparency, aggregation and consolidation, and by sharing best practice.**

- a Work with sources of procurement data, such as Purchase Price and Index Benchmarking (PPIB), and relevant clinical data to identify optimum value for money procurement choices, considering both outcomes and cost/price.
- b Work with sources of procurement data, such as PPIB, and relevant clinical data to identify optimum value for money procurement choices, considering both outcomes and cost/price.
- c Use category towers to benchmark and evaluate products. Rationalise and aggregate demand by working with other

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trusts to secure lower prices and reduce supply chain costs.

## Outcome metrics

### **16. Consider including Patient Reported Outcome Metrics (PROMs) for ENT surgery in the national PROMS programme or other established national audit.**

- a Review existing PROMs to identify those that could be included in the national PROMS programme or other established audit. Identify any gaps.
- b Consider including PROMS identified in 15a in the national PROMS programme or other established national audit.
- c Collaborate with the wider multi-disciplinary team to develop new PROMs where gaps were identified in 15a.

### **17. Consider including Patient Reported Outcome Metrics (PROMs) for head and neck cancer surgery in the national PROMS programme, or other established national audit.**

- a Review existing PROMs to identify those that could be included in the national PROMS programme or other established audit. Identify any gaps.
- b Consider including PROMS identified in 16a in the national PROMS programme or other established national audit.
- c Collaborate with the wider multi-disciplinary team and relevant specialties to develop new PROMs where gaps were identified in 16a.

### **18. Continue to support the development of surgical outcome metrics.**

- a Continue to develop metrics for use by surgeons and departments as part of the National Clinical Improvement Programme (NCIP). Use data that is routinely collected.
- b Identify any further metrics needed that are not covered by existing audits. Consider developing such metrics.

## Data and coding\*

### **19. Implement practices to ensure accurate coding.**

- a Ensure accurate coding of:
  - comorbidities
  - consultant and non-consultant-led activity
  - endoscopic practice
  - out-patient activity
  - hearing tests.
- b Develop a short guide to clinical coding for clinicians and coders that would support best practice.
- c Offer specialty-specific coder training.
- d Ensure that clinical teams, trust information teams and coders meet regularly to review activity attributed to surgeons and to ensure that the clinical team has ready access to their own data.
- e Evaluate whether any coding improvements suggested impact or warrant pricing or currency redesign.

## Service costs

### **20. Clinicians and costing teams should work together to ensure the methods used to apportion and allocate costs used in the Patient Level Information and Costing System (PLICS) are in line with costing standards and accurately reflect resources used.**

### **21. Use PLICS data to investigate and review unwarranted variation and costs.**

\*See Appendix 2 for details on giving commissioners notice of changes in the way you record activity.

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## Other opportunities

### 22. Review Model Hospital theatre data to help understand and maximise theatre productivity.

## Litigation

### 23. Implement the GIRFT 5 point plan for reducing litigation costs.

- a Clinicians and trust management to assess their benchmarked position compared to the national average when reviewing the estimated litigation cost per unit of activity.
- b Clinicians and trust management to discuss with the legal department or claims handler the claims submitted to NHS Resolution included in the data set to confirm correct coding to that department. Inform NHS Resolution of any claims which are not coded correctly to the appropriate specialty via [CNST.Helpline@resolution.nhs.uk](mailto:CNST.Helpline@resolution.nhs.uk).
- c Once claims have been verified, clinicians and trust management to review claims in detail including expert witness statements, panel firm reports and counsel advice as well as medical records to determine where patient care or documentation could be improved. If the legal department or claims handler needs additional assistance with this, each trust's panel firm should be able to provide support.
- d Claims should be triangulated with learning themes from complaints, inquests and serious untoward incidents (SUI)/serious incidents (SI) and where a claim has not already been reviewed as an SUI/SI, we would recommend that this is carried out to ensure no opportunity for learning is missed.
- e Where trusts are outside the top quartile of trusts for litigation costs per activity, GIRFT will be asking national clinical leads and regional hub directors to follow up and support trusts in the steps taken to learn from claims. Clinical leads and regional hub directors will also share with trusts examples of good practice.

# Executive summary

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Our GIRFT review of ENT has found a significant degree of unwarranted variation in a number of key areas in delivery of the specialty.

These findings suggest there are significant opportunities to improve patient care and outcomes in ENT alongside a total notional financial opportunity of between £21.7m and £30.8m a year, plus £2.5m a year in procurement savings.

## Getting it Right First Time (GIRFT)

The GIRFT programme is funded by the Department of Health and Social Care and jointly overseen by NHS Improvement and the Royal National Orthopaedic Hospital NHS Trust.

GIRFT seeks to identify variation within NHS care and then learn from that variation. It is one of several workstreams designed to improve operational efficiency in NHS hospitals. In particular, it is part of the response to Lord Carter's review of productivity, and is providing vital input to the Model Hospital project.

GIRFT is closely aligned with other programmes seeking to improve standards while delivering efficiencies, such as NHS RightCare, acute care collaborations (ACCs) and sustainability and transformation partnerships (STPs)/integrated care systems.

Under the GIRFT programme, data from many NHS sources is consolidated and analysed to provide a detailed national picture of the specialty being reviewed. This process highlights variations in care decisions, patient outcomes, costs and other factors. The data is then reviewed by a GIRFT clinical lead for the specialty – an experienced clinician who is recognised as an expert in their specialty.

The clinical lead visits each individual hospital trust to discuss the data with senior management and clinical teams. These 'deep dive' visits provide an opportunity for both parties to learn. The individual trusts are able to understand where their performance appears to be below average and can draw on clinical expertise to identify actions targeted at addressing performance issues. At the same time, the clinical lead builds a national picture of best practice that feeds into service-wide improvement recommendations and an implementation programme to drive change and address unwarranted variation.

## ENT surgery today

ENT surgery is characterised by a wide range of treatments and surgical procedures with a significant proportion of out-patient work.

Casemix includes those that can be treated with medication, those that require surgery and those that can be treated with technology.

Surgery ranges from extensive head and neck cancer resection and reconstruction work through to more common procedures, such as tonsillectomy.

ENT surgeons work closely with many other surgical disciplines.

## About our analysis

As there is a wide difference in the services provided by different ENT departments, we focused on a number of index procedures to identify key themes. These index procedures are either:

- complex and only performed in certain departments, or
- high-volume and performed in all ENT departments in both adults and children.

We also looked at day case rates, readmission rates, and out-patient activity.

## Head and neck cancer

A lack of national head and neck cancer data of any quality has made it impossible to look at and draw any meaningful conclusions in that area. This means we have not been able to focus on head and neck surgery in any detail in this review.

## Audiology

To reflect the close relationship between ENT and audiology services, we have reviewed overall volumes and staffing levels in audiology services where relevant.

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## What we found

We found unwarranted variation in clinical practice and outcomes across the ENT specialty. We have grouped our findings into 12 themes.

### Day case treatment

There is a huge opportunity for more of the national ENT caseload to be treated on a day case basis if the right facilities and expertise can be put in place. Increasing the use of day case treatment in ENT would benefit patients as well as ENT units and their trusts. There is also a notional financial opportunity in tonsillectomy surgery of around £3.7m per year if all providers were able to match the day case rate of units in the top quartile.

We found wide variation in day case rates across ENT services. This variation is not explained by variations in age and casemix.

Some units with relatively low day case rates expressed the concern that carrying out certain procedures as a day case might be detrimental to outcomes and/or readmission rates. However, we found no significant correlation between day case rates and readmission rates.

We identified seven key reasons underlying the variation:

- whether a unit is fully committed to day case
- variations in practice
- patient travel time
- current target rates for some procedures are too low
- selective case selection by some units
- variation in the use of multidisciplinary teams
- administrative practices.

We have recommended increasing the use of day case across ENT.

There are best practice tariffs for seven ENT day case procedures. We have recommended reviewing whether additional tariffs would help promote greater use of day case in ENT.

### Benign thyroid surgery as day case

A number of units undertake day case thyroid surgery in selected cases. It is not the place of this review to endorse or criticise this practice, but we note that clinical practice is evolving.

There is a separate GIRFT workstream on thyroid surgery and we anticipate that workstream will review this area in more detail.

### Non-elective cases

The number of non-elective spells (admissions) not followed by a dominant procedure is high and there is significant variation between providers. We have made recommendations designed to reduce this figure.

We identified four interrelated themes that impact non-elective spells followed by no dominant procedure.

### The assessment setting

Many of the units achieving low rates of admission followed by no dominant procedure use an ambulatory care setting to provide a safe area where treatment can be instigated and the patient can be observed.

### Out-of-hours network arrangements

There is wide variation in the number of patients admitted for overnight care at weekends. Many of the current arrangements for out-of-hours provision have evolved out of necessity rather than being developed by design. This can impact medical staff and bed availability, and can also impact income at the hubs.

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## Out-of-hours expertise

Units that put greater expertise in place for out-of-hours cover tend to see fewer non-elective admissions that are not followed by dominant procedure.

## Daytime first-on-call expertise

Some units are reaping the benefits of providing either middle grade or consultant-led on-call services during daytime hours.

## Tonsil surgery

Given that tonsils form such a significant portion of the work in ENT, we have grouped the key findings relating specifically to tonsils in this theme. Our findings in the other themes all apply equally to tonsil surgery.

Providers in the top quartile for day case paediatric tonsillectomy are outperforming the British Association of Day Surgery (BADS) target rate by over 10 percentage points. This suggests the target rate is too low.

We believe there is a significant opportunity for greater use of day case surgery for paediatric Obstructive Sleep Apnoea (OSA).

We carried out a detailed review of readmission rates following tonsillectomy and found that overall readmission and return to theatre rates are much higher than previously reported in the literature. Reduction in readmission and return to theatre rates presents a key opportunity for improvement in patient experience, outcomes, and demand on emergency ENT services. We have made a number of recommendations to reduce readmission rates.

## Cancellations

Some providers are cancelling as many as 1 in 10 of their elective in-patient and day case ENT admissions. This figure and the average cancellation rate of 5% are unacceptable.

The length of time between pre-assessment and admission is a key factor in cancellations. The length of this period is generally a function of the other issues that we address in our report.

The specialty needs to take a holistic approach to improving pre-assessment timing in order to reduce cancellations and we have made recommendations to support this.

## Making best use of consultant out-patient time

There is a significant opportunity to use consultant out-patient time more effectively by making a more appropriate use of skill mix. There are opportunities for the wider multidisciplinary team, including specialist nurses and allied health professionals, to play a significant role in the delivery of ENT services.

We also found huge variation in new to follow up ratios, with clear opportunities to reduce unnecessary follow-ups.

There is no significant correlation between casemix and new to follow up ratios. Even several of the providers that carry out high volumes of head and neck cancer treatment, where the workload of mandated follow-ups and case complexity might have been expected to result in increased follow-ups, are able to achieve relatively low new to follow-up ratios.

We found that providers that seek to adopt a one-stop approach whenever possible achieve lower new to follow-up ratios. All ENT units should be supported and encouraged to adopt the same approach.

## Access and commissioning

A number of ENT procedures are subject to specific commissioning guidance and policies at either a national or local level.

Where national guidance exists – such as that developed by NHS England's Evidence-Based Interventions Programme – it should be followed.

## Local prior approval policies

Some CCGs have established local approval policies. We did not set out to assess whether prior approval policies reduce inappropriate activity, but we did look at the impact of different commissioning practice on ENT units.

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While we found that some approval policies impose a greater administrative burden on ENT units, feedback from our deep dive visits did not suggest meaningful variation in the rates of listings between policies. This means that, if commissioners wish to apply a level of control to commissioning certain procedures, approval models where funding is approved before the referral is sent to the ENT department make most sense. These models remove an unnecessary administrative burden from ENT units.

### **Restrictive referral policies**

A number of ENT departments told us that commissioning groups may adopt clinical referral criteria for which there may not be a strong clinical consensus, as well as being implemented and measured in variable ways.

There is potential unwarranted geographical inequity in provision. Restricting some procedures will also limit the opportunities for surgeon training. It is essential that all implications are fully considered to make sure that restrictive referral policies are beneficial.

### **Septoplasty indications**

There is a large variation in the rate of adult septoplasty between CCGs.

We believe this reflects the fact that there is currently no guidance on the indications for septoplasty. We did not find the same variation in treatment volumes for procedures that have clear and well-established guidelines on indications.

The NAIROS (Nasal AIRway Obstruction Study) is a clinical randomised controlled trial, comparing septoplasty to medical management in treating a nasal airway obstruction. Recruitment to the trial will close in May 2020. Following the trial, we believe the specialty associations should develop guidance on the contemporary indications for septoplasty.

### **Procurement**

ENT treatments and surgical procedures require a vast array of medicines, devices and instruments. These range from relatively inexpensive devices to high-cost technologies.

Overall, the NHS spends around £32m on products and technologies in ENT (excluding hearing aids delivered by audiology services).

From our analysis of variation in procurement costs, we estimate that savings of 8%, equivalent to around £2.5m, could be made on the NHS spend on products and technologies in ENT.

These savings could be achieved through more effective and integrated approaches to contract management, inventory management and estate planning.

### **Outcome metrics**

There is an absence of standard, universally adopted, national outcome metrics for ENT.

Comparative outcome metrics provide the truest indication of the quality of service a unit is providing. A standard, national dataset would allow stakeholders to compare units with confidence that measurement is consistent.

We have made a number of recommendations on collecting outcome metrics and welcome the National Clinical Improvement Programme (NCIP).

### **Data and coding**

There is wide variation in the practices and accuracy of coding in ENT.

It is important to get coding right – both in terms of ensuring accurate patient records and in ensuring accurate attribution of income.

We found that more effective coding happens where coders and clinical teams work together and we have made recommendations to support this.

### **Coding and block contracts**

A number of trusts explained that block contracts reduced their impetus to code with fine degrees of accuracy because coding would have limited impact on their income. It is important that everyone across ENT understands the importance of coding, not only for income attribution but also for the completeness and accuracy of treatment records.



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## Service costs

There is a large variation in service costs between providers.

One of the key uses of service costs is to inform tariff rates. Given that there is a general sense that tariffs for ENT provision are relatively low, it is essential that service costs should be as accurate as possible.

We found that some clinical teams and their financial departments have a detailed understanding of ENT costs, while others do not have anywhere near such depth of understanding.

In the future, Patient Level Information and Costing System (PLICS) will offer much more granular, patient-level information. We have recommended that clinicians and costing teams should work together to ensure the methods used to apportion and allocate costs used for patient level costing (PLICS) are accurate.

We recognise the need to factor into clinician timetables the time taken to support the validation of costs.

## Other opportunities

### Theatre productivity

There is currently no agreed benchmark for ENT theatre productivity. This makes it difficult for stakeholders to make meaningful assessments of how sessions are utilised.

Model Hospital data enables units to see the time they take to carry out a procedure in theatre and provides a useful tool for them to benchmark against other units.

We have recommended that Model Hospital theatre data should be used to help understand and maximise theatre productivity.

### Recruitment issues

A number of departments told us about the problems they had in filling consultant-level vacancies or in recruiting locums. Such recruitment issues were clearly affecting the ability of these departments to meet the Referral To Treatment rules published by the Department of Health and Social Care.

It is reasonable to conclude that recruitment issues compound other difficulties – departments that may be less attractive to candidates find it even more difficult to recruit, leading to a vicious cycle of vacancy, service delivery problems and recruitment struggles.

## Litigation

We used two methods to review the relationship between estimated cost of claims and the activity carried out by trusts:

- litigation related to operative procedure
- litigation related to out-patient procedures and all admissions.

Both reveal wide variation in the average cost of litigation between trusts.

Several of the most common causes of claims are avoidable. There is also some evidence that claims cannot be defended effectively because providers do not have the necessary documentary evidence.

It was also interesting that many providers had little knowledge of the claims against them.

We recommend that providers employ GIRFT's 5 point plan to help reduce litigation costs.

## Making it happen – GIRFT regional hub support

Our report makes 22 recommendations and identifies owners and timelines for each one.

GIRFT regional hubs will support providers in implementing the recommendations.

The hubs provide practical advice based on the research data, feedback from visits and expert input of experienced clinicians.

# ENT surgery today

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Ear, nose and throat surgery in children and adults is characterised by a wide range of treatments and surgical procedures with a significant proportion of out-patient work.

Casemix includes those that can be treated with medication, those that require surgery, and those that can be treated with technology, such as cochlear implants to restore or provide hearing for congenital and acquired hearing loss.

Surgery ranges from extensive head and neck cancer resection and reconstruction work through to more common procedures, such as tonsillectomy.

The National Institute for Health and Care Excellence (NICE) produces guidance on a variety of ENT conditions. This is available at [www.nice.org.uk](http://www.nice.org.uk)

## Work with other specialties

ENT surgeons work closely with many other surgical disciplines. For example, in the field of head and neck cancer, they work with colleagues in oral and maxillofacial surgery and oncology. In both anterior and lateral skull base surgery ENT surgeons work with neurosurgeons. They also work with colleagues in ophthalmology on operations to the nose and orbit.

## ENT department organisation

Not all ENT departments carry out the full range of ENT services.

Some larger departments provide a wide range of services, including head and neck surgery. Others offer limited services including diagnostic head and neck procedures and rely on close links with a larger centre for surgery and further treatment. There are a limited number of centres performing cochlear implant surgery.

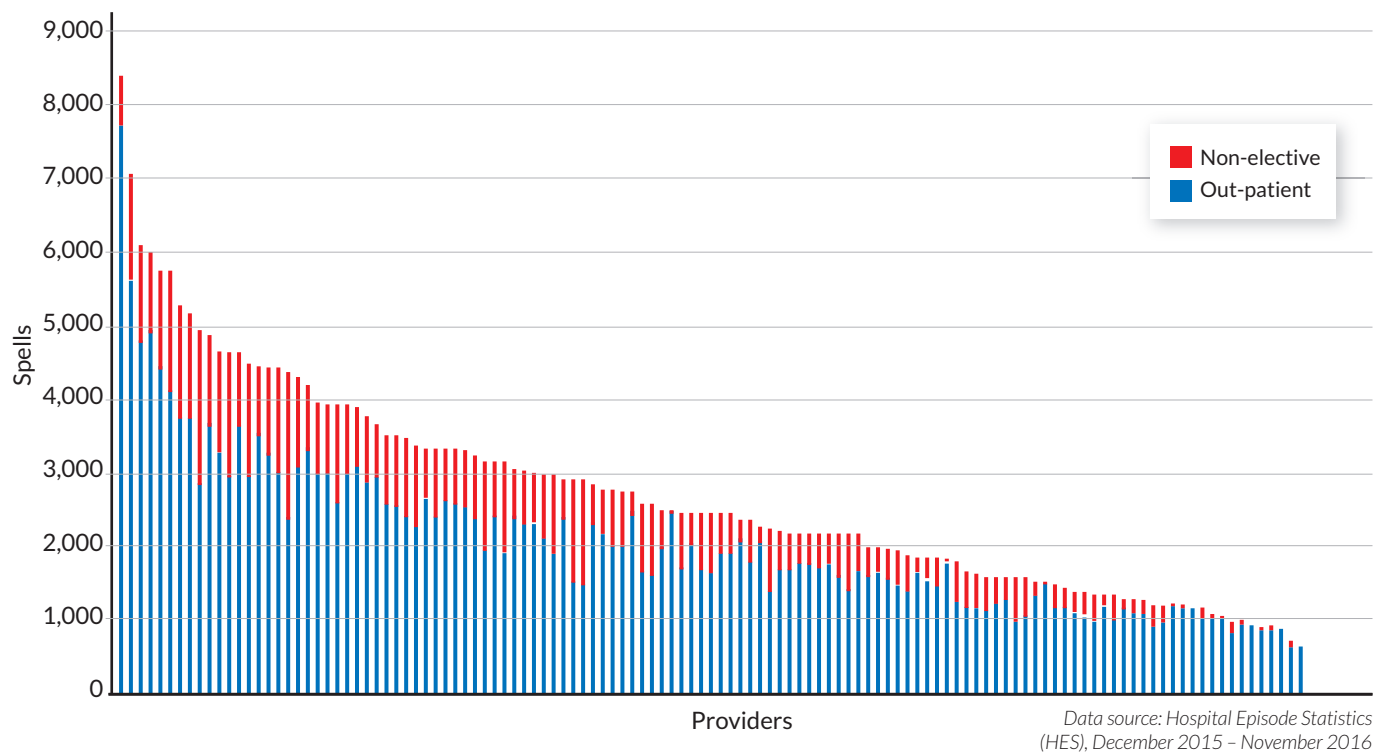
## ENT activity and spend

- 330,000 admitted patient spells<sup>1</sup>.
- 76% of admitted spells are elective (250,000)<sup>1</sup>.
- 8,400 admitted patient spells recorded by the provider with the highest number<sup>1</sup>.
- 17% of the total elective workload relates to tonsillectomy (circa 43,000 spells)<sup>1</sup>.
- 2.8m outpatient attendances<sup>1</sup>.
- 960,000 out-patient procedures (around 34% of total out-patient attendances)<sup>1</sup>.
- £865m total spend on ENT services<sup>2</sup>.

<sup>1</sup> Hospital Episode Statistics (HES), April 2015 to March 2016

<sup>2</sup> Reference costs, 2016/17

Figure 2: Total admitted activity in ENT – split by elective and non-elective activity



## About our analysis

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We carried out our analysis following the established GIRFT model. (For more on the GIRFT programme, see the separate section in this report.)

We provided ENT departments with data packs that we used to inform our deep dive visits. The data packs were divided into the sub-specialist areas of paediatric ENT, otology, rhinology and head and neck surgery (both malignant and benign). We also looked at the use of cochlear implants and bone anchored hearing aids (BAHAs).

As there is a wide difference in the services provided by different ENT departments, we focused on a number of index procedures that are either:

- complex and only performed in certain departments, or
- high-volume and performed in all ENT departments in both adults and children.

We also looked at day case rates, readmission rates, and out-patient activity.

### Head and neck cancer

A lack of national head and neck cancer data of any quality has made it impossible to look at and draw any meaningful conclusions in that area. This means we have not been able to focus on head and neck surgery in any detail in this review.

### Audiology

To reflect the close relationship between ENT and audiology services, we have also reviewed overall volumes and staffing levels in audiology services where relevant.

### A note on outcome metrics

Outcome metrics are not used consistently and universally across ENT. This results in an absence of outcome data that hampers analysis of the specialty. Better quality outcome data would undoubtedly enable any review to build a fully evidenced picture of the effectiveness or otherwise of ENT service provision. We address this point specifically in one of our recommendations.

However, by combining the insight from our deep dive visits with Hospital Episode Statistics (HES) and other data, we have been able to draw conclusions and make recommendations confidently.

# Findings and recommendations

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## DAY CASE TREATMENT

We found wide variation in day case rates across ENT services. The overall average rate is 67%, with some providers achieving much higher rates.

The successful practices in place at providers with higher day case rates show that a significant number of ENT cases currently treated on an in-patient basis would be suitable for treatment as a day case.

We believe there is a huge opportunity for more of the national ENT caseload to be treated on a day case basis, rather than with an overnight stay, if the right facilities and expertise can be put in place.

### Benefits of day case treatment

Increasing rates of day case treatment in ENT offers a number of potential benefits – for patients, for ENT units and for trusts:

- More patients would be able to have their treatment without the worry or inconvenience of a stay in hospital.
- ENT services become more resilient to the various pressures on beds that often affect their opportunity to run lists efficiently. For example, during our deep dive visits we found that ENT units with higher rates of day cases are far less affected during NHS-wide winter surgery embargoes.
- Trusts would be able to free up beds for use by other specialties.

### Potential financial opportunity

While reduced costs are only one measure of the benefit of day case treatment versus in-patient treatment, it is worth noting that the average cost of keeping an ENT patient in hospital overnight is £345.

There is an overall notional financial opportunity in tonsillectomy surgery of around £1.4m per year if all providers were to achieve average day case rates, and up to £3.7m per year if all providers were able to match the top quartile.

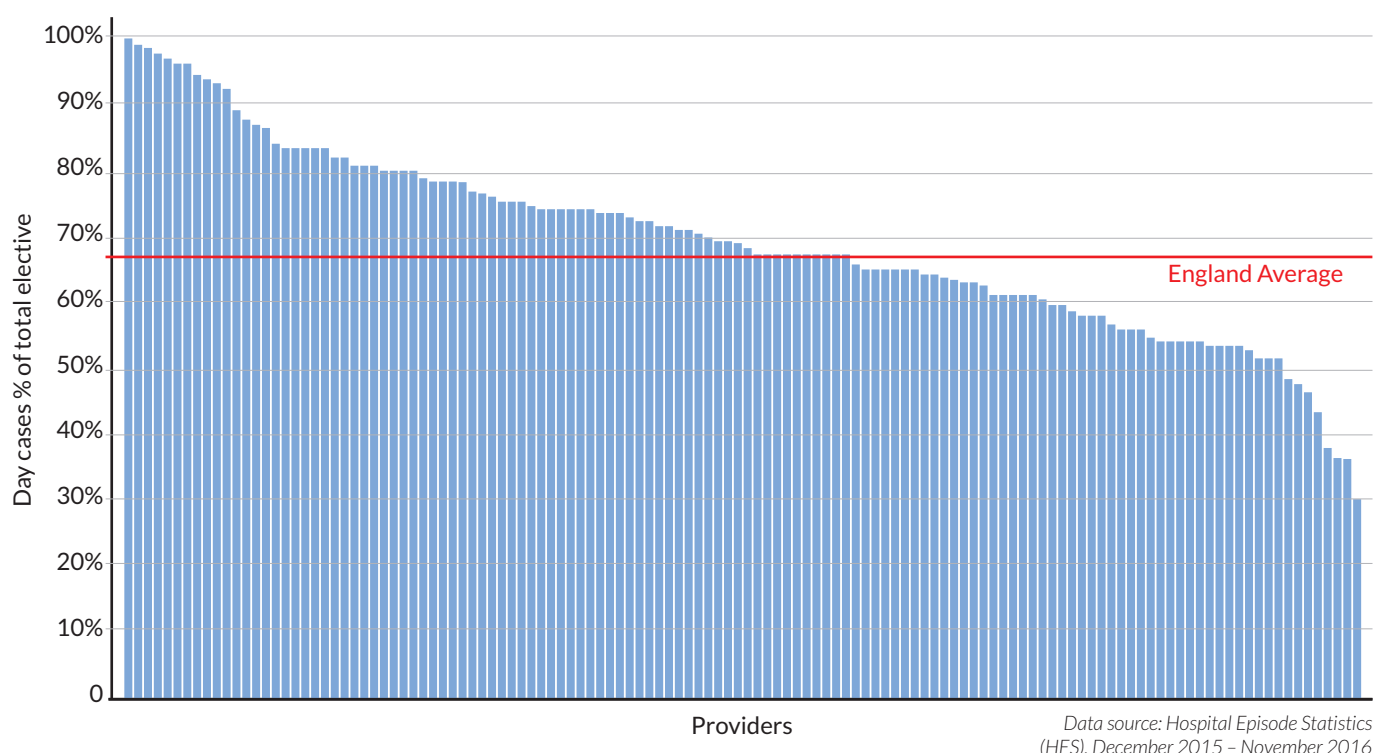
### Best practice tariffs

Best practice tariffs for ENT day case currently exist for the following seven procedures:

- nasal polypectomy
- intermediate sinus procedures
- minor sinus procedures
- tympanoplasty in those aged 19 years and over
- tonsillectomy in those aged 19 years and over
- tonsillectomy in those aged under 19
- adenotonsillectomy.

We recommend reviewing whether additional best practice tariffs would help to promote greater use of day case in ENT.

**Figure 3: Total day case rate – as percentage of all day case and elective in-patient activity**



## Variations in day case rates are not explained by casemix

Since ENT units vary in terms of their size and the nature of the services they provide, we looked at a number of index procedures to investigate whether there is a relationship between day case rates and casemix. These procedures included the following:

### Adult

- Septoplasty of nose
- Tonsillectomy
- Diagnostic endoscopic examination of pharynx, larynx plus biopsy
- Tympanoplasty
- Myringotomy
- Manipulation under anaesthetic of fractured nose
- Polypectomy of internal nose

### Paediatric

- Tonsillectomy
- Myringotomy
- Adenoid surgery
- Manipulation under anaesthetic of fractured nose.

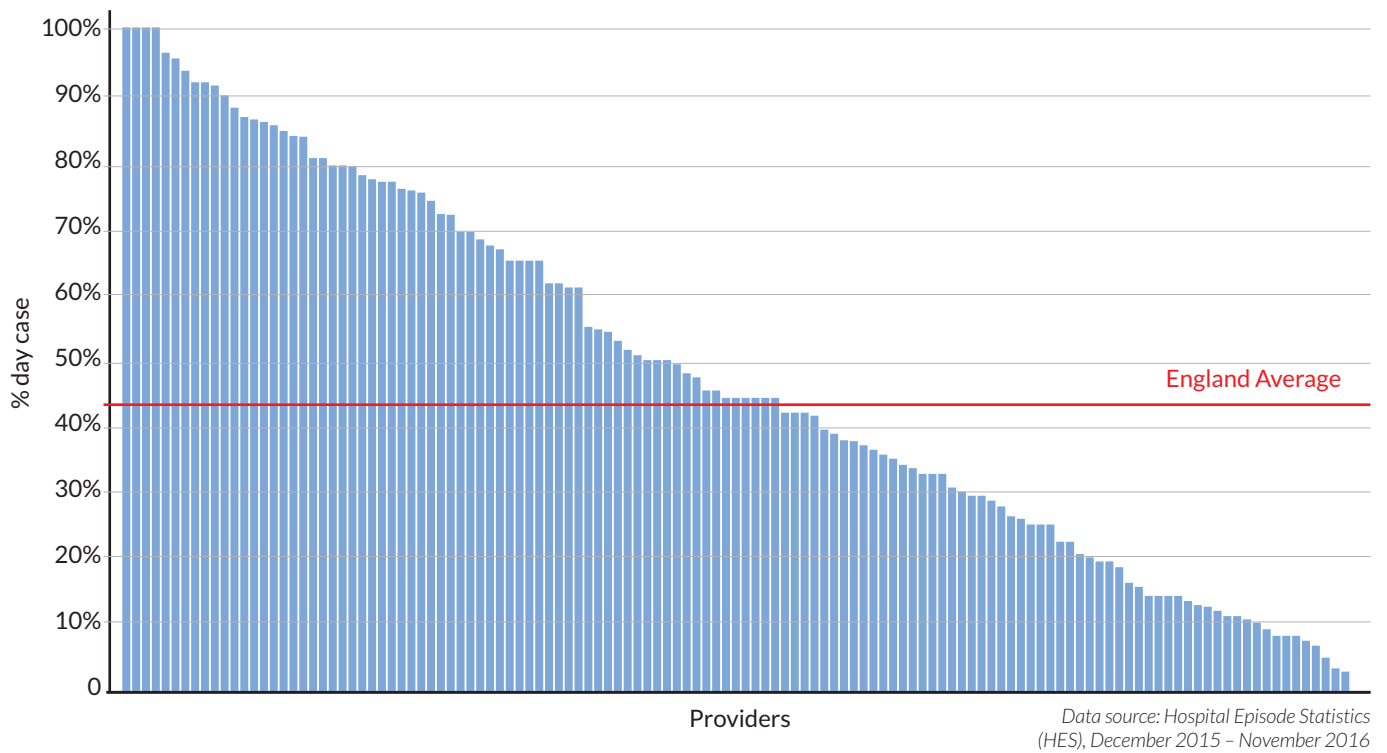
We found that variations in age and casemix do not explain low day case rates. For example, Figure 4 and Figure 5 show how there is wide variation in both day case rates for paediatric tonsillectomy patients and in day case rates for paediatric patients with an underlying diagnosis other than tonsillitis, e.g. those with breathing difficulties for sleep apnoea.

Figure 7 shows variation in day case rates for adult tonsillectomies, with average rates by provider ranging from 1.1% to 100%.

Figure 8 shows the extreme variation in day case rates for cochlear implants, with rates by provider ranging from 0% to above 70%.

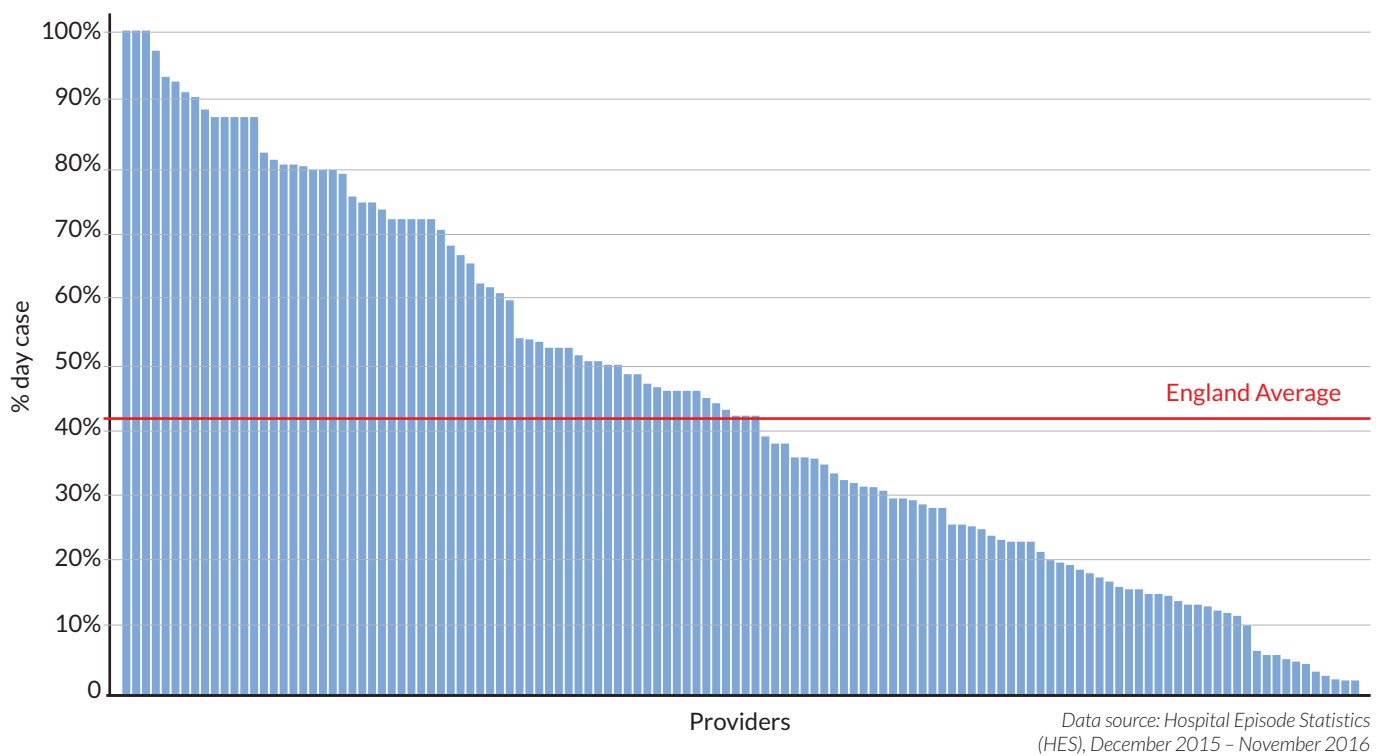
We found variation irrespective of which procedure we looked at and whether patients were paediatric or adult.

**Figure 4: Paediatric tonsillectomy day case rates – patients under six years of age (all diagnosis codes)**

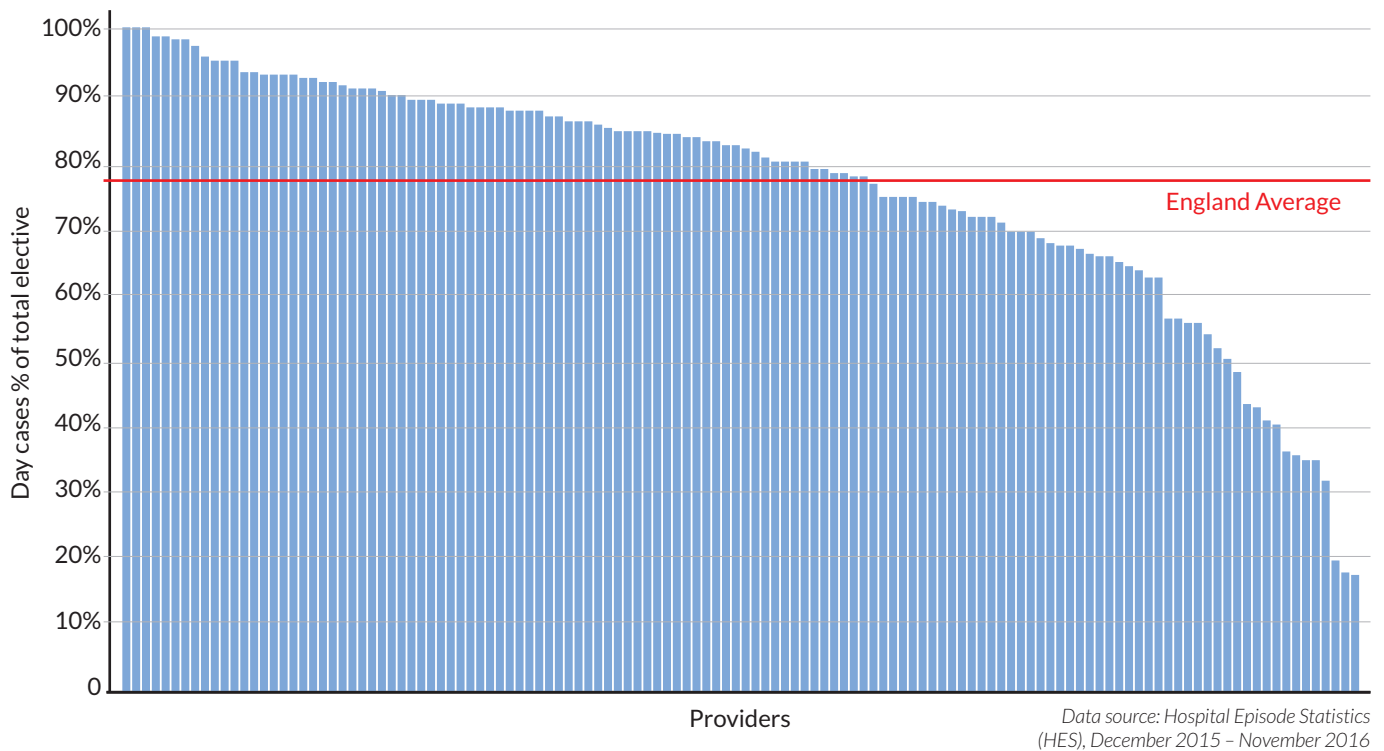


Appendix 1 gives examples of the data for paediatric tonsillectomy day case rates reviewed in the data packs. The appendix shows one provider with a high day case rate and one with a low day case rate

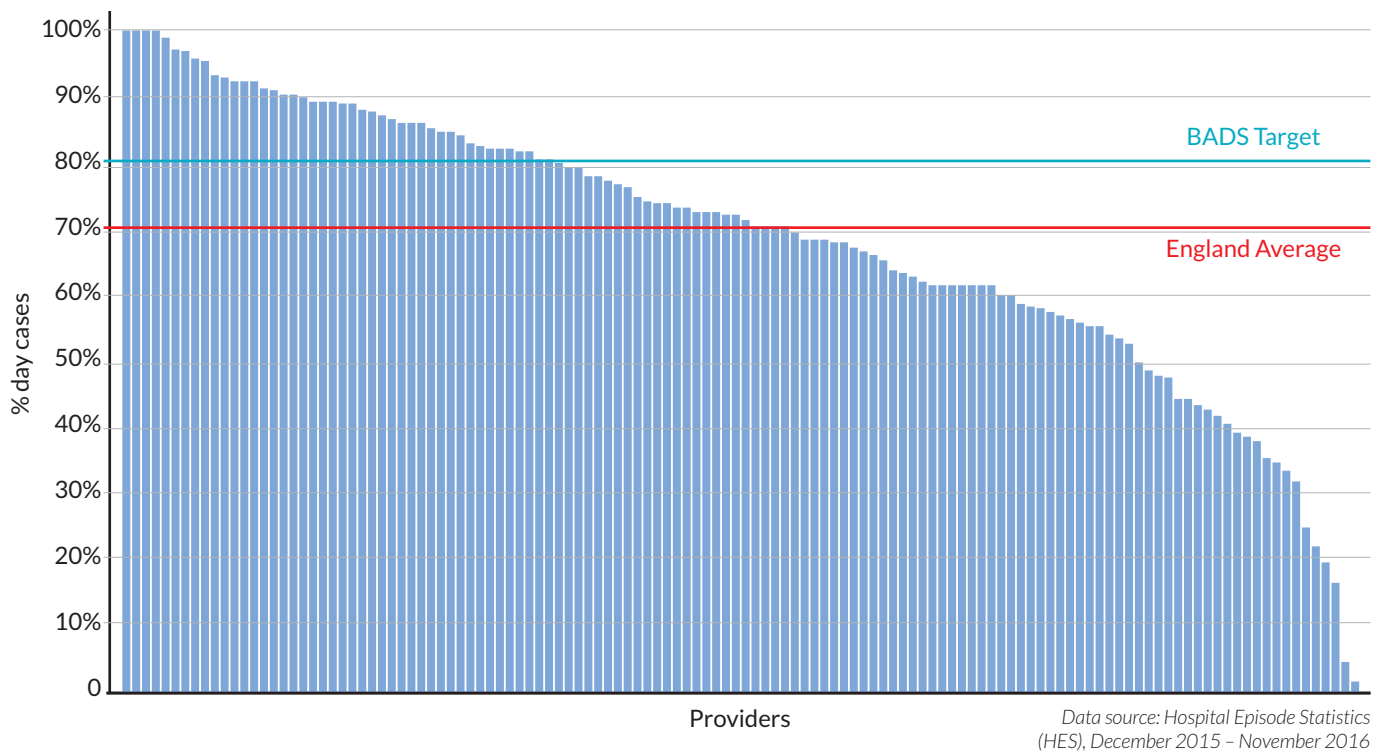
**Figure 5: Paediatric tonsillectomy day case rates, where diagnosis code is not tonsillitis**



**Figure 6: Adult septoplasty day case rate – as percentage of day case and elective inpatient activity**

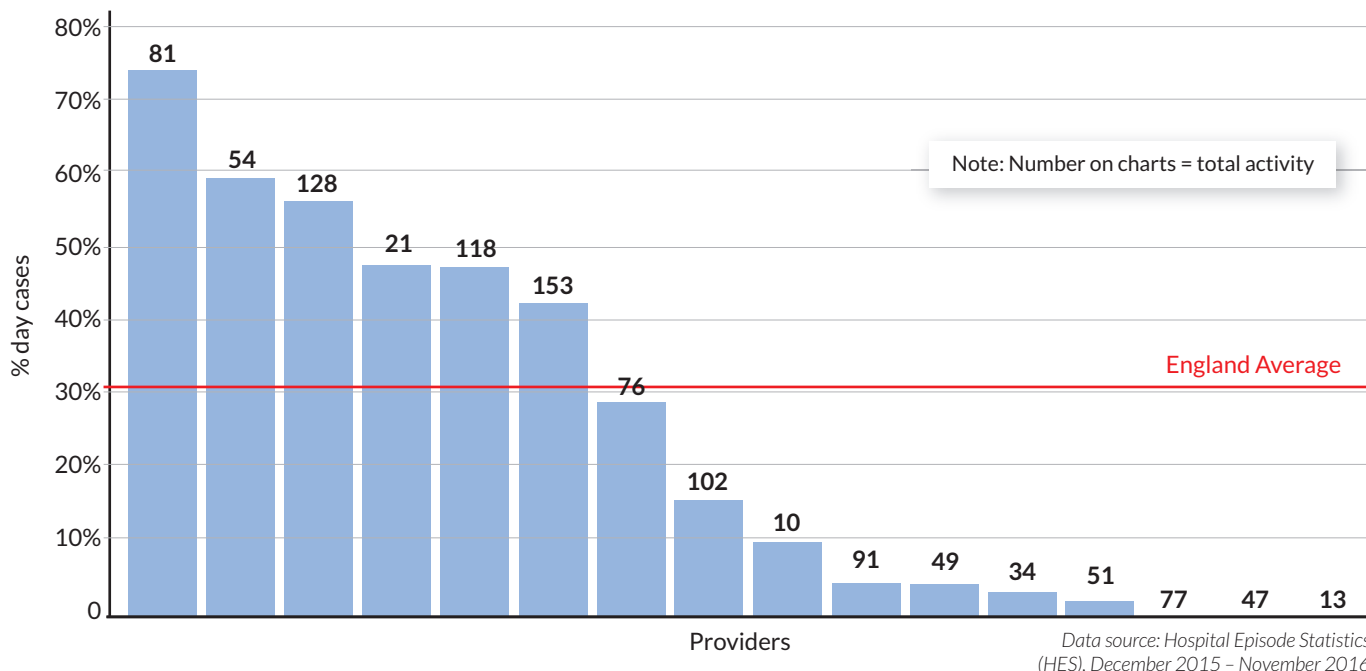


**Figure 7: Adult tonsillectomy day case rates**





**Figure 8: Combined adult and paediatric cochlear implant day case rates**



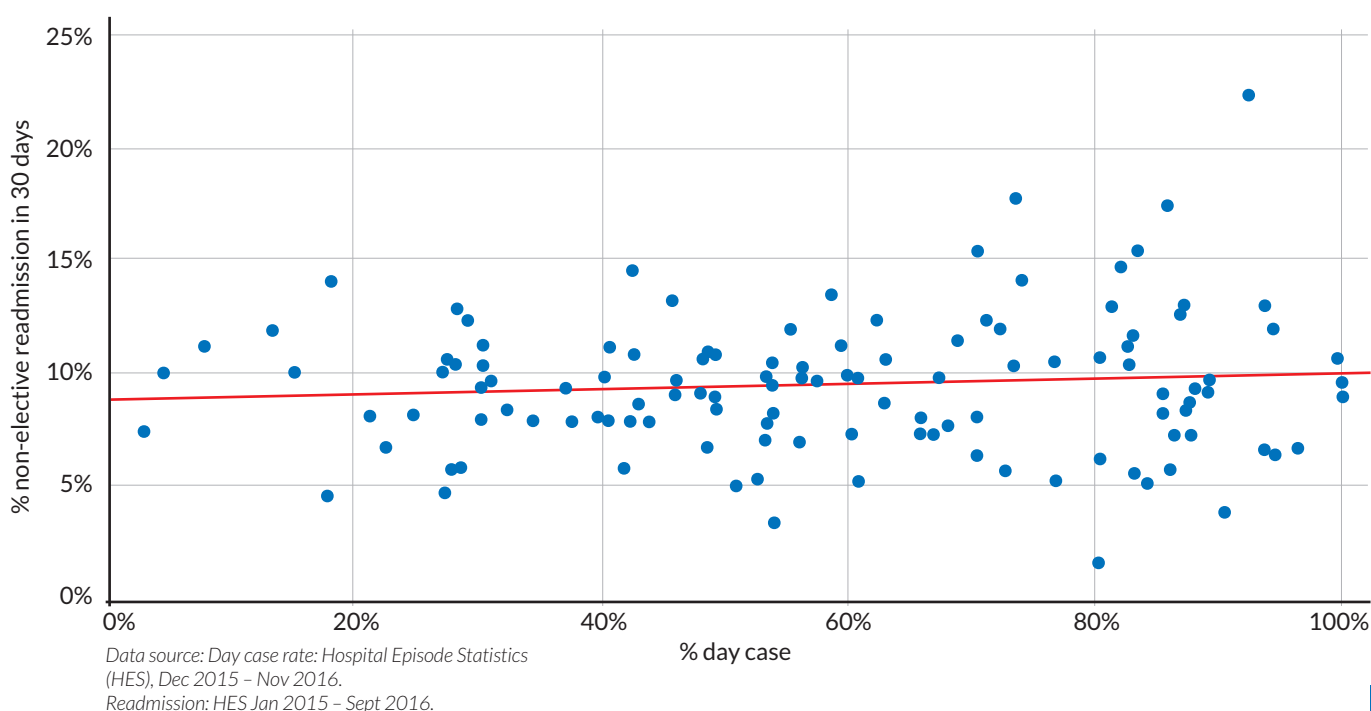
### There is no significant correlation between day case rates and readmission rates

Some of the units with relatively low day case rates expressed the concern that carrying out certain procedures as a day case might be detrimental to outcomes and/or readmission rates.

In the absence of meaningful outcome metrics, we looked at whether there is any relationship between day case rates and readmission rates and found no significant correlation.

Paediatric tonsillectomy provides an effective index procedure as it is common to most ENT units. As Figure 9 shows, it is possible to achieve both high day case rates and low readmission rates.

**Figure 9: Paediatric tonsillectomy day case rates and readmission rates**



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## Understanding the variation in day case rates

Our deep dive visits gave us the opportunity to discuss the underlying reasons for variation in day case rates.

We have described the key themes here.

### Belief in the benefits of day case treatment

As would be expected, units that are convinced of the benefits of day case treatment tend to be those with higher day case rates. Their commitment to day cases drives them to design practices, procedures and policies around delivering day case treatment.

Where units are less convinced of the benefits of day cases, they have no impetus to move away from their customary practices, procedures and processes, which are unlikely to be designed around seeing patients as day cases. We believe that it will only be possible to increase day case rates by addressing this mindset.

### Variations in practice

Variations in practice are a key influence on day case rates.

For example, we found that some providers are commonly performing paediatric cochlear implant surgery as day cases, whereas other providers are not comfortable with treating these cases without an overnight stay.

Another common cause of variation in day case rates is variation in the length of expected post-operative observation. For some procedures, practice can vary from three to six hours. At the upper ends of this time period, an overnight stay is going to be more likely.

### Patient travel time

In some regions, it can take patients a long time to travel to hospital – for example, in remote areas of the country. Longer travel times can mean that day case treatment becomes inappropriate due to concerns about accessing timely care in the event of post-operative complications.

### Low target rates

There are day case target rates for a number of ENT procedures. However, there is evidence that some of these targets are currently too conservative and should be readjusted.

For example, providers in the top quartile for day case paediatric tonsillectomy achieve rates that are 10 percentage points higher than the British Association of Day Surgery (BADs) target. We address paediatric tonsillectomy day case rates with a specific recommendation in the tonsils theme of our report.

### Case selection

From discussions at our deep-dive visits, we found that some smaller units are highly selective in the cases that they will take on: they will keep cases that are suitable for day case treatment while passing more complex cases (sometimes unnecessarily) to larger units. This finding appears to be supported by our analysis of treatment settings, which shows a clear increase in activity at specialist<sup>3</sup> providers, despite an overall reduction in admitted activity. See Appendix 3 and the forthcoming National Strategy for Paediatric ENT Surgery for more detail on paediatric tonsillectomies.

The process of case selection can result in some patients travelling further for their treatment, meaning it becomes less appropriate for the larger unit to treat them as a day case – perhaps because of concerns about distance and the time it would take to return in the case of complications.

This makes it harder for the receiving larger unit to achieve higher day case rates because day case treatment is not appropriate for a larger proportion of their patient population.

### Shared approach across multidisciplinary teams

A team-based approach, shared among surgical and theatre staff, nursing staff, allied healthcare professionals and anaesthetic staff can help to promote day case treatment.

The absence of this shared approach and mindset tends to lead to the fall-back position of an overnight stay.

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## CASE STUDY

### Managing expectations: moving to day case as default for all routine ENT surgery

#### LEEDS TEACHING HOSPITALS NHS TRUST

Over the past ten years, Leeds Teaching Hospitals NHS Trust has successfully established day case as the default setting for all routine ENT surgery. Previously, an overnight stay was standard.

#### How Leeds established day case as the default

Leeds involved staff at all levels to create the expectation that routine ENT surgery would usually be carried out as a day case.

They also put processes in place to ensure that as many patients as possible are able to leave without an overnight stay.

- The hospital consultants agreed on criteria for using day case procedures up front.
- During patients' out-patient consultations and pre-assessment, staff explain that day case is standard for their procedure.
- Staff are also careful to make sure patients know what this means for them – for example that they need someone to take them home and stay with them overnight, and that they will need to have painkillers ready at home.
- The hospital manages operating lists carefully, moving day cases to the start of the day to give patients enough time to recover.
- Ward staff are involved and have the training and tools to be able to play their role in supporting patients to leave without an overnight stay wherever appropriate.

#### The routine procedures Leeds treats as day case as default

Leeds Hospitals use day case as the default for all the following routine procedures, among others:

- Nasal and sinus surgery: septoplasty, septorhinoplasty, FESS.
- Ear surgery: myringoplasty, BAHA and mastoid surgery.
- Paediatric surgery: tonsillectomy and lymph node excision.
- Head and neck surgery: submandibular and parotid surgery, branchial cysts and hypoglossal cysts.
- Laryngeal surgery: microlaryngoscopy and biopsy.

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## **Administration geared towards supporting day case treatment**

Making day cases an earlier priority on the operating list – ideally on the morning list – helps ensure patients can be safely discharged on the same day.

We found that some units find it difficult to list patients as day cases because of unhelpful administrative processes.

In these units, it is currently easier to list a patient as an overnight case in case the patient needs to stay in. This means everything is geared around the default expectation that the patient might stay overnight, making it much more likely that they do. For example, the patient doesn't go back to a day case ward following their surgery.

### **Day case treatment across specialties**

The desire to increase day case rates is emerging as a recurring theme across a number of specialties.

The GIRFT programme will review the cross-cutting practices, processes and models that are found to support and promote day case treatment, as well as any barriers.

## BAETS review of thyroid surgery as a day case

The British Association of Endocrine and Thyroid Surgeons (BAETS) has recently reviewed and debated the safety of thyroid surgery as a day case. They reviewed several thousand cases recorded in the UK Registry of Endocrine and Thyroid Surgery (UKRETS) database and carried out a literature review.

Their review indicates that, while patients at high risk of bleeding can be identified, it is not possible to identify with any confidence a group of patients with a very low risk. Even when post-operative haemorrhage happens in the relative safety of a surgical ward, the outcome can still be catastrophic.

## Current practice

During our GIRFT review, we found that a number of units undertake day case thyroid surgery in selected cases – with 16 units reporting day case rates of above 10%. These units all reported that they are comfortable carrying out benign thyroid surgery as a day case and have not had any problems.

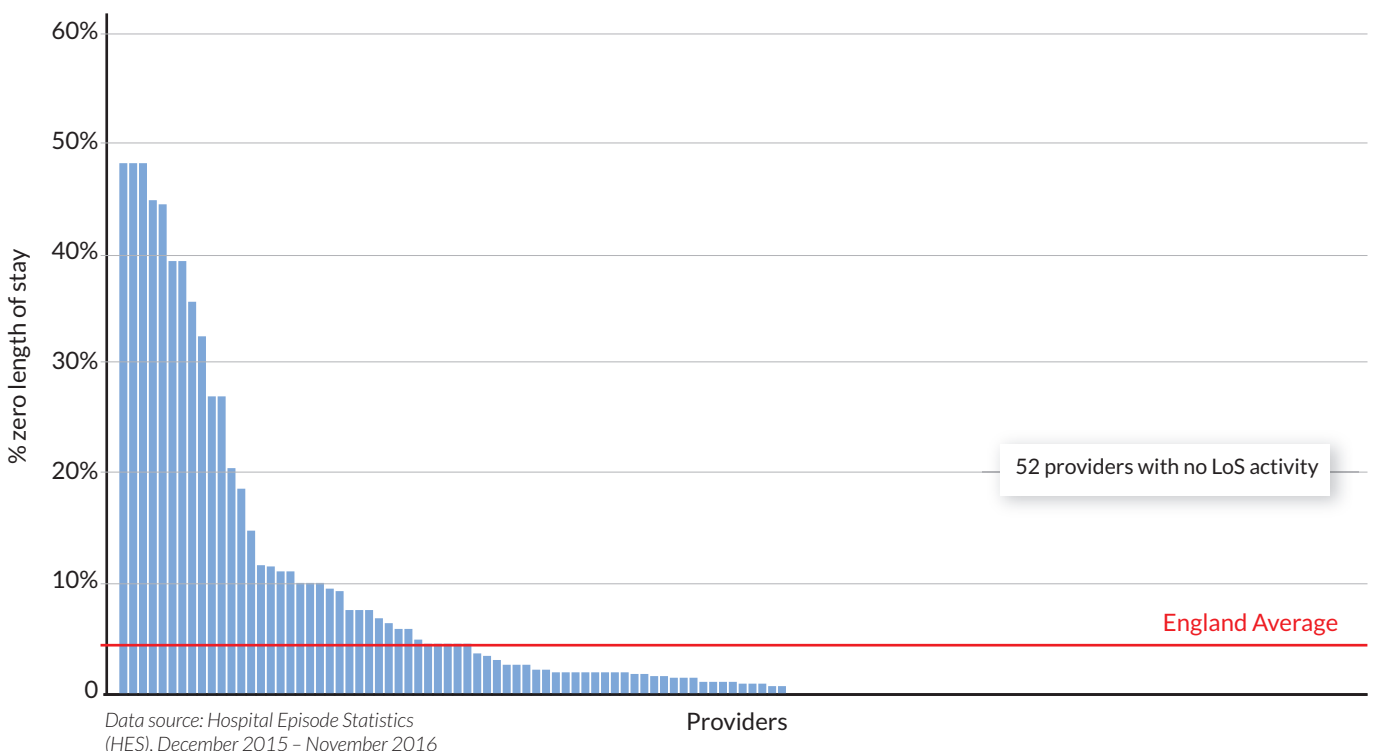
It is not the place of this review to endorse or criticise this practice, but we note that clinical practice is evolving.

BAETS recommends that all wards accepting thyroid patients should have detailed information on how to manage post-operative complications. If a unit offers patients the option of discharge on the same day as thyroid surgery, the unit must:

- provide the patient and their carers detailed information as part of shared decision-making
- not put the patient under pressure to accept day case surgery
- consider availability of transport, local geography and family support.

There is a separate GIRFT workstream on thyroid surgery and we anticipate that workstream will review this area in more detail.

Figure 10: Percentage of thyroid surgery with no overnight stay



## Recommendations

Recommendation	Actions	Owners	Timescale
1. Increase the use of day case across ENT.	<p><b>a</b> Explore ways to ensure that procedures suitable to be a day case are routinely completed as a day case.*</p> <ul style="list-style-type: none"> <li>• reviewing administrative processes to ensure they enable patients to be listed as day cases</li> <li>• prioritising cases to morning or early afternoon lists</li> <li>• having a dedicated day case unit/bed, where possible</li> <li>• carrying out capacity planning.</li> </ul>	Providers	November 2019
	<p><b>b</b> Review day case practice across ENT. The desire to increase day case rates is emerging as a recurring theme across a number of specialties. Review the cross-cutting practices, processes, models, and estate factors that are found to support and promote day case treatment, as well as any barriers.</p>	GIRFT, NHS Improvement, British Association of Day Surgery (BADS)	May 2020
	<p><b>c</b> Review existing guidance and target rates for day cases. Consider whether current guidance should be updated and whether targets should be introduced for additional procedures. Where targets already exist, consider readjusting them if they are set too conservatively.</p>	ENT UK, BADS, (British Association of Paediatric Otolaryngology) BAPO, British Association of Endocrine and Thyroid Surgeons (BAETS)	May 2021
	<p><b>d</b> Review best practice tariffs for day cases.</p>	GIRFT, NHS Improvement Pricing Team	May 2021

*\*Providers should consult this report, forthcoming GIRFT reports and The BADs directory for advice on what procedures can be carried out as a day case. providers should also be cognisant that GIRFT's view is that performing surgery as a day case should be the norm (unless clinically inappropriate), and that when making a decision between day case and inpatient admission, providers should frame the decision by considering why the procedure requires an inpatient admission, rather than by considering if the procedure could be a day case.*

## NON-ELECTIVE CASES

We identified four interrelated themes relating to non-elective cases:

- the assessment setting;
- out-of-hours network arrangements;
- out-of-hours expertise;
- daytime first-on-call expertise.

Practices in each of these can contribute to non-elective admissions where no dominant procedure takes place.

### Non-elective spells (admissions) not followed by a dominant procedure

The number of non-elective spells (admissions) not followed by a dominant procedure, such as a trip to theatre or significant surgical intervention, is high at 50.8%, representing 40,600 spells.

There is also significant variation between providers – ranging from 25% to 75%.

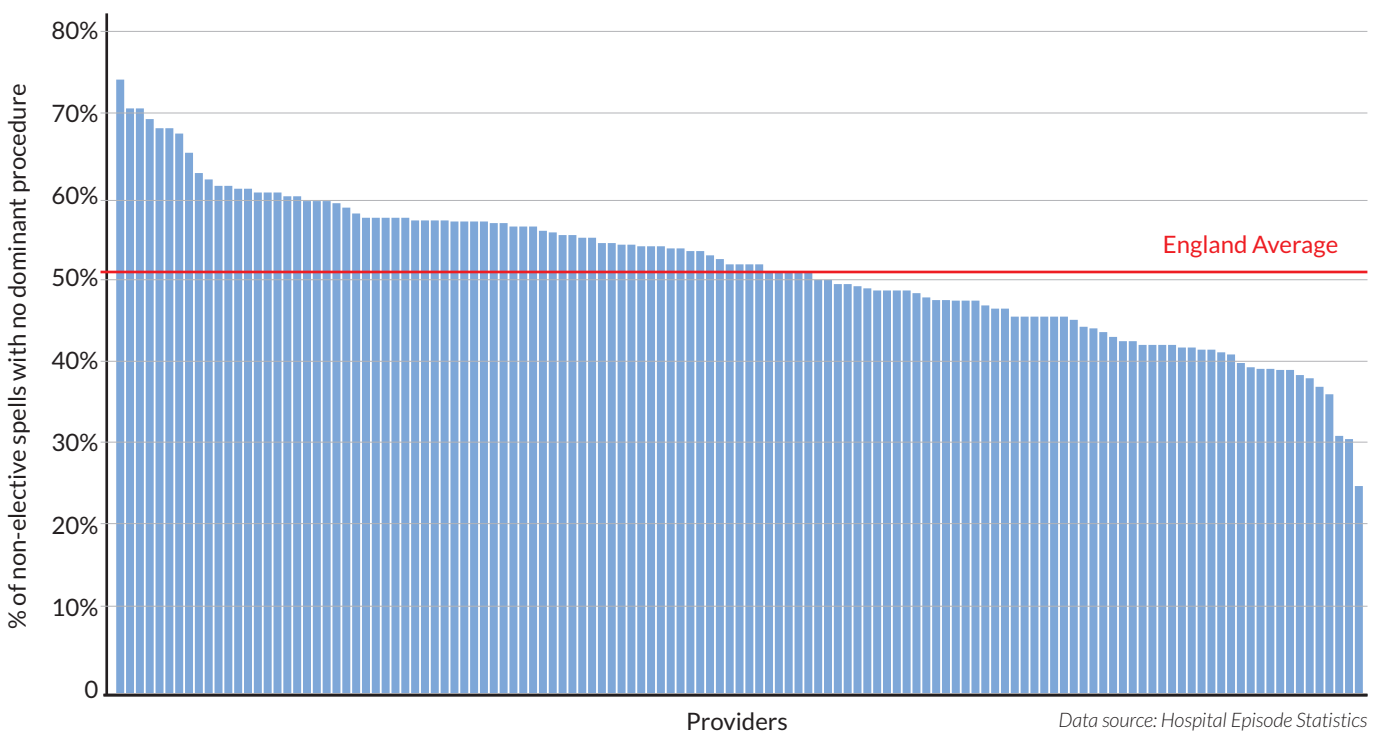
A proportion of non-elective spells not followed by a dominant intervention will be for cases that are appropriately treated by a non-surgical intervention. For example, treatment by intravenous antibiotics or conservative management of orbital cellulitis. However, these would not account for the level of variation we found.

We investigated the causes of these figures and looked at the models and practices being used by providers with lower rates.

In coding, the dominant procedure for an admission spell is the procedure with the highest expected resource use. It is used to derive the healthcare resource group (HRG).

A non-elective admission not followed by a dominant procedure is where a patient has been admitted, but has not undergone a procedure (other than minor or routine diagnostic procedure, such as x-rays and scans).

Figure 11: Percentage of non-elective spells where no procedure takes place



Data source: Hospital Episode Statistics (HES), December 2015 – November 2016

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## The assessment setting

Many of the units achieving low rates of admission followed by no dominant procedure use an ambulatory care setting to provide a safe area where treatment can be instigated and the patient can be observed. For example, a number of units manage quinsy in an ambulatory setting.

There are number of different models in use, including emergency ENT out-patient clinics and rapid-access ENT units. Others have established a dedicated observation area that enables them to make a fully informed decision on whether or not to admit.

### CASE STUDY

#### Managing emergency cases through a GP referral unit

##### JOHN RADCLIFFE HOSPITAL, OXFORD UNIVERSITY HOSPITALS NHS FOUNDATION TRUST

John Radcliffe Hospital's GP referral unit (GPRU) sees over 450 adult patients per month. This helps the hospital manage its large non-elective ENT caseload – 28.8% of ENT spells are non-elective – and contributes to A&E targets.

#### Better decision-making and diagnostic certainty

The GPRU has a dedicated nursing team and is based next to the ENT ward and theatres. It has 16 trolleys (shared with plastic surgery).

A registrar carries out a senior review every morning and there is a consultant review every evening.

These reviews have improved decision-making and diagnostic certainty – 74.8% of admitted non-elective patients have a procedure, compared with a national average of just 49.2%.

#### Supporting A&E targets

The unit's opening hours of 8am to 9pm were extended to 7am to 11pm to help with winter pressures.

The increased opening hours reduced the number of patients attending A&E by 60 a month and reduced admissions to ENT by 20.

This contributes to the 4-hour A&E target and avoiding breaches of the 12-hour target.

#### Facilitating ambulatory care

The GPRU also facilitates ambulatory care by enabling appropriate discharge for home and ambulatory intravenous treatment of cases, such as for facial cellulitis, quinsy, tonsillitis and pinna infections.

This has reduced admissions by five per week.

#### Creating opportunities for other care

The overall reduction in ENT admissions means the in-patient ward is able to treat 25 cataract patients a day.

#### Continued development

The unit is currently looking at nurse-prescribing and advanced nurse practitioners with the aim of providing care without having to admit patients. This should further improve the patient experience and open the way for more opportunities to use resources more effectively.

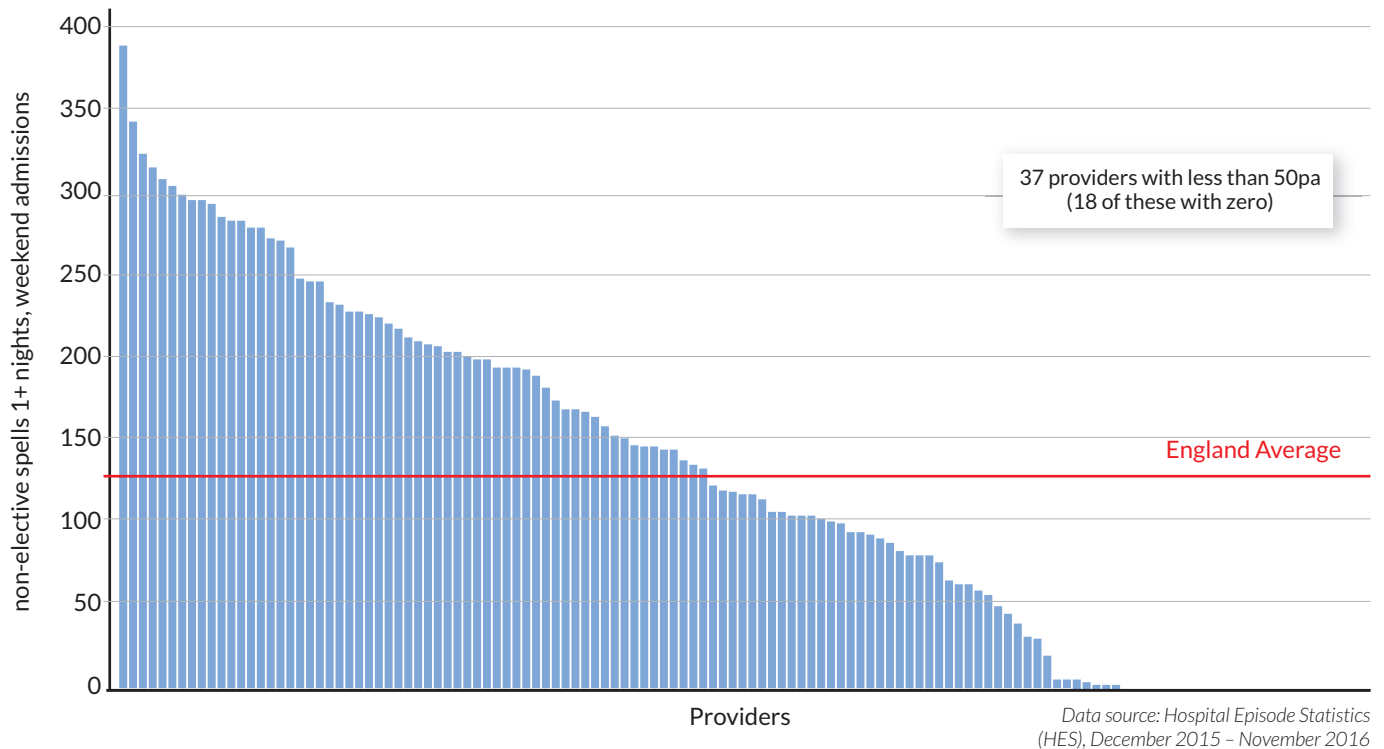


## Variation in out-of-hours admission

There is wide variation in the number of patients admitted for overnight care at weekends. 37 providers reported fewer than 50 admissions per year with 18 of those providers reporting no activity at all.

Two key contributory factors to this variation emerged: network arrangements and expertise.

**Figure 12: Number of non-elective admissions with length of stay of 1+ nights on a Saturday or Sunday**



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## Out-of-hours network arrangements

Many of the current arrangements for out-of-hours provision have evolved out of necessity rather than being developed by design. Current and new network arrangements should be formalised using learning from existing networks and should link in with local sustainability and transformation partnerships (STPs) and integrated care systems (ICSs).

### Partnership models

We found many district general hospitals would struggle to provide on-call ENT cover at every level if they were to try to achieve a seven-day service. Instead, they provide out-of-hours cover from Monday morning to Friday afternoon. Between Friday afternoon and Monday morning, there is an informal agreement with a larger neighbouring trust that emergency ENT can go there.

With this sort of informal arrangement, there is rightly a degree of anxiety about what happens if a critical case turns up at the emergency department of the district general hospital outside of these hours.

### Emergency hub and spoke models

There are also examples of networks where one centre acts as the emergency hub with spokes carrying out routine ENT activity. The spokes also contribute staff resources to the on-call services of the hub.

## CASE STUDY

### Hub and spoke model in practice

#### ROYAL WOLVERHAMPTON TRUST WITH DUDLEY GROUP OF HOSPITALS

The Royal Wolverhampton Trust and The Dudley Group of Hospitals have found practical ways to work collaboratively, combining skills and resources effectively with the help of video links.

#### How the trusts share services

**Consultant split:** There are eight consultants across two sites – five at Wolverhampton and three at Dudley. Consultants work together with shared clinics.

**Clinic split:** Wolverhampton takes the out-of-hours patients and head and neck cancer cases, while Dudley covers mostly day cases, follow-ups for cancer patients, and non-cancer cases, partnering with orthopaedics for overnight stays.

**Emergencies:** Wolverhampton runs a daily emergency clinic, covered by an SHO for head and neck, with a video link to Dudley. An orthopaedic SHO covers Dudley, but consultants and registrars travel to Dudley as needed.

**On-call:** The two sites combine their on-call duties, using a 1:8 rota to cover weekends, and also share on-call with orthopaedics at Wolverhampton.

**MDTs:** The head and neck MDT is held at Wolverhampton, with a video link to the Dudley site, while the thyroid MDT is held at Dudley (for non-malignant cases).

*This hub and spoke model has improved access to resources for both staff and patients, and is helping the trusts as they work towards a seven-day model.*

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## CASE STUDY

### When four trusts collaborate: a long-established hub and spoke model

MID ESSEX HOSPITAL SERVICES NHS TRUST (HUB),  
SOUTHEND UNIVERSITY HOSPITAL NHS FOUNDATION TRUST,  
BASILDON AND THURROCK HOSPITALS NHS FOUNDATION TRUST,  
PRINCESS ALEXANDRA HOSPITAL NHS TRUST (HARLOW)

This hub and spoke model includes four trusts, and has been in place for more than 10 years.

Complex work is carried out at the hub (Mid Essex), while all four trusts share MDT teams and on-call rotas.

#### Hub activity

The hub at Mid Essex has four consultants, and carries out more complex procedures, including:

- all in-patient emergencies
- major head and resections
- all elective surgery where the patient needs an overnight stay.

#### Spoke activity

The spokes – at Southend, Basildon and Thurrock, and Harlow – share the on-call rota and take part in the MDTs. They refer patients to the hub as needed, and carry out day case work on site.

In an emergency, the spoke trusts decide whether the patient is well enough to transfer. If they are, they will be moved to the hub, but if not, the on-call team will go to the spoke.

#### Charging

Southend, Basildon and Thurrock, and Harlow charge Mid Essex for any time their consultants spend at the spoke on elective work. They also recharge Mid Essex for the costs of providing doctors of all levels to cover the out-of-hours rota.

When a patient is transferred to Mid Essex, the tariff goes to Mid Essex.

### Absent arrangements

We have also found examples of providers with no out-of-hours provision which simply rely on a neighbouring hospital picking up non-elective cases. There is no arrangement in place to provide any medical support.

### Issues with informal network arrangements

There are many issues with informal arrangements.

Hubs can find that taking on ENT emergency cases impacts their medical staff and bed availability. Both factors can prevent the hub from carrying out their routine ENT and other elective work.

In terms of income, informal network arrangements can be hugely liberating for spokes, but far less beneficial to the hubs. Current tariff arrangements can mean that emergency work does not off-set the work a hub could potentially generate through their elective activity. The clinical model may be right, but the financial model doesn't necessarily support it.

A lack of regional planning can also mean that fully staffed units may develop in close proximity to each other, which may not be the best use of resources.

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## Out-of-hours expertise

Unsurprisingly, we found that units that put greater expertise in place for out-of-hours cover tend to see fewer non-elective admissions that are not followed by dominant procedure. These units are able to manage appropriate non-elective conditions on an out-patient basis.

There are a number of different models in place, including using ENT nurse practitioners and ENT first-on-call doctors.

Other units rely on out-of-hours cover from junior medical staff with limited experience and knowledge of ENT. It is reasonable to assume that these staff are more likely to be unsure about some ENT cases and therefore more likely to admit patients. Networks should ensure that they provide appropriate levels of senior out-of-hours support and prioritise patient safety.

## Induction and training

From our deep dive visits, we found that the level of induction provided for first-on-call doctors varies between providers.

At the minimum, staff should be given the training necessary for them to be able to identify ENT emergencies.

As network arrangements become formalised, providers and commissioners will need to ensure that:

- tenders are assessed for their impact on training;
- appropriate measures are put in place to provide suitable arrangements for trainees.

Where providers raise concerns about the impact on induction and training, GIRFT regional hubs will:

- assess whether an impact assessment has been carried out (in accordance with HEE guidance)<sup>4</sup>
- encourage providers to work with HEE to take any required action.

## Daytime first-on-call expertise

Some units are providing either middle grade or consultant-led on-call services during daytime hours.

This approach offers several benefits, including:

- enabling units to manage appropriate non-elective conditions on an out-patient basis
- providing junior staff with a learning opportunity
- potentially supporting compliance with standards 2 and 8 of the NHS seven-day services programme.

Clearly, any consultant-led non-elective model requires careful management of consultant resources to ensure that routine elective work does not suffer. It may also require units to review their staffing model and identify any potential increase in the consultant workforce.

## Recommendations

Recommendation	Actions	Owners	Timescale
<b>2.</b> Reduce the number of non-elective spells (admissions) where no procedure takes place.	<b>a</b> Carry out a local audit of trusts that are shown by GIRFT data to have a high rate of non-elective spells (admissions) where no procedure takes place. Report results to GIRFT.	Providers, GIRFT	May 2020
	<b>b</b> Analyse causes of non-elective spells (admissions) where no procedure takes place at a national level. Develop recommendations to reduce the number.	GIRFT, NHS Improvement	May 2020
	<b>c</b> Where alternative settings currently exist, assess their impact in reducing the number of non-elective spells (admissions) where no procedure takes place.	GIRFT	May 2020
	<b>d</b> Following evaluation in 2c, where appropriate, develop alternative observation and treatment settings, such as a dedicated observation unit, ambulatory care or rapid-access ENT unit.	Providers, Commissioners, Sustainability and Transformation Partnerships (STPs)/Integrated Care Systems (ICs)	May 2021
<b>3.</b> Formalise networks for out-of-hours provision.	<b>a</b> Develop guidance on setting up formal hub and spoke models. The guidance should be based on best practice found in effective existing ENT arrangements that feature an emergency hub with spokes that carry out routine ENT activity. The guidance should specify that: <ul style="list-style-type: none"> <li>- spokes contribute staff resources to the on-call services of the hub</li> <li>- the model provides appropriate levels of senior out-of-hours cover</li> <li>- a minimum level of induction and training is given to staff proving on-call cover.</li> </ul>	ENT UK to lead with support from GIRFT, NHS Improvement, NHS England	May 2020
	<b>b</b> Model the financial arrangements for a hub and spoke network, taking into account the new blended payment approach and ensuring that the tariff accurately reflects the cost of providing ENT services within hubs and spokes.	GIRFT, NHS Improvement	May 2020
	<b>c</b> Ensure that financial arrangements support the optimal model of care, as described in the outputs of a and b above. Where local pathways are agreed, ensure that local prices reflect the costs of the pathway and that the appropriate section of the national tariff is followed when setting and agreeing prices.	Providers, Commissioners	May 2020
	<b>d</b> Review existing out-of-hours provision and network (hub and spoke) arrangements. Implement or, where arrangements already exist, formalise according to the guidance developed in 3a.	Providers, Commissioners, STPs	May 2021
	<b>e</b> GIRFT regional hubs to use Health Education England (HEE) guidance with providers to ensure compliance with training standards within network arrangements. GIRFT regional hubs to refer to HEE for any action required.	GIRFT, Providers, HEE	May 2021

## TONSIL SURGERY

Since tonsil surgery accounts for such a high proportion of the ENT caseload in terms of volume of cases, we have grouped the key findings relating specifically to tonsils in this section.

The other themes identified in this report all apply equally to tonsil surgery.

### Target rates for day case tonsillectomy

The day case target rate for paediatric tonsillectomy, set by the British Association of Day Surgery (BADS), is 70%. However, we found that providers in the top quartile for day case paediatric tonsillectomy are currently achieving rates of 80.6% plus.

This suggests that the BADS target rate is currently set too low. (Also see the 'low target rates' section in the 'day case treatment' theme).

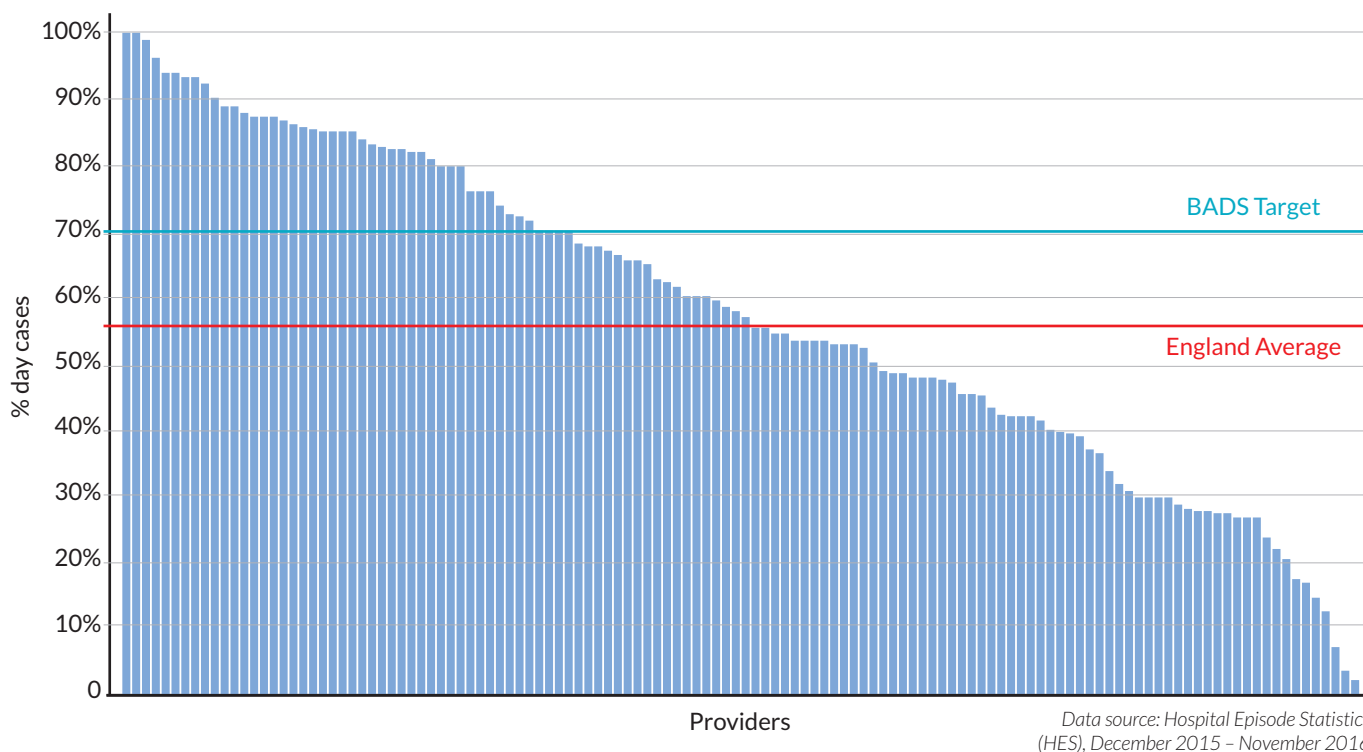
### Variation in day case tonsillectomy

While there is a significant group of providers out-performing the current target rate, we also found that 80 providers failed to achieve the BADS target rate.

Indeed, there is huge variation in the rate of paediatric tonsillectomies treated as day cases. The average day case rate (any diagnosis code) was 55.8% with a range of 2.5% to 100%.

We have recommended a general increase in day case rates across ENT elsewhere in this report that would tackle this variation.<sup>5</sup>

**Figure 13: Paediatric tonsillectomy day case rates (all diagnosis codes)**



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## Day case treatment for obstructive sleep apnoea (OSA)

We found there is huge variation in willingness to consider day case surgery for children with any degree of potential or proven obstructive sleep apnoea. Some units are very comfortable with undertaking surgery as a day case, while others are much more reluctant.

Clearly day case surgery will not be appropriate in all cases. However, clinical needs do not account for the level of variation we found and we believe there is a significant opportunity for a greater proportion of cases to be carried out on a day case basis.<sup>5</sup>

### CASE STUDY

#### Increasing day case rates for children with OSA

##### MAIDSTONE AND TUNBRIDGE WELLS NHS TRUST

Maidstone and Tunbridge Wells has very high rates of day case delivery of tonsillectomies and adenoidectomies – especially among younger children and children with some form of airway obstruction.

The majority of procedures are listed as day case procedures. This contributes to one of the highest ENT day case rates in the country at 92.6%

##### Dedicated ENT anaesthetists

A team of three dedicated ENT paediatric anaesthetists see any child under the age of four.

ENT staff and anaesthetists work closely together, using a standardised (but not prescriptive) anaesthetic protocol.

Leave cover is provided by other paediatric anaesthetists.

The anaesthetists see severe cases of OSA pre-operatively to assess whether they are safe to be treated within the trust or should be referred to a tertiary centre.

##### List organisation

Lists are paediatric only – as specified in national guidelines.

All tonsillectomies are done on morning lists to allow appropriate post-operative recovery time and discharge on the same day. Surgeons and anaesthetists confirm list organisation on the day of surgery according to age, clinical importance and other comorbidities. Theatre staff will automatically arrange the list in ascending age order.

Tonsillectomies are all done on a single site.

##### Standard post-operative regime

The trust follows a standard post-operative regime to improve the patient pathway.

Recovery nurses receive specific training on paediatric post-operative recovery, and work closely with the Critical Care Directorate. Recovery nurses see the children pre-operatively. There is one lead paediatric recovery nurse and three more nurses are trained for specific paediatric ENT recovery.

The post-operative regime includes standardised analgesia, prescriptions and discharge summaries for GPs.

All children self-extubate as the default.

##### Anaesthetist review of obese patients

The trust has recently introduced a policy of reviewing the BMI of all children. Those that are obese are seen by an anaesthetist.

<sup>5</sup> Further advice on paediatric day surgery is provided by Royal College of Anaesthetists (2019) Chapter 10 Guidelines for the Provision of Anaesthesia Services (GPAS) Guidelines for the Provision of Paediatric Anaesthesia Services 2019, available via: [www.rcoa.ac.uk/system/files/GPAS-2019-10-PAEDIATRICS.pdf](http://www.rcoa.ac.uk/system/files/GPAS-2019-10-PAEDIATRICS.pdf)

## Readmission rates following tonsillectomy

For full details of our findings on readmission rates following tonsillectomy, please see Appendix 4.

In summary, we found that:

- Overall readmission and return to theatre rates following tonsillectomy are now much higher than previously reported in the literature.
- Rates are generally higher amongst adults compared to children. This reflects findings of previous national audit.
- Readmissions are due to tonsillectomy related complications and not unrelated causes.
- There is wide national variation in readmission and return to theatre rates after tonsillectomy.
- There does not appear to be an independent variable in clinical or departmental practice that is accounting for the variation in outcomes.
- There is emerging evidence that tonsillectomy performed using Coblation in paediatric patients is no longer associated with a higher risk of complications than other surgical techniques. This is due to the recent advent of the intracapsular Coblation technique for tonsillectomy.
- Paediatric intracapsular Coblation appears to be associated with lower complication rates compared to other techniques in units with experience of performing high volumes of paediatric intracapsular Coblation.
- Reduction in readmission and return to theatre rates presents a key opportunity for improvement in patient experience, outcomes, and demand on emergency ENT services.

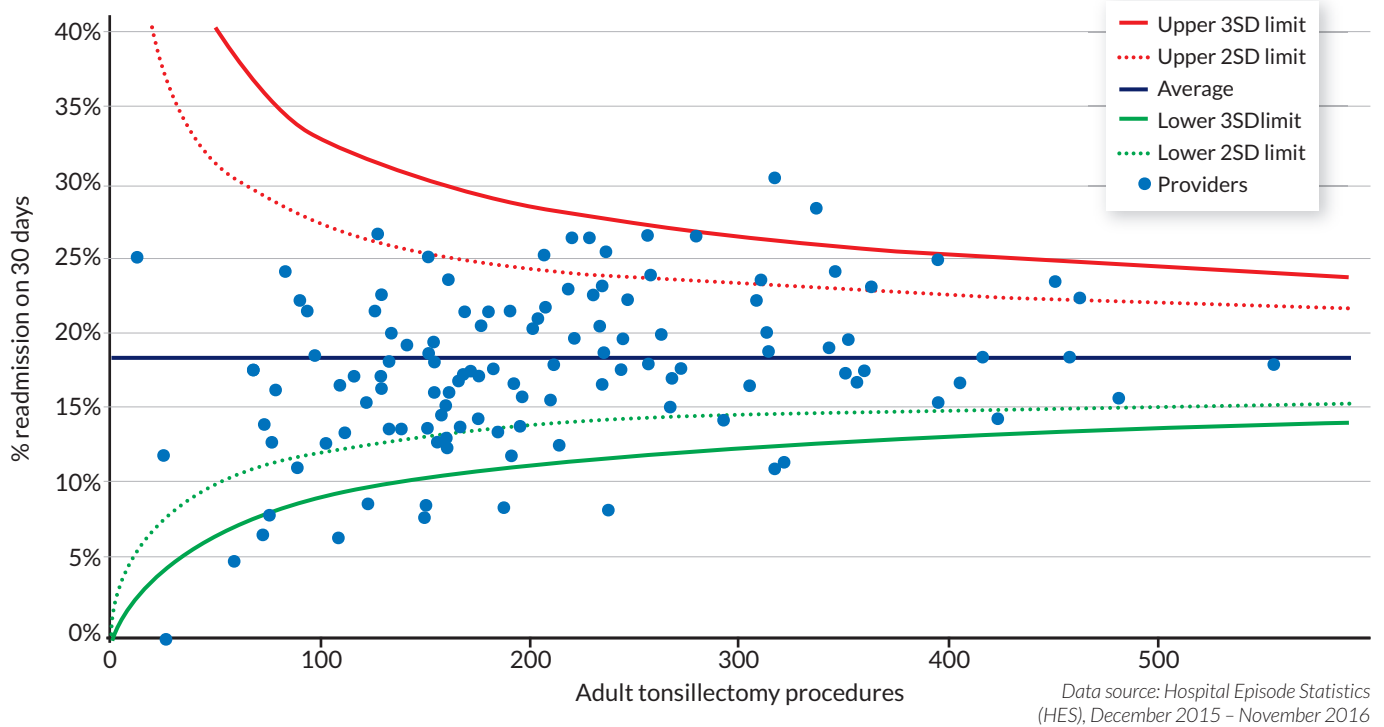
**Table 1: Readmission rates following tonsillectomy**

	Tonsillectomies		Readmissions within 30 days	Overall readmission rates	Variation in high volume providers >200 procedures
	Number	%			
Paediatric	48,747	68%	-	9.4%	3.7% to 18.6%
Adult	22,889	32%	-	18.4%	9.2% to 31.2%
Total	71,636	100%	8,784	12.3%	-

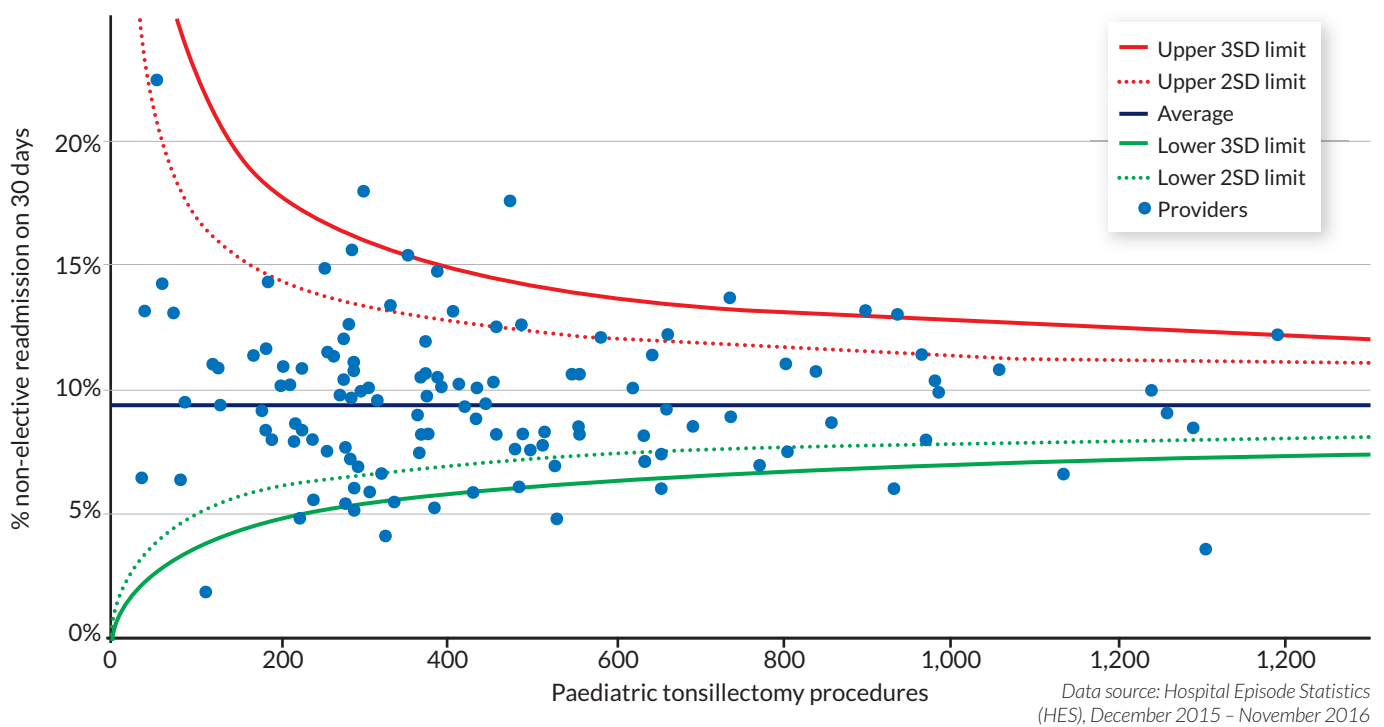
Data source: Hospital Episode Statistics, April 2015 – September 2016.



**Figure 14: Readmission within 30 days following adult tonsillectomy**



**Figure 15: Readmission within 30 days following paediatric tonsillectomy**



## Recommendations

Recommendation	Actions	Owners	Timescale
4. Increase the day case target for paediatric tonsillectomy to 80% (the top quartile rate of GIRFT providers). (Providers to see recommendation 1a.)*		BADS	May 2021
5. Develop guidance on day case treatment of obstructive sleep apnoea (OSA). (Providers to see recommendation 1a)	a BAPO (British Association of Paediatric Otolaryngology) to establish a working group to develop guidance on which cases are appropriate to be managed as a day case.	BAPO, BADS	May 2021
6. Reduce readmission rates following tonsillectomy.	a Develop and share a more robust methodology for accurately capturing data on readmissions following tonsillectomy.	GIRFT	May 2020
	b Audit reason for readmission using the methodology developed in 6a.	Providers	November 2020
	c Adopt standard patient information that provides: <ul style="list-style-type: none"> <li>clear post-operative information on expected recovery; and</li> <li>instructions for managing the early signs of complications.</li> </ul>	GIRFT, ENT UK	May 2020
	d Review and standardise protocols for post-operative pain control. Provide patients, parents and children with standard patient information.	Providers	November 2019
	e Where there is appropriate clinical expertise, training and resource, consider intracapsular tonsillectomy for paediatric patients with obstructive or infective symptoms.	Providers	November 2019
	f Revise the coding system to enable coders to more accurately capture the variety of surgical technique within HES data.**	GIRFT, NHS England, NHS Digital	May 2021

\*The denominator for the day case rate calculation would only include tonsillectomies performed at the provider. GIRFT supports the EBI programme and, as such, would expect that procedures would only be performed by providers for cases meeting the referral criteria provided by the EBI.

\*\*See Appendix 2 for details on giving commissioners notice of changes in the way you record activity.

## CANCELLATIONS

Cancellations see patients being admitted for treatment, but then discharged without the planned procedure having taken place.

Some providers are cancelling as many as one in 10 of their elective in-patient and day case ENT admissions. There is wide variation of 1.5% to 10% between providers, with an unacceptable average 5% – equivalent to around 12,600 spells.

We have estimated that the annual total estimated cost of cancellations is £5m (based on average cost per spell in 2015/16 reference costs.)

The savings we have identified are £610k if every trust was at the average rate (or better), or £1.4m if every trust was at best quartile (or better).

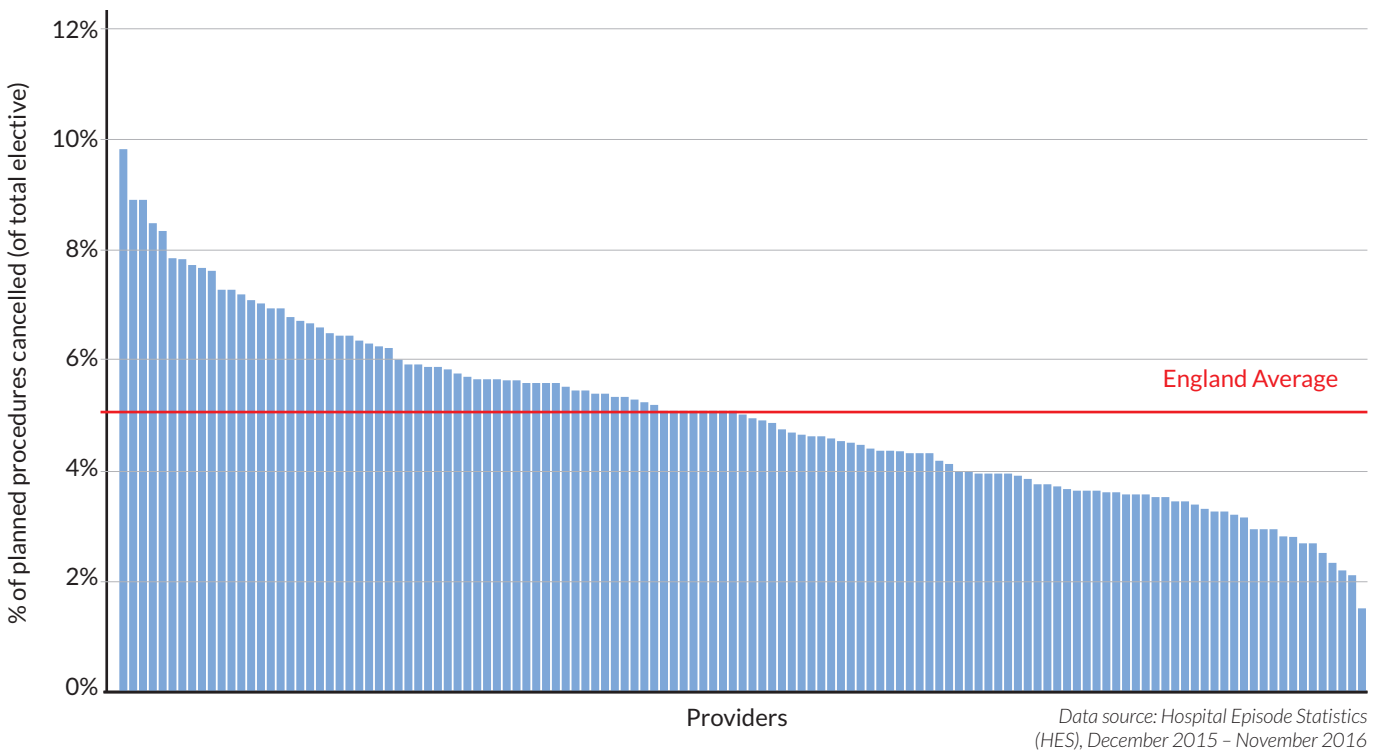
During our deep dive visits, we explored the medical and non-medical reasons for cancellations and found that many factors contribute to the high rates.

### Pre-assessment timing

The length of time between pre-assessment and admission is a key factor in cancellations. This period can be so long that the patient’s medical condition and comorbidity may have changed by the time they are admitted.

The length of this period is generally a function of the other issues that we address in this report. The key point is that the specialty needs to take a holistic approach to improving pre-assessment timing in order to reduce cancellations. For example, this might include the use of appropriately trained nurses or second line telephone pre-assessments to rule out recent illness.

**Figure 16: Planned procedure not carried out, as a percentage of total elective activity**



## Recommendations

Recommendation	Actions	Owners	Timescale
7. Reduce day of surgery cancellations.	<b>a</b> Review and adapt existing pre-assessment processes, to ensure they are timely and appropriate to the timing of the surgery.	Providers	November 2019
	<b>b</b> Review the delivery setting for activity and increase use of day case where appropriate in order to reduce the impact of cancellations for reasons such as winter pressures. (See recommendation 1a.)	Providers	November 2019
	<b>c</b> Collect examples of best practice and share with providers through GIRFT regional hubs.	GIRFT	November 2019

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## MAKING BEST USE OF CONSULTANT OUT-PATIENT TIME

We found significant unwarranted variation in the grade of clinical professional performing a number of activities. This was true for many different conditions and treatments.

We believe there is a significant opportunity to use consultant out-patient time more effectively by making better use of skill mix. There are opportunities for the wider multidisciplinary team, including specialist nurses and allied health professionals, to play a significant role in the delivery of ENT services. In particular, there could be greater use of:

- aural care services to support the post-operative care of ear surgery and chronic disease management
- audiology-led services delivering follow-up after grommet insertion.

Examples of other services can be found in the ENT UK Departmental Quality Standards, available to ENT UK members at [www.entuk.org/appraisal-guidelines](http://www.entuk.org/appraisal-guidelines).

We also found huge variation in new to follow-up ratios. There are clear opportunities to reduce unnecessary follow-ups and, where appropriate, use a one-stop approach, making best of use skill mix as above.

### CASE STUDY

#### Mixing skills to support patients and staff

##### UNIVERSITY HOSPITALS BRISTOL NHS FOUNDATION TRUST

Bristol University Hospitals' ENT department has seen real benefits from using appropriate skill mix for different ENT services – including improved continuity, extra support for junior doctors, and a reduced reliance on SHOs.

#### Nurse practitioners

They have a team of three experienced nurse practitioners

The nurse practitioners provide essential support in many areas of the department. Many of these tasks would previously have required activity from SHOs – posts which are difficult to fill.

The nurse practitioner role includes:

- delivering pre-op assessment for ENT patients
- helping to run the Hot clinic – for patients with urgent but not emergency problems
- carrying out weekly cancer follow up clinics
- supporting junior doctors – for example, a senior nurse practitioner runs junior doctor induction for the department (mostly GP trainees on rotation)
- running a tracheostomy care clinic
- checking plans with consultants
- providing continuity for patients and staff alike.

#### Developing deep experience and understanding of the service

The nurse practitioners all had good ENT knowledge when they began and have now remained in the department long-term. This brings further benefits in terms of experience and continuity.

They have also had the opportunity to undertake a wide range of training to help them fulfil their role.

#### Audiology services

Bristol's audiology team has a wide range of responsibilities, including:

- leading a paediatric grommet clinic
- leading a paediatric glue ear clinic.

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## **CASE STUDY**

### **Nurse-led aural care clinic**

#### **NOTTINGHAM UNIVERSITY HOSPITALS**

Nottingham's nurse-led aural care clinic has been running for more than 25 years. Today the clinic sees more than 7,000 patients each year, with a variety of conditions.

#### **Post-mastoidectomy**

The bulk of the caseload is made up of post-mastoidectomy patients, whose cavities need regular maintenance, ranging from periodic checks to the treatment of active infection.

#### **Open access for patients with bone anchored hearing aids (BAHA)**

Like patients who have undergone mastoid surgery, those who have had a bone-anchored hearing aid (BAHA) also have open access to the clinic. After an initial post-surgery check-up, BAHA patients are seen on an 'as required' basis. The primary reason for treatment is localised skin inflammation, which can be particularly problematic in those with an exposed abutment.

#### **Other services**

As well as its own caseload, the clinic also offers support to the otology and audiology clinics through a de-waxing service. This service can also be accessed directly by GPs through the Choose and Book system.

Similarly it also offers support to the emergency service through aural toileting and removal of foreign bodies.

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## Follow-up after grommet insertion for glue ear

At least one hearing test is required following grommet insertion for glue ear.

In some ENT units, this test is carried out at a consultant appointment. Other units will use an audiology-led service to examine and test the patient's hearing, freeing up consultant appointments for other patients. If there is a concern, the patient is immediately referred to a consultant.

Using audiology staff in this way frees consultant time, improving patient flow. Being able to provide this service depends on sufficient audiology recruitment and time to train staff.

*Note that guidance on grommets for glue ear in children is included in NHS England's Evidence-Based Intervention programme (see the access and commissioning theme).*

### CASE STUDY

#### Improving patient experience and access to specialist ENT care through an audiologist-led grommet follow-up clinic

##### NOTTINGHAM AUDIOLOGY SERVICES - NOTTINGHAM UNIVERSITY HOSPITALS

Nottingham Audiology Services have successfully run a clinic for post-operative hearing tests following grommet insertion for over 12 years.

The clinic means children do not have to visit ENT out-patient services. In turn, this eases the burden on specialist ENT services, improving access for those who need it.

#### Clinician expertise and an established pathway

It is essential that every child is assessed following grommet insertion to check the level of improvement in hearing thresholds.

Nottingham runs an audiology-led clinic to carry out these tests and are able to offer patients their audiogram six weeks after surgery.

Audiologists in the clinic have paediatric training and follow strict criteria. This ensures that any children who do require a medical follow-up are identified appropriately and referred back to the medical ENT team.

#### Casemix

The clinic sees children aged three years and older who have not had any other procedure other than grommets and where there are no other medical concerns.

Younger children and those that have had other procedures, such as adenoidectomy, or with other medical concerns, such as cleft palate, are seen in ENT.

#### Maximising clinical expertise

Running the clinic in audiology rather than ENT enables the ENT out-patient service to see around 130 additional patients every year.

This reflects the findings of Davies-Husband et al (2012), who reported that an audiology-led grommet follow-up service can reduce the number of patients requiring follow-up by an otolaryngologist by 54%.

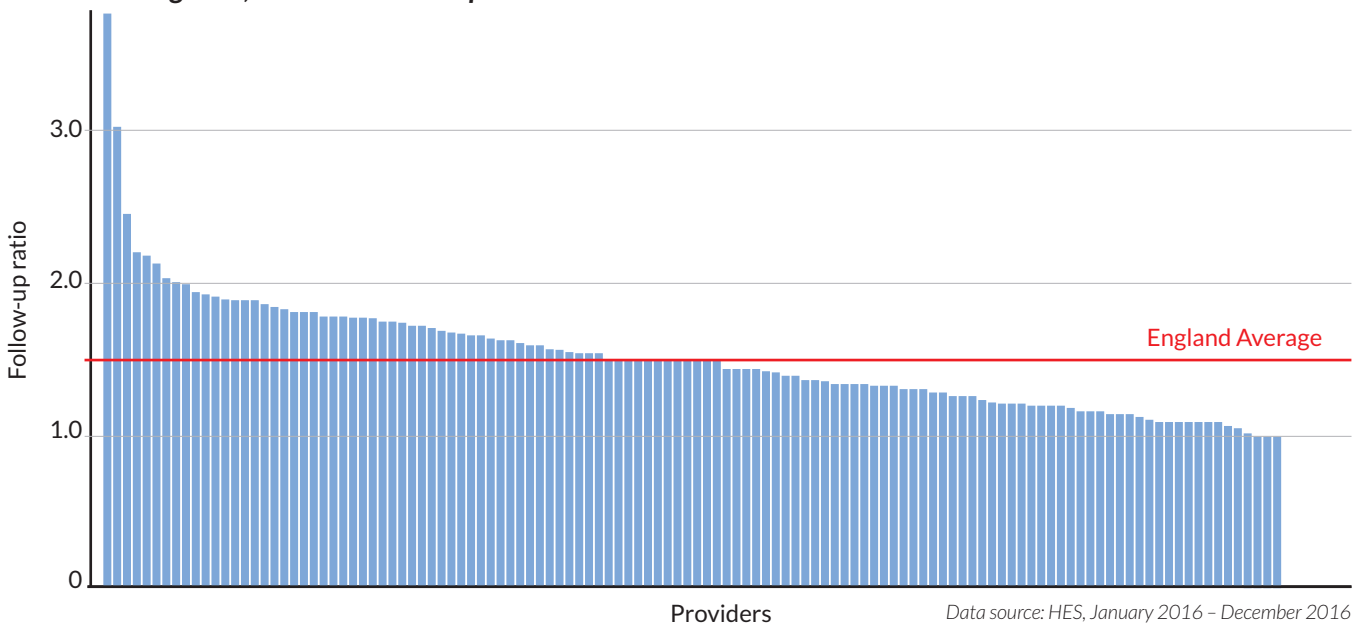
*Reference: Davies-Husband, C.R., Harker, C., Davison, T., Yates, P.D., (2012). Post-surgical tympanostomy tube follow up with audiology: experience at the Freeman Hospital. The Journal of Laryngology and Otology, 126(2), 142-6.*

## New to follow-up ratios

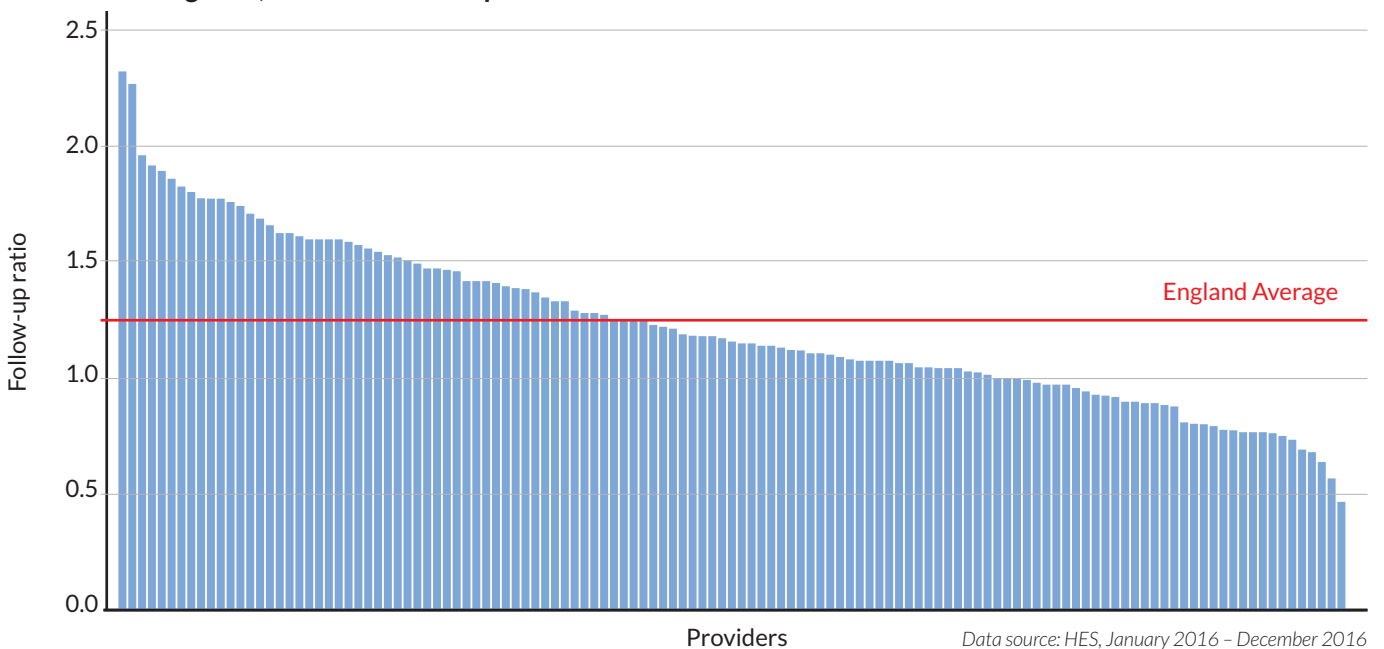
There is huge variation in new to follow-up ratios between providers, ranging from 0.7 to 3.77 in adult out-patients and 0.48 to 2.33 in paediatric out-patients. Follow-up attendances include attendances after surgery and reviews of patients who have not had surgery.

The overall follow-up ratios are 1.49 for adult out-patients and 1.25 in paediatrics. With a follow-up attendance costing an average of around £88, reducing this level of variation offers a significant financial opportunity.

**Figure 17: New to follow-up ratios in adult out-patient attendances – excludes hearing tests, but includes other procedures**



**Figure 18: New to follow-up ratios in paediatric out-patient attendances – excludes hearing tests, but includes other procedures**





## Undated follow-up appointments

The new to follow-up metrics available to us do not capture the number of patients who have an undated follow-up appointment. For example, where a patient is requested to return in a certain number of months, but there are no available appointment slots or the clinic does not book that far ahead. In these cases, the patient would go onto a subsidiary waiting list.

A number of units told us that they had a backlog of such patients. They may have a very low new to follow-up ratio, but if the appointment slots were available, it is likely their ratios would be very different. This hidden backlog masks a large, uncaptured cohort of patients and a potential clinical risk. Delayed follow-ups in other specialties have been shown to cause significant harm to patients<sup>6</sup>. While the clinical risks in ENT will be different, it is not possible to accurately assess the potential harm or prioritise patients if the data does not include undated follow-up appointments.

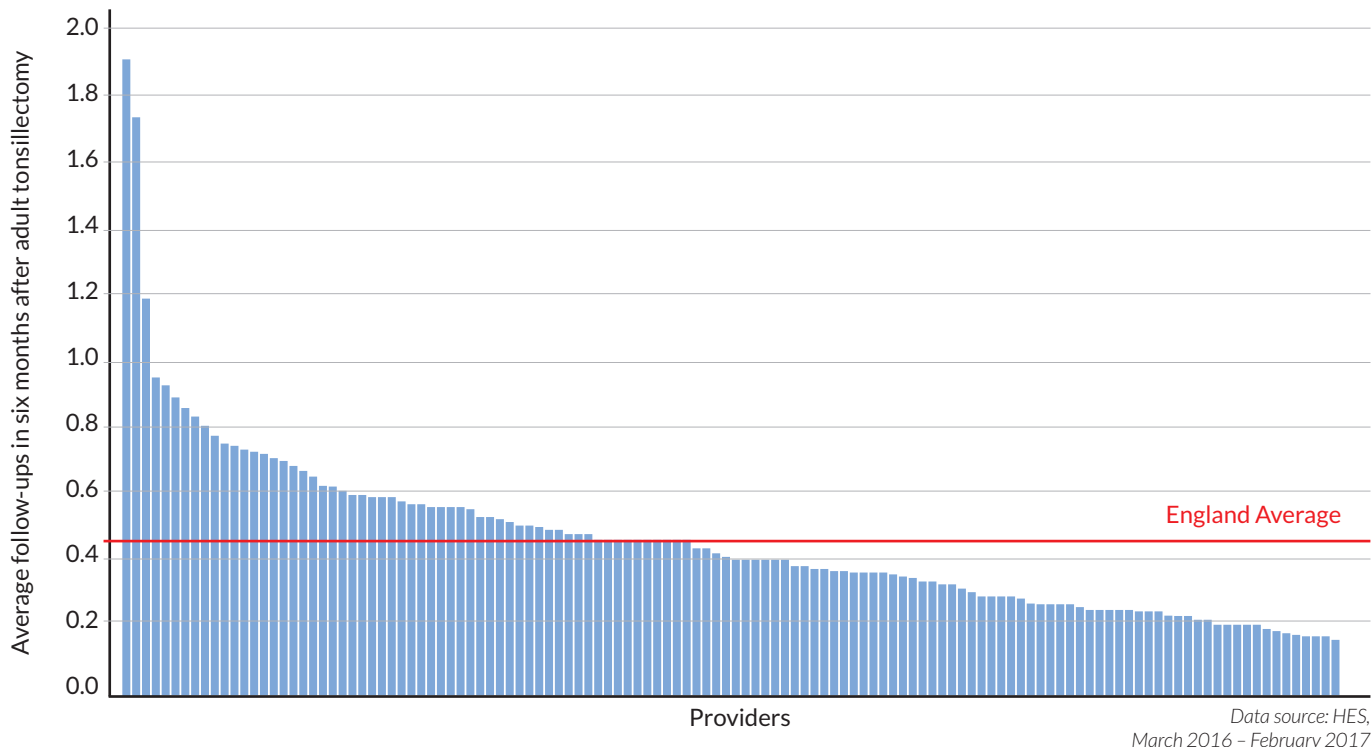
## Casemix and variation in new to follow-up ratios

We looked at whether casemix plays any part in the variation in new to follow-up ratios between providers.

Tonsillectomy offers a suitable index since it is a common procedure carried out by almost all ENT units. We reviewed the number of follow-up attendances reported in ENT within six months of a patient having a tonsillectomy we found that wide variation in the ratios remains. See Figure 19 and Figure 20.

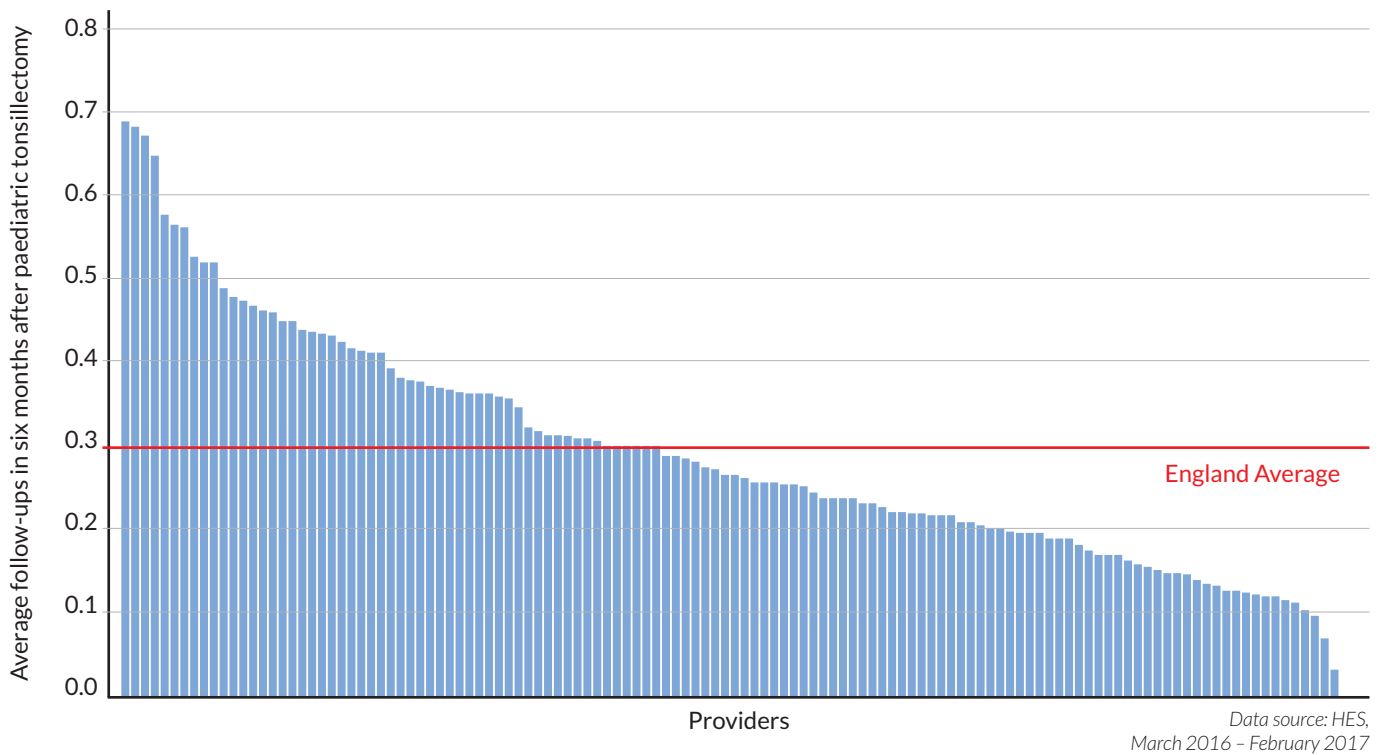
We found there is no significant correlation between casemix and new to follow up ratios. Even several of the providers that carry out high volumes of head and neck cancer treatment, where the workload of mandated follow-ups and case complexity might have been expected to result in increased follow-ups, are able to achieve relatively low new to follow-up ratios.

**Figure 19: New to follow-up ratios in adult out-patient attendances within six months of tonsillectomy**



<sup>6</sup> Davis, A & Baldwin, A & Hingorani, M & Dwyer, A & Flanagan, D. (2016). A review of 145 234 ophthalmic patient episodes lost to follow-up. *Eye*. 31. 10.1038/eye.2016.225.

Figure 20: New to follow-up ratios in paediatric out-patient attendances within six months of tonsillectomy



### Learning from providers with lower new to follow-up ratios

From our deep dive visits, we found that providers with lower new to follow-up ratios tend to adopt a one-stop approach whenever possible.

Their mindset is always to consider why they are bringing the patient back and whether:

- the patient really does need to come back
- there are more efficient ways to carry out necessary follow-up activity
- they can instigate a treatment plan and give GPs options if the initial treatment plan does not resolve the situation
- consultant time can be freed by telling patients and GPs about results of investigations, such as a normal MRI to investigate unilateral tinnitus or an asymmetrical sensorineural hearing loss (SNHL), by letter or phone
- appropriately trained staff such as specialist nurses or allied health professionals can support follow-up activity, such as telling patients about their results by phone as above.

All ENT units should be supported and encouraged to adopt the same approach.

## Recommendations

Recommendation	Actions	Owners	Timescale
8. Maximise the use of appropriate aural care services for the post-operative care of ear surgery and in chronic disease management.	a Define activity that can be completed by aural care services and the resources required.	GIRFT, ENT UK	May 2020
	b Identify, review and share existing effective best practice that demonstrates the cost benefits of using aural care services.	GIRFT, ENT UK	May 2020
	c Review and increase use of aural care services in line with outputs of 8a and 8b.	Providers, Commissioners	May 2021
9. Maximise the use of appropriate audiology services for follow-up after grommet insertion.	a Identify, review and share existing effective best practice that demonstrate the cost-benefits of using audiology services for follow-up after grommet insertion.	GIRFT	May 2020
	b Review and increase use of audiology services for follow-up after grommet insertion in line with the output of 9a.	Providers, Commissioners	May 2021
10. Reduce new to follow-up ratios, making optimal use of clinical out-patient resource.	a Carry out local audits in trusts that are shown to have high follow-up rates in the GIRFT data.	Providers, GIRFT	November 2019
	b Maximise opportunity for one-stop services where possible.	Providers	May 2021
	c Reduce unnecessary consultant-led follow ups.	Providers	May 2021
11. Enable reporting of patients who are waiting for a date for their follow-up appointment so this can be considered alongside follow-up data.	a Report on the number of patients who are waiting for a date for their follow-up appointment using data from patient administration systems.	Providers	November 2019

## ACCESS AND COMMISSIONING

A number of ENT procedures are subject to specific commissioning guidance and policies at either a national or local level.

At a national level, NHS England's Evidence-Based Interventions Programme has developed guidance on three ENT procedures of limited clinical value (PLCVs). The development of evidenced-based, consistent commissioning policies is an important part of reducing unwarranted variation. Where national guidance exists, it should be followed.

At a local level, some CCGs have established local procedures. We looked at the efficiency of these procedures as part of our review.

### About the Evidenced-Based Interventions Programme

NHS England's Evidence-Based Interventions Programme aims to ensure that interventions routinely available on the NHS are evidence-based and performed appropriately.

The programme's ambition is "to support systems to improve clinical outcomes for their populations by ensuring that patients only receive interventions for which there is an established, high-quality evidence base."<sup>7</sup>

It is guided by five goals:

- Reduce avoidable harm to patients.
- Save precious professional time.
- Help clinicians maintain their professional practice.
- Create headroom for innovation.
- Maximise value and avoid waste.

To date, the programme has developed guidance for 17 interventions, divided into two categories. Three of these interventions are in ENT.

Category	ENT intervention
<b>Category 1</b> Intervention should not be offered to patients unless there are clinical exceptions.	Snoring surgery (in the absence of obstructive sleep apnoea)
<b>Category 2</b> Interventions should not be offered unless clinicians can demonstrate that patients meet the criteria as set out in the EBI guidance. These criteria align with existing NICE/SIGN (Scottish Intercollegiate Guidelines Network) guidelines.	Grommets for glue ear in children Tonsillectomy for recurrent tonsillitis

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## Local policies and procedures

Some commissioning groups have categorised several ENT interventions as procedures of limited clinical value (PLCV). These commissioners adopt specific approaches to commissioning such interventions with the aim of avoiding inappropriate activity.

In broad terms, they take one of two approaches:

- they establish approval policies with the aim of monitoring and/or controlling activity (most notably seen in tonsillectomy commissioning)
- they impose restrictions on referrals, effectively decommissioning a procedure (most notably seen in pinnoplasty).

On deep dives we heard concerns that sometimes local commissioners may adopt clinical referral criteria for which there may not be a strong clinical consensus, and that such criteria vary around the country. There is potential unwarranted variation in this respect, which requires ongoing consideration with colleagues across the system. However it was not within the scope of this ENT review to assess whether approval policies reduce inappropriate activity. Our focus was on observing the variation in commissioning practice imposed on ENT departments.

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## Approval policies to monitor and/or control activity

We found a great deal of variation in approval policies. This prompted concerns that the administration of local referral policies can be quite resource intensive. This is a valid concern and is reflected in the NHS Standard Contract and guidance from the EBI. For example, in the case of tonsillectomy, we found variants of each of the following approaches.<sup>8</sup>

- GP refers > Consultant refers to commissioner > Commissioner approves Secondary care consultation > Commissioner pays
- GP applies to commissioner > Commissioner approves > GP refers > Secondary care consultation > Commissioner pays
- GP refers > Secondary care consultation > Commissioner pays > Commissioner audits retrospectively and may choose to withhold funding
- GP refers > Referral management system approves > Secondary care consultation > Commissioner pays

Models shown above assume funding is granted. This is not always the case.

What became clear from our deep dive visits is that some approval policies impose a large administrative burden on the ENT department. It would be reasonable to assume there is an administrative burden for the commissioners too. It is also inevitable that approaches that require approval have a built-in delay to the patient's route to treatment.

Feedback from our deep dives suggested no meaningful variation in the rates of listings for different CCGs. This suggests that:

- a. the different policies are not affecting practice
- b. there is no clinical reason for practice to be different from one CCG to another
- c. the least burdensome approval policies are just as effective as the most burdensome.

Where there is evidence, it seems that very few cases are actually rejected. This means it's questionable whether such time-consuming and costly administrative processes achieve anything.

## Developing the most efficient approach

If commissioners wish to apply a level of control to commissioning certain procedures, approval models where funding is approved before the referral is sent to the ENT department make most sense. This means the patient is referred with guaranteed funding (prior approval), which removes an unnecessary administrative burden from the ENT unit.

Such prior approval models should comply with guidance from the Evidence-Based Interventions Programme:

- Category 1 interventions, such as surgery for snoring in adults, should not be offered to patients unless a successful individual funding request (IFR) has been made.
- Category 2 interventions, such as tonsillectomy, can be offered to patients where the clinical criteria set out in EBI guidance are met. CCGs are encouraged to establish processes to monitor compliance, such as a prior approval process or retrospective clinical audits.

## Restrictive referral policies

A number of ENT departments told us that commissioning groups have imposed referral restrictions on some treatments. For example, restrictions on pinnaplasty, which have effectively left units unable to provide this procedure.

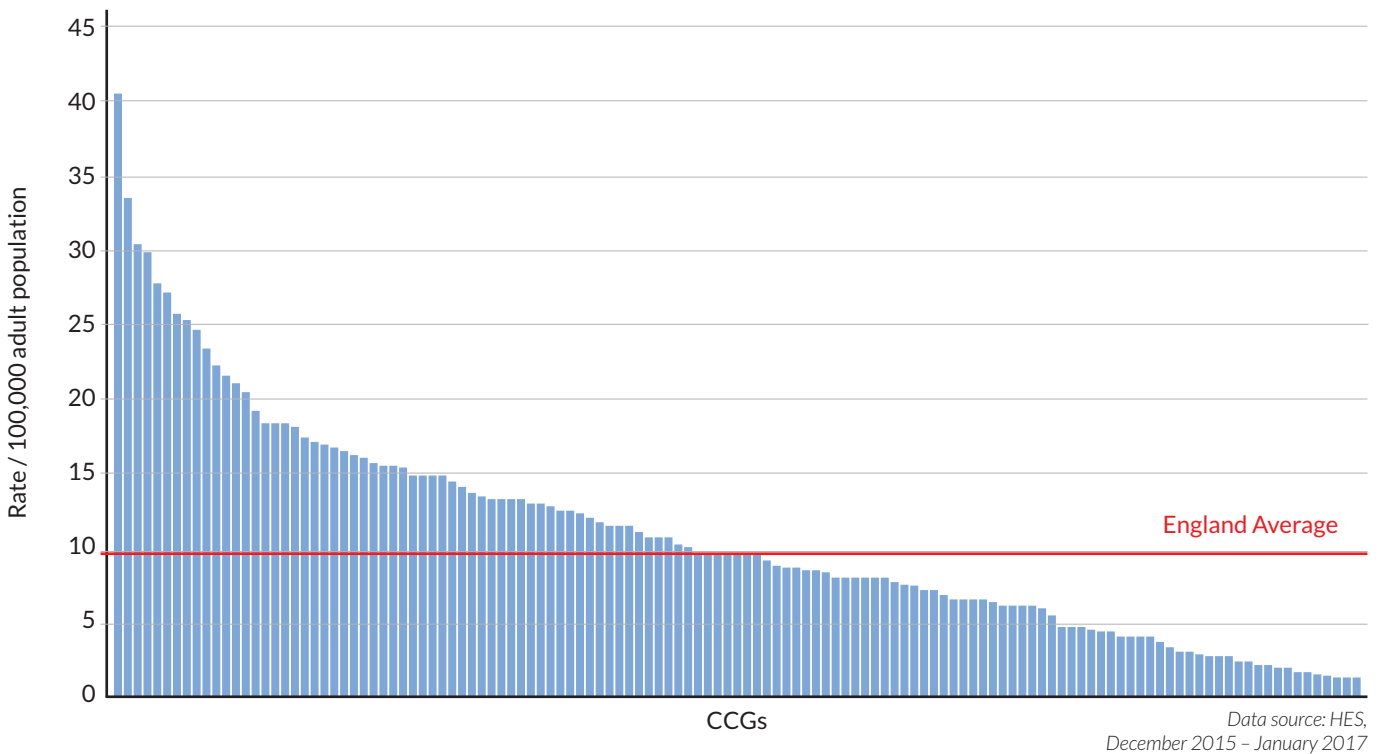
Figure 21 shows the wide variation in volumes of paediatric pinnaplasty between CCGs.

These policies are having and will continue to have a number of negative impacts, including:

- creating geographical inequity in provision – the ‘postcode lottery’
- restricting the availability of procedures for patients that have all the indications
- limiting the opportunities for surgeon training, creating issues with future service delivery.

It is essential that all implications are fully considered to make sure that restrictive referral policies are beneficial.

**Figure 21: Paediatric pinnaplasty rates per 100,000 by CCG**



## Training the next generation of consultants

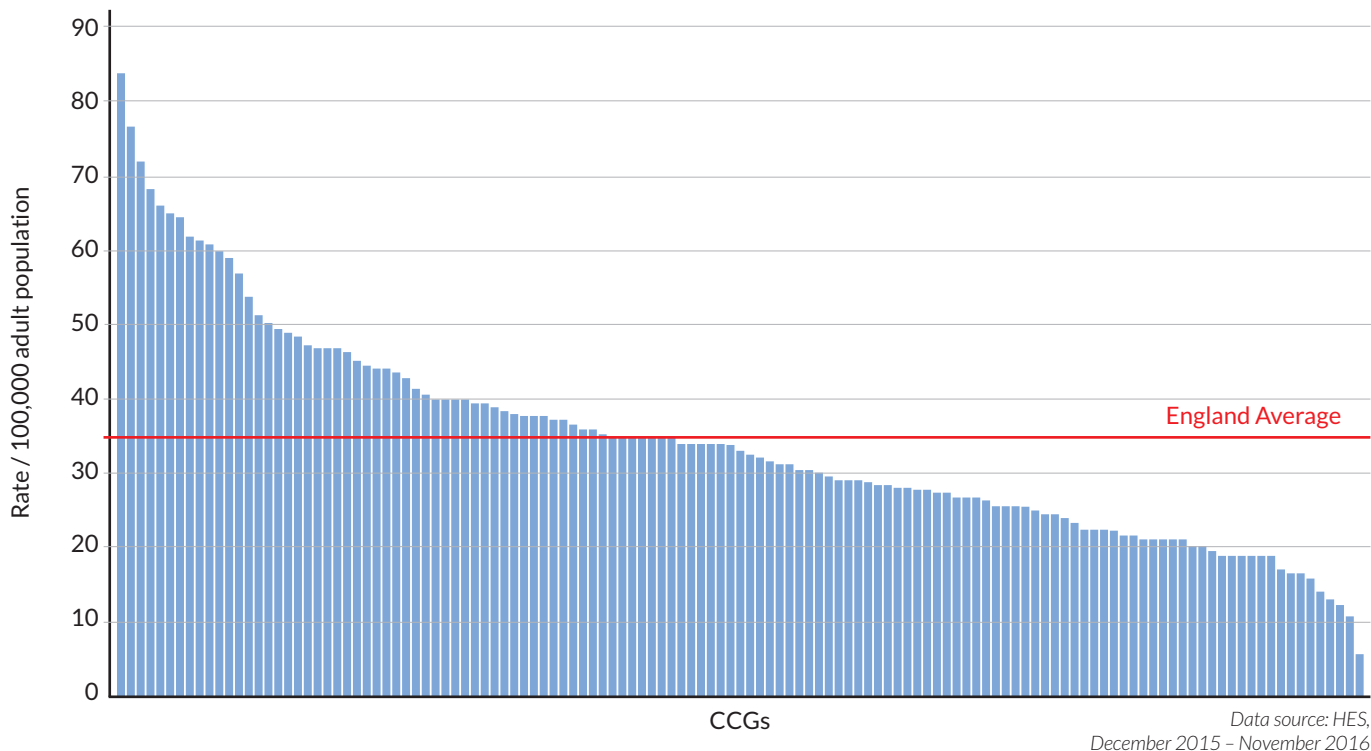
If funding for some procedures is restricted, meaning fewer are carried out, the opportunities for surgeon training will be reduced. This means surgeons may not be able to deliver the service in the future should commissioning policy change.

## Septoplasty indications

Our analysis reveals a large variation in the rate of adult septoplasty between CCGs, ranging from 5.6 to 83.5 per 100,000 population, with a national average of 34.6 per 100,000.

This reflects Public Health England's Atlas of Variation, which shows a similar picture.

**Figure 22: Number of septoplasty procedures in adults per 100,000 population by CCG**



## Causes for the variation

During our deep dive visits, we found that ENT units have very different clinical opinions about when it is appropriate to carry out septoplasty. For example, some consultants routinely choose to offer a septoplasty for indications of improving the ability of intra-nasal medications to reach more of the nasal cavity; others would no longer consider this an appropriate treatment.

There are similar differences in opinion about the appropriateness of septoplasty as a treatment for significant unilateral nasal obstruction and for fluctuating nasal obstruction due to mucosal disease.

## Guidance on indications for septoplasty

We did not find the same variation in treatment volumes that we found for septoplasty in either tonsillectomy or grommet insertion. Both of these procedures have very clear and well-established guidelines on indications, whereas septoplasty currently lacks the same level of guidance.

The absence of clear guidance means there is little impetus for change among clinicians or units that have been expected to rely on entirely on their own clinical judgement and experience: there is no reason for them to reconsider when they are carrying out septoplasty.



## NAIROS clinical trial

The NAIROS (Nasal AIRway Obstruction Study) is a clinical randomised controlled trial that compares septoplasty to medical management in treating a nasal airway obstruction. Recruitment to the trial began in late 2017 and will close in May 2020.

After the conclusion of the trial, we believe the specialty associations should develop guidance on the contemporary indications for septoplasty. This will ensure that patients get maximum benefit without unnecessary exposure to risk from an operation that may be unwarranted or give very limited benefit.

## Recommendations

Recommendation	Actions	Owners	Timescale
<b>12.</b> Commissioners, GPs and providers to work collaboratively to ensure that the Evidence Based Interventions guidance is implemented.	<b>a</b> Follow national commissioning guidance where available, including policies developed through the Evidence-Based Interventions Programme (published November 2018).	Providers, Commissioners, NHS England	May 2020
<b>13.</b> Prior-approval policies should be implemented proportionately and only audited retrospectively.	<b>a</b> Where commissioners wish to use prior approval policies, they should use a retrospective audit approach.	Commissioners	Ongoing
	<b>b</b> Commissioners to share prior approval policies with GIRFT regional hubs for review by GIRFT clinical leads.	Commissioners, GIRFT	Ongoing
<b>14.</b> Review the implications and validity of referral restrictions, such as those imposed on pinnaplasty referrals by some commissioners.	<b>a</b> The Evidence-Based Interventions programme is to produce further standard commissioning criteria on further interventions: it should consider ENT procedures recommended by GIRFT (e.g. pinnaplasty).	NHS England	May 2020

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## PROCUREMENT

ENT is characterised by a wide range of treatments and surgical procedures. These require a vast array of medicines, devices and instruments that range in cost from the relatively inexpensive, such as ear grommets, to high-cost technologies, such as cochlear implants.

Data from NHS Improvement's Purchase Price and Index Benchmarking database (PPIB) shows that the NHS spends around £32m on products and technologies in ENT (not including hearing aids delivered by audiology services). 80% of this spend goes on cochlear implants, bone-anchored hearing aids (BAHAs), processors and accessories, with the implants, BAHAs and processors themselves accounting for the largest proportion.

Given that the implants and BAHAs account for the largest proportion of spend in ENT, we prioritised them for our analysis of any variation in procurement costs. We are continuing our analysis of other ENT procurement costs.

### Potential procurement savings

We estimate that savings of 8%, equivalent to around £2.5m, could be made on the NHS spend on products and technologies in ENT.

These savings could be achieved through more effective and integrated approaches to contract management, inventory management and estate planning.

### Cochlear implants

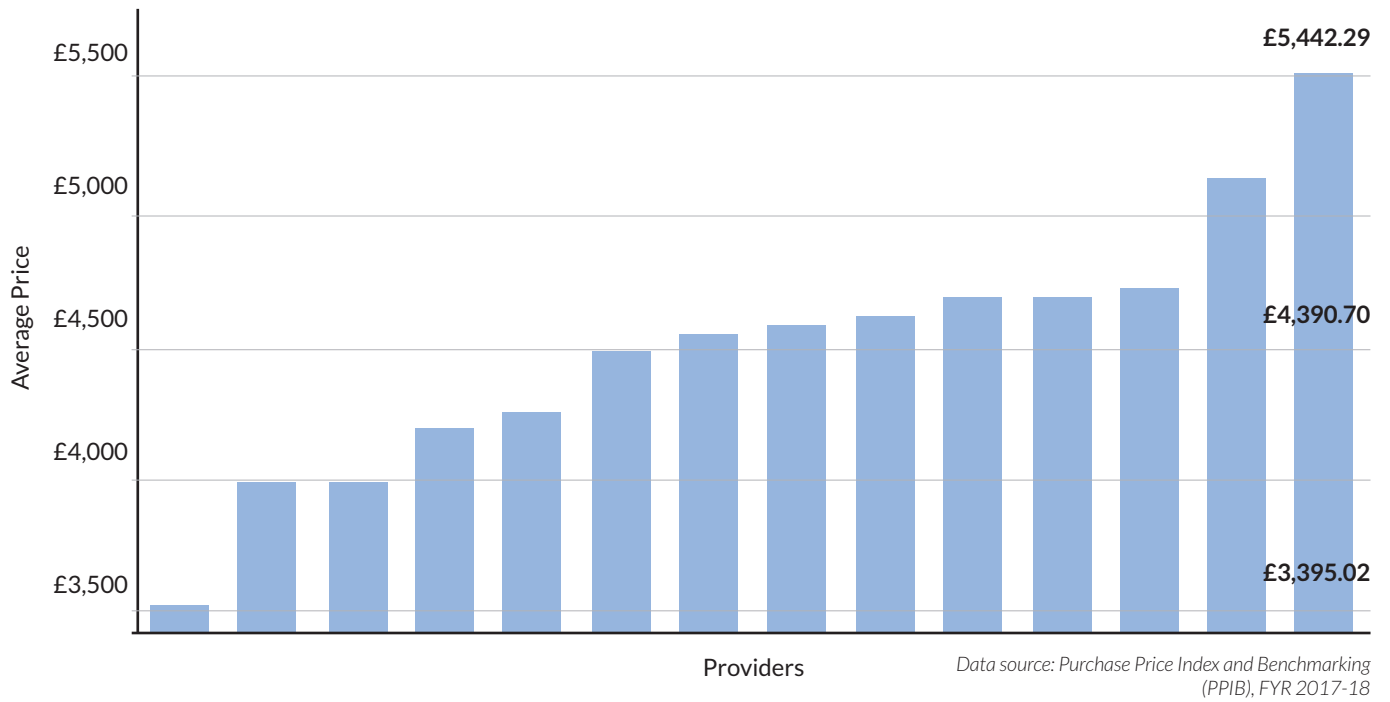
Two companies (Cochlear Europe and Advanced Bionics) dominate the supply of cochlear implants, selling around 27 product variations into NHS England.

Five products account for 75% (around £15m) of the total spend, with the remaining 25% (around £5m) spent on 22 further products. Evidence suggests there is little to choose between the brands in terms of clinical outcomes.

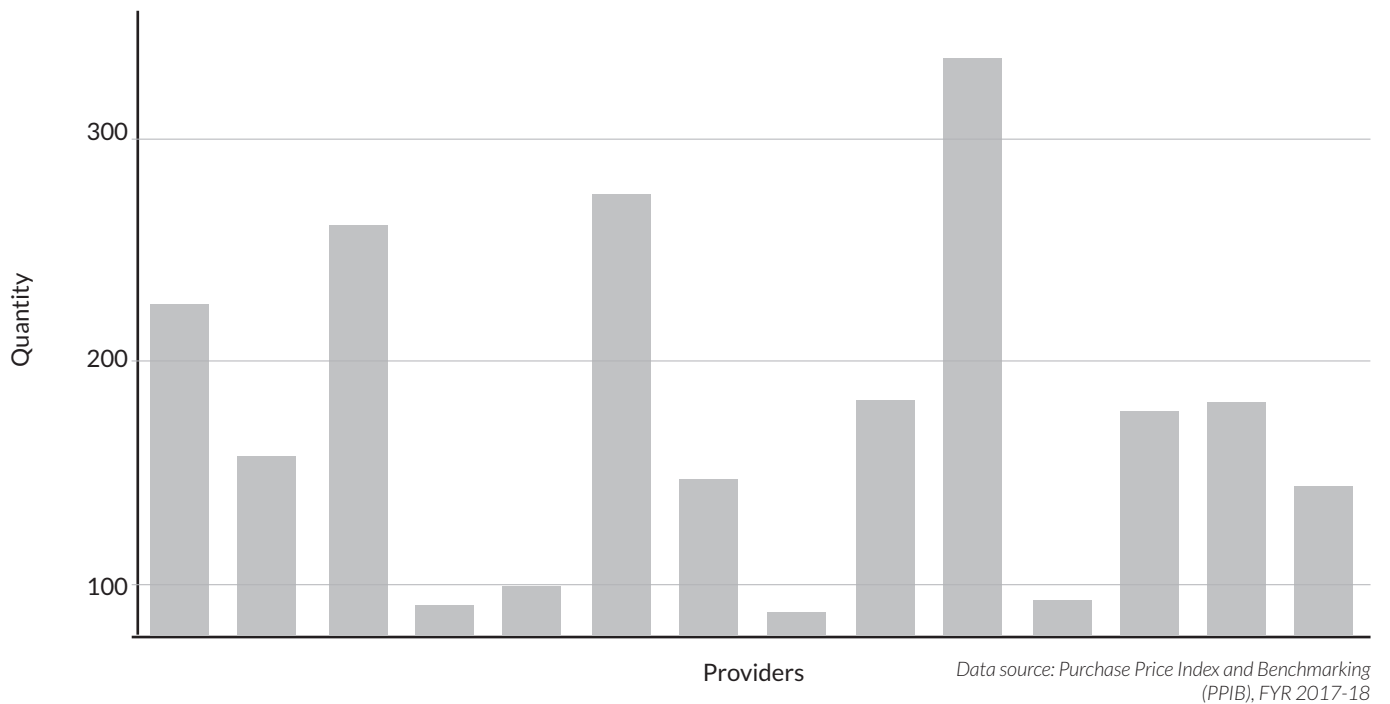
Although the supply base is relatively consolidated, we found wide variation in specification and pricing.

As an example of this variation, the chart below shows the average price of the Cochlear Implant processor across a selection of leading providers.

**Figure 23a: Cochlear implants – price paid by trust**



**Figure 23b: Cochlear implants – quantity used by trust**

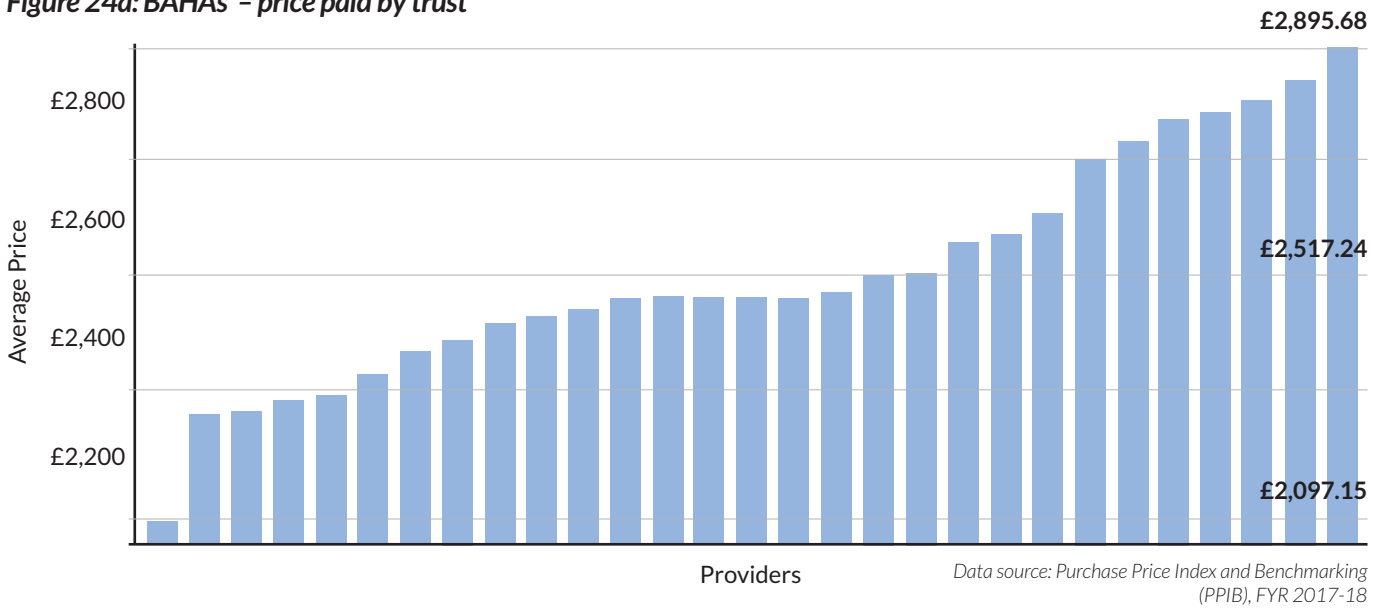


## Bone-anchored hearing aids (BAHAs)

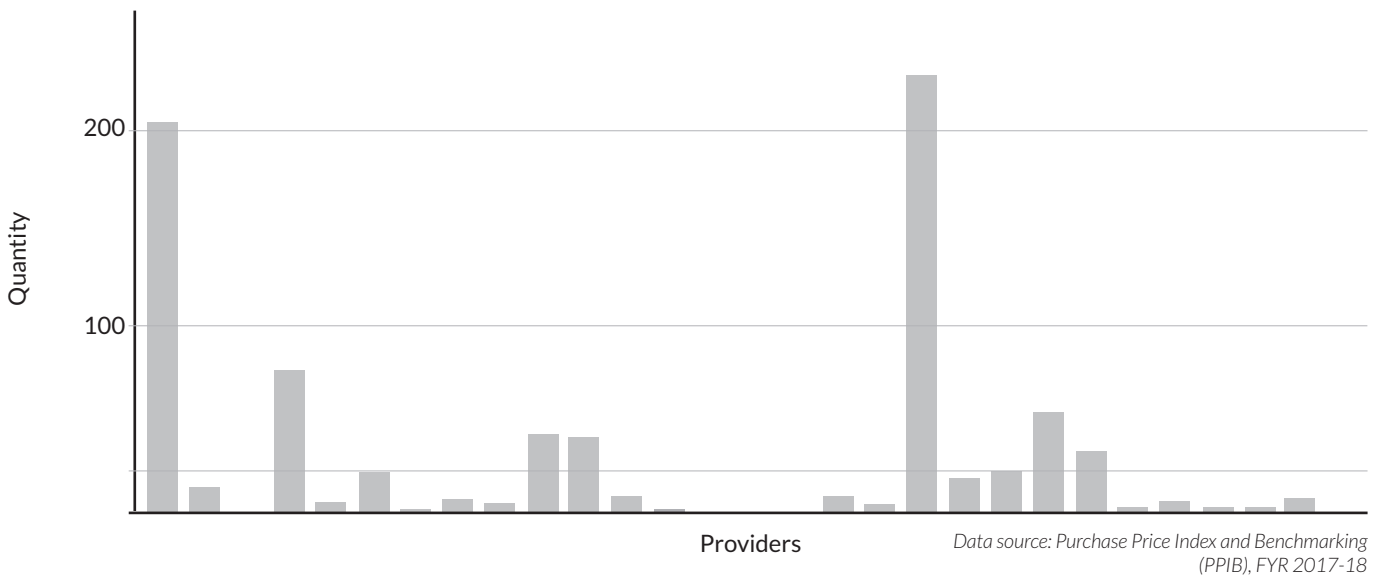
We found a similar picture in the procurement of BAHAs.

Two companies (Oticon and Cochlear Europe) cover the majority of the market share across five products. Again, we found variation in specification and prices paid between trusts. As illustrated in the chart below that shows the average price of the bone-anchored hearing aid across a selection of leading providers which reflects variation in specification. As these are pass-through devices, the GIRFT programme is working closely with NHS England to review this variation and its impact on the wider inventory and maintenance supply chains.

**Figure 24a: BAHAs – price paid by trust**



**Figure 24b: BAHAs – quantity used by trust**



## Reviewing procurement in ENT

There is clearly an opportunity to work more closely with cochlear implant and BAHA suppliers to ensure that demand for new devices and maintenance support is better planned. These plans should lead to commitment-based contracts that deliver purchasing efficiencies for trusts and supply chain efficiencies for suppliers.

### Growth in demand

Forecasted growth in the demand for cochlear implants and BAHAs provides a further impetus to develop more efficient procurement arrangement, as does the expected increase in the use of middle ear implants, where uptake is currently in its early stages.

### Maintenance and repair arrangements

As demand increases, there will also be a cumulative demand for maintenance, repair and replacement. Current maintenance and repair arrangements vary from centre to centre. However, there is no national forecasting and fragmented planning.

### Next steps

In the coming months, GIRFT will be working with trusts to understand the reasons for variation in the procurement of cochlear implants, BAHAs and other devices and consumables.

The new procurement category towers are a key element in the Department of Health and Social Care’s strategy to help trusts reduce procurement variation and exploit the purchasing power of the NHS. GIRFT will be working closely with category towers and trusts to secure better procurement value.

## Recommendations

Recommendation	Actions	Owners	Timescale
15. Improve procurement of devices and consumables through cost and pricing transparency, aggregation and consolidation, and by sharing best practice.	a Work with sources of procurement data, such as Purchase Price and Index Benchmarking (PPIB), and relevant clinical data to identify optimum value for money procurement choices, considering both outcomes and cost/price.	GIRFT	May 2020
	b Identify opportunities to improve value for money, including by developing benchmarks and specifications. Identify best practice and procurement excellence that lead to the most favourable procurement outcomes.	GIRFT	May 2020
	c Use category towers to benchmark and evaluate products. Rationalise and aggregate demand by working with other trusts to secure lower prices and reduce supply chain costs.	Trusts, STPs, GIRFT	May 2020

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## OUTCOME METRICS

Ideally, we would have considered outcome metrics to help inform our review. Unfortunately, this was not possible due to the absence of standard, universally adopted, national outcome metrics for ENT.

### Self-reporting data sets

There are a number of self-reporting datasets, such as for thyroid surgery. However, with these datasets, surgical units voluntarily collect their own data and compare it to nationally published rates for that outcome.

It is not possible to compare units using this data because:

- the dataset does not include all units
- there are likely to be, at least, slight differences in the ways units record and measure their data.

We found that many ENT surgeons audit themselves closely by comparing their metrics to published rates. This should be welcomed, but it is no substitute for standard, national outcome metrics.

### The potential benefits of a standard, national dataset

Comparative outcome metrics provide the truest indication of the quality of service a unit is providing.

A standard, national dataset would allow stakeholders to compare units with confidence that measurement is consistent. The dataset should collect:

- **Patient Reported Outcome Measures (PROMs)** – the patient’s perception of the clinical improvements provided by their procedure. These can measure improvements that are:
  - specific to the operation. For example, does the patient report that they can hear better after an ear operation?
  - a result of the procedure, but which could also be measured for others. For example, how much better is their overall quality of life?
- **Outcomes using surgical, technical, or objective measures** – for example, the dead ear rate following stapedectomy or cholesteatoma surgery.

ENT includes high volume procedures, such as tonsillectomy and grommet insertion, and low volume, complex procedures, such as cholesteatoma surgery and stapedectomy surgery.

Standard, national outcome metrics would benefit each area:

- With high volume surgeries, the volume implications of identifying best practice are significant.
- With complex surgeries, poor outcomes can have a significant impact on patients – for example, potential complications of recurrent/residual disease or dead ear following cholesteatoma surgery. The specialty lacks the metrics to compare units’ rates, meaning it is not possible to identify when further training is needed.

### Patient Reported Outcome Measures (PROMs)

Patient Reported Outcome Measures (PROMs) are considered most valuable for use with high volume surgical interventions.

There are cost implications to developing and implementing PROMs, and these must be considered along with the potential additional burden on trusts. It may be beneficial to take a sample approach rather than collecting data from every procedure. It is essential that the data collected is specific and collected for a clear purpose.

PROMs could be used directly in patient care as well as to evaluate care after the event. Digital collection of PROMs would support this aim, increasing timeliness of the data and giving patients greater access to their own PROMs data, as well as being more cost-effective.

Any decision regarding the development, implementation and reporting of national PROMs in ENT or head and neck cancer surgery must be made by clinicians in these specialties. Securing clinical support from across the wider multidisciplinary team would also be vital.

## National Clinical Improvement Programme (NCIP)

The National Clinical Improvement Programme (NCIP) is currently looking at outcome metrics.

The programme aims to support clinicians with learning and continuous self-development. It will provide both team and clinical-level activity and metrics about the whole of a clinician's practice, and links to relevant service delivery research and other evidence.

GIRFT clinical leads are working with their colleagues from professional societies and Royal Colleges to select the procedures and metrics that will be included within NCIP.

Clinicians from most surgical specialties can expect to have access to NCIP information during 2019.

### The need to capture data accurately

The welcomed NCIP developments confirm the importance of ensuring that units establish effective processes for capturing accurate data.

These processes are key to ensuring that outcomes are attributed to the right clinicians and this will become even more important as mandatory national metrics are established.

## Recommendations

Recommendation	Actions	Owners	Timescale
16. Consider including Patient Reported Outcome Metrics (PROMs) for ENT surgery in the national PROMS programme or other established national audit.	a Review existing PROMs to identify those that could be included in the national PROMS programme or other established audit. Identify any gaps.	NHS England, GIRFT, ENT UK	May 2020
	b Consider including PROMs identified in 15a in the national PROMS programme or other established national audit.	NHS England	May 2021
	c Collaborate with the wider multi-disciplinary team to develop new PROMs where gaps were identified in 15a.	NHS England, GIRFT, ENT UK	May 2021
17. Consider including Patient Reported Outcome Metrics (PROMs) for head and neck cancer surgery in the national PROMS programme, or other established national audit.	a Review existing PROMs to identify those that could be included in the national PROMS programme or other established audit. Identify any gaps.	NHS England, GIRFT, ENT UK, British Association of Head & Neck Oncologists (BAHNO)	May 2020
	b Consider including PROMs identified in 16a in the national PROMS programme or other established national audit.	NHS England	
	c Collaborate with the wider multi-disciplinary team and relevant specialties to develop new PROMs where gaps were identified in 16a.	NHS England, GIRFT, ENT UK, BAHNO, BAOMS	May 2021
18. Continue to support the development of surgical outcome metrics.	a Continue to develop metrics for use by surgeons and departments as part of the National Clinical Improvement Programme (NCIP). Use data that is routinely collected.	NHS Improvement, NCIP	May 2020
	b Identify any further metrics needed that are not covered by existing audits. Consider developing such metrics.	GIRFT, ENT UK, NHS England	May 2021

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## DATA AND CODING

The data and the information we collected from our deep dive visits suggests there is wide variation in the practices and accuracy of coding in ENT.

Effective coding is important for two main reasons:

- to ensure that important clinical information is on the patient record
- to ensure that ENT departments and their trusts receive the correct income for the services they have provided.

Both procedure codes and diagnosis codes are used to allocate a Health Resource Group (HRG) to an activity. Accurate coding of both is essential for ensuring the correct HRG is allocated.

*Also see the tonsil surgery theme earlier in the report.*

### Coding changes relating to bilateral dissections in tonsil excision

As the majority of tonsil excisions are bilateral dissections, it is essential that the different techniques for excision of tonsils can be separated and assessed.

The GIRFT coding team has proposed a number of changes to enable coding to identify the technique used in the following:

- hot and cold dissection
- intra and extracapsular Coblation
- mono and bipolar diathermy.



## Coding within admitted patient care

### Coding impact on patient records

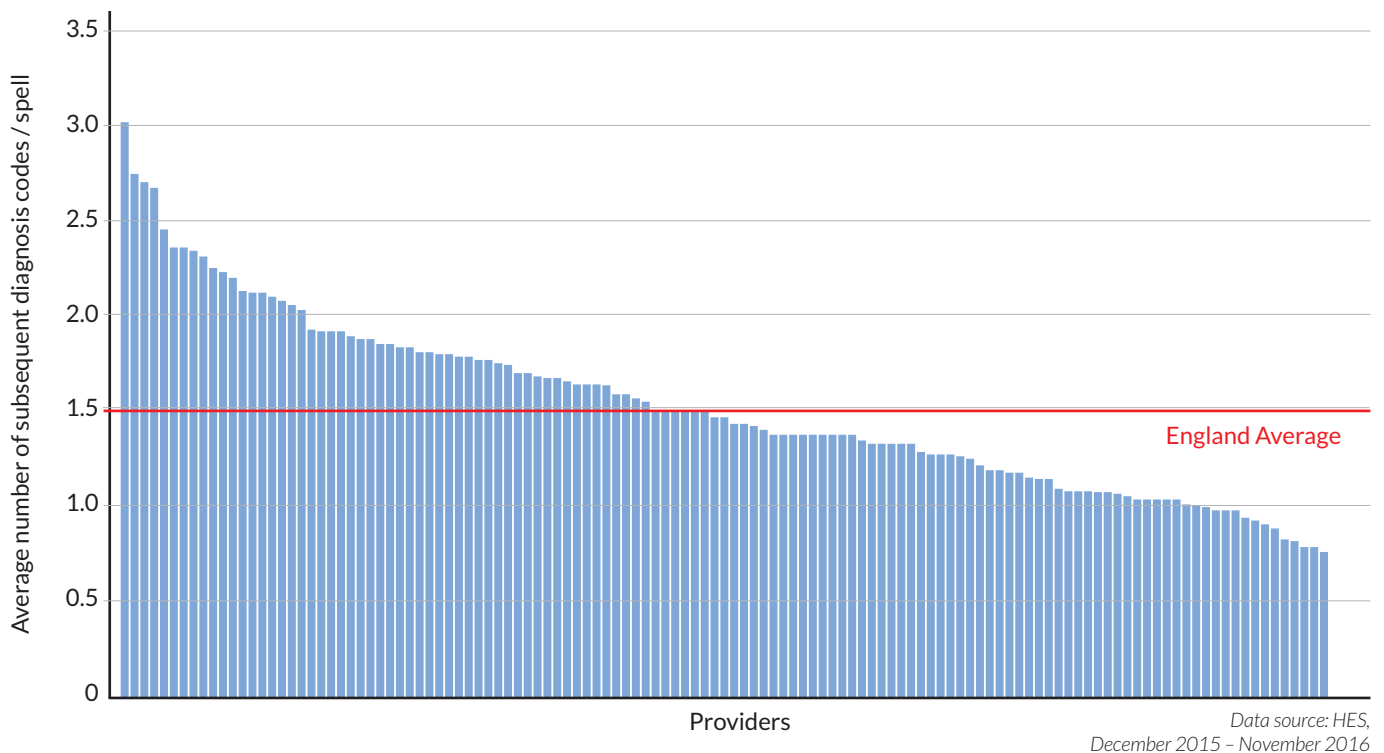
#### Adult tonsillectomy

We looked at the depth of diagnosis coding within adult tonsillectomies. Since this procedure is commonly carried out by most ENT providers, it offers a useful set of data for comparison.

As Figure 25 shows, some providers are coding an average of three secondary diagnosis codes per spell. Others are only coding an average of 0.5, suggesting they are only coding the primary diagnosis code in many cases. This means that secondary diagnosis codes (including comorbidities and complications that impact patient care) may not be recorded or coded.

While there would be no impact on provider income in this example, inaccurate reporting of other procedures can have a significant impact on income – see below.

**Figure 25: Average number of subsequent diagnosis codes per spell in adult tonsillectomy**



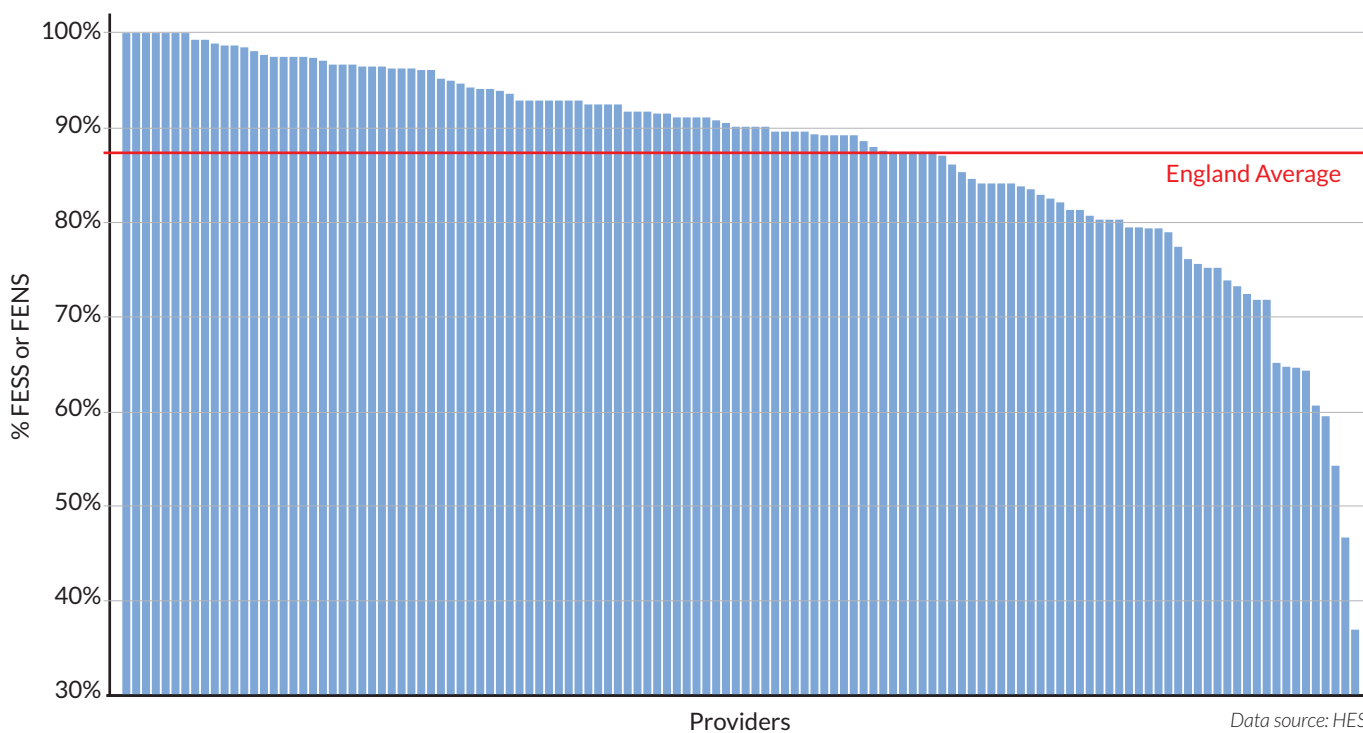
## Functional Endoscopic Sinus Surgery (FESS) and Functional Endoscopic Nasal Surgery (FENS)

We also looked at the proportion of activity undertaken using FESS or FENS across a range of relevant procedures.

There is a wide variation of between 37% and 100%, with an England average of 87%.

Our discussions with clinicians at deep dive meetings suggested that much of this variation is down to recording and coding, with some providers being very poor at recording the technique in the procedure coding for the episode. This means that patient records will not accurately reflect the treatment undertaken. In this example, there would be no impact on provider income.

**Figure 26: Percentage of activity undertaken using FESS or FENS for a selection of procedures**



Data source: HES,  
December 2015 – November 2016

Uses data for:

- E081 Polypectomy of internal nose
- E132 Excision of lesion of maxillary antrum
- E133 Intranasal antostomy
- E142 Intranasal ethmoidectomy
- E148 Other specified operations on frontal sinus.

## Coding impact on income

Poor coding can have a significant impact on income.

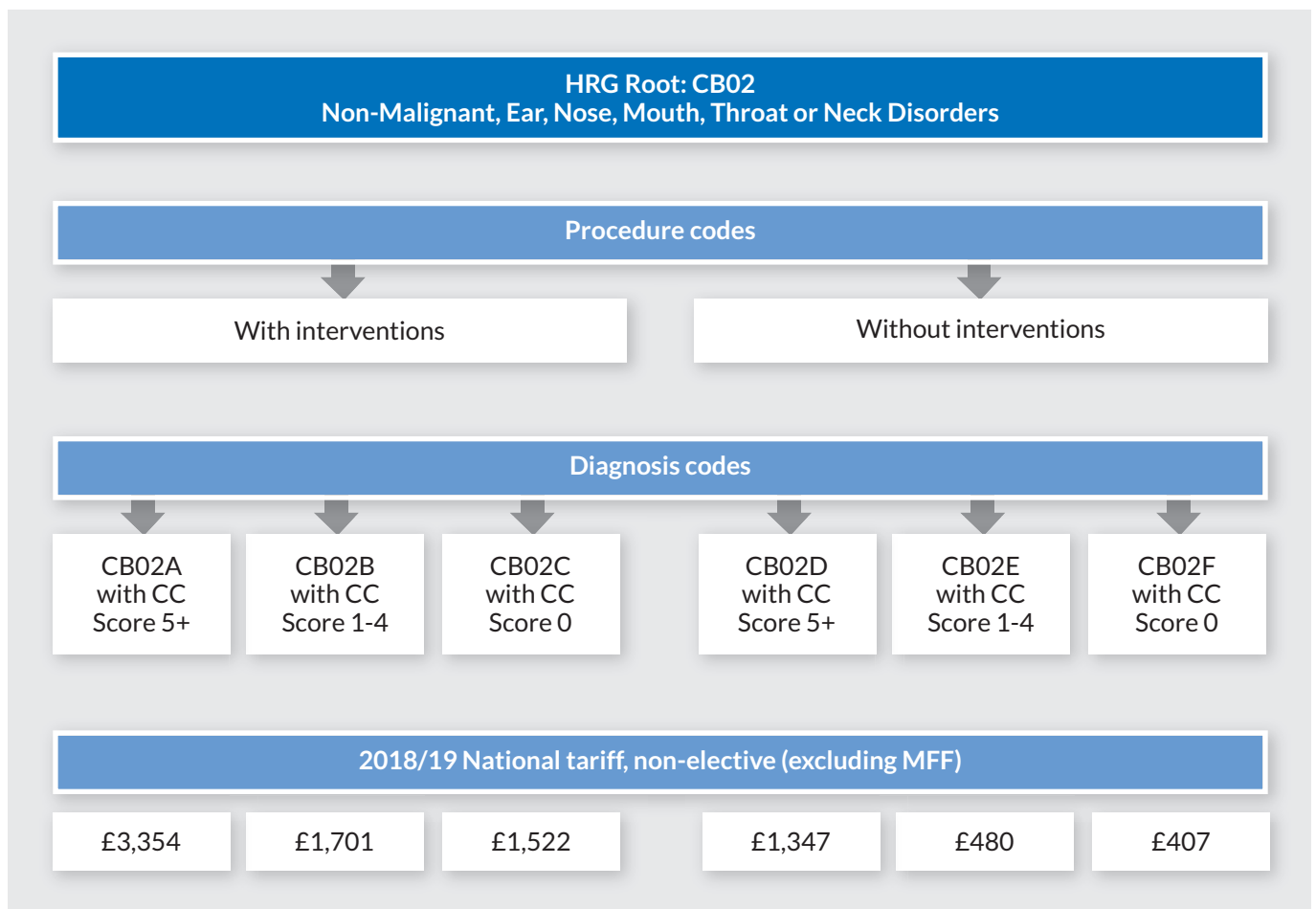
We looked at coding under HRG Root CB02 to gauge the potential difference coding selection can make to the tariff that is paid for an activity.

### Non-elective activity with a length of stay greater than one day

#### HRG Root CB02 Non-Malignant, Ear, Nose, Mouth, Throat or Neck Disorders

The split of activity within HRG Root CB02 is influenced by coding of both procedure and diagnosis codes. Figure 27 shows how coding selection can lead to a significant difference in the resulting tariff. Prices range from £407 for an admission with no intervention and few complications/comorbidities to £3,354 for an admission with an intervention and multiple complications/comorbidities.

**Figure 27: Effect of procedure codes and diagnosis codes on the national tariff in HRG Root: CB02 Non-Malignant, Ear, Nose, Mouth, Throat or Neck Disorders**



As Figure 28 shows, there is significant variation in interventions reported within the HRG Root. The highest provider reported interventions in 52% of cases, whereas the lowest provider reported only 8%.

The most common procedures reported were:

- F363 Drainage of abscess of peritonsillar region
- E064 Balloon packing of cavity of nose
- E659 Unspecified diagnostic endoscopic examination of nasal cavity
- E051 Cauterisation of internal nose.

We suggest that the low level of interventions reported by some providers is due to poor recording and coding rather than fewer interventions taking place.

**Figure 28: Percentage of activity with an intervention**  
**HRG root C02 Non-Malignant, Ear, Nose, Mouth, Throat or Neck Disorders, NEI > 0 Length of stay**

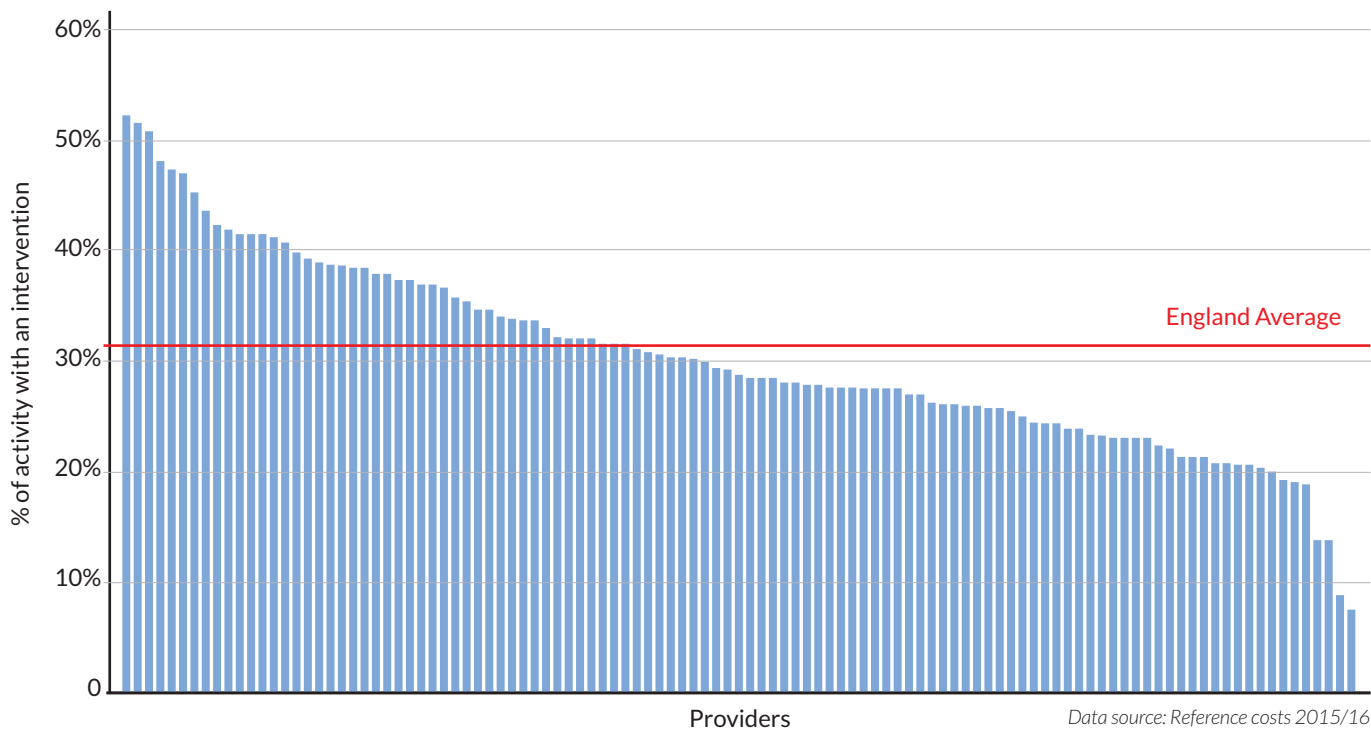
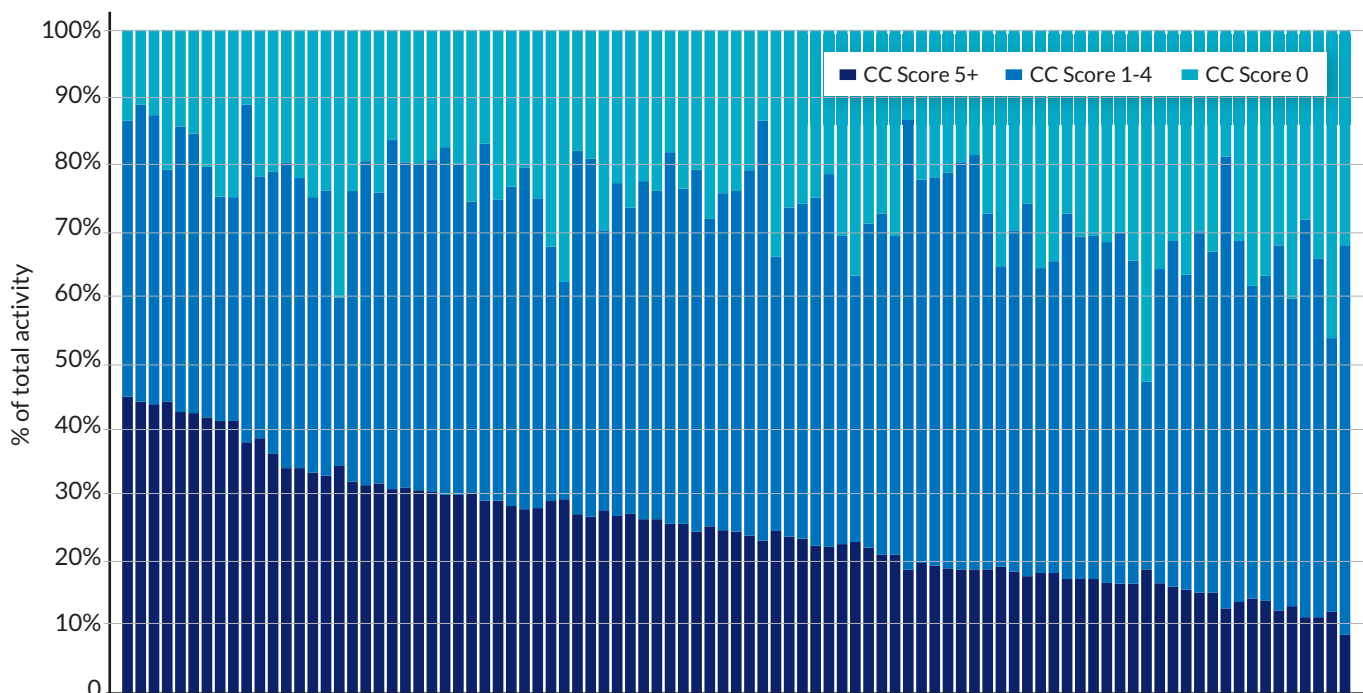


Figure 29 shows the variation in the 'with intervention' activity in terms of how this then splits to individual HRGs, which is dependent on reported diagnosis codes.

**Figure 29: HRG root CB02, non-elective spells > 1 day, with interventions, split by HRG**



Data source: Reference costs 2015/16

When we look at the impact that procedure and diagnosis codes have on the average tariffs paid to providers for activity within this HRG Root, we find huge variation, ranging from £431 to £2,405, with an England average of £994.

**Figure 30: HRG root CB02, non-elective spells > 1 day, average tariff (excluding Market Forces Factor)**

	Overall	With Intervention	Without Intervention
<b>Average</b>	<b>£994</b>	<b>£2,049</b>	<b>£507</b>
Minimum	£615	£1,777	£431
Maximum	£1,396	£2,405	£635
<b>Range</b>	<b>£780</b>	<b>£628</b>	<b>£203</b>

Data source: Reference costs, 2015/16; National tariff, 2018/19

## Coding of non-consultant-led out-patient activity

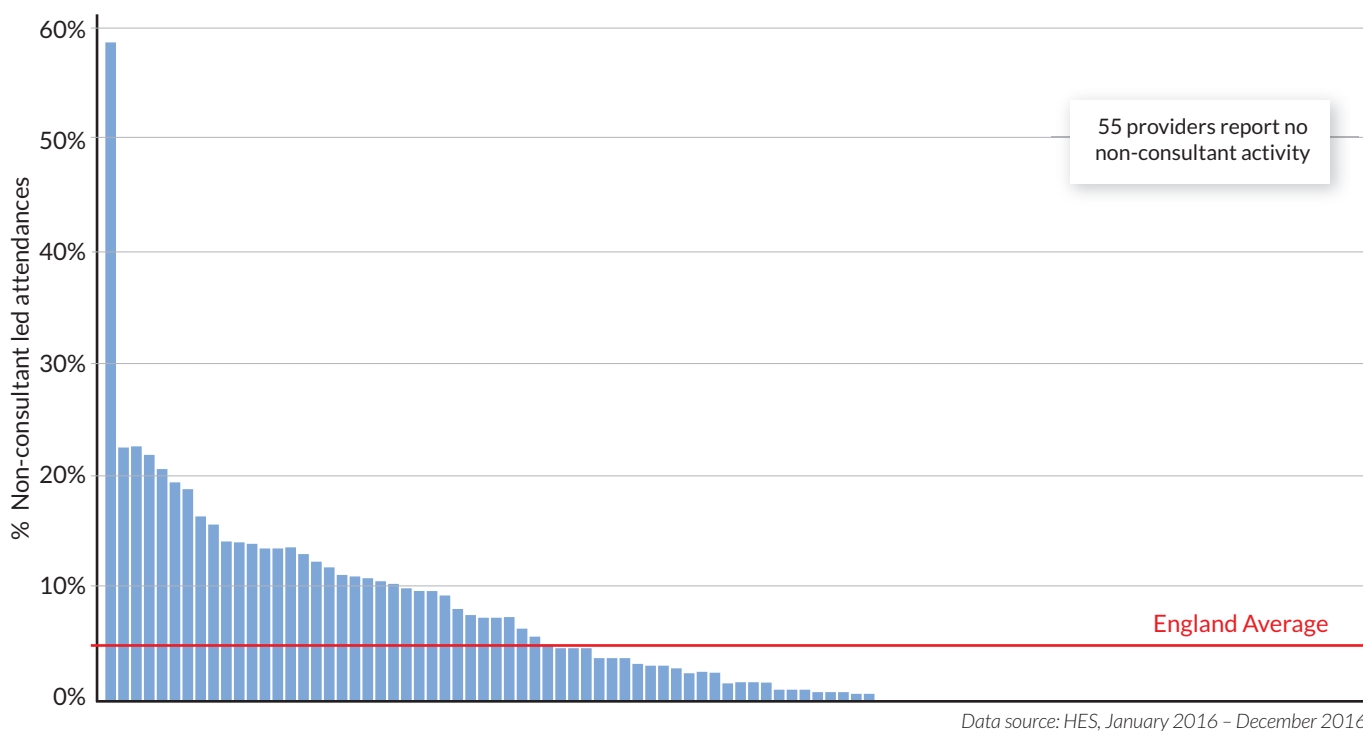
According to HES data, 55 of the providers in our review carried out no non-consultant-led out-patient activity in ENT specialties.

The range of variation we found and the discussions we had during our deep dive visits indicate that variation in coding practice is masking what is actually happening in the departments. In some cases, units are coding the same activity differently. For example, some units will code aural nurse activity in a consultant's clinic under the consultant (because they feel it is part of the consultant's clinic). Whereas another unit would code exactly the same activity to the aural nurses.

We look at the effective use of non-consultant staff earlier in this report.

Following a recommendation in the Oral and Maxillofacial Surgery report, GIRFT plans to investigate options to measure or estimate the amount of activity performed by non-consultant career grade staff under consultant supervision in all surgical specialties.

**Figure 31: Non-consultant out-patient attendances as percentage of total out-patient attendances (excluding procedures)**



Note: Based on discussions during our deep dive visit, we believe that issues with coding are the cause of the extreme outlier. We are working with this trust to understand this further, as their data for this period is significantly different to previous years.

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## Understanding the reasons for variation in coding

Our analysis shows how important it is to get coding right – both in terms of ensuring accurate patient records and accurate income attribution.

From our deep dive visits, we would characterise two general approaches to coding:

- more effective coding happens where coders and clinical teams are working together to improve coding
- coding is much less effective where it is regarded as a separate activity in which the clinical team needs only to have minimum involvement.

This picture is not limited to ENT, with other GIRFT reviews finding a similar story in other specialties.

Accurate coding is far from a simple task. So it is not surprising that where units invest time and effort in improving coding practice, with coding staff and clinical staff working together, their coding accuracy stands out. We also found that these units anecdotally reported a link between their improved coding accuracy and increases in the average amount they are paid for their elective work.

We recognise the need to factor the time taken to support coding activity into clinician timetables.

We have included case studies of some of the ways that providers are supporting improved coding.

### Block contracts

We spoke to a number of trusts that explained their block contracts reduced their impetus to code with fine degrees of accuracy because coding had limited impact on their income.

It is important that everyone across ENT understand the importance of coding, not only for income attribution but also for the completeness and accuracy of treatment records.

#### CASE STUDY

##### Easing the coding process

###### AINTREE UNIVERSITY HOSPITAL NHS FOUNDATION TRUST

Aintree's simple, standardised pre-formatted operation sheets have greatly improved both the quality and volume of data collected for major cases.

##### How the operation sheets improve data collection

Aintree first created pre-formatted operation sheets for laryngectomy after a consultant became frustrated at the lack of standardised information recorded in hand-written operative notes.

The current operation sheets, which include tickbox comorbidity forms, have improved processes in several ways:

- They are faster and easier for surgeons to complete than hand-written notes. This means more data is collected.
- Using standard tickboxes means that data provided is more consistent, helping the clinical coders collect information more accurately.
- The sheets also avoid errors and problems caused by abbreviations or illegible handwriting.

##### Answering a common need: how the operation sheets were created

The operation sheets were developed following detailed discussions with clinical coders. These discussions not only informed the design of the sheets themselves, but also allowed the coders to fully understand the different component parts of major procedures. This has helped them to code individual procedures more accurately.

The project has been such a success that the operation sheets have since been extended to other procedures.

## Recommendations

Recommendation*	Actions	Owners	Timescale
19. Implement practices to ensure accurate coding.	<b>a</b> Ensure accurate coding of: <ul style="list-style-type: none"> <li>• comorbidities</li> <li>• consultant and non-consultant-led activity</li> <li>• endoscopic practice</li> <li>• out-patient activity</li> <li>• hearing tests.</li> </ul>	Providers in partnership with commissioners	May 2020
	<b>b</b> Develop a short guide to clinical coding for clinicians and coders that would support best practice.	GIRFT, NHS Digital	May 2021
	<b>c</b> Offer specialty-specific coder training.	Providers	May 2020
	<b>d</b> Ensure that clinical teams, trust information teams and coders meet regularly to review activity attributed to surgeons and to ensure that the clinical team has ready access to their own data.	Providers	November 2019
	<b>e</b> Evaluate whether any coding improvements suggested impact or warrant pricing or currency redesign.	GIRFT, NHS Improvement Pricing Team, National Casemix Office (NHS Digital)	May 2021

\*See Appendix 2 for details on giving commissioners notice of changes in the way you record activity



## SERVICE COSTS

One of the key uses of service costs is to inform tariff rates.

Providers are mandated to submit annual reference cost returns that show the cost of their clinical services (reconciled to annual accounts). Historically, this cost information has been used to inform the National Tariff and to compare a provider's actual costs with expected costs (based on national average cost adjusted for casemix and market forces).

Given that there is a general sense that tariffs for ENT provision are relatively low, it is essential that service costs should be as accurate as possible. From 2018/2019, reference costs for many areas of acute activity, including most core ENT services, are being replaced by PLICS (Patient Level Costing Information Systems). PLICS are designed to enable costs to be viewed at a much more granular level. For example it will enable comparisons of elements of costs, such as ward costs or theatre costs.

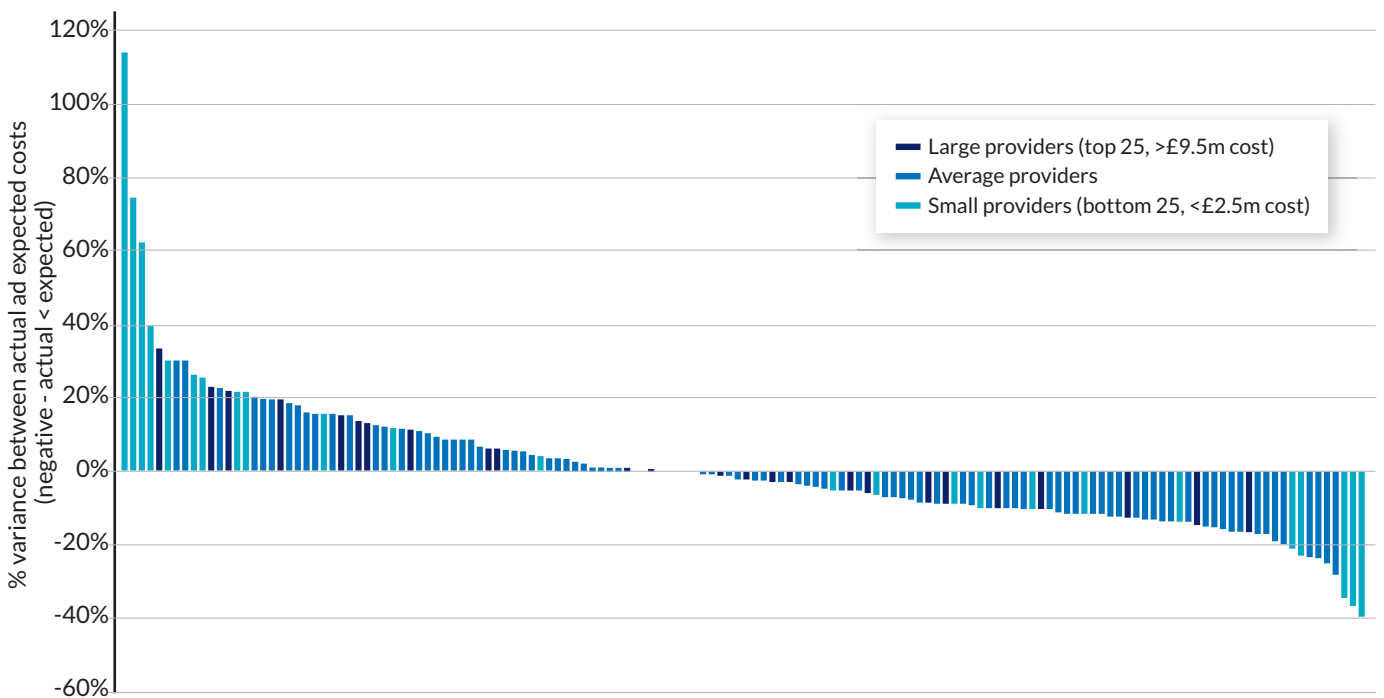
### Variation in service costs

There is a large variation in service costs between providers.

As Figure 32 shows, there is no discernible link to the size of the provider: large providers are spread across the range, with some having costs below average, while others have costs above average.

The largest financial variation is found in a provider whose actual costs were £5.4m above their expected cost (+34%).

**Figure 32: Percentage variation between actual cost and expected costs in ENT specialties**



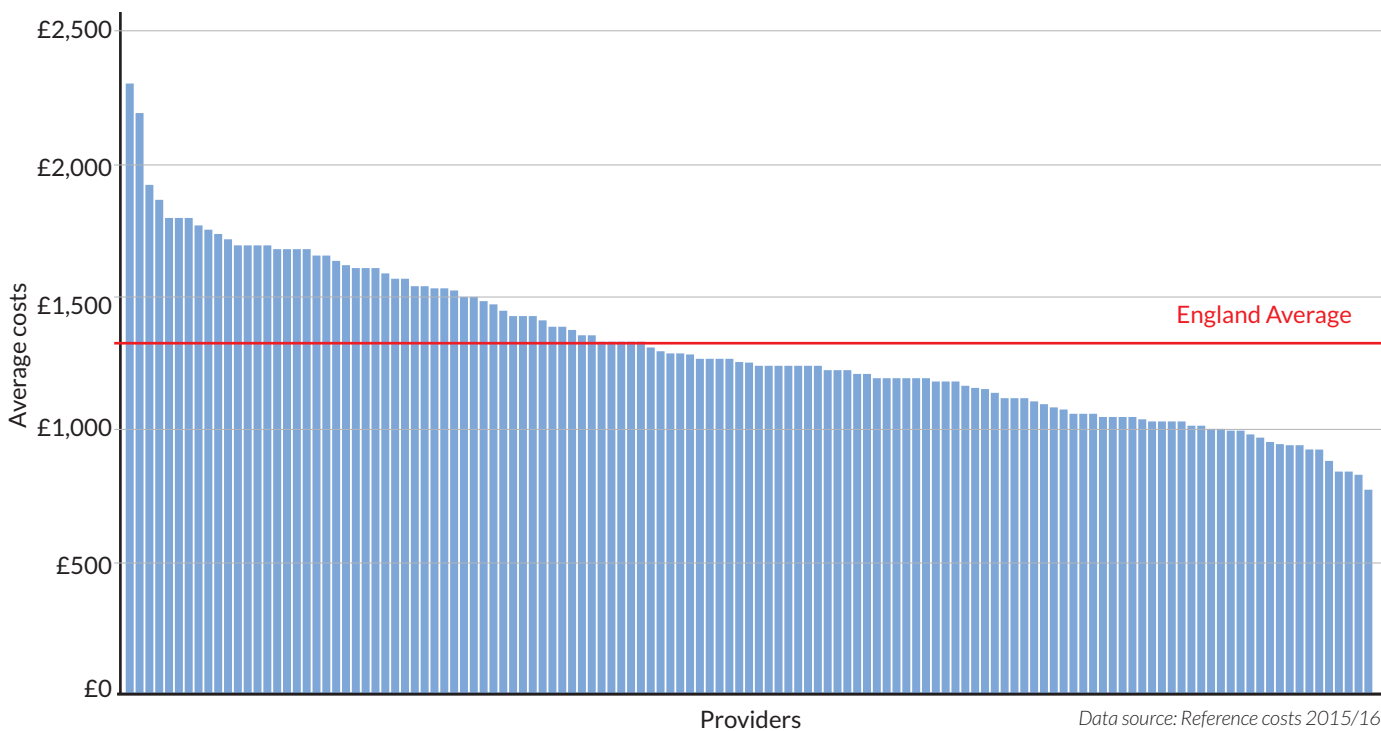
Data source: Reference costs, 2015/16

### Variation in procedure costs

When we drill down into the detail of procedure costs, we find the same magnitude of variation.

In the example of average unit costs for paediatric day case tonsillectomies, the England average cost was £1,329, but at provider level this ranged from £775 to £2,308 (all figures adjusted for Market Forces Factor).

**Figure 33: Average cost of paediatric day case tonsillectomy**



### Awareness of costs

During our deep dive visits, we found that some clinical teams and their financial departments have a detailed understanding of ENT costs, while others do not have anywhere near such depth of understanding.

Different processes and practices in recording and allocating costs affect the extent to which it's possible to drill down into ENT costs.

In the future, PLICS will offer much more granular, patient-level information, which will enable clinicians to help validate the accuracy of their activity and costs on a regular basis.

We recognise the need to factor the time taken to support the validation of costs into clinician timetables.

#### Example of the impact of cost allocation practice

*These are fictional trusts, but the practices described are found in actual trusts.*

The ENT departments at Trust A and Trust B are one of 10 surgical specialties in each trust.

Both ENT departments use 5% of their trust's overall theatre time.

Trust A charges 5% of overall theatre costs to ENT, giving an accurate measure of the actual ENT costs.

But Trust B charges a tenth of theatre costs to each of its ten specialties. Here, the ENT department finds itself being allocated with 10% of the overall theatre costs, yet is only using 5% of theatre time.

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## Recommendations

Recommendation	Owners	Timeline
<b>20.</b> Clinicians and costing teams should work together to ensure the methods used to apportion and allocate costs in the Patient Level Information and Costing System (PLICS) are in line with costing standards and accurately reflect resources used.	Providers	August 2019 (submission for 18/19 data). Ongoing requirement thereafter.
<b>21.</b> Use PLICS data to investigate and review unwarranted variation and costs.	GIRFT, Providers	November 2019

## OTHER OPPORTUNITIES

### Theatre productivity

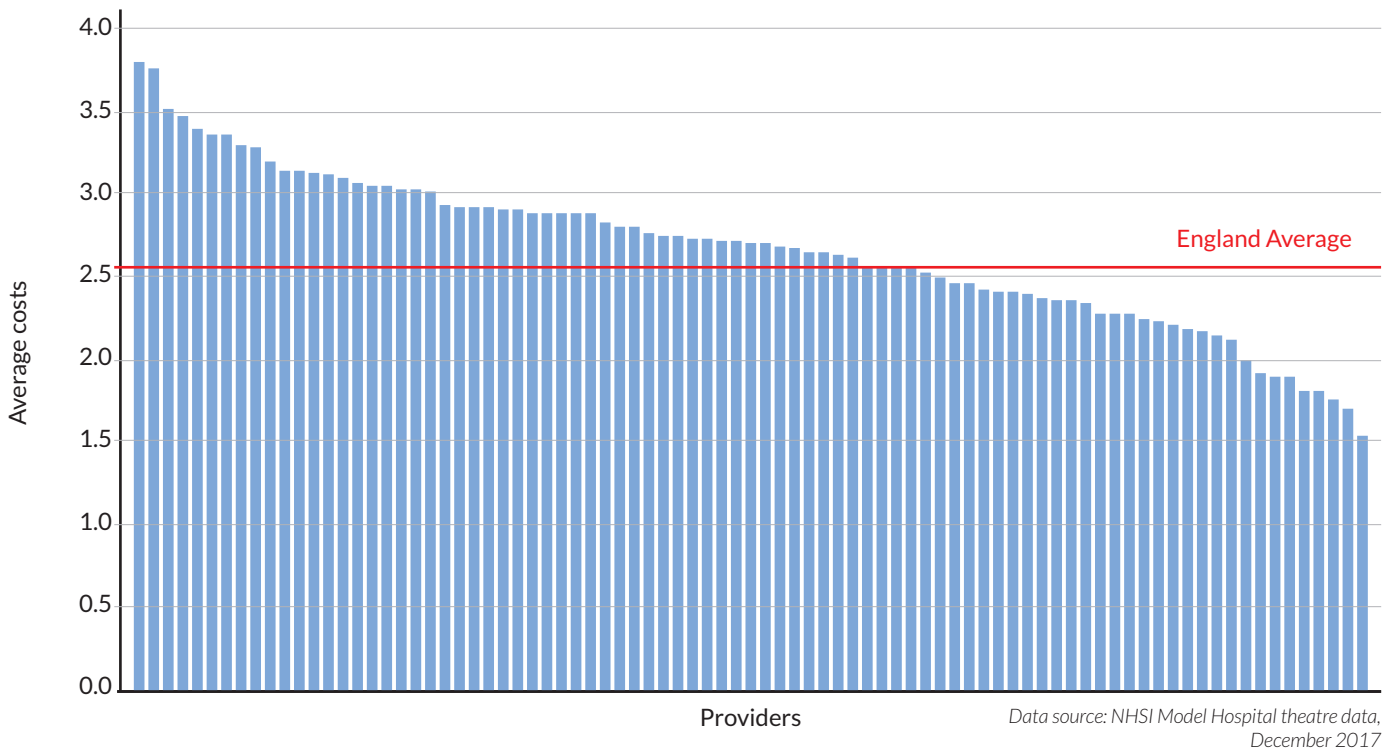
There is currently no agreed benchmark for ENT theatre productivity. This makes it difficult for stakeholders to make meaningful assessments of how sessions are utilised.

The default measure of in-session utilisation is a crude metric for measuring session productivity and should be replaced with a more meaningful metric. Data on surgeons' theatre productivity should be interpreted in light of their commitment to training junior staff.

Model Hospital data enables units to see the time they take to carry out a procedure in theatre and provides a useful tool for them to benchmark against other units. Interpretation of theatre data should also be informed by data on casemix and comorbidity, as provided in GIRFT data packs.

[www.improvement.nhs.uk/resources/model-hospital](http://www.improvement.nhs.uk/resources/model-hospital)

**Figure 34: Average number of cases per 4 hour ENT theatre list**



### Recommendation

Recommendation	Owners	Timeline
22. Review Model Hospital theatre data to help understand and maximise theatre productivity.	Providers, GIRFT	November 2019

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## Recruitment issues

We visited a number of departments that told us about the problems they had in filling consultant-level vacancies or in recruiting locums. Such recruitment issues were clearly affecting the ability of these departments to meet the Referral To Treatment rules published by the Department of Health and Social Care.

Anecdotally, most audiology departments pointed to difficulties with recruitment and retention – particularly at Band 5 level – and cited Any Qualified Provider (AQP) as a contributory factor.

It's also reasonable to conclude that recruitment issues compound other difficulties. In a seller's market, departments that may be less attractive to candidates find it even more difficult to recruit, leading to a vicious cycle of vacancy, service delivery problems and recruitment struggles.

The GIRFT reviews give us a snapshot of recruitment issues. However, the overall national picture is not clear, which makes effective workforce planning challenging.

# LITIGATION

## Reducing litigation

As well as addressing variation in clinical practice, each GIRFT review assesses the impact and causes of litigation. Giving providers and clinical staff the opportunity to learn from best practice, claims, complaints, serious untoward incidents (SUIs)/serious incidents (SIs) and inquests will help improve patient care, reduce length of stay, and reduce the frequency of incidents. In turn, this will lead to reduced costs, both in terms of litigation itself, and of managing complications related to incidents.

## Clinical negligence claims in ENT

NHS Resolution data shows that the total cost of clinical negligence claims in ENT surgery was estimated to be between £10.7 and £28.9 million per year over the five years from 2012/13 to 2016/17. The average cost of an ENT litigation case during this period was £127,000.

## Variation in average litigation costs

We used two methods to review the relationship between estimated cost of claims and the activity carried out by trusts. Both reveal wide variation in the average cost of litigation between trusts.

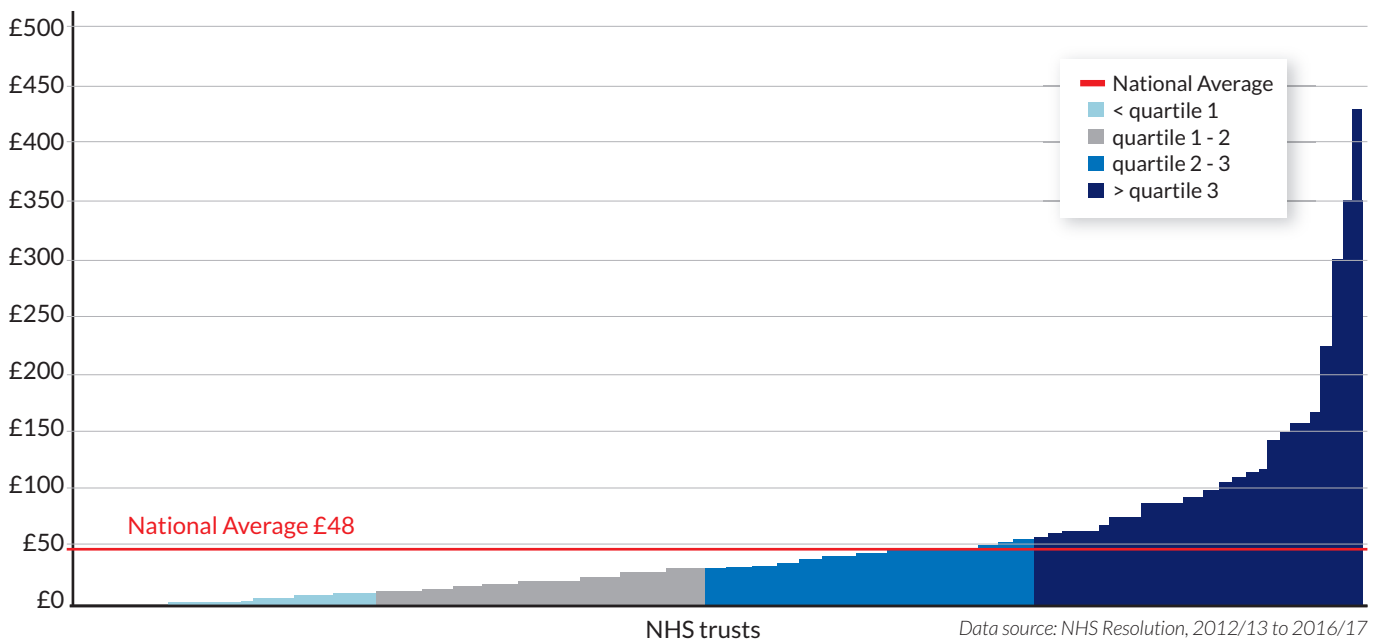
## Litigation related to operative procedure

The national average estimated cost of litigation per case for operative procedures is £48, with figures for trusts ranging from £0 to £429 – see Figure 35.

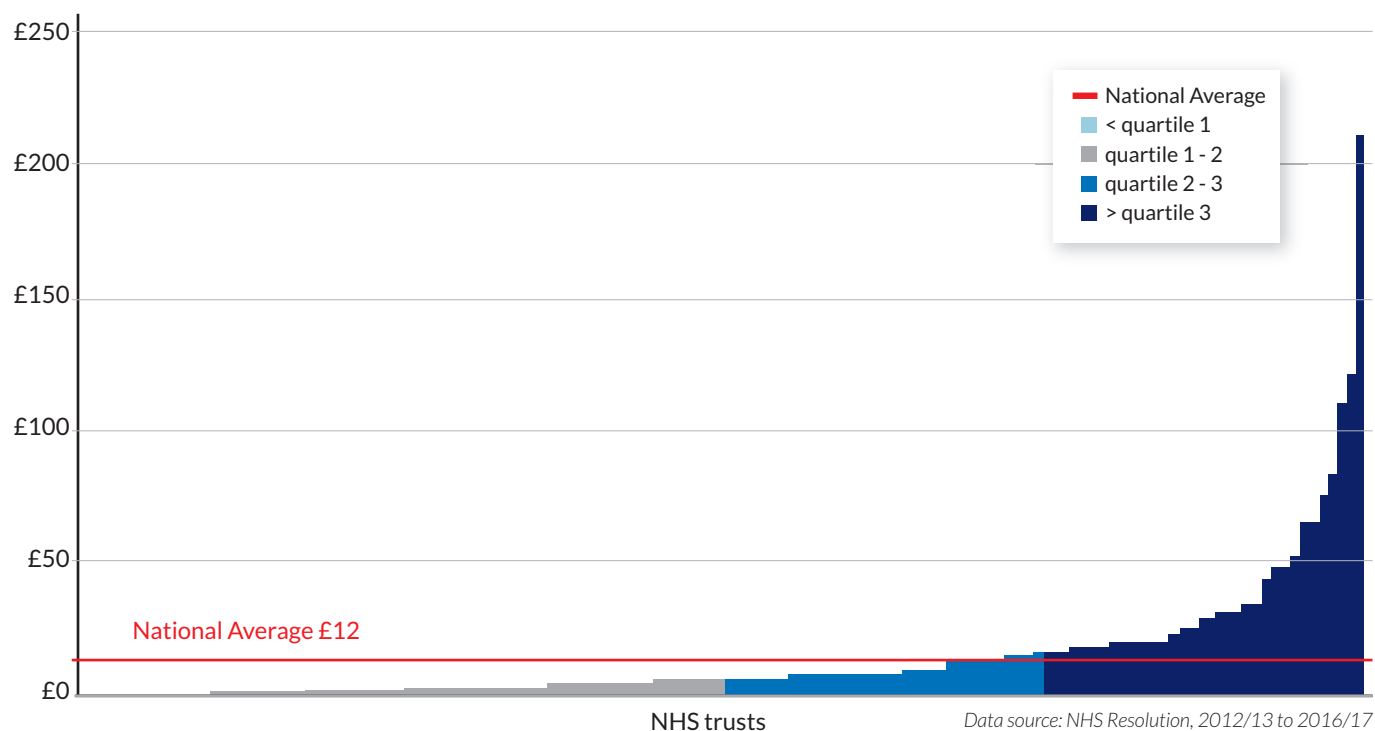
## Litigation related to out-patient procedures and all admissions

The average estimated cost of litigation per out-patient procedure and all admissions is £12, with figures for trusts ranging from £0 to £237 – see Figure 36.

**Figure 35: Estimated litigation costs for ENT per operative case**  
(Denominator includes all admissions for ENT surgery. Adult and paediatric patients).



**Figure 36: Estimated litigation costs for ENT per admission or out-patient procedure**  
 (Denominator includes out-patient procedures, day case, elective and emergency admissions.  
 Adult and paediatric patients)



## Trends

There was an increase in the number of claims and their estimated costs over the five-year period from 2012/13 to 2016/17 – see Table 2.

**Table 2: Volume and cost of medical negligence claims against ENT notified to NHS Resolution**

Year	Number of claims	% change in claims number	Total costs (£m) (including estimated and reserve values)	% change in total costs
2012/13	108	-	£10.7m	-
2013/14	152	40.74	£15.5m	44.52
2014/15	157	3.29	£20.2m	30.24
2015/16	132	-15.92	£12.8m	-36.71
2016/17	152	15.15	£28.9m	126.18
<b>Total</b>	<b>701</b>	<b>-</b>	<b>£88.1m</b>	<b>-</b>

Data source: NHS Resolution, 2012/13 to 2016/17

**Table 3: Most common causes of medical negligence claims in ENT – 2012/13 to 2016/17**

Cause	Number of claims	Percentage of claims (%)
Judgement/timing	308	43.94
Interpretation of results/clinical picture	166	23.68
Unsatisfactory outcome to surgery	124	17.69
Fail to warn/informed consent	82	11.70
Retained foreign object post-operation	21	3.00

Data source: NHS Resolution, 2012/13 to 2016/17

## Informed consent

There were 82 claims directly identified as failure to warn/informed consent. However, the impact of lack of informed consent is more significant because it also played a role in many claims that were attributed to unsatisfactory outcome of surgery.

Many of these claims are clearly avoidable since an effective consent process would see an informed patient involved in shared decision-making.

## Never events

It is concerning that 'retained foreign object post-operation' resulted in 21 claims.

These events, along with other surgical never events, such as 'wrong site surgery', which was reported in five claims (0.71%), represent system failure and are patient safety issues that can be eradicated by more diligent organisation and closer adherence to tools including the World Health Organisation checklist and National Safety Standards for Invasive Procedures (NatSSIPs).

## Reducing claims

### Improving training to eliminate avoidable causes of claims

Several of the most common causes of claims are avoidable.

Issues of poor judgement and timing often relate to inexperience and poor decision-making, which could be addressed through training.

### Improving record keeping

There is some evidence that claims cannot be defended effectively because providers do not have the necessary documentary evidence.

Collecting and keeping this evidence would improve the ability to prove that processes have been followed correctly, and that patients' interests have been considered.

### Sharing details of the existence and cost of litigation claims

During our deep dive visits, it became clear that many providers had little knowledge of the claims against them. This included providers with high litigation costs per admission as well as those at the low end.

Sharing knowledge of claims in a formalised manner with all clinical staff would help providers learn lessons that would improve future practice.

Further work is needed to analyse and share claims data – at both a local and national level – in order to improve patient care.



## Recommendations

Recommendation	Actions	Owners	Timeline
23. Implement the GIRFT 5 point plan for reducing litigation costs.	a Clinicians and trust management to assess their benchmarked position compared to the national average when reviewing the estimated litigation cost per unit of activity	Providers	For immediate action
	b Clinicians and trust management to discuss with the legal department or claims handler the claims submitted to NHS Resolution included in the data set to confirm correct coding to that department. Inform NHS Resolution of any claims which are not coded correctly to the appropriate specialty via <a href="mailto:CNST.Helpline@resolution.nhs.uk">CNST.Helpline@resolution.nhs.uk</a>	Providers	On completion of 22a
	c Once claims have been verified, clinicians and trust management to review claims in detail including expert witness statements, panel firm reports and counsel advice as well as medical records to determine where patient care or documentation could be improved. If the legal department or claims handler needs additional assistance with this, each trust's panel firm should be able to provide support.	Providers	On completion of 22b
	d Claims should be triangulated with learning themes from complaints, inquests and serious untoward incidents (SUI)/serious incidents (SI) and where a claim has not already been reviewed as an SUI/SI, we would recommend that this is carried out to ensure no opportunity for learning is missed.	Providers	On completion of 22c
	e Where trusts are outside the top quartile of trusts for litigation costs per activity, GIRFT will be asking national clinical leads and regional hub directors to follow up and support trusts in the steps taken to learn from claims. Clinical leads and regional hub directors will also share with trusts examples of good practice.	Providers	For continual action throughout GIRFT programme

# Activity and notional financial opportunities

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This report sets out a series of ways to improve the delivery of NHS ENT services using the existing resources available to the specialty.

## Potential benefits

Improvements to the patient experience would be seen in shorter stays, fewer admissions and fewer repeat visits – and potentially shorter wait times. All of these also benefit providers, reducing the costs of common procedures and pathways and freeing up resource for other purposes.

While the impact in some areas is hard to measure, in others there is a clear tangible benefit.

## Notional financial opportunity

The notional financial opportunity could be between £21.7m and £30.8m a year. This opportunity is in addition to the potential cost savings in procurement, which we estimate to be £2.5m a year

These figures provide a financial value for a wide range of efficiency opportunities, which may not be cash releasing.

The figures are based on a selection of metrics (shown in Table 4) and provide an indication of what may be possible. The metrics do not represent a comprehensive set of all opportunities discussed in the report.

- The gross notional financial opportunities put an estimated value on the resource associated with variation based on all providers achieving at least the average or best quartile performance.
- The opportunities are not cash-releasing efficiency savings.

## Further opportunities

The opportunity values shown are for illustration only. Individual providers and clinicians should assess their own services to determine the unwarranted variation that exists and the associated opportunity. Their assessment will help them to prioritise the service changes that they wish to deliver.

Individual providers may also have other opportunities that are not included here.

**Table 4: Activity opportunities and notional financial opportunities in ENT**

Improvement (opportunities are per annum)	National mean average or better			Top quartile or better (* or national average)		
	Target	Activity opportunity	Gross notional financial opportunity	Target	Activity opportunity	Gross notional financial opportunity
<b>Increase proportion of outpatient activity provided by non-consultant</b> - gross notional financial opportunity estimated at difference between consultant led and non-consultant led outpatient average cost, 15/16 reference costs * Note: best quartile has been retained at national average, on the basis that some variation could be coding, thus reducing the genuine opportunity for change Activity source: HES Jan 16 - Dec 16	4.8%	48,600 attendances	£1,360k	4.8%	48,600 attendances	£1,360k
<b>Increase tonsillectomy day case rates - paediatrics</b> - gross notional financial opportunity estimated at one bed day per spell, at ENT national average excess bed day cost, 15/16 reference costs Activity source: HES Dec 15 - Nov 16	58%	3,095 spells	£1,070k	80.6%	8400 spells	£2,915k
<b>Increase tonsillectomy day case rates - adults</b> - gross notional financial opportunity estimated at one bed day per spell, at ENT national average excess bed day cost, 15/16 reference costs Activity source: HES Dec 15 - Nov 16	70.1%	1,065 spells	£370k	84.7%	2,315 spells	£800k
<b>Reduce tonsillectomy readmissions - paediatrics</b> - gross notional financial opportunity estimated at the average PbR price of paediatric tonsillectomy readmission spells Activity source: HES Jan 15 - Sept 16 (pro-rata to 12 months)	9.4%	340 readmission spells	£280k	7.6%	700 readmission spells	£570k
<b>Reduce tonsillectomy readmissions - adults</b> - gross notional financial opportunity estimated at the average PbR price of adult tonsillectomy readmission spells Activity source: HES Jan 15 - Sept 16 (pro-rata to 12 months)	18.5%	275 readmission spells	£305k	14.3%	680 readmission spells	£750k
<b>Reduce Non-elective admissions with no dominant procedure</b> - gross notional financial opportunity estimated at the average cost of a non-elective admission with no dominant procedure, less the average cost of an A&E attendance Activity source: HES Dec 15 - Nov 16	50.8%	2,620 spells	£1,485k	45.5%	5,315 spells	£3,015k

**Table 4: Activity opportunities and notional financial opportunities in ENT (continued)**

Improvement (opportunities are per annum)	National mean average or better			Top quartile or better (* or national average)		
	Target	Activity opportunity	Gross notional financial opportunity	Target	Activity opportunity	Gross notional financial opportunity
<b>Reduce rate of adult septoplasty</b> - gross notional financial opportunity estimated at the average PbR price of septoplasty procedures <i>Activity source: HES Jan 16 - Dec 16</i>	34.7 per 100,000 adult population	2,125 spells	£3,080k	24.3 per 100,000 adult population	4,875 spells	£6,785k
<b>Reduce adult outpatient follow up rates</b> - gross notional financial opportunity estimated at the average cost of follow up outpatient attendance, 15/16 reference costs * Note: best quartile has been retained at national average <i>Activity source: HES Dec 15 - Nov 16</i>	1.49	114,441 attendances	£10,066k	1.49	114,441 attendances	£10,066k
<b>Reduce paediatric outpatient follow up rates</b> - gross notional financial opportunity estimated at the average cost of follow up outpatient attendance, 15/16 reference costs * Note: best quartile has been retained at national average <i>Activity source: HES Dec 15 - Nov 16</i>	1.25	35,000 attendances	£3,080k	1.25	35,000 attendances	£3,080k
<b>Reduce planned procedures not carried out (as % of total elective activity)</b> - gross notional financial opportunity estimated at the average cost of planned procedures not carried out, 15/16 reference costs <i>Activity source: HES Dec 15 - Nov 16</i>	5.1%	1,560 spells	£610k	3.7%	3,600 spells	£1,405k
<b>Total</b>			<b>£21,706k</b>			<b>£30,746k</b>

# About the GIRFT programme

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Getting It Right First Time (GIRFT) is a national programme designed to improve medical care within the NHS.

Funded by the Department of Health and Social Care and jointly overseen by the Royal National Orthopaedic Hospital NHS Trust and NHS Improvement, it combines wide-ranging data analysis with the input and professional knowledge of senior clinicians to examine how things are currently being done and how they could be improved.

Working to the principle that a patient should expect to receive equally timely and effective investigations, treatment and outcomes wherever care is delivered, irrespective of who delivers that care, GIRFT aims to identify approaches from across the NHS that improve outcomes and patient experience, without the need for radical change or additional investment. While the gains for each patient or procedure may appear marginal they can, when multiplied across an entire trust – and even more so across the NHS as a whole – deliver substantial cumulative benefits.

The programme was first conceived and developed by Professor Tim Briggs to review elective orthopaedic surgery to address a range of observed and undesirable variations in orthopaedics. In the 12 months after the pilot programme, it delivered an estimated £30m-£50m savings in orthopaedic care – predominantly through changes that reduced average length of stay and improved procurement.

The same model is now being applied in 39 different areas of clinical practice. It consists of four key strands:

- a broad data gathering and analysis exercise, performed by health data analysts, which generates a detailed picture of current national practice, outcomes and other related factors
- a series of discussions between clinical specialists and individual hospital trusts, which are based on the data – providing an unprecedented opportunity to examine individual trust behaviour and performance in the relevant area of practice, in the context of the national picture. This then enables the trust to understand where it is performing well and what it could do better – drawing on the input of senior clinicians
- a national report, that draws on both the data analysis and the discussions with the hospital trusts to identify opportunities for NHS-wide improvement
- an implementation phase where the GIRFT team supports providers to deliver the improvements recommended.

## GIRFT and other improvement initiatives

GIRFT is part of an aligned set of workstreams within NHS Improvement. It is the delivery vehicle for one of several recommendations made by Lord Carter in his February 2016 review of operational efficiency in acute trusts across England. As well as support from the Department of Health and Social Care and NHS Improvement, it has the backing of the Royal Colleges and professional associations.

GIRFT has a significant and growing presence on the Model Hospital portal, with its data-rich approach providing the evidence for hospitals to benchmark against expected standards of service and efficiency. The programme also works with a number of wider NHS programmes and initiatives which are seeking to improve standards while delivering savings and efficiencies, such as NHS RightCare, acute care collaborations (ACCs), and sustainability and transformation partnerships (STPs).

## Implementation

GIRFT has developed a comprehensive implementation programme designed to help trusts and their local partners to address the issues raised in trust data packs and the national specialty reports to improve quality. GIRFT regional hubs provide support at a local level with clinical and project delivery leads able to visit trusts and local stakeholders in each region on a regular basis. They advise on how to reflect the national recommendations into local practice and support efforts to deliver any trust specific recommendations emerging from the GIRFT visits. These teams also help to disseminate best practice across the country, matching up trusts who might benefit from collaborating in selected areas of clinical practice.

Through all its efforts, local or national, the GIRFT programme strives to embody the ‘shoulder to shoulder’ ethos that has become GIRFT’s hallmark, supporting clinicians nationwide to deliver continuous quality improvement for the benefit of their patients.

## Acute care collaborations (ACCs)

A group of NHS trusts working together to improve their clinical and financial viability in delivering acute care, reducing variation in care and efficiency. For example, hospitals working together as groups or chains, specialty franchises and clinical networks.

Part of NHS England's new care models programme.  
[www.england.nhs.uk/new-care-models/about/acute-care-collaboration](http://www.england.nhs.uk/new-care-models/about/acute-care-collaboration)

## Adenotonsillar Hypertrophy

Enlarged adenoids and tonsils.

## Adenotonsillectomy

A surgical procedure to remove the tonsils and adenoids.

## Casemix

The type or mix of patients, categorised by a variety of measures, including: demographics, disease type and severity, and the diagnostic or therapeutic procedures performed.

## Category towers

The procurement function of the NHS Supply Chain operating model. There are 11 category towers, with each one specialising in a particular area of products or services, for example medical equipment.  
[www.supplychain.nhs.uk/sccl](http://www.supplychain.nhs.uk/sccl)

## Cholesteatoma surgery

Surgery to remove a cholesteatoma, an abnormal collection of skin cells deep inside the ear.

## Clinical Commissioning Groups (CCGs)

Clinically-led statutory NHS bodies responsible for the planning and commissioning of healthcare services for their local area. [www.nhsc.org/ccgs/](http://www.nhsc.org/ccgs/)

## Coblation tonsillectomy

A method for performing tonsillectomy by soft tissue dissolution using bipolar radiofrequency energy under a conductive medium such as normal saline

## Cochlear implants

A surgically implanted electronic device to restore or provide hearing for congenital and acquired hearing loss.

## Commissioning

The various processes that identify the health needs of a population, such as a local area, and purchase services to meet those needs.

## Comorbidity

The simultaneous presence of two or more chronic (long-term) diseases or conditions in a patient.

## Day case

When a patient is admitted electively for care that day, without the use of a hospital bed or overnight stay.

## Day of surgery admission

Admission to hospital on the same day that surgery takes place.

## Elective (surgery or care)

Surgery or care that is planned rather than carried out as an emergency (non-elective).

## Glue ear – otitis media with effusion (OME)

A condition characterised by a collection of fluid within the middle ear space without signs of acute inflammation.

## Grommets

Ventilation tubes inserted into the eardrum, often to treat glue ear.

## Healthcare Resource Group (HRG)

Standard groupings of clinically-similar treatments that use common levels of healthcare resource. HRGs help organisations to understand their activity in terms of the types of patients they care for and the treatments they undertake.

## Hospital Episode Statistics (HES)

Data on all admissions, out-patient appointments and A&E attendances at NHS hospitals in England. HES data aims to collect a detailed record for each 'episode' of admitted patient care commissioned by the NHS and delivered in England, by either an NHS hospital or the independent sector. HES data is used in calculating what hospitals are paid for the care they deliver.

## Integrated care systems

NHS organisations, in partnership with local councils and others, taking collective responsibility for managing resources, delivering NHS standards, and improving the health of the population they serve.  
[www.england.nhs.uk/integratedcare/integrated-care-systems](http://www.england.nhs.uk/integratedcare/integrated-care-systems)

## Length of stay

The length of an inpatient episode of care, calculated from the day of admission to day of discharge, and based on the number of nights spent in hospital.

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## Model Hospital

A free digital tool provided by NHS Improvement to enable trusts to compare their productivity and identify opportunities to improve. The tool is designed to support NHS provider trusts to deliver the best patient care in the most efficient way.

<https://model.nhs.uk>

## Multidisciplinary team (MDT)

A team of healthcare professionals from different disciplines.

## Myringotomy

A surgical procedure to relieve pressure or drain fluid from the ear drum.

## Nasal Polypectomy

A surgical procedure to remove polyps from the inside of the nose.

## National Clinical Improvement Programme (NCIP)

A programme to provide both team- and clinical-level activity and metrics about the whole of a clinician's practice. It aims to provide a single point of access to existing information from Hospital Episode Statistics (HES), audit and registry, and private sector.

<https://gettingitrightfirsttime.co.uk/associated-projects/ncip/>

## National Institute for Health and Care Excellence (NICE)

Provides evidence-based guidance, advice, quality standards, performance metrics and information services for health, public health and social care.

[www.nice.org.uk](http://www.nice.org.uk)

## NHS Resolution (formerly NSH Litigation Authority)

Provides expertise to the NHS to resolve negligence concerns, share learning for improvement and preserve resources for patient care.

NHS Resolution is an 'arm's length' body of the Department of Health and Social Care. This means it is an independent body, but can be subject to ministerial direction.

[www.resolution.nhs.uk](http://www.resolution.nhs.uk)

## NHS RightCare

An NHS England programme that works locally with systems (bodies involved in delivering services) to diagnose issues, develop solutions and deliver improvements.

[www.england.nhs.uk/rightcare](http://www.england.nhs.uk/rightcare)

## NHS Supply chain

An organisation that provides healthcare products and supply chain services to the NHS, including procurement, logistics, e-commerce, and customer and supplier support.

[www.supplychain.nhs.uk](http://www.supplychain.nhs.uk)

## Non-elective (surgery or care)

Surgery or care that is carried out as an emergency rather than being planned (elective).

## Obstructive Sleep Apnoea (OSA)

An interruption to normal breathing during sleep, caused by complete or partial obstructions of the upper airway.

## Otology

A subspecialist area of ENT, focused on the anatomy and diseases of the ear, including hearing and balance.

## Patient Level Information and Costing Systems (PLICS)

A system of collecting and deriving costs at the patient level.

## Payment by Results (PbR)

The payment system in England used by healthcare commissioners to pay healthcare providers for each patient seen or treated. The system takes account of the complexity of the patient's healthcare needs

## Pinnaplasty

A surgical procedure to correct prominent ears.

## Purchase Price Index and Benchmarking (PPIB)

A system to collect procurement data from NHS trusts that enables trusts to compare and benchmark data.

## Reference costs

Reference costs are the average unit cost to the NHS of providing defined services to NHS patients in England in a given financial year. They show how NHS providers spend money to provide healthcare to patients. NHS providers submit reference costs annually.

## Rhinology

A subspecialist area of ENT, focused on the anatomy and diseases of the nose and sinuses.

## Septoplasty

A surgical procedure to correct a deviated nasal septum (the cartilage and bony structure that separates the nostrils).

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## Spell

A period of healthcare, for example a period spent in hospital or admission to hospital.

## Stapedectomy

A surgical procedure to remove part of the stapes bone in the middle ear, and replace it with a plastic or metal implant.

## Sustainability and transformation partnerships (STPs)

Partnerships between NHS providers, CCGs, local authorities and other health and care services to develop proposals for how local areas will work together to improve health and care for their local population. There are 44 STPs.

[www.england.nhs.uk/integratedcare/stps](http://www.england.nhs.uk/integratedcare/stps)

## Tonsillar Hypertrophy

Enlarged tonsils.

## Tonsillectomy

A surgical procedure to remove the tonsils.

In **intracapsular tonsillectomy** the tonsil tissue is removed from within the surrounding fibrous capsule, which is left intact.

In **extracapsular tonsillectomy** the tonsil is removed along with the fibrous capsule that surrounds it.

## Tympanoplasty

Reconstruction of the eardrum (tympanic membrane) with inspection of the ossicles (bones within the middle ear).



## Acknowledgements

---

It's been a privilege to be the GIRFT clinical lead for ENT, working with fantastic individuals in the GIRFT team and with clinical and managerial colleagues across the country on my deep dive visits. Although it's not possible to thank everyone here, I'd like to extend my personal gratitude to the following people for their support.

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**Andrew Marshall**

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- NHS England – Friends and Family test; cancer waiting times; Return to Theatre waiting times
- Health & Social Care Information Centre (HSCIC) – Quality and Outcomes Framework (QOF); HRG Grouper; Prescribed Services selection tool
- Public Health England – SMHI
- Department for Communities and Local Government – Index of Multiple Deprivation
- Department of Health – reference costs.

We would like to thank NHS Resolution for litigation data.

We would also like to thank HSCIC for providing and allowing us to use HES data.

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## **GIRFT report team**

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Mark Stanton – Editor

Madeline Connolly – GIRFT Senior Manager, Finance and Analytics

Matthew Barker – Senior Policy Lead

Anna Woodford – Series Editor

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Michelle Tompkins – Communications and Media Relations Manager

Juliana Ansah – Governance and PMO Manager, GIRFT regional hubs

# Appendix 1: Examples of paediatric day case analysis from data packs

## Provider with high paediatric tonsillectomy day case rate (93.9%)

Figure 37a: Paediatric tonsillectomy spells by age

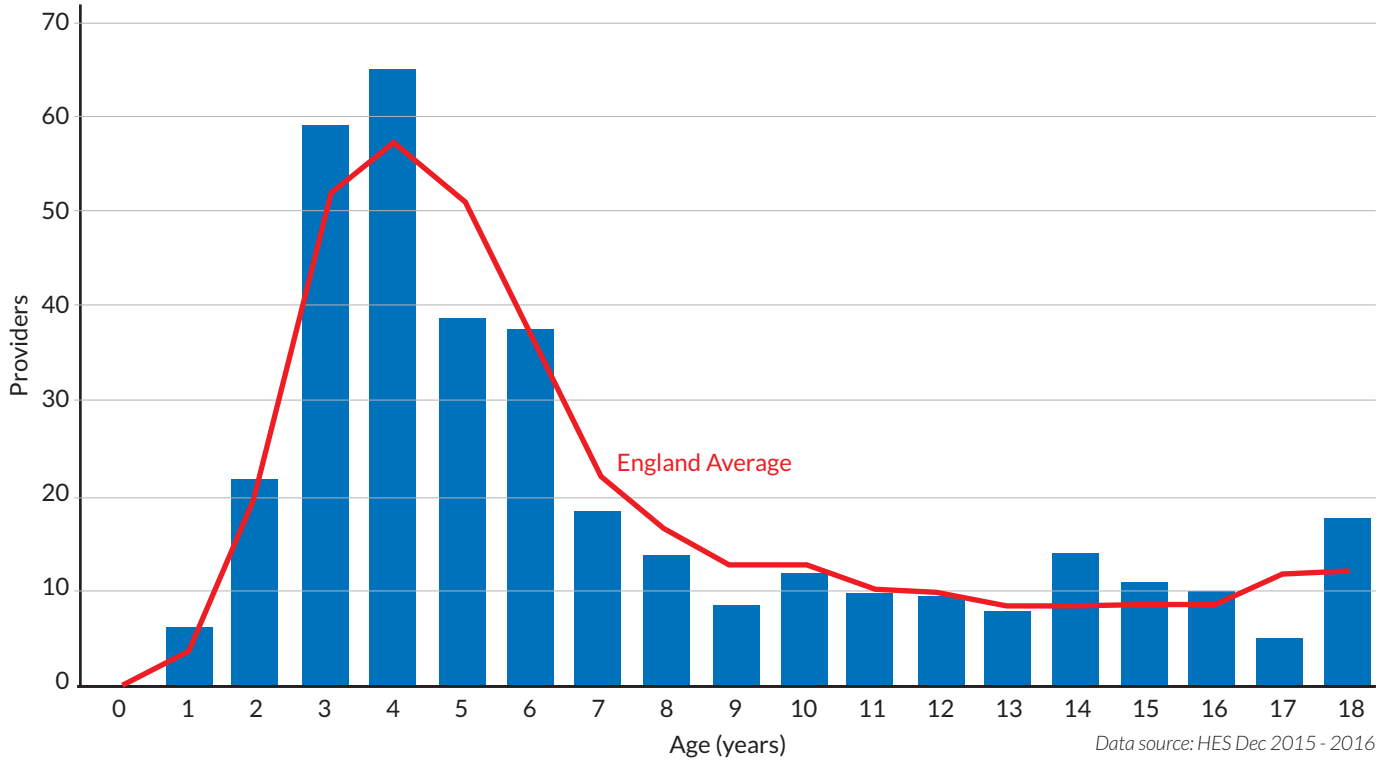
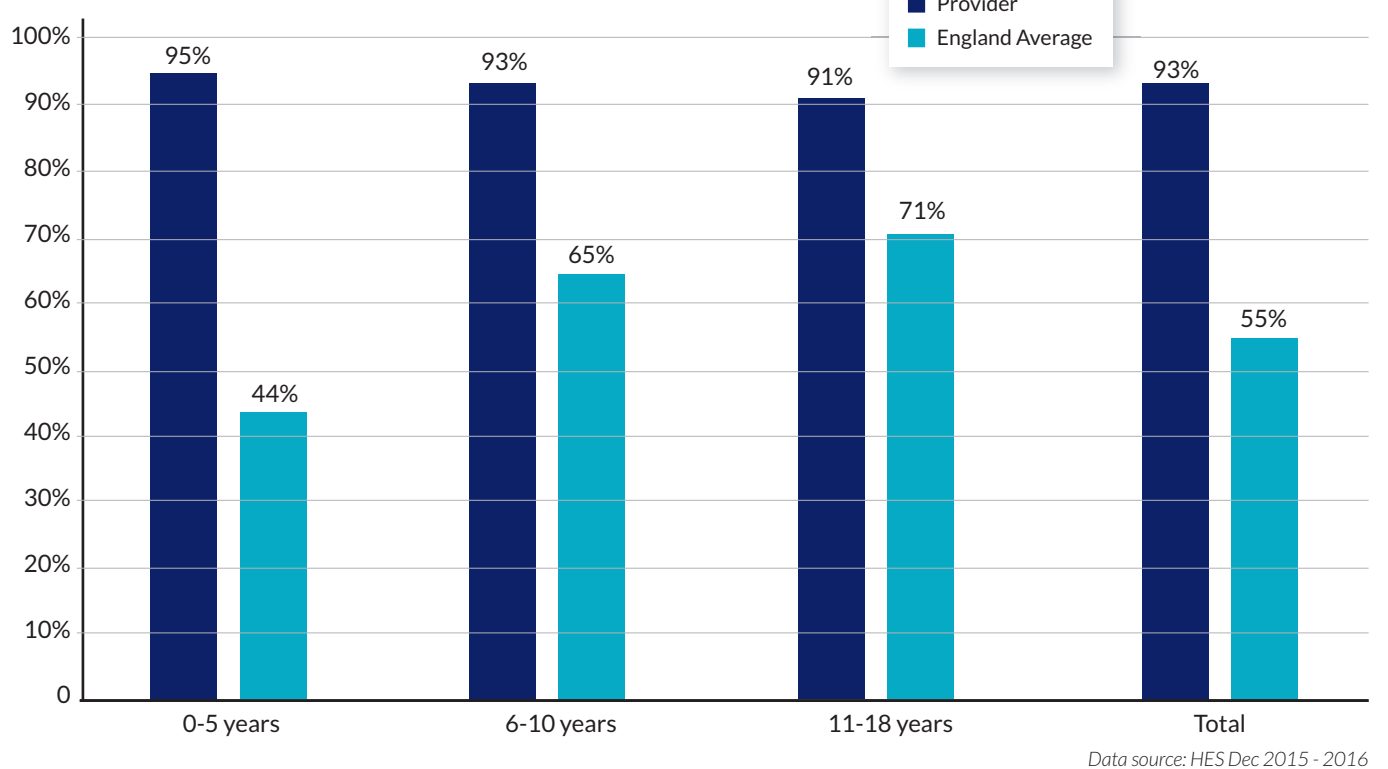


Figure 37b: Paediatric tonsillectomy day case rates by age band



## Provider with high paediatric tonsillectomy day case rate (93.9%)

Figure 37c: Paediatric tonsillectomy by diagnosis type

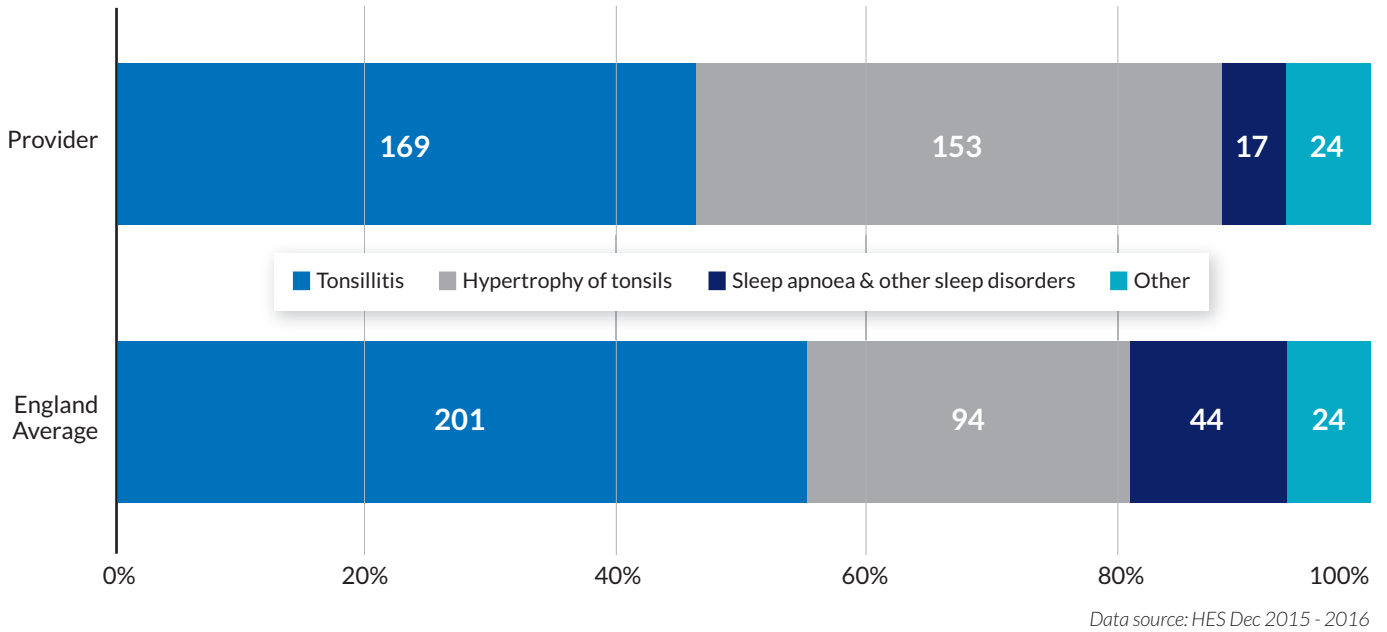
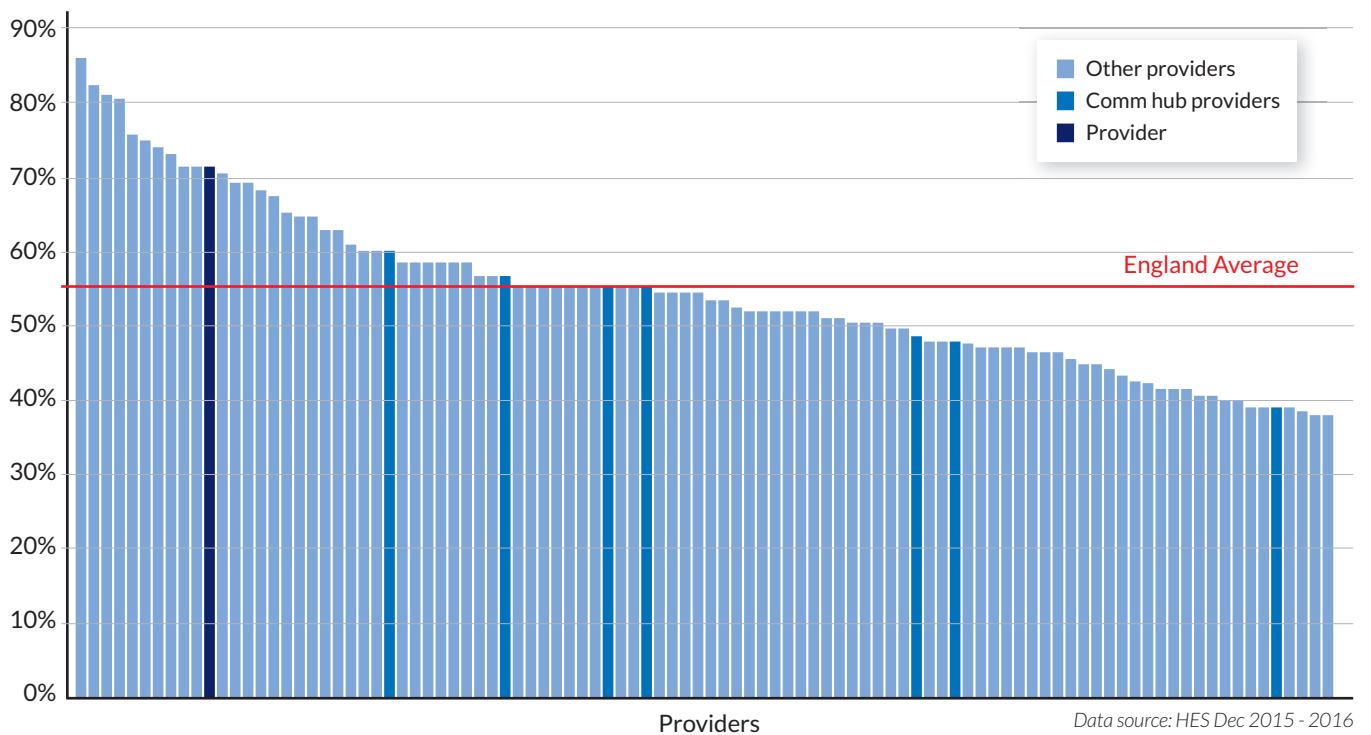


Figure 37d: Percentage of paediatric tonsillectomy spells where patient also had adenoidectomy



## Provider with low paediatric tonsillectomy day case rate (2.5%)

Figure 38a: Paediatric tonsillectomy spells by age

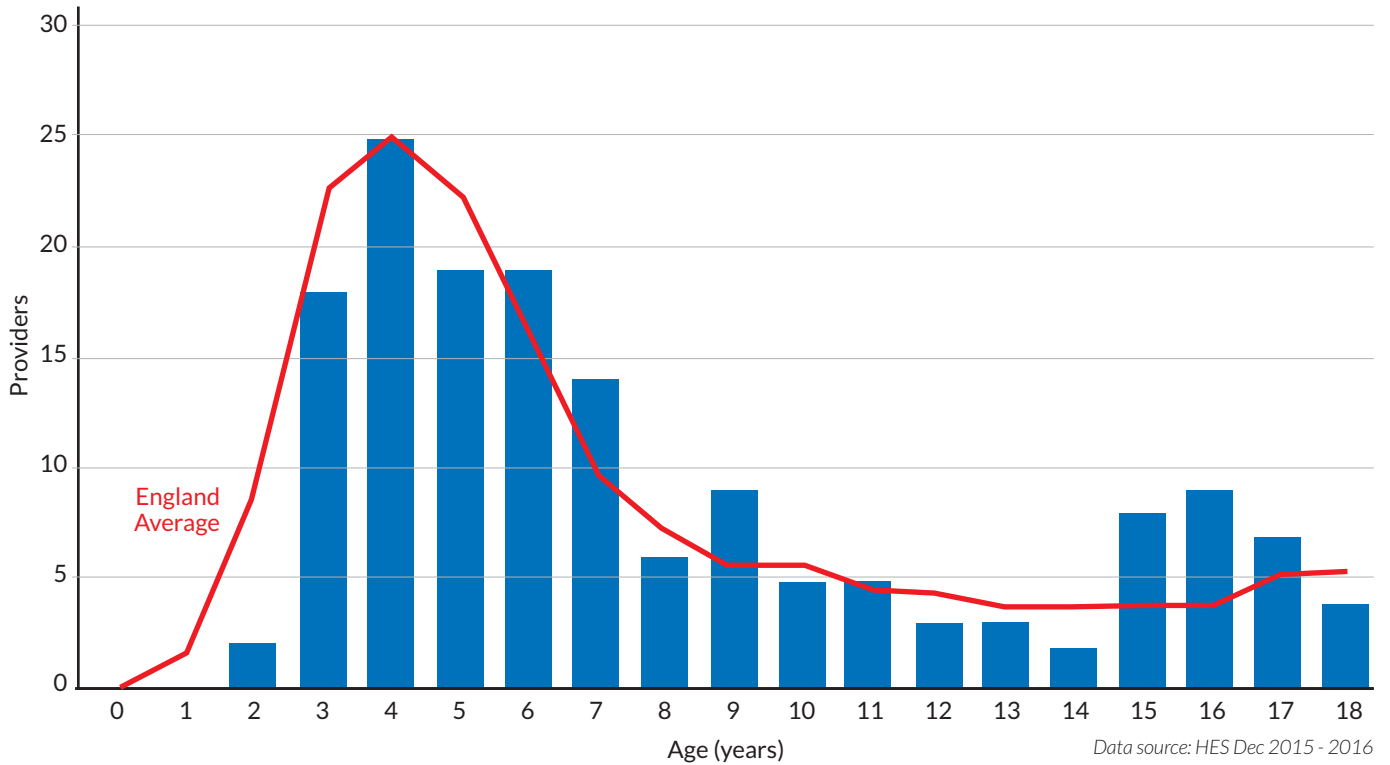
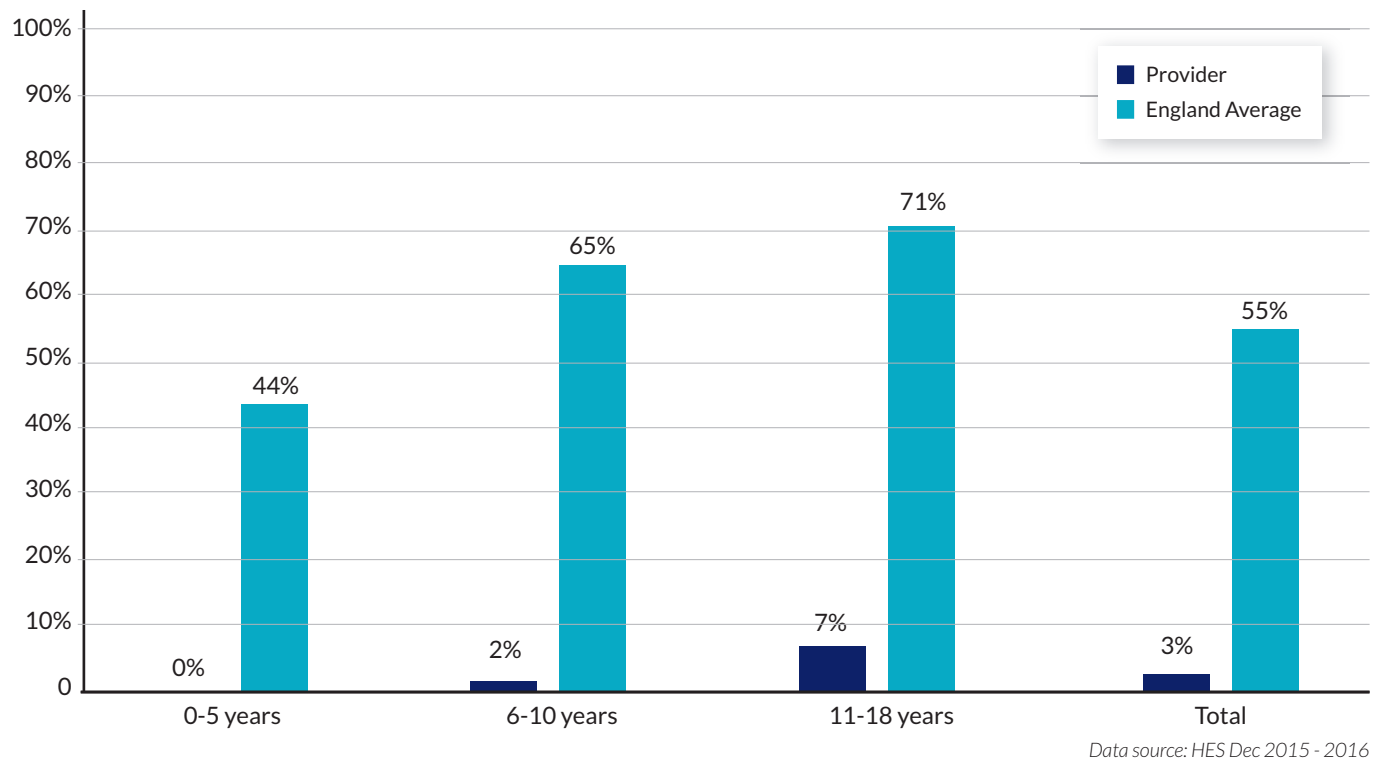
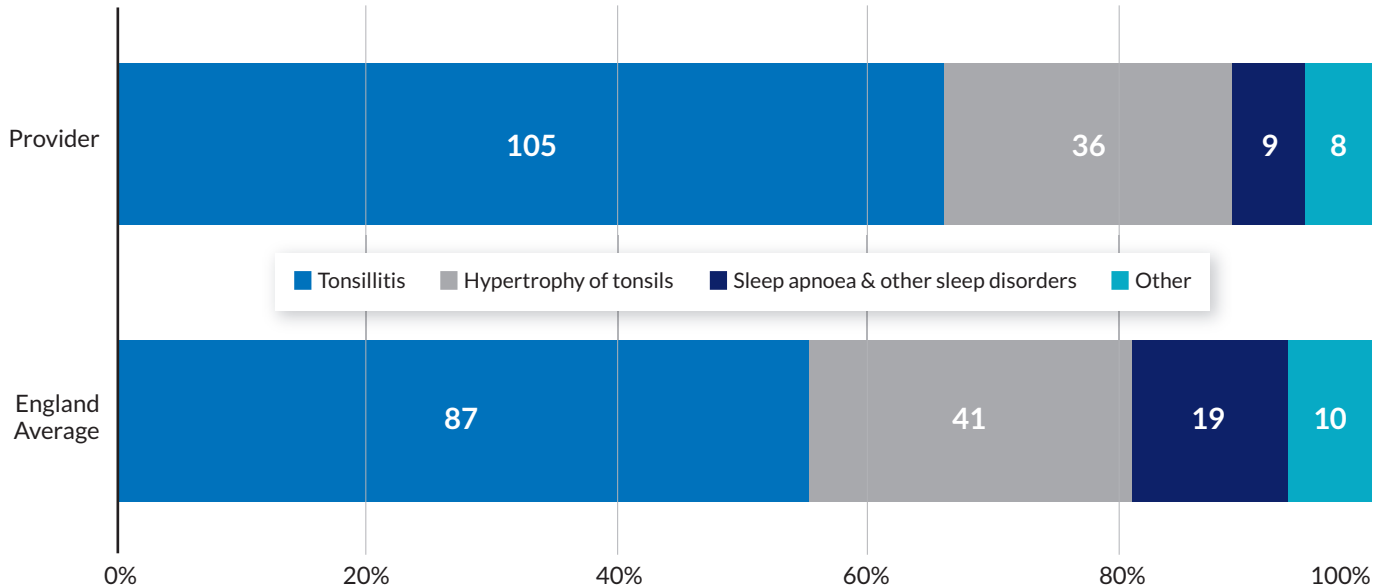


Figure 38b: Paediatric tonsillectomy day case rates by age band



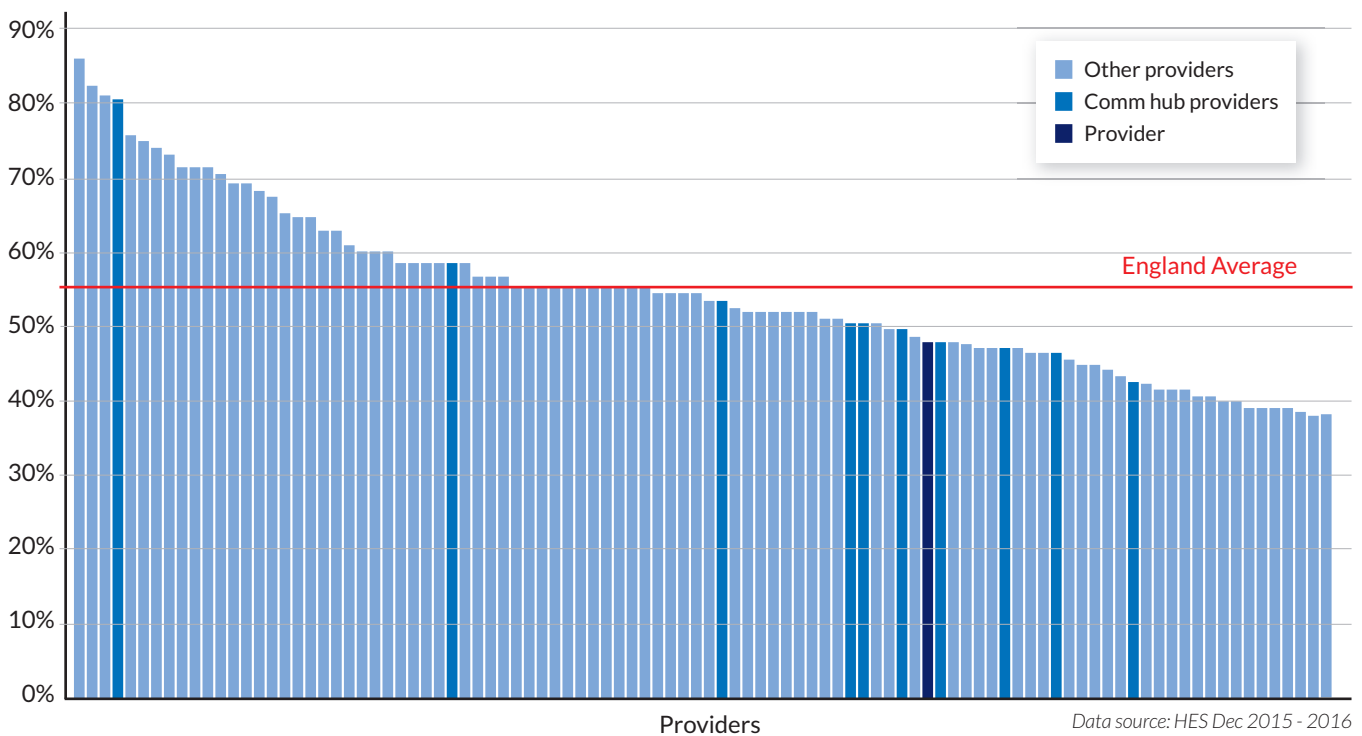
**Provider with low paediatric tonsillectomy day case rate (2.5%)**

**Figure 38c: Paediatric tonsillectomy by diagnosis type**



Data source: HES Dec 2015 - 2016

**Figure 38d: Percentage of paediatric tonsillectomy spells where patient also had adenoidectomy**



Data source: HES Dec 2015 - 2016

## Appendix 2: Giving commissioners notice of changes in the way you record activity

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### NHS Standard Contract, Service Condition 28

If you intend to change the way you record activity, for example in order to correct inaccurate specialty attribution, Service Condition 28 of the NHS Standard Contract states requires you to:

- give your commissioner notice; and
- neutralise any financial impact of the change in the short term.

You can find the relevant section of the contract at:

<https://www.england.nhs.uk/publication/nhs-standard-contract-2017-18-and-2018-19-service-conditions-full-length-may-2018/>

The contract provisions are further explained in section 44 of the Contract Technical Guidance at:

<https://www.england.nhs.uk/publication/nhs-standard-contract-2017-18-2018-19-technical-guidance-may-2018/>



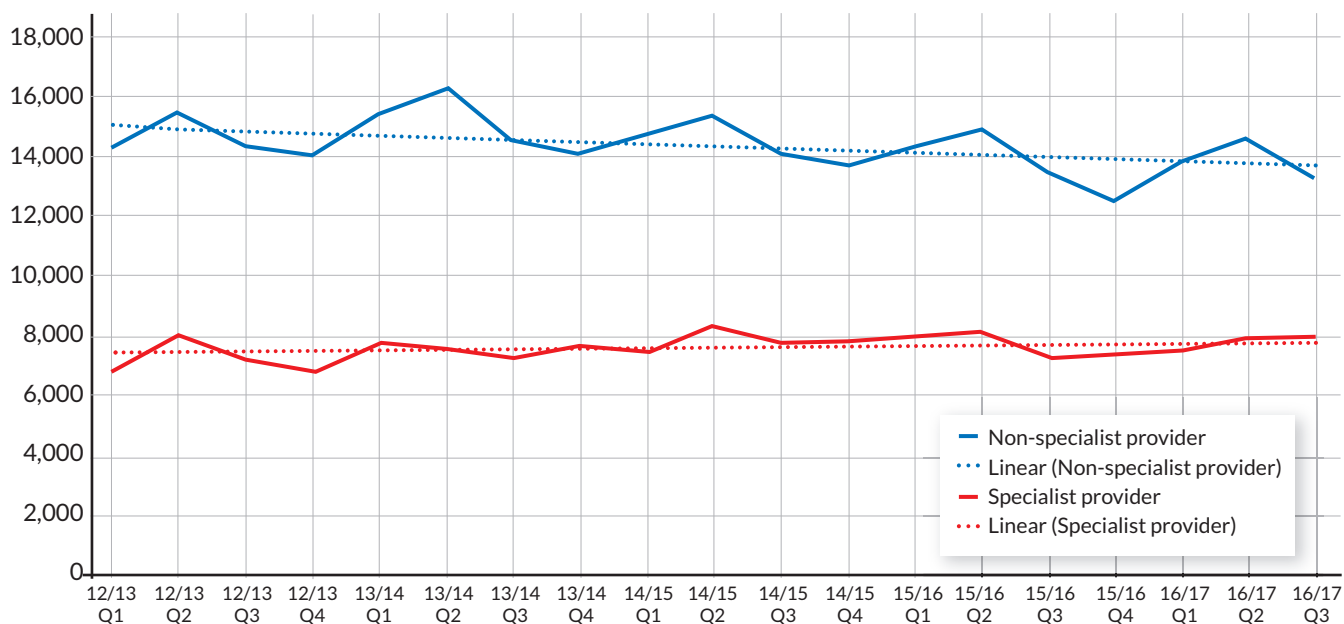
## Appendix 3: Treatment setting for paediatric ENT

### Overall paediatric activity

Overall paediatric ENT admitted patient care activity has reduced by around 2.5% over the last few years, from 87,500 in 2012/13 to 85,300 in 2016.

However, this reduction is concentrated in the non-specialist providers, with activity in specialist providers<sup>9</sup> increasing during the same time period – see Figure 39.

**Figure 39: Total ENT admitted patient care activity, age 0-16 years**



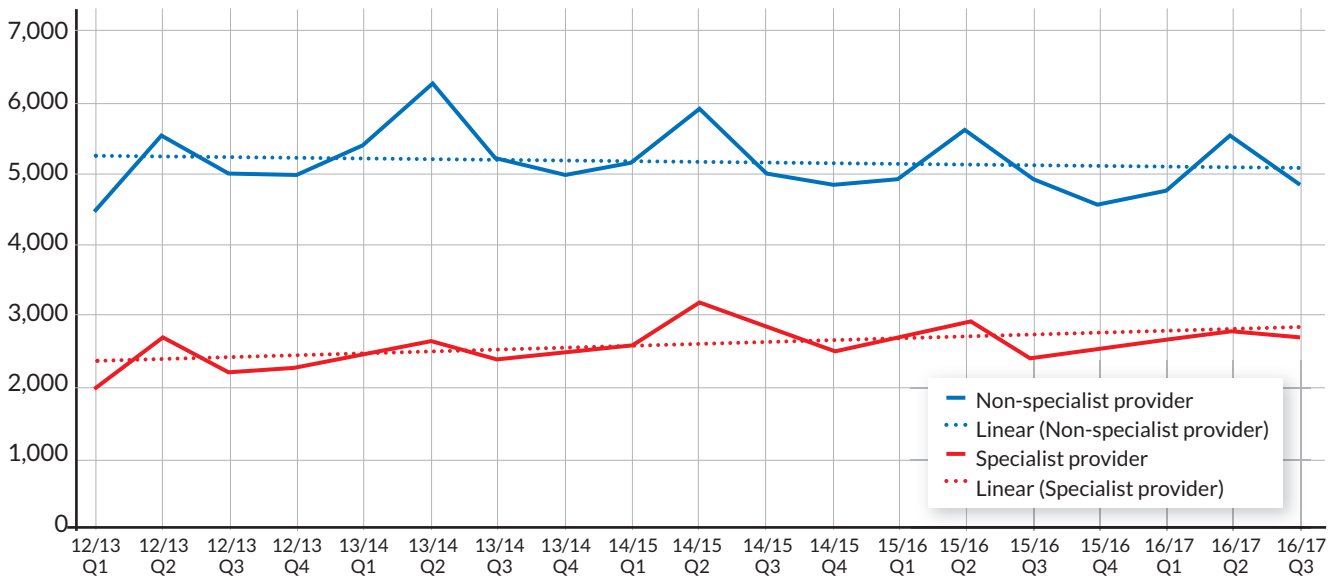
Data source: Hospital Episode Statistics, 2012/13 – 2016/17

<sup>9</sup> Specialist providers identified by BAPO (British Association for Paediatric Otolaryngology)

## Paediatric tonsillectomy activity

In paediatric tonsillectomy, while overall activity has remained relatively stable, there has been a clear reduction in activity at non-specialist providers and an increase in activity at specialist providers – see Figure 40. Specialist providers were delivering 31.5% of activity in 2012/13 and 35.4% in 2016.

**Figure 40: Total ENT tonsillectomy activity, age 0-16 years**

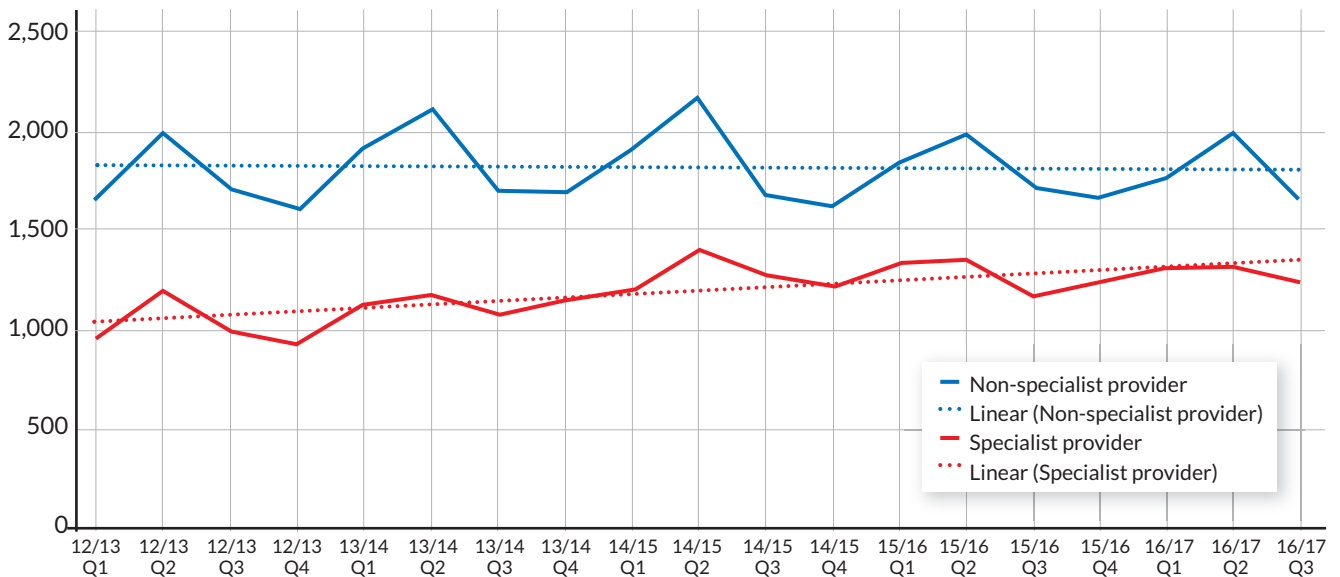


Data source: Hospital Episode Statistics, 2012/13 – 2016/17

An analysis of paediatric tonsillectomy activity by age group shows that much of the increase in specialist-provider activity is within the 0-4 year patient cohort – see Figure 41.

In total, activity for this patient cohort is around 10% higher in 2016/17 than in 2012/13. All of this increase has been delivered by specialist providers.

**Figure 41: Total ENT tonsillectomy activity, age 0-4 years**



Data source: Hospital Episode Statistics, 2012/13 – 2016/17

## Appendix 4: Readmission rates following tonsillectomy

### Summary

We looked at readmission rates following tonsillectomy by comparing data for outlier providers with low rates and outlier providers with high rates.

We found that:

- Overall readmission and return to theatre rates following tonsillectomy are now much higher than previously reported in the literature.
- Rates are generally higher amongst adults compared to children. This reflects findings of previous national audit.
- Readmissions are due to tonsillectomy related complications and not unrelated causes.
- There is wide national variation in readmission and return to theatre rates after tonsillectomy.
- There does not appear to be an independent variable in clinical or departmental practice that is accounting for the variation in outcomes.
- There is emerging evidence that tonsillectomy performed using Coblation in paediatric patients is no longer associated with a higher risk of complications than other surgical techniques. This is due to the recent advent of the intracapsular Coblation technique for tonsillectomy.
- Paediatric intracapsular Coblation appears to be associated with lower complication rates compared to other techniques in units with experience of performing high volumes of paediatric intracapsular Coblation.
- Reduction in readmission and return to theatre rates presents a key opportunity for improvement in patient experience, outcomes, and demand on emergency ENT services.

### Tonsillectomy

Tonsillectomy is one of the most common surgical procedures. It is indicated in the treatment of recurrent acute tonsillitis, chronic tonsillitis, obstructive sleep apnoea, peritonsillar abscess or for diagnostic purposes.

#### Common post-operative complications leading to readmission

The most common post-operative complications of tonsillectomy requiring readmission to hospital include: bleeding, infection, pain and vomiting.

### Readmission rates

Readmission rates are often used as a measure of surgical outcomes and performance, with lower readmission rates considered an indicator of more effective surgery.

#### Variation

We found wide variation in readmission rates following tonsillectomy when comparing high volume providers. There is greater variation in adult patients.

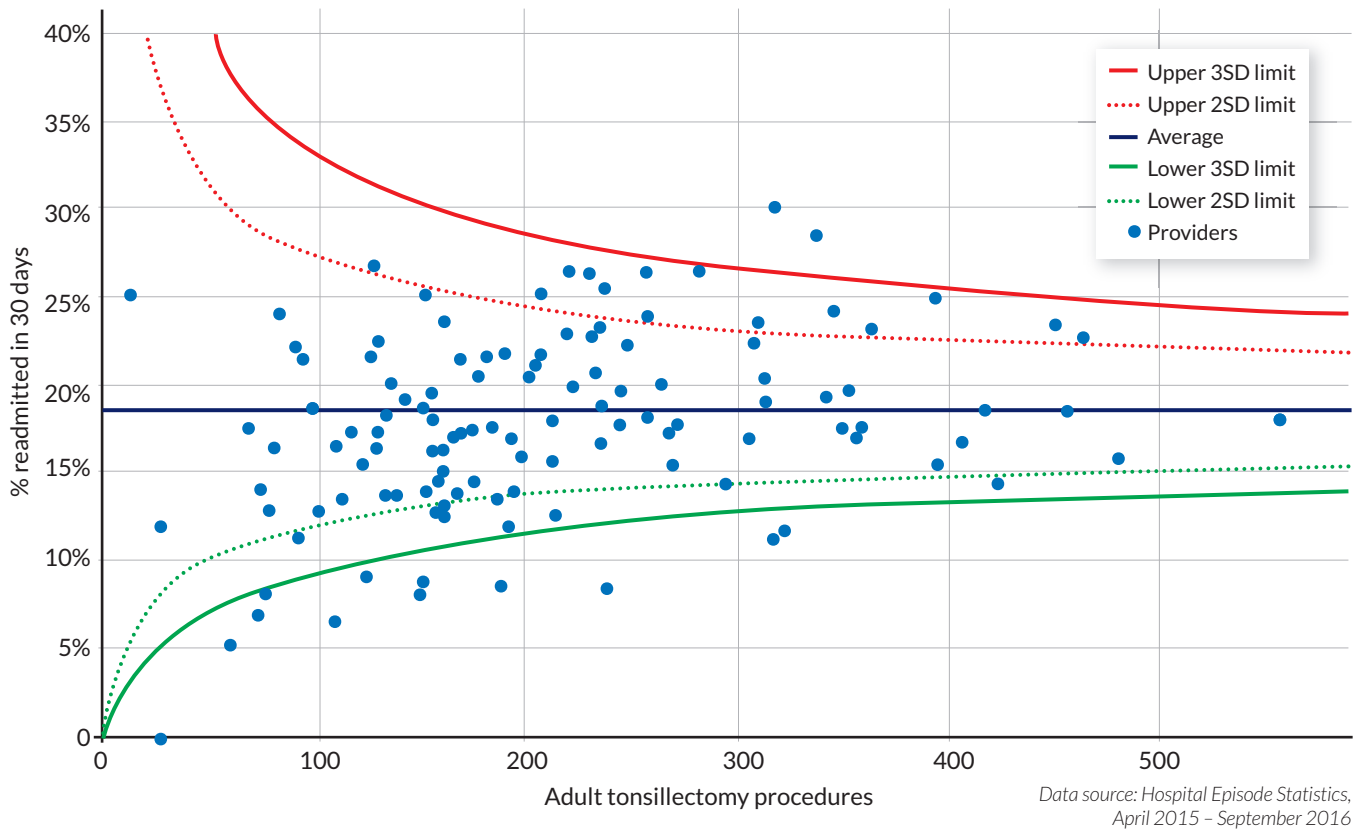
- In adult tonsillectomy, the readmission rate varies from 9.2% to 31.2%.
- In paediatric surgery, the rate in high volume providers (> 200 cases) varies from 3.7% to 18.6%.

**Table 5: Readmission rates following tonsillectomy**

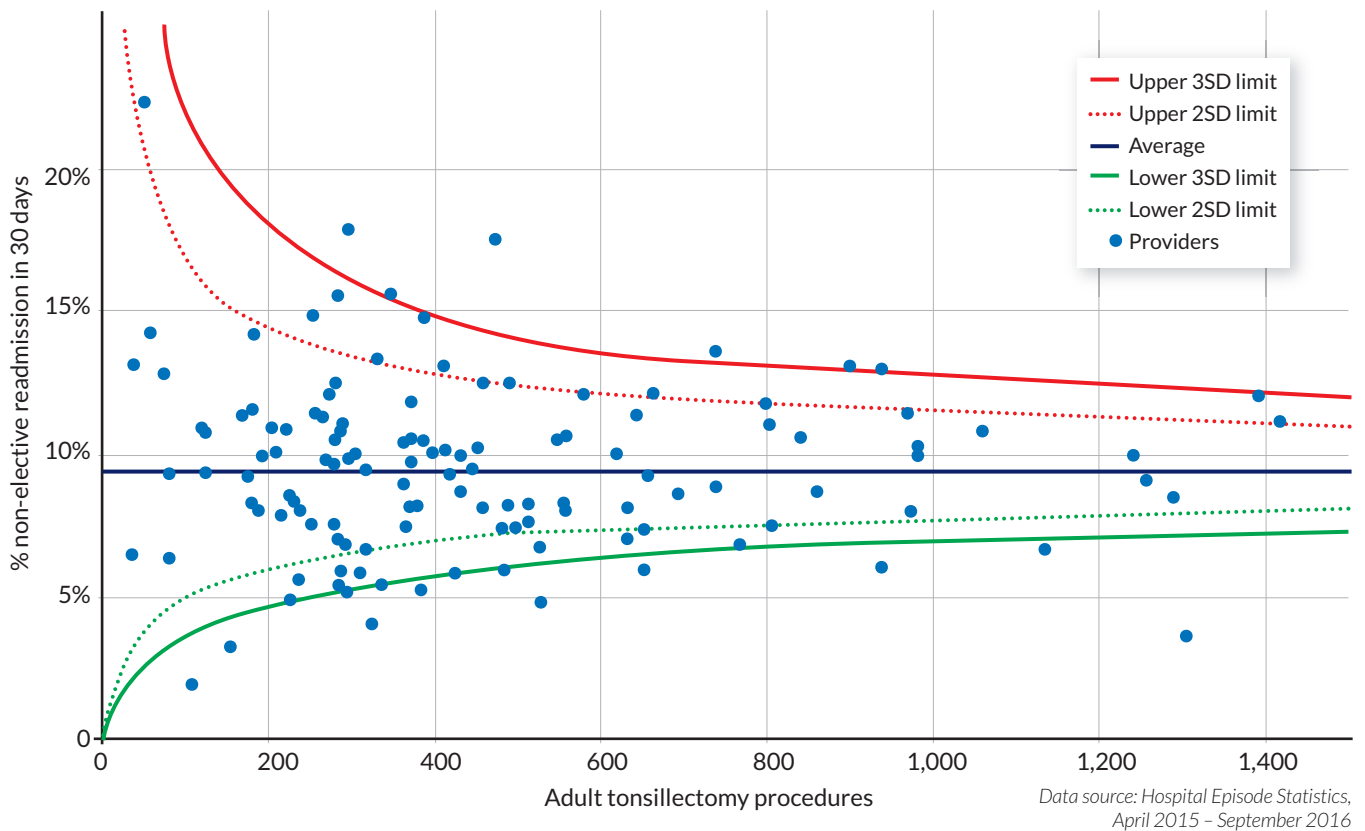
	Tonsillectomies		Readmissions within 30 days	Overall readmission rates	Variation in high volume providers >200 procedures
	Number	%			
Paediatric	48,747	68%	-	9.4%	3.7% to 18.6%
Adult	22,889	32%	-	18.4%	9.2% to 31.2%
Total	71,636	100%	8,784	12.3%	-

Data source: Hospital Episode Statistics, April 2015 – September 2016.

**Figure 42: Readmission within 30 days following adult tonsillectomy**



**Figure 43: Readmission within 30 days following paediatric tonsillectomy**



## A picture of increasing readmission rates

Our analysis represents the largest detailed dataset of tonsillectomy readmissions in England. When we compare our data to previous studies and to the local audits carried out by providers, we find a picture of increasing readmission and return to theatre rates.

**Table 6: Readmission rates in adult and paediatric patients by diagnosis**

Coded Diagnosis of Readmission	Adults	Paediatrics	Total
Haemorrhage (T810)	2,972 <b>13.0%</b>	2,788 <b>5.7%</b>	5,760 <b>8.0%</b>
Of which return to theatre (F365)	523 <b>2.3%</b>	380 <b>0.8%</b>	903 <b>1.3%</b>
Infection (T814, J029, R509)	327 <b>1.4%</b>	486 <b>1.0%</b>	813 <b>1.1%</b>
Pain (R070)	187 <b>0.8%</b>	170 <b>0.4%</b>	357 <b>0.5%</b>
Nausea & Vomiting (R11X)	0 <b>0.0%</b>	71 <b>0.2%</b>	71 <b>0.1%</b>
Other related cause (T818)	192 <b>0.8%</b>	200 <b>0.4%</b>	392 <b>0.5%</b>
Other (could include unrelated reason for admission)	533 <b>2.3%</b>	858 <b>1.8%</b>	1391 <b>1.94%</b>
Total	4211 <b>18.4%</b>	4573 <b>9.4%</b>	8784 <b>12.3%</b>

Data source: Hospital Episode Statistics, April 2015 – September 2016.

## National prospective tonsillectomy audit (NPTA)<sup>10</sup>

33,921 patients undergoing tonsillectomy surgery in England and Northern Ireland, July 2003 to September 2004

The national prospective tonsillectomy audit (NPTA) identified lower rates of readmission across several indications:

- a combined adult and paediatric bleed rate of 3.5%, compared to 8.0% in our analysis
- return to theatre rates of 0.8%, compared to 1.3% in our analysis.

Our findings that bleed and return to theatre rates are higher in adults than in paediatric patients mirrored the previous NPTA study. However, we found higher rates here too:

- an adult bleed rate of 4.9%, compared to 13.0% in our analysis
- return to theatre rates of 1.2%, compared to 2.3% in our analysis.

We also noted that the NPTA found that the risk of bleeding was higher with 'hot' techniques (those involving diathermy) and identified a statistically significant relative risk increase for return to theatre with Coblation extracapsular tonsillectomy.

## Osborne and Clark study<sup>11</sup>

A more recent study<sup>2</sup> using HES data from 2010-2016 reviewed return to theatre rates and reported rates that were significantly higher than the NPTA, but in line with our findings.

- 1.88% (5,027 out of 267,159) of tonsillectomies required a return to theatre for arrest of haemorrhage.

<sup>10</sup> The Royal College of Surgeons of England. FINAL REPORT of an audit carried out in England and Northern Ireland between July 2003 and September 2004. May 2005. Accessed at: <https://www.rcseng.ac.uk/library-and-publications/rcs-publications/docs/tonsillectomy-audit/>

<sup>11</sup> Osborne MS, Clark M. The surgical arrest of post-tonsillectomy haemorrhage: Hospital Episode Statistics 12 years on. *Ann R Coll Surg Engl.* 2018;100(5):406-408.

## Variables reviewed in our analysis

We set out to identify whether the following variables are affecting readmission rates after tonsillectomy:

- indication for tonsillectomy
- surgical technique
- day case surgery
- primary diagnosis of readmission
- length of stay of readmission.

To do this, we compared data for trusts with the lowest readmission rates with data for trusts with the highest readmission rates. We looked at adult and paediatric patients separately and identified matched volume cohorts in both groups – see Table 7.

**Table 7: Study cohort**

	Paediatric		Adult	
	Low readmission outliers	High readmission outliers	Low readmission outliers	High readmission outliers
Units	3	7	5	5
Tonsillectomies	2,390	2,341	1,254	1,240
Bleeding overall (range)	2.18% (1.5% - 3.3%)	8.71% (5.4% - 11.4%)	8.29% (7.3% - 10.9%)	19.0% (16.4% - 22.0%)
Return to theatre overall (range)	0.29% (0.2% - 0.5%)	1.54% (0.4% - 2.5%)	1.2% (0.5% - 1.7%)	4.68% (3.4% - 7.5%)
Readmission rate overall (range)	4.69% (3.7% - 6.0%)	15.8% (13.9% - 18.6%)	12.1% (9.2% - 14.8%)	28.5% (26.9% - 31.2%)

Data source: Hospital Episode Statistics, April 2015 – September 2016

## Indication for tonsillectomy

It has been hypothesised that delaying tonsillectomy can result in a more complex dissection due to increased scar tissue from recurrent infections. The hypothesis continues that this would contribute to an increase in post-operative complications and readmissions.

We analysed the data on indications for tonsillectomy to assess whether casemix causes warranted variation in readmission rates.

## Paediatric patients

**Table 8: Indication for tonsillectomy in paediatric patients by coded primary indicator**

Coded primary Indication	Low readmission outliers	High readmission outliers	National
Acute Tonsillitis	22%	53%	51%
Chronic Tonsillitis	3%	4%	6%
OSA / Adenotonsillar Hypertrophy	71%	39%	38%
Other	4%	4%	5%

Data source: Hospital Episode Statistics, April 2015 – September 2016

## Acute tonsillitis

The lowest readmission outliers perform proportionally fewer tonsillectomies for acute tonsillitis compared to national averages. However the highest readmission outliers perform the same proportion of tonsillectomies for recurrent acute tonsillitis as the overall national figures.

## Adults

**Table 9: Indication for tonsillectomy in adult patients by coded primary indicator**

Coded primary Indication	Low readmission outliers	High readmission outliers	National
Acute Tonsillitis	71%	62%	65%
Chronic Tonsillitis	10%	15%	14%
Tonsillar Hypertrophy	13%	12%	9%
Cancer	1%	1%	2%
Other	5%	10%	10%

Data source: Hospital Episode Statistics, April 2015 – September 2016

## Conclusion

Readmission rates for post-operative complications do not appear to be influenced by the primary indication for surgery. This is the same in paediatric and adult patients.

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## Surgical techniques

Tonsillectomy can be performed using several different surgical methods. During our deep dive visits, we found that methods vary between different departments and between surgeons within the same department.

The most common methods we found were:

- Cold steel dissection (using metal instruments to perform a blunt dissection with subsequent ligation of vessels with surgical ties or bipolar diathermy)
- bipolar diathermy dissection
- Coblation with intracapsular or extracapsular tonsillar dissection.

We set out to look at whether there is any correlation between tonsillectomy method and readmission rates.

## Coding system limitations

The OPCS-4 procedural coding system does not categorise tonsillectomy in a manner that enables accurate differentiation between the surgical technique used. For example, both cold steel dissection and bipolar dissection tonsillectomy could be coded as F341 Bilateral Dissection Tonsillectomy.

We were able to determine when procedures were coded as Coblation, but the codes available don't accurately reflect the other techniques in practice. This means it was not possible to establish whether differences in surgical technique could account for variation in readmission rates.

Revisions to the coding system would allow the different techniques for tonsillectomy to be captured more accurately within HES data, which would allow more useful analysis in the future.

**Table 10: Most common codes for tonsillectomy in HES data**

F341	Bilateral Dissection Tonsillectomy
F344	Bilateral Excision of Tonsillectomy
F347	Bilateral Coblation Tonsillectomy
F349	Unspecified excision of Tonsil

## Paediatric patients

### Coblation

Since the NPTA, there have been understandable concerns about using Coblation techniques. However, at the time of the NPTA, all Coblation tonsillectomies were performed via an extracapsular approach. In recent years there has been a shift to a new surgical technique of intracapsular tonsillectomy using Coblation.

We found no ongoing association between the use of Coblation and increased readmission rates. Amongst the lowest readmitting providers there was a 0.7% readmission rate for bleeding with Coblation tonsillectomy, compared to 2.9% for all other techniques performed in these units. Even amongst the high readmitting outliers the readmission rate for bleeding in patients that underwent Coblation was lower than other techniques at 7.2% compared to 9.0%. At a national level, the readmission rate for all causes for Coblation tonsillectomy was 9.6% compared to 9.4% for all other coded techniques. The national level data presented here does not differentiate between intra and extracapsular techniques for Coblation. This is considered in more detail below.

It appears that the risks associated with Coblation tonsillectomy in children are at least comparable to other techniques, if not better in some circumstances.



## Intracapsular tonsillectomy

Intracapsular tonsillectomy has emerged as a new technique since the NPTA.

In intracapsular tonsillectomy, the tonsil tissue is destroyed, but the outer capsule adjacent to the pharynx is left intact. In extracapsular Coblation tonsillectomy the whole tonsil is removed in the same manner as for other dissection techniques, exposing the underlying constrictor muscle and blood vessels.

A recent systematic review<sup>12</sup> did not demonstrate there is adequate evidence that extracapsular Coblation tonsillectomy is superior to other tonsillectomy techniques. Some case series have shown positive results in terms of low complications and good patient-reported outcomes from intracapsular tonsillectomy.<sup>13, 14</sup>

### CASE STUDY

#### Intracapsular Coblation

##### EVELINA LONDON CHILDREN'S HOSPITAL

Evelina Children's Hospital had the lowest readmission rate for tonsillectomy in our analysis, with a readmission rate (all causes) of 3.7% for 1,147 episodes.

63% of their tonsillectomies were coded as Coblation and they reported that all of these were performed by an intracapsular technique.

The Evelina's overall readmission rate for bleeding was 1.5%, with a return to theatre rate of 0.2%. The readmission rate for bleeding for the Coblation technique was 0.4%, compared to 3.3% for other techniques. This is a significant difference – particularly within the same unit, where it would be reasonable to expect all other factors to be similar.

#### Intracapsular Coblation in the treatment of infective symptoms

There have been suggestions that intracapsular Coblation is only suitable for the treatment of adenotonsillar hypertrophy because of the risks of recurrent symptoms if there is excess residual tonsillar after the procedure. However, a recent case series of 1,003 tonsillectomies performed at the

Evelina demonstrated that approximately 40% of cases were performed for recurrent tonsillitis as one of the indications. The overall revision rate at mean follow-up of 306 days was 2.3%<sup>15</sup> in a total cohort of 1,003 patients with obstructive and/or infective indications.

#### Developing expertise

The NPTA highlighted that Coblation tonsillectomy should only be performed following adequate training. To develop expertise safely, surgeons at the Evelina first use intracapsular Coblation to treat patients with adenotonsillar hypertrophy only.

Once expertise is developed, the technique is offered to appropriate patients with recurrent tonsillitis. Even then, all parents of children with recurrent tonsillitis take part in shared decision making regarding the risks and benefits of the different techniques.

#### Findings

The Evelina's figures clearly show that intracapsular Coblation offers promise for improving outcomes for paediatric tonsillectomy when it is performed in a standardised manner in high volumes with appropriate training and expertise.

Its use must be balanced against appropriate training, volumes of procedure performed, and local audit of outcomes and revision rates.

Given the risks of recurrent symptoms if there is excess residual tonsillar after the procedure, intracapsular Coblation should only be considered for infective symptoms once surgeons have developed expertise in the procedure on patients with obstructive symptoms.

<sup>12</sup> Pynnonen M, Brinkmeier JV, Thorne MC, Chong LY, Burton MJ. Coblation versus other surgical techniques for tonsillectomy. *Cochrane Database Syst Rev*. 2017 Aug 22;8: PMID: 28828761

<sup>13</sup> Hoey AW, Foden NM, Hadjisymeou Andreou S, Noonan F, Chowdhury AK, Greig SR, Sproson EL, Allin D, Amin N, Wouters KM, Jonas NE, Tweedie DJ. Coblation® intracapsular tonsillectomy (tonsillotomy) in children: A prospective study of 500 consecutive cases with long-term follow-up. *Clin Otolaryngol*. 2017 Dec;42(6):1211-1217. PMID: 28198598

<sup>14</sup> Duarte VM, Liu YF, Shapiro NL. Coblation total tonsillectomy and adenoidectomy versus Coblation partial intracapsular tonsillectomy and adenoidectomy in children. *Laryngoscope*. 2014 Aug;124(8):1959-64. PMID:24493326

<sup>15</sup> Eamon Shamil, Andrew Hoey, Maral Rouhani, Gentle Wong, Arun Takhar, Katrina Mason, Claudia Nogueira, Daniel Tweedie. Coblation® intracapsular tonsillectomy in children: a prospective study of 1000 consecutive cases, with long term follow up. *British*

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## Adults

There were very few tonsillectomies coded as Coblation in the adult data – only 1,237 (5.4%) were performed via this technique. This made it impossible to make comparisons with other techniques.

A larger proportion of paediatric tonsillectomies were performed using Coblation, which may suggest that Coblation is a more popular technique amongst surgeons treating the paediatric population.

As we did for the paediatric outlier providers, we set out to collect departmental information on the techniques used. However, we found there is variation in technique between individual clinicians, which made it impossible to accurately establish the volumes of each technique performed in a department.

## Conclusion

In paediatric patients, the surgical techniques used to perform a tonsillectomy do not appear to be associated with a significant variation in the readmission rate.

Limitations in coding should be addressed to enable a more detailed analysis of surgical techniques.

Intracapsular Coblation offers promise for improving outcomes for paediatric tonsillectomy when it is performed in a standardised manner in high volumes with appropriate training and expertise.

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## **Day case surgery**

The British Association of Day Surgeons have set a target of 80% of adult tonsillectomy surgery to be performed as a day case. We looked at whether there is any relationship between carrying out procedures as a day case and readmission rates. The first theme of this report outlines the numerous benefits of day case surgery.

## **Paediatric patients**

There may be clinical indications requiring a child to be admitted overnight but standardised processes and pathways need to be in place to ensure that the children who are appropriate for day case treatment are able to go home the same day.

## **Adult patients**

We did not observe any major differences in day case rates amongst the low and high outlier providers. For example, Leeds Teaching Hospitals has one of the lowest readmission rates and successfully achieves a day case rate of 84% compared the current national rate of 67.1%.

## **Conclusion**

We found that whether a procedure is conducted as a day case or not does not significantly influence the rate of readmissions.

There is no evidence that optimising day case surgery will have a negative effect on outcomes or readmission rates. In addition it may have a positive impact on patient experience and recovery, as well as being cost effective for providers.

---

## Primary diagnosis of readmission

We looked at the primary coded diagnosis for readmission spells to analyse whether readmissions are related to the primary operation.

### Paediatric patients

61% of paediatric readmissions were due to post-operative bleeding. The other 39% of readmissions included infection, pain or vomiting.

The readmission rate for post-operative bleeding ranged from 1.5% to 11.4%, with the rate of children returning to theatre ranging from 0.2% to 2.5%.

Overall, the return to theatre rates were proportional to the readmission rates.

During our deep dive visits, some units queried whether higher readmissions could be due to a lower threshold for admitting children, particularly by less experienced clinicians. We did not find that disproportionately lower numbers of children return to theatre at the units with higher readmission rates. Return to theatre rates were higher in units with higher overall readmission rates. This suggests that admissions for post-operative bleeding are likely to be appropriate.

### Adult

71% of the adult readmissions were due to post-operative bleeding. A further 16% were readmissions related to the tonsillectomy (such as pain or infection) and the remaining 13% were coded as 'other' so could therefore represent unrelated causes for readmission.

Even when other causes are removed from the readmission data, the national readmission rate is still above 16%, with bleeding rates ranging from 7.3% to 22%, and the rate of adults returning to theatre ranging from 0.5% to 7.5%.

### Conclusion

We did not find that disproportionately lower numbers of adults or children return to theatre at the units with higher readmission rates.

Return to theatre rates were higher in units with higher overall readmission rates. This suggests that admissions for post-operative bleeding are likely to be appropriate.

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## Length of stay of readmission

### Paediatric patients

We compared providers with different rates of readmissions. We found no differences in the length of stay of readmission, either between outlier providers (for readmission rates) or in outliers compared to overall national readmission rates. This suggests that all readmissions were warranted.

77% of readmission in paediatric patients was for one night.

### Adults

We compared providers with different rates of readmissions. We found no differences in the length of stay of readmission, either between outlier providers (for readmission rates) or in outliers compared to overall national readmission rates. This suggests that all readmissions were warranted.

68% of readmission in adult patients was for one night.

### Conclusion

Only 22% of paediatric readmissions and 15% of adult readmissions were for less than 24 hours. This suggests that the readmission rates we found are unlikely to be clinically avoidable.

The data does not suggest that providers are applying a lower threshold for admission or increased short stay monitoring compared to previous estimates of readmission.



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