Humber Acute Services Review

Case for Change

November 2019

Glossary of Abbreviations

ACU	Ambulatory Care Unit
AHP	Allied Health Professional
ANNP	Advanced Neonatal Nurse Practitioner
APNP	Advanced Paediatric Nurse Prescriber
BAME	Black, Asian and minority ethnic
BMI	Body Mass Index
CCG	Clinical Commissioning Group
CDSG	Clinical Design Sub Group
CFC	Case for Change
CHH	Castle Hill Hospital
CHPPD	Care Hours Per Patient Day
CQC	Care Quality Commission
CT	Computerised Tomography
DNA	Did not attend
DPoW	Diana, Princess of Wales Hospital
ED	Emergency Department
ENT	Ear, Nose and Throat
ER CCG	East Riding of Yorkshire CCG
FFU	First to Follow Up Ratio
FTE	Full Time Equivalent
FY	Financial Year
GDH	Goole and District Hospital
GIRFT	Getting It Right First Time
GMC	General Medical Council
GP	General Practitioner
HASR	Humber Acute Services Review
HCV	Humber Coast and Vale
HRI	Hull Royal Infirmary
HUTH	Hull University Teaching Hospitals NHS Trust
ICU	Intensive Care Unit
IT	Information Technology
LDRP	Labour, Delivery, Recovery, Postpartum
LMS	Local Maternity System
LNU	Local Neonatal Unit
LOS	Length of stay

Glossary of Abbreviations

MRI	Magnetic Resonance Imaging
MTC	Major Trauma Centre
NEL CCG	North East Lincolnshire CCG
NHS	National Health Service
NHSI	National Health Service Improvement
NICE	National Institute of Clinical Excellence
NICU	Neonatal Intensive Care Unit
NL CCG	North Lincolnshire CCG
NLaG	Northern Lincolnshire and Goole NHS Foundation Trust
OP	Outpatient
PAU	Paediatric Assessment Unit
RTT	Referral to treatment
SDEC	Same Day Emergency Care
SGH	Scunthorpe General Hospital
SHMI	Summary Hospital-Level Mortality Indicator
STP	Sustainability and Transformation Partnership
T&O	Trauma & Orthopaedics
UEC	Urgent and Emergency Care
UTC	Urgent Treatment Centre
WTE	Whole Time Equivalent
Y&H	Yorkshire and Humber
YAS	Yorkshire Ambulance Service
YLL	Years of Life Lost

Case for Change

Table of Contents

Preface

The Humber Acute Services Review

This document is a long version of the Humber Acute Services Review (HASR) Case for Change. This long form structure reflects the views of three Clinical Design Groups regarding the main challenges facing service provision at Hull University Teaching Hospitals NHS Trust (HUTH) and Northern Lincolnshire and Goole NHS Foundation Trust (NLaG).

A short version of this document is also available which summarises the main themes regarding the challenges above.

The Case for Change uses both publicly available data and that which has been supplied by each Trust. Where possible and appropriate, this data has been assessed in relation to accepted national standards, targets and norms. The analysis in this Case for Change was undertaken between September and November 2019 and used the information that was available at that time.

The Case for Change has been developed in partnership with key stakeholders. Initial analyses were explored in a series of Clinical Design Sub Group (CDSG) workshops with wide clinical and operational representation across both Trusts as well as from other stakeholders (such as Clinical Commissioning Groups (CCGs) and Ambulance Trusts). Patient engagement events have also been held to gain public views.

Iterative input from Trust senior clinical and managerial leaders has been sought and provided throughout the process of developing these documents. Earlier versions have been reviewed by a wide range of appropriate stakeholders, and comments have been addressed incorporating sometimes contradictory feedback in as fair and balanced a way as possible.

Chapter 1
Executive Summary

Executive Summary (1 of 3)

We have to change hospital services across the Humber because:

We do not have, and cannot attract, the staff we need to do everything everywhere

- There is a national shortage of specialist staff – doctors, nurses, radiographers etc. – and this is worse for some medical conditions than others. For example, there is an international shortage of cancer doctors.
- We are competing to attract staff and many of them (especially younger ones) want a lifestyle which is offered best by living in or close to larger cities. As these areas have larger patient catchments, they also offer staff the opportunity to work in more specialised services.
- Staff who do work in our hospitals are under pressure because of these shortages and we need to make our hospitals better places to work so that they don't leave.
- For some services, staff can only maintain their skills and knowledge if they see enough patients, which means drawing patients from a large enough catchment area. Given our rural and coastal geography, neither side of the River Humber alone has a big enough catchment population to give the volume of patients needed to maintain specialist services and skills.
- Our current model of trying to run similar services across multiple sites, 24 hours a day and seven days a week, stretches the staff we do have thinly, which is not fair on staff or patients.
- We don't always have access to the very latest IT and equipment, and many of our buildings are old and not nice places to work, which makes it harder to attract staff.

Executive Summary (2 of 3)

We have to change hospital services across the Humber because:

Patients are not always being seen or treated quickly enough, and more patients die than would be expected. We have reached a critical point which means that we can no longer operate services as they are.

- Along with many other parts of the country, we are not meeting any of the expected core NHS standards such as waiting times in A&E, for cancer care or for planned surgery.
- Death rates locally are higher than national figures. A widely used measure that shows how the number of deaths following hospital care compares to the expected number has values of 107 for Hull University Teaching Hospitals NHS Trust (HUTH) and 116 for Northern Lincolnshire and Goole NHS Foundation Trust (NLaG). A value of more than 100 means more patients die than expected. The higher the number the more unexpected deaths there have been.
- Much of our medical equipment is old and often breaks down, which means we cannot diagnose and evaluate medical conditions as quickly as we want which can lead to delays in treatment starting.
- We don't have modern technology in place to support care, such as electronic shared records to hold important information about patients or being able to offer video-link clinical consultations.
- Our buildings are old and sometimes they need urgent repairs. This puts more pressure on the buildings we can still use.

Source: SHMI Data, NHS Digital, April 2018 – March 2019

Executive Summary (3 of 3)

We have to change hospital services across the Humber because:

We can't go on like this – it's not fair for patients or staff. Doing nothing is not an option – things will get worse. So we have to change how we run our hospitals

- We want people living across the Humber area to get the very best care as well as modern treatment. This means seeing skilled, specialist staff who are used to dealing with the illness you have.
- To do this we need a clear plan for the future of our hospitals as well as other services that can help keep people well so they don't need hospital services.
- This plan will set out how we will provide modern healthcare for everyone in the Humber region and improve care across the communities we serve.
- The Humber Acute Services Review is how we are going to develop this plan.

The Humber Acute Services Review is about coming up with a clear plan for the future of our hospitals that will describe how we will provide modern health care for the population of the Humber region.

Chapter 2
The Humber Acute Services Review

1. Rationale for, and objectives of and approach to the Review
2. Work to date on the Review
3. Current phase of the Review: scope
4. Purpose of this Case for Change document

The Humber Acute Services Review

Rationale for the Review

The National Health Service (NHS) is constantly evolving to cope with challenges in delivering healthcare. In March 2018, **four themed challenges** were identified in relation to healthcare in the Humber region, which needed to be urgently addressed.

1. Quality of care

- All patients should get the best possible care, but the quality and safety of all our health services varies enormously and depends on where and when you are treated
- Treatment within the hospital is not always the best place for patients' care
- Where conditions have better outcomes when care is provided at specialist centres, clinicians need to see enough patients to maintain their skills, so low volume services in the area are at risk.

2. Healthcare is changing

- The needs of our population are changing and healthcare is evolving too, so we need to consider delivering services differently
- More conditions can be treated in the community than ever before and we need to support people to stay well
- Up to 25% of patients currently attending hospital could have been cared for out of hospital, closer to home
- One of the focusses of the NHS Long Term Plan is that of incorporation and use of digital and technology across the health system, such as electronic patient records.

Source: https://humbercoastandvale.org.uk/humberacutereview/ | https://humbercoastandvale.org.uk/wp-content/uploads/2018/03/Issues-document_final_webversion1.pdf

The Humber Acute Services Review

Rationale for the Review

3. Workforce

- Despite concerted efforts, we struggle to recruit and retain the expert clinical staff required for a range of specialties
- As of March 2018, we had a deficit of 350 nurses, and 1 in 5 doctors posts were vacant
- Without the specialist doctors, nurses and therapists we need, we cannot run the safe, high quality services that our local population needs; smaller teams mean fewer people are available to cover rotas and provide 24/7 care.

4. Finance

- The costs of providing care is rising faster than available funding; in 2017/18 we spent £60 million more than we received
- Without changes, the financial position of the local NHS will continue to deteriorate and it will become increasingly difficult for us to continue to provide the services our population needs in years to come
- Around 3% of our population is aged over 85; by 2036 this will reach 6% further increasing the need for NHS services.

Source: https://humbercoastandvale.org.uk/humberacutereview/ | https://humbercoastandvale.org.uk/wp-content/uploads/2018/03/Issues-document_final_webversion1.pdf

The Humber Acute Services Review

Approach to the Review

The HASR has been set up to address the challenges in healthcare in the Humber area. It will investigate possible scenarios for the provision of acute services for the population of the Humber area that are person-focussed, safe and sustainable. It will consider how to make best use of new models of care and new technology. It has had ongoing engagement and work for several years, and operates within **nine principles** which were developed in 2017.

1. A commitment to provide acute hospital services that are **patient-focussed, safe and sustainable, meeting the needs of our population both now and in the future**
2. The service review will be **clinically-led**
3. The review will be **evidence-based** and take into account best practice
4. The review will **focus on hospital services** rather than hospital buildings and organisations
5. The review will be **cognisant of local developments** in out-of-hospital care and work towards solutions that support **joined-up care** across the system
6. A transparent, collaborative and inclusive approach will be adopted at all stages of the review process, ensuring **engagement with key stakeholders** from the outset
7. Plans for the future provision of acute hospital services will be developed in accordance with the levels of **human, physical and financial resource** expected to be available
8. Plans for the future provision will include **Urgent and Emergency Care (UEC) and Maternity Care** at Hull Royal Infirmary (HRI), Diana, Princess of Wales (DPoW) in Grimsby and Scunthorpe General Hospitals (SGH)
9. The review will be undertaken in accordance with an agreed programme plan that sets out objectives, processes, timescales and resources.

Source: https://humbercoastandvale.org.uk/wp-content/uploads/2018/02/Humber-Acute-Services-Review-Project-Plan-FINAL.pdf

The Humber Acute Services Review

Objectives of the Review

In response to the challenges and changes to healthcare, the HASR was initiated with the following **objectives**:

- Meeting the needs of the population, providing the best possible care within the resources available
- Achieve improved levels of service quality and strengthen both operational and financial sustainability
- Determine the long term future of acute hospital provision across the Humber
- Encourage the formation of groups or networks of healthcare provision to overcome these challenges together
- Forge greater links to integrate services with primary care and the communities
- Ensure plans are fit for future by developing them in the knowledge of current and future digital technologies available
- Align with national ambitions to modernise outpatients (OP) and same-day emergency care (SDEC).

The Humber Acute Services Review

Work to date on the Review

The HASR has already been underway for several years

- The previous work of the HASR is still ongoing. This began by considering a number of individual secondary care specialties at NLaG and HUTH. The specialties initially considered included Cardiology, Complex Rehabilitation, Critical Care Services, Neurology, Oncology and Stroke. Patient and clinician engagement occurred at this stage, as well as data analyses.
- In 2017 temporary changes were made to some clinical services to ensure sustainability. This involved consolidating:
    - inpatient Ear, Nose and Throat (ENT) at DPoW
    - emergency inpatient Urology at SGH.
- Some of this work is still ongoing, and more information on previous work can be found here:
    - https://humbercoastandvale.org.uk/humberacutereview
- The Humber Acute Services Review currently aims to build on the foundation of work which has already been achieved, while aligning with other ongoing projects in the area. It intends to bring together key clinical areas, looking for the best solutions for the population in the Humber region as a whole.

Source: https://humbercoastandvale.org.uk/humberacutereview

The Humber Acute Services Review

Current phase of the Review: scope

This current phase of HASR aims to build on the foundation of work which has already been achieved

The focus of the current work, and this Case for Change (CFC), is on the key building blocks of acute hospital care.

The three service areas that have been agreed by the Executive Oversight Group for inclusion. These are:

1. Urgent and Emergency Care
2. Maternity and Paediatrics
3. Planned Care as related to ENT, Gastroenterology, General Surgery (includes Upper Gastrointestinal, Lower Gastrointestinal and Colorectal), Ophthalmology, Orthopaedics, Urology and those service areas which support them such as Diagnostics.

The remit of the work includes:

- The catchment area of four Clinical Commissioning Groups (CCGs) and the two acute Trusts involved in the review
- Patient care outside the NHS for this area and care provided locally to patients from further afield
- Secondary care and high-level primary care and community care elements where relevant. Tertiary services provided on a Humber footprint are not covered (though the impact of this work on tertiary services will be considered).

The Humber Acute Services Review

Current phase of the Review: scope

At the beginning of the review, the following was agreed regarding the scope:

Service elements out of scope of this phase of the Review:

- Low volume services delivered across the Humber, Coast and Vale (HCV) area with York and Scarborough are not in the scope of this review. These include Cardiac Surgery, Clinical Haematology, Clinical Oncology, Complex Rehabilitation, Gynae-Oncology, Neurosurgery, Plastic Surgery, Renal Dialysis and Thoracic Surgery
- Reviews of Cardiology, Complex Rehabilitation, Critical Care, Neurology, Oncology and Stroke have already been considered in previous work
- Tertiary services at HUTH are excluded e.g. Cancer, Cardiac and Major Trauma
- There are no plans to review the service flow from NLaG to Sheffield. However, the impact of possible changes to secondary care services on tertiary flows will be included (i.e. Paediatrics)
- New projects arising from the review, such as a capital funding bids, new builds, education and training programmes, workforce consultation are also outside of the current scope of the review
- The review of Paediatric Services will exclude Level 3 Neonatology. However, the impact of possible changes to secondary care services on tertiary flows will be included
- Planned Care will be restricted to high volume specialties: ENT, Gastroenterology, General Surgery, Ophthalmology, Orthopaedics, Urology.

Geographical scope limitations:

- Earlier work has indicated there are a number of services that are likely to be provided on both sides of the Humber. Typically, these will be higher volume services with sufficient critical mass for accreditation and training
- Other services would more clearly benefit from routine clinical collaboration across the Humber area, e.g. Urology and ENT.

The Humber Acute Services Review

Purpose of this Case for Change document

The objectives of this Case for Change (CFC) document are to:

1. serve as a basis for service change at both Trusts for the service areas under consideration; and
2. describe reasons why the status quo service configuration is not sustainable in the long term and why change is necessary.

The CFC will articulate the reasons for needing to change by describing service performance across a number of domains that have been developed and are supported by patients and the public. These are decision making criteria developed by the original HASR steering group. The CFC will consider not just the current but also future challenges as well as respond to wider system and national plans and work.

This CFC report will articulate the system-, organisational- and service-specific challenges found during the HASR for the three service areas under assessment:

- Urgent and Emergency Care
- Maternity and Paediatrics
- Planned Care (covering ENT, Gastroenterology, General Surgery, Ophthalmology, Orthopaedics and Urology, as well as those service areas which support their activity such as Diagnostics).

Further work is then planned to develop cross-service options that could help address the key local challenges.

Chapter 3
Strategic Context

1. National policy direction and planning context
2. Regional planning context: delivering place plans
3. Organisational planning context: Trust strategies
4. Organisational snapshots: HUTH and NLaG

Strategic context

National policy direction and planning context

The NHS Long Term Plan, published in January 2019, supersedes the NHS Five Year Forward View of 2014, building upon its successes and setting the ambitions of the NHS over the next 10 years. There are some bold commitments with a focus on patients taking greater ownership of their care, with improved disease prevention and support, digital technology use and workforce wellbeing.

Since its publication, local health authorities and individual Trusts have revised their strategies to align more closely with the overarching national ambitions for the health service. In the following section, we set out how various strategies align with the HASR, particularly focussing on UEC (acute assessment, inpatient and Critical Care), Maternity and Paediatrics, and Planned Care.

To achieve this, we will review:

- The NHS Long Term Plan
- Humber, Coast and Vale Place Based Plans
- Nuffield Trust: Rethinking Acute Medical Care in Smaller Hospitals
- Local Maternity System Review
- Hull University Teaching Hospitals NHS Trust Strategy 2019-2024
- Northern Lincolnshire and Goole NHS Foundation Trust Strategy 2019-2024.

Strategic context

National policy direction and planning context

The NHS Long Term Plan

Overview

There are a number of important documents by national bodies that articulate the direction of travel for healthcare for the country, the most recent and important being that of the NHS Long Term Plan ('the Plan'). The Plan outlines the strategy for the Health Service over the coming decade by keeping "all that's good about [the] health service" and tackling "head-on the pressures." Split into seven chapters, the Plan highlights many areas of relevance to the HASR.

GENERAL THEMES

Faster support to people in their own homes and improved NHS support for people in care homes.

Funding of new evidence-based NHS **prevention programmes**, including smoking cessation; obesity reduction; reducing alcohol related ED admissions and to lower air pollution.

Every local area across England will be required to set out specific measurable goals and mechanisms by which they will contribute to **narrowing health inequalities.**

Expanding the number of medical, nursing, midwifery, allied health professional (AHP) and other staff by **increasing training and international recruitment.**

Making the NHS a more **attractive place to work** with mandatory flexible rostering and increased professional development funding.

Widespread upgrades in **technology** to allow clinicians to access patient records and care plans wherever they are, and to allow patients and their carers to better manage their health and condition.

Reforms to diagnostic services including investment in new digital diagnostic imaging services and creation of pathology and diagnostic imaging networks.

Source: NHS Long Term Plan, January 2019

Strategic context

National policy direction and planning context

MATERNITY

Halving maternity-related deaths by 2025 and the roll out of **Saving Babies Lives Care Bundle** across every maternity unit in 2019.

To continue the work of **Local Maternity Systems (LMS)** and the **National Maternal and Neonatal Health Safety Collaborative.**

Expanding perinatal mental health services, digital options, maternity outreach clinics, postnatal physiotherapy and accreditation to an evidence-based infant feeding programme.

Redesign of Neonatal Critical Care Services and developing an **expert neonatal nursing** workforce.

Continuation of the **Maternity Incentive Scheme.**

Enhanced and targeted **continuity of carer model** for the most vulnerable mothers and babies, particularly from the black, Asian and minority ethnic (BAME) communities.

Specialist smoking cessation support for all women who smoke during pregnancy.

PAEDIATRICS

Expansion of mental health services for children and young people, growing funding faster than overall NHS funding.

Action to tackle the **causes of morbidity and preventable deaths in people with learning disabilities** and for autistic people, with reduced waiting times for specialist services.

Offer all children with cancer whole **genome sequencing** and actively supporting clinical trials.

Prioritise improvements in **childhood immunisation**.

Improve primary or community care treatment options to **reduce attendance at ED**.

Clinical network roll out for children with long term conditions, including Critical Care and surgical networks.

Sources: NHS Long Term Plan, January 2019; The Summary of the NHS Long Term Plan (HFMA Briefing January 2019)

Strategic context

National policy direction and planning context

URGENT AND EMERGENCY CARE

Fully implement the **Urgent Treatment Centre (UTC) model** by autumn 2020, with the option for appointments booked through NHS 111.

All hospitals with a major ED will: provide **SDEC at least 12 hours a day**; provide an **acute frailty service** for at least 70 hours a week; aim to record 100% of patient activity in ED, UTCs and SDEC units via Emergency Care Data Set by 2020; test and begin implementing **new care standards arising from the Clinical Standards review** by October 2019 and further reduce delayed transfer of care in partnership with local authorities.

By 2023, **Clinical Assessment Service** will typically act as a single point of access for patients, carers and health professionals.

Develop new ways to treat those with the most serious illness and injury to receive the best care in the shortest time.

Improved responsiveness of **community health crisis response** to deliver services within two hours of referral in line with National Institute of Clinical Excellence (NICE) guidelines.

PLANNED CARE

Grow the amount of planned surgery year-on-year to cut long waits and reduce the waiting list.

New **diagnostic and treatment practices**.

Wider choice for patients on where and when to have an appointment or operation.

Continued backing of hospitals that support a **'hot'** and **'cold' site split**.

Avoid up to a third of face-to-face outpatient visits over the next five years.

Increase use of **technology** in outpatients for appointments and referrals.

Source: NHS Long Term Plan, January 2019

Strategic context

Regional planning context: delivering the NHS Long Term Plan across Humber, Coast and Vale

Humber, Coast and Vale Health and Care Partnership

The Humber, Coast and Vale Health and Care Partnership is a collaboration of health and care organisations who believe we are stronger when working together. The Partnership is striving to improve the health and wellbeing of the population it serves, as well as the quality and effectiveness of services.

The Partnership priorities are:

1. Helping people to look after themselves and stay well
2. Providing services that are joined up across all aspects of health and care
3. Improving the care provided in key areas
4. Making the most of all our resources.

By collaboratively working across the region, the ambitions for clinical areas align with those of the NHS Long Term Plan and include:

- **Urgent Care**: access to urgent advice and treatment 24/7 via NHS 111 or online, reducing the number of patients in hospital who don't need to be there, improving support to frail older people.
- **Maternity**: ensuring women can make informed choices; reducing the number of still births; increasing continuity of care.
- **Planned Care**: transforming hospital outpatients; continuing with the National Diabetes Prevention Programme; improving waiting times for planned surgery.

Strategic context

Regional planning context: delivering the NHS Long Term Plan across Humber, Coast and Vale

Humber, Coast and Vale Health and Care Partnership

Specific goals have been highlighted by the Partnership regarding **Planned Care**, which includes the following:

1. Prevention
   - Supporting citizens to make healthy choices with a primary focus on prevention of diabetes, cardiovascular and respiratory diseases.
2. Empowering patients and communities
   - Supporting and enabling patients to manage their health conditions better, with ownership of and access to their health records. Increased use of patient initiated follow ups, shared decision making and group consultations.
3. Digital
   - Increasing the use of technology and apps to improve appointment access, communication and the use of virtual clinics.
4. Workforce
   - Tackling workforce shortages; supporting the existing workforce by making our region and our organisations great places to work; introducing new roles to the workforce.
5. Integrated care
   - Removing the boundaries between primary and secondary care, supporting General Practitioners (GP) to access specialist advice and guidance from hospital specialists; guided referral pathways will assist in getting patients to the right care first.
6. Reducing inequalities in access
   - Addressing underlying inequalities and reasons for these.

Strategic context

Regional planning context: Humber, Coast and Vale Local Maternity System

Local Maternity System (LMS)

The Humber, Coast and Vale Local Maternity System (HCV LMS) is coterminous with the Humber, Coast and Vale Health and Care Partnership. The LMS is working to ensure that **maternity care is safer, more personalised, kinder, professional and more family friendly**. Our ambition is that every woman has access to information to enable her to make decisions about her care and that she and her baby can access support that is centred around their individual needs and circumstances.

The LMS will need to implement the vision of Better Births by 2020/21, and any work by HASR must take into account and work of the LMS. Following a self-assessment review, **four priority work steams** have been identified, including:

1. Improving choice, personalisation and continuity of carer
2. Putting the individual, quality and safety at the core of service delivery
3. Delivering improvements in Perinatal Mental Health
4. Multi professional working and governance.

Other major pieces of work being undertaken in addition to these work streams include:

- Ensuring women and families have realistic expectations of maternity care and feel involved in the care they receive
- Setting aside organisational boundaries and developing a single culture of mutual co-operation
- Understanding the workforce to meet the ambitions for named midwives and integrated care pathways
- Active participation in wider prevention and health promotion initiatives
- The work above will link to wider work of the Partnership in relation to communication, involvement and engagement; information technology and digital transformation and workforce.

Source: Humber Coast and Vale Local Maternity System – System plan 2017-2020. https://www.northeastlincolnshireccg.nhs.uk/data/uploads/boardpapers/09-november-2017/item-12a-hcv-lms-delivery-plan.pptx

Strategic context

Organisational planning context: Trust strategies

Hull University Teaching Hospitals NHS Trust: Trust Strategy 2019-2024 (1/3)

In addition to the national and regional policies, individual Trusts publish their own strategies for the communities they serve and staff they employ. Intertwined in these are themes from the NHS Long Term Plan and regional strategies.

HUTH Strategy 2019-24 sets out the organisation's vision and long term goals across three broad categories: great staff, great care and great future. A summary of strategies relevant to HASR is given below.

Great staff

The Trust aims to improve staff satisfaction and engagement by tailored leadership development for all staff, using coaching and mentoring to support BAME staff in leadership roles, improved internal communication and delivery of schemes to encourage front line innovation and improvement.

The Trust aims to increase vacancy fill and retention rates whilst improving the wellbeing of all staff by an enhanced recruitment approach, increasing local training opportunities, developing and deploying new roles such as physician assistants and increasing the development of clinical academic careers.

Source: Hull University Teaching Hospitals NHS Trust – Trust Strategy 2019-2024

Strategic context

Organisational planning context: Trust strategies

Hull University Teaching Hospitals NHS Trust: Trust Strategy 2019-2024 (2/3)

Great care

The Trust aims to obtain 'outstanding' as an overall rating from the CQC within three years. To help achieve great care, the Trust strategies include:

- Completion of the clinical administration and outpatients improvement programme
- Implementation of an electronic patient record
- Expansion of robotic and minimally invasive surgery programmes
- Procurement and staffing of additional Computerised Tomography (CT) and Magnetic Resonance Imaging (MRI) scanners
- An increase in endoscopy capacity and to work with surgical teams to increase day case rates.

For urgent and emergency care:

- Increase streaming of patients presenting with minor ailments and injuries into the co-located primary care service
- Closer working between medical and surgical teams for patients presenting acutely
- Expand orthopaedic trauma capacity
- Improve services for frail people with development of community based services integrated with specialist hospital support.

Source: Hull University Teaching Hospitals NHS Trust – Trust Strategy 2019-2024

Strategic context

Organisational planning context: Trust strategies

Hull University Teaching Hospitals NHS Trust: Trust Strategy 2019-2024 (3/3)

Great care

For specialist services, including paediatrics:

- Work with partners, through a new operational delivery network for specialist paediatrics, to agree and implement a sustainable clinical service model for specialist paediatric medicine and surgery.

For elective (planned) services:

- Develop a business care for renewal of day case and outpatient services
- Invest in technology to share and report images across HCV providers
- Creation of clinical networks and new models of care for smaller secondary care elective services
- Implementation of the ‘Better Births’ ambitions.

Source: Hull University Teaching Hospitals NHS Trust – Trust Strategy 2019-2024

Strategic context

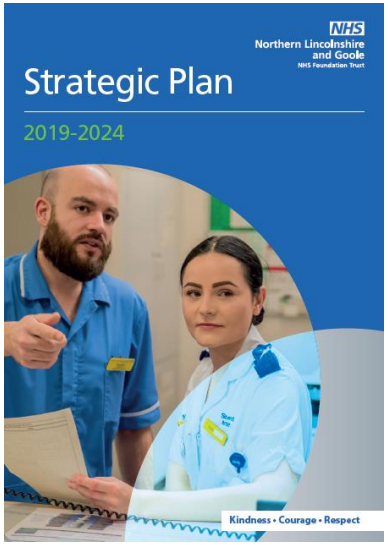
Organisational planning context: Trust strategies

Northern Lincolnshire and Goole NHS Foundation Trust: Trust Strategy 2019-2024 (1/3)

NLaG was placed in **quality and financial special measures in April 2017** following an early warning notice issued in January 2017 by the Care Quality Commission (CQC). The notice was issued as a result of the quality of healthcare requiring significant improvement. A system improvement board was established and led by NHS Improvement which supported the Trust to work effectively with partners. Following a series of improvements, a further CQC inspection was performed in May 2018 and the Trust's **overall position improved to "requires improvement"**.

NLaG's Strategy 2019-24 sets out the challenges the Trust is continuing to face and **recognises its need for collaborative learning and working with other healthcare organisations** to improve from its current position. The refreshed strategy has taken into account the national, regional and Trust environments and aims to achieve the following objectives:

- To give great care
- To be a good employer
- To live within our means
- To work collaboratively
- To provide strong leadership.



Sources: Northern Lincolnshire and Google NHS Foundation Trust – Strategic Plan 2019-2024; CQC Inspection Report published 12 September 2018

Strategic context

Organisational planning context: Trust strategies

Northern Lincolnshire and Goole NHS Foundation Trust: Trust Strategy 2019-2024 (2/3)

The strategy sets out the key priority areas which are to be achieved by 2024. These centre principally around UEC and Planned Care.

Integrated UEC

- Create an UEC service to reduce ED attendances. This will include the implementation of community-based assessment of frail patients, integration of UTCs, multidisciplinary assessment models combining surgical and medical assessment, ambulatory care and short stay services, and the reconfiguration of existing infrastructure.

Transformed outpatient services

- To achieve the NHS Long Term Plan ambitions, the Trust will implement advice and guidance across all specialties, achieve virtual clinics, develop and implement shared care plans and develop digital systems.

Reconfiguration of services

- As part of the HASR, Maternity and Paediatrics will be reviewed to ensure the required standards are met, and strategies for Cardiology, Medicine and Surgery will be developed and implemented.

Primary Care Networks

- The Trust will work more closely with Primary Care through the development of Primary Care Networks to coordinate health and social care to local populations and share skills and knowledge.

Restructured cancer services

- Due to a lack of skilled staff, the Trust will look to work with other Trusts to develop new models of care to achieve faster diagnosis and imaging for patients with cancer.

Sources: Northern Lincolnshire and Google NHS Foundation Trust – Strategic Plan 2019-2024; CQC Inspection Report published 12 September 2018

Strategic context

Organisational planning context: Trust strategies

Northern Lincolnshire and Goole NHS Foundation Trust: Trust Strategy 2019-2024 (3/3)

Creating a sustainable hospital at Goole

- Increase elective/day case planned surgery provision to its full potential and develop opportunities to create a base for centre of excellence.

Sources: Northern Lincolnshire and Google NHS Foundation Trust – Strategic Plan 2019-2024; CQC Inspection Report published 12 September 2018

Organisational snapshots

Hull University Teaching Hospitals NHS Trust

Hull University Teaching Hospitals Trust operates across two sites: Hull Royal Infirmary and Castle Hill Hospital, separated by a few miles.

- It serves ~600,000 people living in Hull and the East Riding of Yorkshire, with specialist and tertiary services provided to 1.2m from Scarborough in North Yorkshire to Grimsby and Scunthorpe in North East and North Lincolnshire respectively
- Services include a full range of urgent and elective services, the Queen's Centre for Oncology/Haematology, a cardiac centre, major trauma centre and other specialist services including Neurosurgery
- As a university teaching hospital, it is partnered with Hull York Medical School and the clinical research institutions of Hull University
- CQC overall rating – requires improvement
- Annual income of £629.2m (FY18/19) which included specialised service income of £167m. In 18/19 there was a surplus of £23.8m which was supported by incentive PSF funding of £16.5m and £10.7m of core PSF. There is an underlying deficit in FY 19/20 of c.£9m
- Outpatient attendances: 2017/18 (including first, follow-ups and other): 732, 237
- Beds: ~1208 beds (average for 2018/19)
- Workforce: 7967 WTE – 1152 medical, 2997 nursing, 3818 other. Absence rate 3.9% (as at March 2019). Percentage of staff recommending care 70.1% (2018 staff survey)
- Standards: ED four hour wait 81.9%; 18-week wait 76.8%; 62-day cancer target 69.1% (2018/19)
- Elective admissions: 91,619 (2018/19)
- Emergency admissions: 53,923 (2018/19)

Northern Lincolnshire & Goole Hospitals NHS Foundation Trust

NLaG operates across three sites across larger distances: Scunthorpe General Hospital, Diana Princess of Wales Hospital and Goole & District Hospital.

- It serves ~450,000 people living across Northern Lincolnshire and the East Riding of York, providing typical services for a District General Hospital along with community services
- SGH and DPoW provide a full range of District General Hospital urgent and emergency services with GDH predominantly focussing on outpatient, diagnostic and planned surgery, and rehabilitation
- The Trust is affiliated with Hull York Medical School and provides clinical training placements
- CQC overall rating – requires improvement. NLaG was placed in (and remains in) quality and financial special measures since April 2017
- Annual income of £354.7m (FY18/19) and a year deficit of £58.1m as of 2018/19 (£26.82m adrift of plan) with an underlying financial deficit of £47.3m. Specialised service income £19.7m (FY 18/19)
- Outpatient attendances: 122,540 first and 249,168 follow up appointments (2018/19) (including first, follow-ups and other): 401,477
- Beds: ~864 beds (average for 2018/19)
- Workforce: 5983 WTE – 634 medical, 1585 nursing (registered), 3764 other. Absence rate 4.7%. Percentage of staff recommending care 67% (2018 staff survey)
- Standards: ED four hour wait 85%; 18-week wait 74%; 62-day cancer target 74.1% (2018/19)
- Elective admissions: 60,468 (2018/19)
- Emergency admissions: 42,173 (2018/19)

Source: Trust data

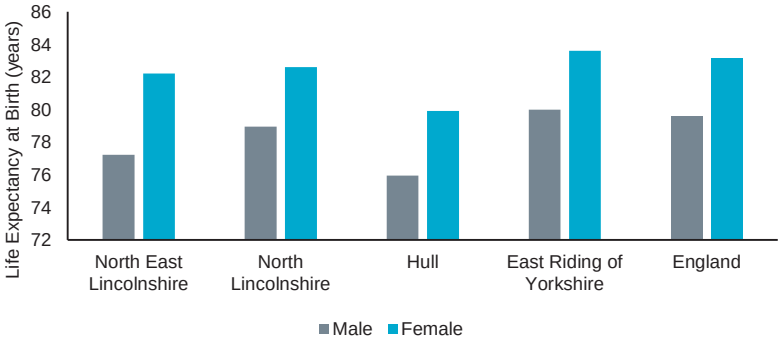
Chapter 4
Population Health, Demographic Trends and Travel Time

Population Health and Demography

The Humber region has an older population than the national average with greater deprivation and lower life expectancy

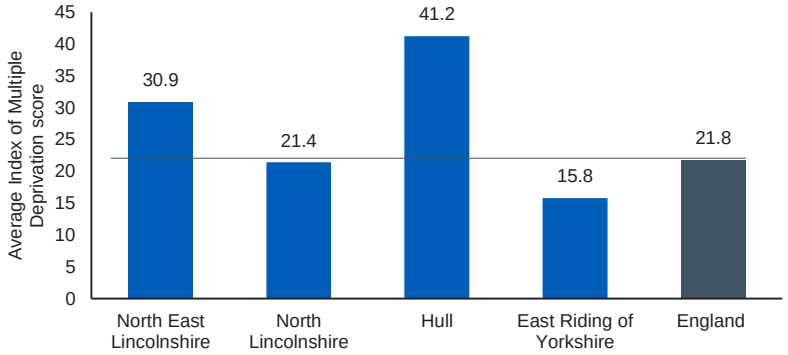
The Humber population is older and more deprived than the national average. Life expectancy in the Humber population is lower than the national average and there are higher levels of risk factors associated with poor health such as obesity and low activity levels. Rates of long term illness, such as diabetes, are higher than national.

Age - The average age of the Humber population is 42, which is higher than the national average of 39.8. The average life expectancy in the Humber population is lower than the national.



Source: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/healthstatelifeexpectanciesuk/2015to2017

Deprivation - Individuals from Hull and North East Lincolnshire are more deprived than the national average.



Source: Department of Communities and Local Government (DCLG)

Ethnicity - Individuals of white ethnicity make up a greater proportion of the Humber population compared to the national average.

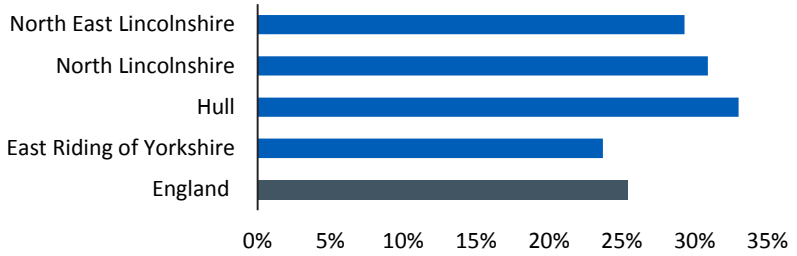
Unitary Authority	White	Mixed/Multiple	Asian	Black / African / Caribbean	Other
North East Lincolnshire	97.4%	0.7%	1.3%	0.3%	0.3%
North Lincolnshire	96.0%	0.7%	2.7%	0.3%	0.2%
Hull	94.1%	1.3%	2.5%	1.2%	0.8%
East Riding of Yorkshire	98.1%	0.7%	0.9%	0.2%	0.2%
England	85.4%	2.3%	7.8%	3.5%	1.0%

Source: 2011 Census: Key Statistics for local authorities in England and Wales. Table number KS201EW.

Population Health and Demography

The Humber population tends to have a greater level of smoking and diabetes than the national average

% of population that smoke

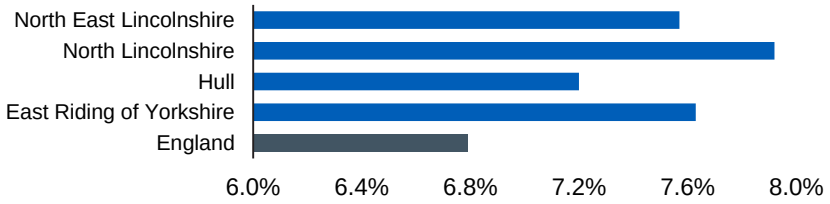


Source: https://fingertips.phe.org.uk/profile/health-profiles/data#page/3/gid/1938132694/pat/6/par/E12000003/ati/101/are/E06000010/iid/92443/age/168/sex/4

Smoking prevalence is higher than the national average in all areas except East Riding of Yorkshire, and this is true of mothers at the time of birth too. **These poor population health factors combine to mean local health and care services have to respond to higher levels of demand than elsewhere, especially for emergency services**.

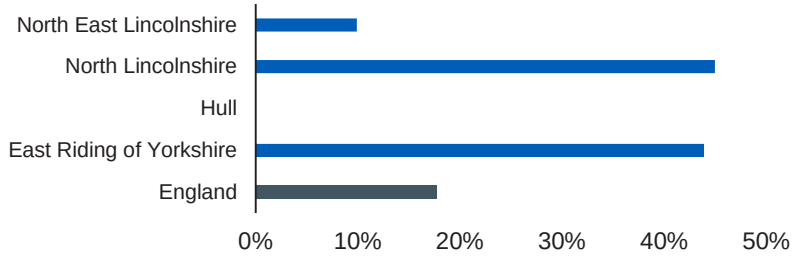
Levels of chronic disease are already higher than average, and as with many other parts of the country, **the older age population is predicted to grow at a faster rate than younger age groups**, meaning demands for health and care services are likely to increase in future.

% of adults who have diabetes



Source: Quality and Outcomes Framework (QOF), NHS Digital

% of population living in rural areas



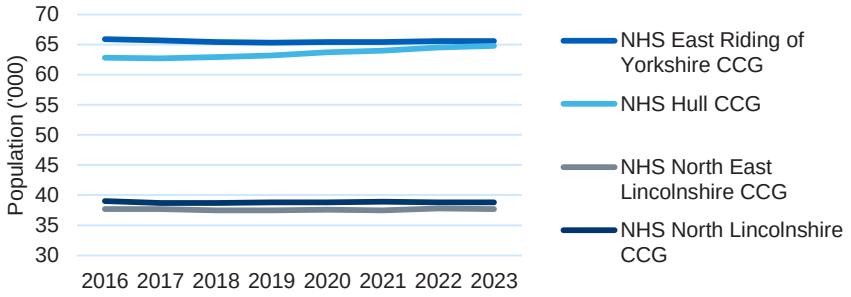
Source: DEFRA. Statistical data set. Rural statistics local level data sets. 21 July 2016

Both Trusts serve both rural and urban populations. In line with the **large rural areas of population served**, ambulance journey times between the five hospital sites are (on average) approximately 40 minutes (based on ambulance service data) – see p.44.

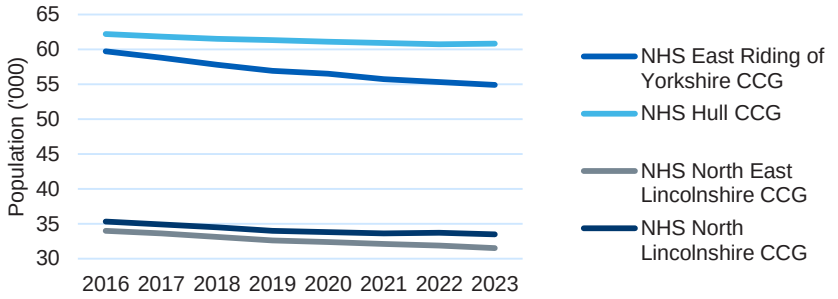
Humber Population Projections

The Office for National Statistics projects a decline in the population of people under 60 and growth in the population over 60

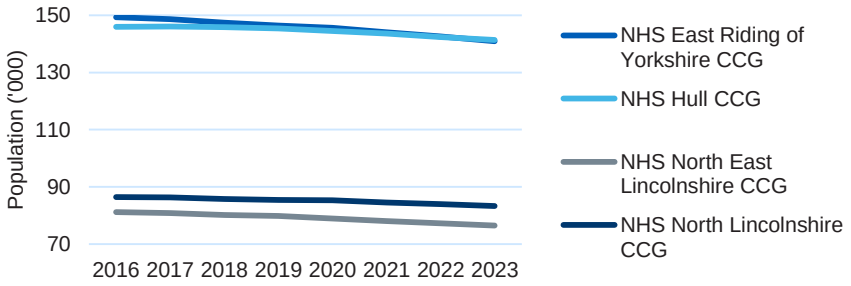
Population projection for children - The population of children (ages 0-19) is expected to decrease gradually by 2023 across the four CCGs.



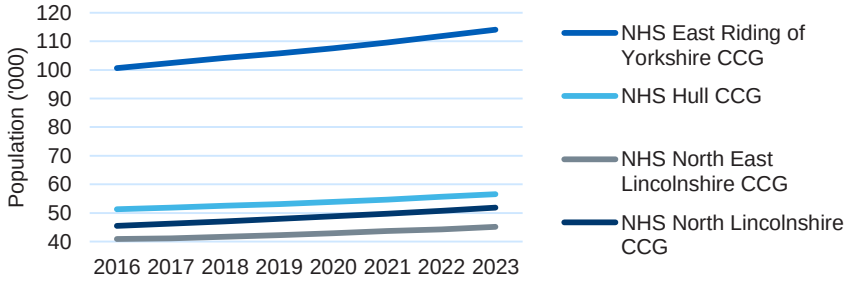
Population projection for women of childbearing age - The population of women of childbearing age (ages 15-49) is expected to decline by, on average, 0.8% year on year across the four CCGs.



Population projection for persons aged 20-59 - The population of persons aged 20-59 is expected to decline by, on average, 0.7% year on year across the four CCGs.



Population projection for persons over 60 - The population of persons aged over 60% is expected to grow by, on average, 1.6% year on year across the four CCGs.

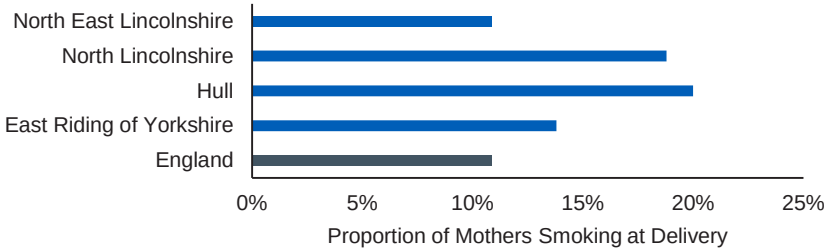


Sources: Office for National Statistics - population projections for local authorities: table 2 (09 April 2019)

Population Health – Early Life

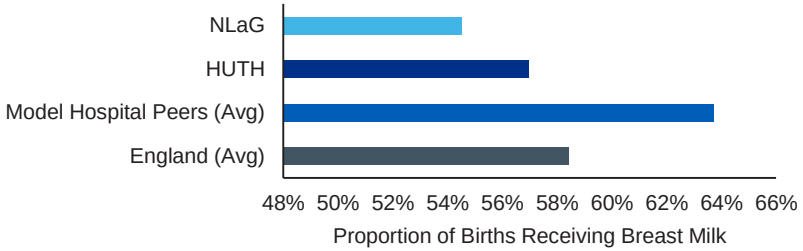
Measures indicate that babies born in the Humber area are less healthy

Smoking status of mother at time of birth - A greater proportion of mothers smoke at the time of delivery in the Humber area, which increases the risk of complications.



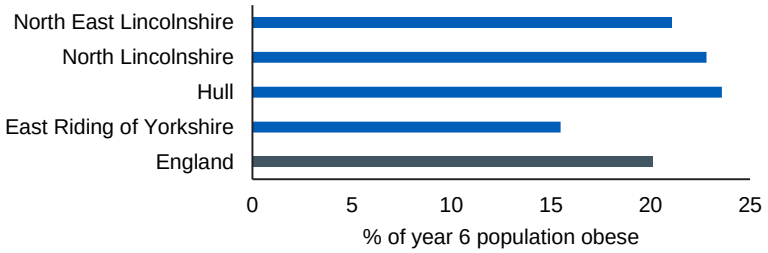
Source: NHS Digital - Statistics on Women's Smoking Status at Time of Delivery. 1 April 2017 to 31 March 2018

Receiving breast milk as first feed - A lower proportion of babies are receiving early initiation of breastfeeding in the Humber area.



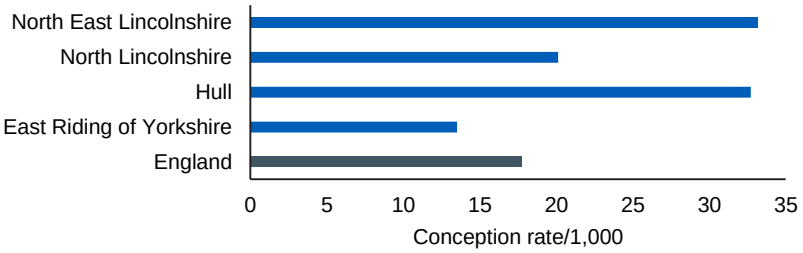
Source: NHS Maternity Statistics, 2017-18: Maternity Services Data Set (MSDS) Interactive Provider Analysis
Publication Date: 25 October 2018

Childhood obesity - The proportion of children aged 10-11 that are classed as obese is greater in all Humber areas, except for East Riding.



Source: NHS Digital - National Child Measurement Programme

Under 18 conception rate - The conception rate in under 18's is greater in the Humber areas, except for East Riding.

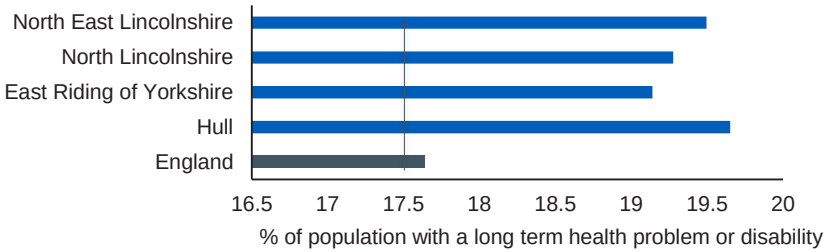


Source: NHS Digital - National Child Measurement Programme

Population Health – Indicators of Disease

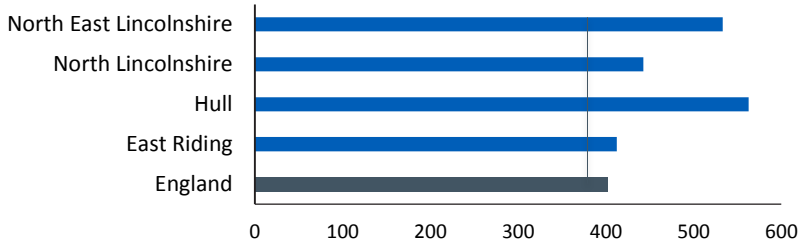
The prevalence of disease is higher in the Humber area compared to the national average

People with long-term illness/disability - A greater proportion of the Humber population have a long term health problem compared to the national average.



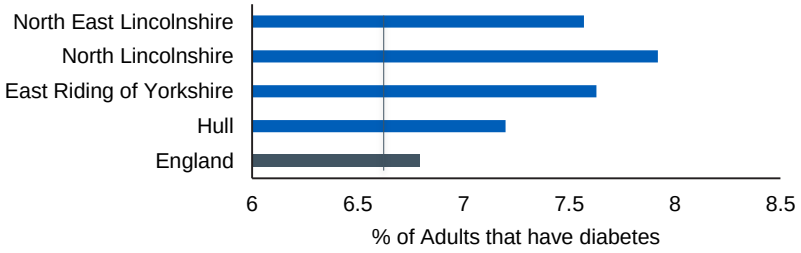
Source: Census 2011

Years of life lost (YLL) - All four Humber areas have a greater number of years of life lost compared to the national average. North East Lincolnshire and Hull are the worst affected.



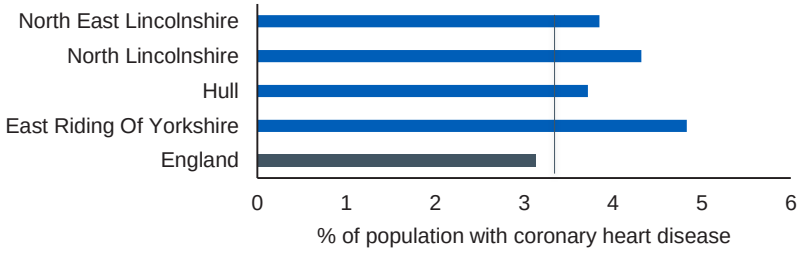
Source: NHS Digital - Compendium of population health indicators, Years of life lost due to mortality from all causes (ICD-10 A00 - Y99). March 2019

Diabetes prevalence - The prevalence of diabetes in the Humber area is greater than the national average by 0.4 – 1.1 percentage points.



Source: NHS Digital - Quality and Outcomes Framework (QOF)

Heart disease prevalence – The prevalence of coronary heart disease in the Humber area is greater than the national average by 0.6 – 1.7 percentage points.

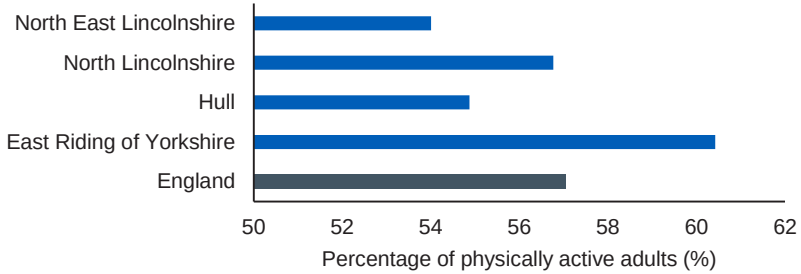


Source: NHS Digital - National Child Measurement Programme

Population Health – Indicators of Healthy Lifestyles

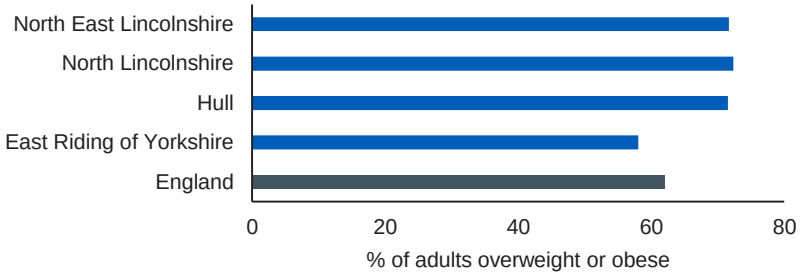
The Humber population, excluding East Riding, have a less healthy lifestyle than the national average

Physically active adults – Except for East Riding, adults in the Humber area are less active than nationally.



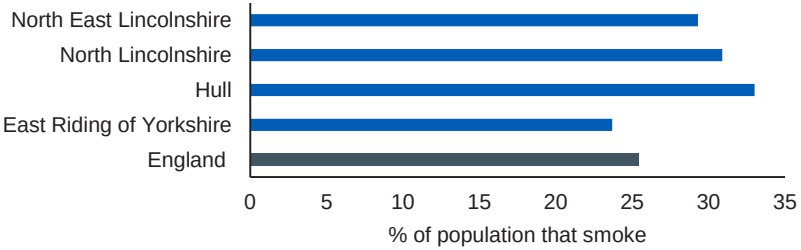
Source: Active People Survey, Sport England

Obesity rate – Except for East Riding, the overweight/obesity rate in Humber is higher than nationally.



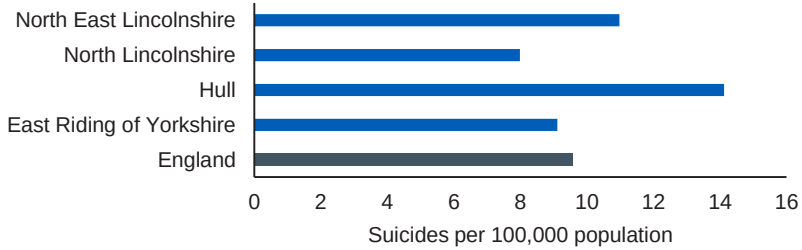
Source: Public Health England (based on Active Lives survey, Sport England)

Smoking prevalence – Except for East Riding, adults are more likely to smoke in Humber than nationally.



Source: https://fingertips.phe.org.uk/profile/health-profiles/data#page/3/gid/1938132694/pat/6/par/E12000003/ati/101/are/E06000010/iid/92443/age/168/sex/4

Suicide rate – The suicide rate in North East Lincolnshire and Hull is greater than the national average, it is lower in North Lincolnshire and East Riding.

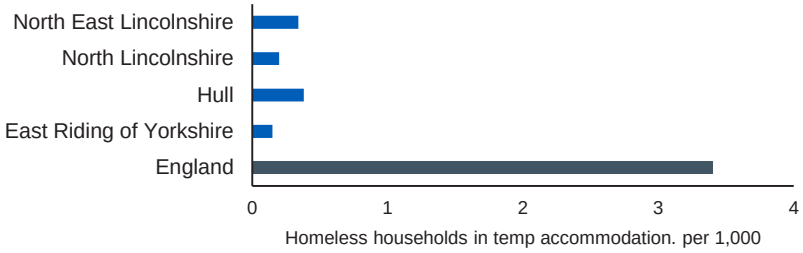


Source: Public Health England (based on ONS source data)

Population Health – Residence and Winter Effects

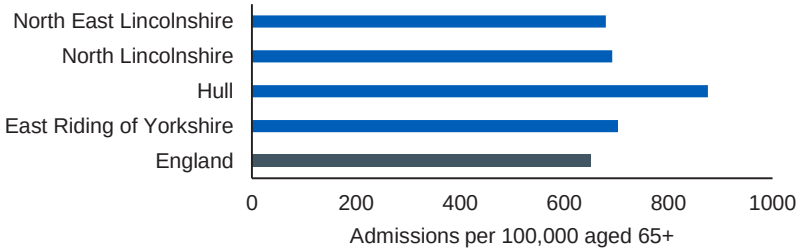
Winter deaths and care home admissions are higher in Humber than the national average

Homelessness rate – The homeless rate in the Humber area is less than the national average by c.3 percentage points.



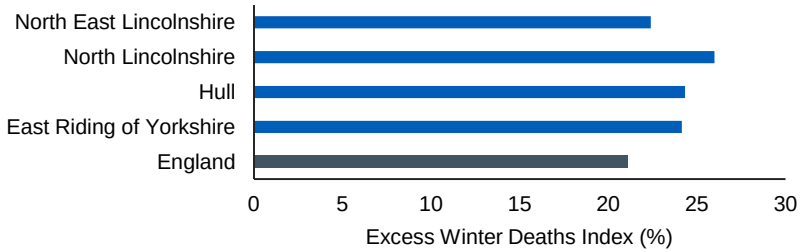
Source: Ministry of Housing, Communities & Local Government

Care home admissions – A greater proportion of people are admitted to residential and nursing care homes in the Humber area compared to the national average.



Source: NHS Digital - Adult Social Care Outcomes Framework (ASCOF)

Excess winter deaths – The amount of excess winter deaths in the Humber area is greater than the national average.

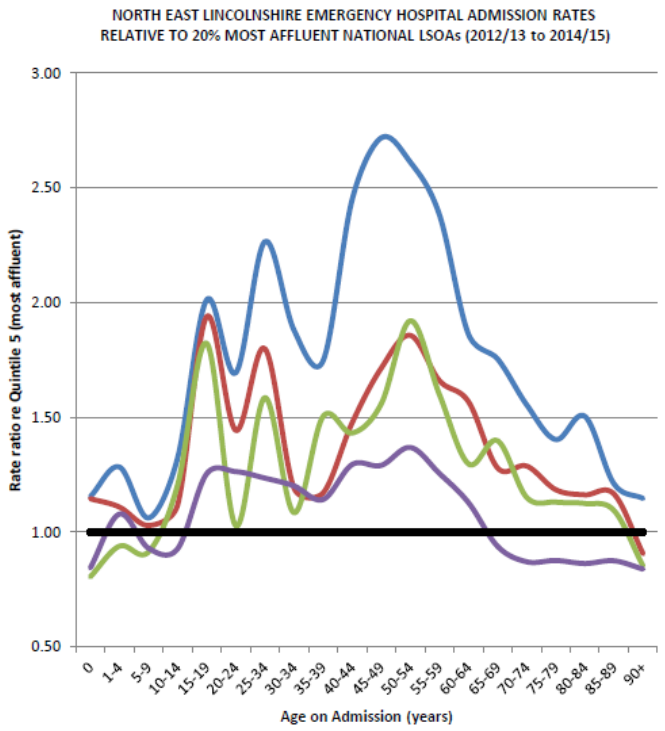


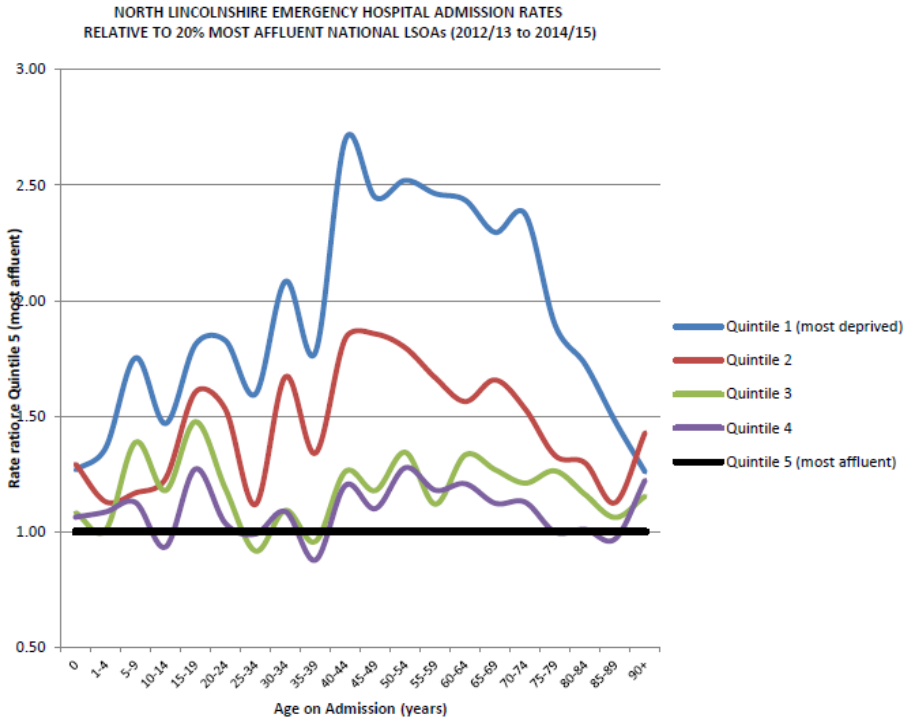
Source: Office for National Statistics: Public Health England Annual Births and Mortality Extracts

Emergency Admission by Demographics

Emergency admission rates are significantly higher in deprived populations

2016 analysis of emergency admissions in North Lincolnshire and North East Lincolnshire populations demonstrated significantly higher rates of presentation from the most deprived quintile of the population
Deprivation can be seen to place a direct burden on the urgent and emergency services.





Source: Burden of Disease in Northern Lincolnshire, August 2016 (Healthy Lives, healthy futures)

Public Health Impact

Poor public health indicators impact on service demand

Higher deprivation is associated with higher use of emergency care, however it is not associated with increased demand to access elective care services

- Smoking and obesity are well established modifiable risk factors for a range of long term medical conditions including cardiovascular disease, type 2 diabetes and many cancers. Higher incidence of smoking and obesity will therefore lead to a greater burden on the healthcare services in the region.
- Previous research into elective referrals in North Lincolnshire and North East Lincolnshire have demonstrated that referrals are evenly distributed throughout the different socioeconomic groups, despite an anticipated higher burden of disease in those areas with greater deprivation. This may be explained, however, by lower health literacy and utilisation of elective healthcare services, leading to later presentations and more reliance on emergency care.
- Public health initiatives and models of healthcare which educate and support patients in the community, can help to keep patients out of acute hospital wards and reduce years lost to disease.

Travel Time Between Hospital Sites

The two main ambulance services for HUTH and NLaG are Yorkshire Ambulance Service and East Midlands Ambulance Service

The average travel times between hospital sites are given below.

	Yorkshire Ambulance Service	DESTINATION HOSPITAL			
		CHH	HRI	DPoW	SGH
Pickup Hospital	CHH	-	00:21:14	00:51:54	00:47:33
	GDH	00:30:13	00:39:55	Not available	00:40:27
	HRI	00:19:33	-	00:47:37	00:45:53

	East Midlands Ambulance Service	DESTINATION HOSPITAL			
		CHH	HRI	DPoW	SGH
Pickup Hospital	DPoW	00:46:07	00:44:48	-	00:38:17
	SGH	00:40:18	00:38:58	00:41:37	-

The above is based on analysis by another organisation, it is therefore subject to review and refresh once the source data has been received.

Source: Local public health HASR analysis v7 supporting data

Travel Access To Hospital Sites

Population with at most a 30 minute journey time via public transport to the below sites:

Site	Total Population with Access	Humber Population with Access
DPoW	115,000	109,000 (12%)
GDH	41,000	39,000 (4%)
SGH	85,000	85,000 (9%)
HRI	240,000	240,000 (26%)
CHH	113,000	113,000 (13%)

Population with at most a 30 minute journey time via car to the below sites:

Site	Total Population with Access	Humber Population with Access
DPoW	227,000	180,000 (20%)
GDH	405,000	142,000 (15%)
SGH	336,000	189,000 (20%)
HRI	486,000	486,000 (53%)
CHH	493,000	493,000 (55%)

The above is based on analysis by another organisation, it is therefore subject to review and refresh once the source data has been received.

Source: Local public health HASR analysis v7 supporting data

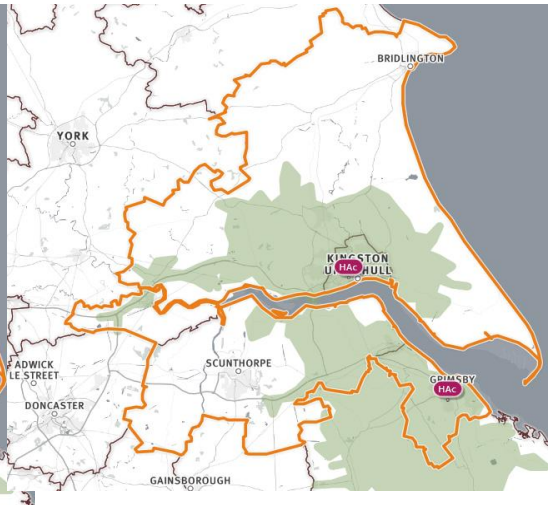
Travel: 30 minute access by car

In the current configuration over 70% of residents have access to an ED by car within 30 minutes

70% of Humber residents have access to HRI and SGH ED sites

86% of Humber residents have access to three ED sites

72% of Humber residents have access to HRI and DPoW sites



The above is based on analysis by another organisation, it is therefore subject to review and refresh once the source data has been received.

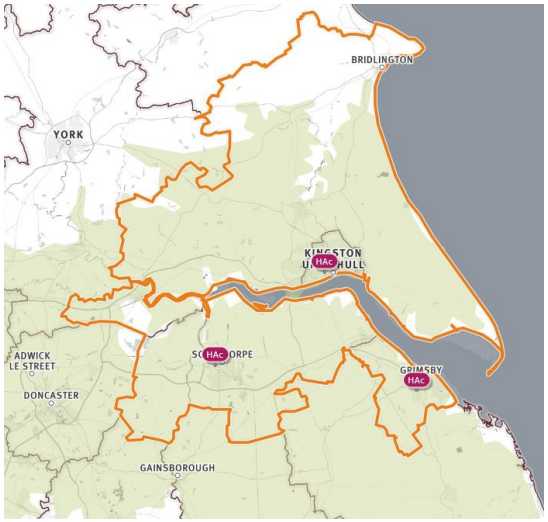
Source: Local public health HASR analysis v7 supporting data

Travel: 45 minute access by car

In the current configuration over 94% of residents have access to an ED by car within 45 minutes

95% of Humber residents have access to HRI and SGH ED sites

95% of Humber residents have access to three ED sites



94% of Humber residents have access to HRI and DPoW sites

The above is based on analysis by another organisation, it is therefore subject to review and refresh once the source data has been received.

Source: Local public health HASR analysis v7 supporting data

Chapter 5
Why Hospitals Need to Change

1. Approach to developing this Case for Change
2. Urgent and Emergency Care
3. Maternity and Paediatrics
4. Planned Care

Why Hospitals Need to Change

Approach to developing this Case for Change

The development of the Case for Change followed a robust, hypotheses-driven process to identify, test, refine and prioritise the challenges that each of the service areas under review face.

Identify service change hypotheses

- **Data-driven:** review available service-level data and identify outliers compared to benchmarks
- **Expert-driven:** interview clinicians, including Sub-Group clinical leads and other staff to uncover operational challenges

Test and validate hypotheses

- **Clinical Design Sub-Group:** discuss and test CFC hypotheses at the Sub Group meetings with wider group of clinicians
- **Data:** prove / disprove hypotheses with available data

Refine and consolidate hypotheses

- **HASR team**: HASR Independent Clinical Chair and team refine and consolidate hypotheses

Prioritise hypotheses

- **Clinical Design Group and senior organisational leads:** senior clinicians provide final validation and prioritisation of challenges

Repeated for each service

Why Hospitals Need to Change

Approach to developing this Case for Change

CFC hypotheses have been developed for each of the service areas along three agreed domains: Quality; Operational Delivery; and Sustainability

These domains reflect the HASR decision making criteria that were developed in 2017. They incorporate views of clinicians, NHS and Local Authority leaders and patients and represent a collective view of preferences for local healthcare services.

Decision Making Criteria

Quality

- Clinical outcomes
- Clinical interdependence and patient safety
- Patient experience and satisfaction

Operational delivery

- Performance
- Access and transport

Sustainability

- Workforce availability
- Physical resource availability
- Cost effectiveness

Why Hospitals Need to Change

Decision Making Criteria

Theme	Criteria	Key Questions
Quality	Clinical outcomes	Will the proposed scenario deliver acceptable clinical outcomes for patients?
	Patient experience and satisfaction	Will the proposed scenario deliver acceptable standards of access and experience for patients?
	Clinical interdependency and patient safety	Will the proposed scenario maintain essential clinical service interdependencies and services that are safe for patients?
Operational Delivery	Harnessing technology	Will the proposed scenario make best use of digital technology?
	Performance	Will the proposed scenario support delivery of acceptable performance?
	Access and transport	Will the proposed scenario be appropriate when considering the demographic of patients and transport links?
Sustainability	Workforce availability	Will we be able to attract, retain and deploy the skilled workforce required to operate the proposed scenario?
	Physical resource availability	Will we be able to provide the buildings and equipment required to support the proposed scenario?
	Cost effectiveness	Will the proposed scenario be cost effective when compared with Reference Cost and Service Line Reporting norms?

Why Hospitals Need to Change

Approach to developing this Case for Change

The CFC hypotheses, organised along the three Review domains (Quality; Operational Delivery; and Sustainability) have been **supplemented with information about current service configurations and interdependencies**, and **service-specific patient population health assessments**:

- **Service configuration and interdependencies provide a baseline understanding of the kind of services that are available at each of the sites**, and what clinically co-dependent services are required and available.
- **The service-specific patient population health assessment describes the characteristics of the local patient population** and links overall population health descriptions to a service level. Where possible, trend data and forecasts have been included to provide a forward-looking perspective on likely health status of and demand from the local population.

Both Trusts Are Rated As Requires Improvement

The CQC has rated all sites as Requires Improvement except Castle Hill

The CQC performance rating for HUTH were published in June 2018, and for NLaG in September 2018. Overall both Trusts Require Improvement, although all sites were rated Good for caring. As a measure for clinical care provided by these two Trusts, the CQC results illustrate that change is necessary to improve.

Site	Safe	Effective	Caring	Responsive	Well-led	Overall
HRI	Requires improvement ↔	Good ↔	Good ↔	Requires improvement ↔	Good ↗	Requires improvement ↔
CHH	Requires Improvement ↔	Good ↗	Good ↔	Good ↗	Good ↗	Good ↗
HUTH overall	Requires Improvement ↔	Good ↗	Good ↔	Requires improvement ↔	Good ↗	Requires improvement ↔
DPoW	Requires improvement ↔	Requires improvement ↔	Good ↔	Requires improvement ↔	Requires improvement ↗	Requires improvement ↔
SGH	Requires improvement ↗	Requires improvement ↔	Good ↔	Requires improvement ↔	Requires improvement ↗	Requires improvement ↗
GDH	Requires improvement ↙	Requires improvement ↙	Good ↔	Requires improvement ↙	Requires improvement ↙	Requires improvement ↙
NLaG overall	Requires improvement ↗	Requires improvement ↔	Good ↔	Requires improvement ↔	Requires improvement ↗	Requires improvement ↗

Source: CQC reports, Attain CFC v6

Why services need to change: infrastructure

Both Trusts face long-term issues with their estates and facilities

The estates infrastructure of both Trusts has areas in need of capital investment - capacity, quality and configuration are recurrent themes. Critical infrastructure costs are broadly similar (HUTH - £21.3m, NLaG - £21.4m) but both significantly exceed the national median of £13.7m

HUTH

- HUTH has major challenges at HRI due to aged infrastructure for some buildings.
- The HRI tower block suffers with poor ventilation and cooling (particularly in summer months). Asbestos is present within the structure causing challenges for upgrading, and there are not enough lifts and storage areas.
- Wards are smaller than current specifications and do not have suitable en suite facilities. The layout of six beds per bay does not meet modern standards.
- Theatres also face challenges with a £14m upgrade required to the trauma theatre to ensure the ventilation meets current air flow specifications.
- There are also particular problems with aged water pipes leading to high Legionella counts.
- The CQC criticised the quality of accommodation for children, with concerns about patient privacy, as well as a lack of parental accommodation.

NLaG

- In many areas, the physical condition of estate and quality of accommodation for providing services is not fit for purpose.
- Significant fire safety issues were identified in relation to evacuation of patients due to the layout of the Coronation Building at SGH.
- In October 2018 following routine random sampling, major water infrastructure issues were identified, leading to the closure of two wards and two laminar flow theatres.
- The majority of the current buildings are not appropriate for delivery of modern healthcare services. For example they do not meet standards for en suite facilities in ward bays or for sufficient single cubicle capacity.
- Further work will help to identify whether there is potential estate that could be better utilised, or capacity optimised, at GDH.
- IT infrastructure is not able to keep up with modern technology and capacity due to ongoing system issues and lack of investment.
- NLaG acknowledges that estates are a major financial risk.

Why services need to change: financial sustainability

Both Trusts face major financial challenges, which need to be tackled over the coming years

HUTH

- There is an underlying financial deficit of c.£9m as of 1st April 2019. As part of an annual plan for a £1.5m surplus by the end of FY19/20 there is a commitment to delivering a £19.1m efficiency programme. This equates to 3.4% of operating costs. Shortfalls in delivery in 2017/18 and 2018/19 indicate risks to achieving delivery in 2019/20 which requires system level collaboration. In July 2019, HUTH was £0.2m below plan on their planned improvements in productivity and efficiency.
- At the end of July 2019, HUTH was on plan with a deficit of £2.9m but this includes £1.9m of Provider Sustainability Funding.
- At the end of the 2018/19 financial year HUTH had spent £11m on temporary staff (agency and bank).

NLaG

- NLaG are in quality and financial special measures, indicating significant financial challenges.
- In 2018/19, the Trust's deficit for the year was £58.1m which is £26.82m adrift of plan. The clinical income was behind plan and there were a number of contract challenges.
- NLaG failed to qualify for the planned Provider Sustainability Fund income, due to an ED performance below 90% and non-compliance with financial control total. However, the Trust received £2.33m of Provider Sustainability Fund General Distribution in April 2019.
- At the end of the 2018/19 financial year NLaG had spent £46m on temporary staff (agency, bank, locum).

Sources: HUTH Trust Board Papers 23 May 2019 | HUTH Trust Board Papers 30 July 2019 | NLaG Trust Board Meeting 07 May 2019 | NLaG Finance Report September 2019 | Trust Financial Ledger Data | Model Hospital

Why services need to change: digital

Both trusts report a limited digital maturity across all of their services which negatively impacts on collaborative working and seamless patient care

NLaG considers itself relatively more digitally mature than HUTH…

While both trusts report to struggle with similar issues, NLaG assess itself to be more digitally mature than HUTH: the **Digital Maturity Index data** suggests that NLaG is highly confident in its ability to plan, deliver and optimise the digital systems to operate paper-free (readiness category).

Required infrastructure and capability has also been considered to be substantially higher for NLaG than HUTH.

DIGITAL MATURITY INDEX	Readiness	Capabilities	Infrastructure
Hull University Teaching Hospitals	81%	36%	57%
North Lincolnshire & Goole	90%	64%	82%

…but representatives from both trusts report that operations are hampered by poor IT and technology infrastructure, connectivity, interoperability of systems and variable IT confidence of staff.

Clinicians and operational managers from both trusts who participated in Clinical Design Sub Group meetings reported that aged IT hardware and WiFi connectivity make digital, paper-free working burdensome. Staff report applications and software are sometimes slow to load and counterintuitive to use which increase the time required to complete tasks.

Staff also reported a fragmentation of different systems which limited interoperability between sites, Trusts and the community. It was felt this causes duplication of work, hampering smooth patient flow.

It was specifically mentioned that the lack of connectivity causes challenges in the Radiology service between Trusts, meaning images generated at one Trust cannot be easily viewed by another. Source data also reveals that Radiology equipment is in need of replacement. Improving the connectivity and the ability to share images faster could help make operations more efficient and allow the pooling of resources.

Source: Clinical Design Subgroup (CDSG) Planned Care Workshop 6th September 2019 | Model Hospital | NHS Digital Maturity Index

Why services need to change: Primary and Community Care

Challenges across primary care within the Humber regions

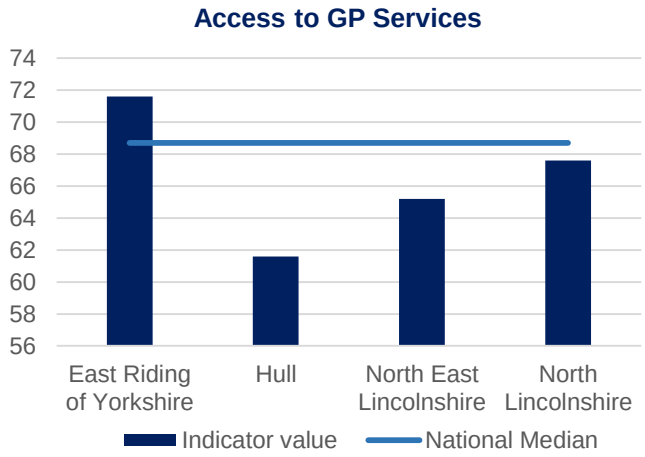
Limited access to GP services in some areas across the Humber

NHS Outcomes framework indicators show that there is differential ability for patients to access GP services across the Humber region. Hull, North East Lincolnshire and North Lincolnshire are lower than the national median whilst East Riding is better than the national median.

Hull and North East Lincolnshire are particularly challenged in terms of GP workforce when comparing to the rest of the region with 46.44 and 47.01 GPs per 100k patients respectively.

A high proportion of the GP workforce close to the age of retirement

The Humber region has a significantly higher proportion of GPs closer to the age of retirement (aged 55 and over), with Hull and North East Lincolnshire the worst affected with 30.3% and 33.8% respectively.



Source: https://digital.nhs.uk/4-4-i-access-to-gp-services

Limited, ineffective paediatric Advice and Guidance provided to primary care doctors

Clinicians from the CDSG suggested that GPs currently do not have access to an effective Advice and Guidance system which impacts on their ability to manage presentations in the GP practice. One cause suggested by the clinicians was related to the timing of the 'switch on' of the paediatrics Advice & Guidance module in the Electronic Referral System on both the North and South Bank. The speed of response to the request, and poor levels of education and engagement amongst clinicians regarding the benefits of the service across both primary and secondary care impacted on the effectiveness of the Advice and Guidance system.

Fragmentation of community services and limited awareness of available services in the Humber area

Acute Trusts, Commissioners, and Local Authorities all provide services in community care in the Humber region. Clinicians from the Clinical Design Subgroup reported that the array of providers, along with a general lack of clarity around available services meant that it was difficult to access the right services for their patients.

Source:https://app.powerbi.com/view?r=eyJrIjoiNmY4NGNiMWQtMGVkZi00

Urgent and Emergency Care

Urgent and Emergency Care

- Current service configuration and interdependencies
- Service quality
- Operational delivery of the service
- Service sustainability

Urgent and Emergency Care

There are 24/7 emergency departments on three sites with some urgent care access at Goole

Urgent and Emergency Care (UEC) is provided across the Humber region through a selection of ED departments, Urgent Treatment Centres (UTCs) and Ambulatory Care Units (ACU).

Hull University Teaching Hospitals

HUTH provides the majority of its emergency care at Hull Royal Infirmary which is designated as a Major Trauma Centre (MTC) covering East and North Yorkshire and the Humber region. It houses a separate Children's ED and ACU. UTCs are provided away from the main hospital sites.

Northern Lincolnshire and Goole Hospitals

NLaG provides 24-hour emergency care at DPoW and SGH. Ambulatory care is provided at both DPoW and SGH. The UTC at GDH is open 7am to 11pm, seven days a week, has access to diagnostic and x-ray facilities, and is run by City Health Care Partnership.

	HRI	DPoW	SGH	GDH
Type 1 ED	✓	✓	✓	✗
Dedicated Children's ED	✓	✗	✗	✗
Major Trauma Centre	✓	✗	✗	✗
Trauma Unit	✗	✓	✓	✗
Ambulatory Care Unit	✓	✓	✓	✗
Urgent Treatment Centre	✓	✓	✓	✓
Acute Medical Unit	✓	✓	✓	✗
Surgical Assessment Unit	✓	✓	✓	✗

Source: Trust websites

Urgent and Emergency Care

Key clinical interdependencies for EDs and MTCs include a large number of 'front-door' as well as historically 'ward-based' specialties

Extant guidance on the mixture of clinical specialties necessary to support ED care does not exist.

Urgent and Emergency Care encompasses an array of specialties, both direct and indirectly, with activity interdependences which must be considered in the future planning of services. Whilst it is recognised that it is not always possible to provide all services in one location, particularly for more geographically challenged locations, certain specialties must co-exist to provide safe care to patients.

There is no hard and fast guidance regarding clinical interdependencies specific to this purpose. The South East Coast Clinical Senate distilled guidance from a number of sources, along with consensus clinical opinion, to set out a guide that is widely used and adapted to practice. The published matrix of clinically co-dependent services provides a consensus view of services required to be on site or within reach to safely operate acute medical and surgical services such as an ED and acute unselected take (including acute surgical patients), and a Major Trauma Centre (MTC).

Source: South East Coast Clinical Senate – The Clinical Co-Dependencies of Acute Hospital Services: A Clinical Senate Review, December 2014.

Urgent and Emergency Care

CQC results

Site	Specialty	Safe	Effective	Caring	Responsive	Well-led	Overall
HRI	**Urgent and Emergency Services**	Good	Good	Good	Requires improvement	Good	Good
DPoW	**Urgent and Emergency Services**	Requires Improvement Sept 2018	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Requires Improvement Sept 2018
SGH	**Urgent and Emergency Services**	Requires Improvement Sept 2018	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018	Requires Improvement Sept 2018	Requires Improvement Sept 2018
HRI	**Critical Care**	Requires Improvement Feb 2017	Good Feb 2017	Good Feb 2017	Good Feb 2017	Requires Improvement Feb 2017	Requires Improvement Feb 2017
DPoW	**Critical Care**	Requires Improvement Sept 2018	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018	Requires Improvement Sept 2018	Requires Improvement Sept 2018
SGH	**Critical Care**	Requires Improvement Sept 2018	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Requires Improvement Sept 2018

Sources:
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH1419.pdf
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH2795.pdf

Urgent and Emergency Care

CQC results

Site	Specialty	Safe	Effective	Caring	Responsive	Well-led	Overall
HRI	Medical Care	Requires improvement June 2018	Good June 2018	Good June 2018	Good June 2018	Good June 2018	Good June 2018
CHH	Medical Care	Requires improvement June 2018	Good June 2018	Good June 2018	Good June 2018	Good June 2018	Good June 2018
DPoW	Medical Care	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018	Requires Improvement Sept 2018	Requires Improvement Sept 2018	Requires Improvement Sept 2018
SGH	Medical Care	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018	Requires Improvement Sept 2018	Requires Improvement Sept 2018	Requires Improvement Sept 2018
GDH	Medical Care	Requires Improvement Sept 2018	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018	Requires Improvement Sept 2018	Requires Improvement Sept 2018

Sources:
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH1419.pdf
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH2795.pdf

Seven Day Services (1/2)

Trust level assessment of their ability to achieve seven day care

The NHS aims to provide the same quality of care for patients every day of the week

To facilitate this, ten clinical standards were initially devised in 2013. These have later been revised to highlight the four most pertinent standards (2,5,6 and 8) to reducing the risk of increased mortality rates on weekends. 90% of patients need to receive the care for the standard to be met.

	HUTH (Feb 2019 Audit)	NLaG (April 2019 Audit)
Clinical Standard 2 – First consultant review All emergency admissions must be seen and have a thorough clinical assessment by a suitable consultant as soon as possible but at the latest within 14 hours from the time of admission at hospital.	**Standard not met** 79% of patients were reviewed within 14 hours of admission. Of the patients admitted Monday - Friday, 76% (133 out of 175) were seen by a Consultant within 14 hours, while 85.7% (60 out of 70) of patients admitted during the weekend received a Consultant review within 14 hours.	**Standard not met** 73.8% of patients are assessed by a suitable consultant within 14 hours of admission but this drops to 37% at the weekend (poor documentation may account for these lower scores, as it is sometimes difficult to identify the time of a ward round, or whether a consultant was present).
Clinical Standard 5 – Consultant directed diagnostic tests Hospital inpatients must have scheduled seven-day access to diagnostic services such as x-ray, ultrasound, CT, MRI, echocardiography, endoscopy, bronchoscopy and pathology. Consultant-directed diagnostic tests and reporting should be available seven days a week for the following: within 1 hour for critical patients, within 12 hours for urgent patients, and within 24 hours for non-urgent patients.	**Standard achieved** An audit of urgent and routine CT, MRI and ultrasound requests received for the seven days commencing 11 February 2019 showed that urgent CT and ultrasound scans were performed within 12 hours for more than 90% of patients. MRI averaged 83%. CT/MRI reporting times averaged 84% and 79% respectively for urgent cases.	**Standard achieved** The Trust achieved this standard as echocardiograph is the only test not available over the weekend. An inability to provide echocardiography on weekends has been identified as a national problem.

Seven Day Services (2/2)

Trust level assessment of their ability to achieve seven day care

The NHS aims to provide the same quality of care for patients every day of the week

	HUTH (Feb 2019 Audit)	NLaG (April 2019 Audit)
Clinical Standard 6 – Consultant directed interventions Hospital inpatients must have timely 24 hour access, seven days a week, to consultant-directed interventions that meet the relevant specialty guidelines, either on-site or through formally agreed networked arrangements with clear written protocols.	**Standard met** All interventions are available with 24 hour access either on site, or by formal arrangement off site.	**Standard not met** The Trust failed this standard as Interventional Radiology is not available out of hours due to limited consultants able to perform interventions, and a lack of nursing staff and interventional trained radiographers. HRI is the referral point for emergency interventional cases. Additionally, cardiac pacing is not currently available at the weekend. Options are being explored within the Medicine division with the possibility of having a Cardiology Operational Delivery Network in place.
Clinical Standard 8 (Daily Consultant Review) All patients with high dependency needs should be seen and reviewed by a consultant twice daily (including all acutely ill patients directly transferred and others who deteriorate). Once a clear pathway of care has been established, patients should be reviewed by a consultant at least once every 24 hours, seven days a week, unless it has been determined that this would not affect the patient's care pathway.	**Standard not met** The Trust achieved 72% compliance on weekdays, and only 52% compliance at weekends. There were a total of 12 patients that required twice daily reviews. 67% were reviewed by a consultant (50% on a weekday, 83% at the weekend). Hyper Acute Stroke Unit - reviewed daily by ward-based consultant. On call consultant may review patients out of hours but this is not embedded. Patients will be reviewed further at any time if required. Cardiology - reviewed daily. Patients will be reviewed further at any time if required.	**Standard not met** Overall, the Trust achieved 62% compliance against clinical standard 8. The result for daily ongoing consultant reviews on weekdays is 72% but drops to 37% at the weekend. This may relate to poor documentation, as for Clinical Standard 2.

Urgent and Emergency Care

The Humber region tends to underperform against national averages and benchmarks for fractured neck of femur surgery and SHMI respectively. Conversely, DPoW outperforms the national average for neck of femur fracture surgery

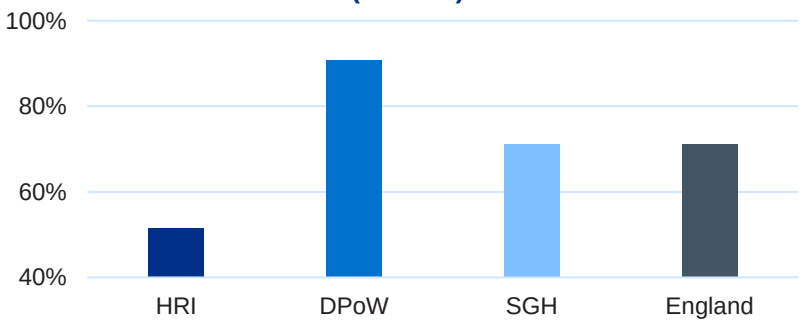
DPoW succeeds in undertaking fractured neck of femur surgery within 48 hours for relatively more patients than its local and national peers. SGH has made recent improvements bringing them in line with the national average

Appropriate, timely surgery is crucial to the successful rehabilitation of patients. Delays in fractured neck of femur surgery increase length of stay, dependence of patients, financial burden and delirium. Those with delirium are twice as likely to die as inpatients and four times more likely to need a nursing home placement.

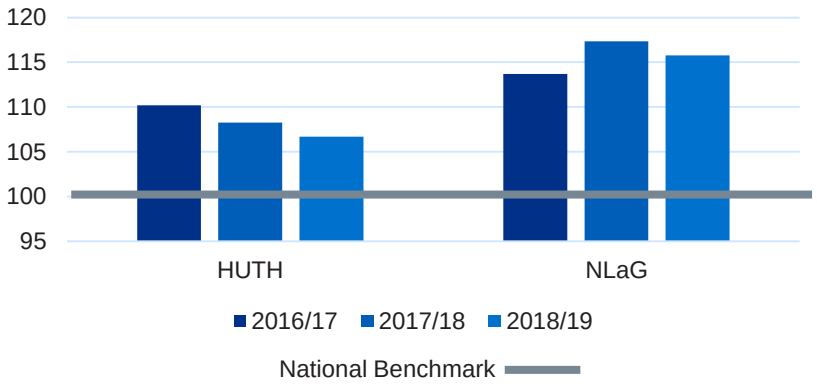
Mortality rates at both Trusts are higher than the benchmark, with NLaG having a SHMI value rated as "higher than expected".

HUTH has marginal improvements year on year. When looking at the specific causes of death, NLaG is an outlier for gastrointestinal haemorrhage at almost 60% higher than expected. This may relate to provision of endoscopy out of hours.

% of patients with fractured neck of femur who have surgery on day, or day after the admission (2018/19)



Trust-level SHMI over three years



Sources: Trust data on fractured neck of femur surgery 2019 | Published SHMI data https://digital.nhs.uk/data-and-information/publications/clinical-indicators/shmi/current/shmi-data.

Urgent and Emergency Care

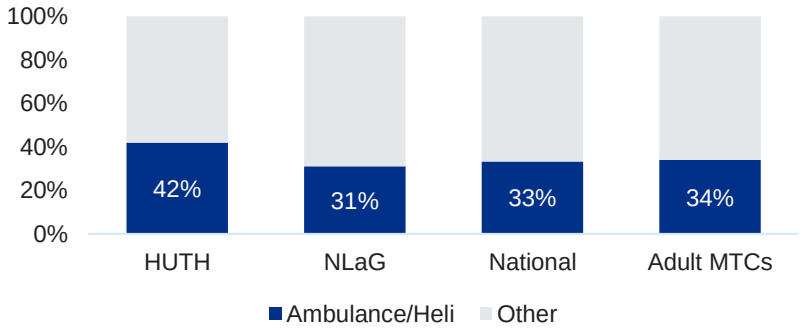
Patients report challenges accessing primary and community services, increasing demand on ED services with HUTH having a higher than national average arrival by ambulance

The proportion of type 1 ED arrivals by ambulance or helicopter at HUTH is high compared to the national average and other MTCs

The use of ambulances as an arrival method to NLaG is below the national average, whereas the use of ambulance/helicopter for arrival to HRI is greater than the national average and other MTCs.

More patients arriving at ED via ambulances can increase ambulance offload times, reducing availability of ambulances to take new calls. Yorkshire Ambulance Service (YAS) staff report that in Hull, there are limited alternatives to the HRI ED to offload patients.

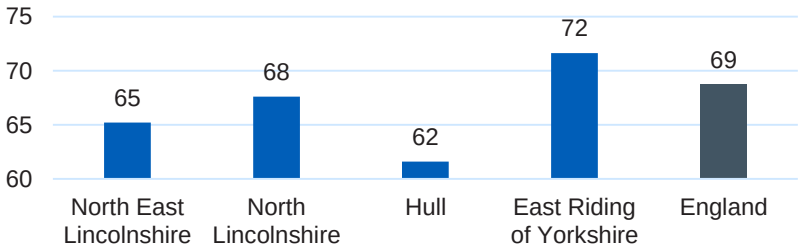
Arrival Method for Type 1 ED (Dec 2018)



Patients report facing challenges in accessing primary and community services, resulting in a greater demand on ED services

Patients in Hull in particular find it more difficult to get a GP appointment than in the rest of Humber and in England. Clinicians at the Clinical Design Sub Group workshops reported that there is a large number of patients presenting to ED who would be more appropriately managed by primary care and community services. ED continues to be seen as the 'default destination' by patients but also by medical professionals. For example, reportedly some specialties request GPs to send patients to ED due to a lack of facilities to review them directly.

% of GP patient survey respondents reporting a 'very good' or 'fairly good' experience of making an appointment



Sources:: Model Hospital | https://digital.nhs.uk/data-and-information/publications/clinical-indicators/nhs-outcomes-framework/current/domain-4-ensuring-that-people-have-a-positive-experience-of-care-nof/4-4-i-access-to-gp-services

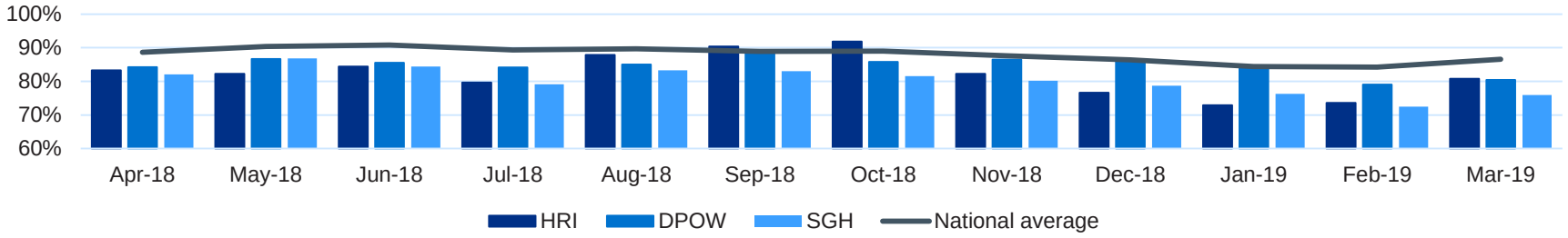
Urgent and Emergency Care

ED attendances are fluctuating with a deterioration of the four-hour target in line with national trends

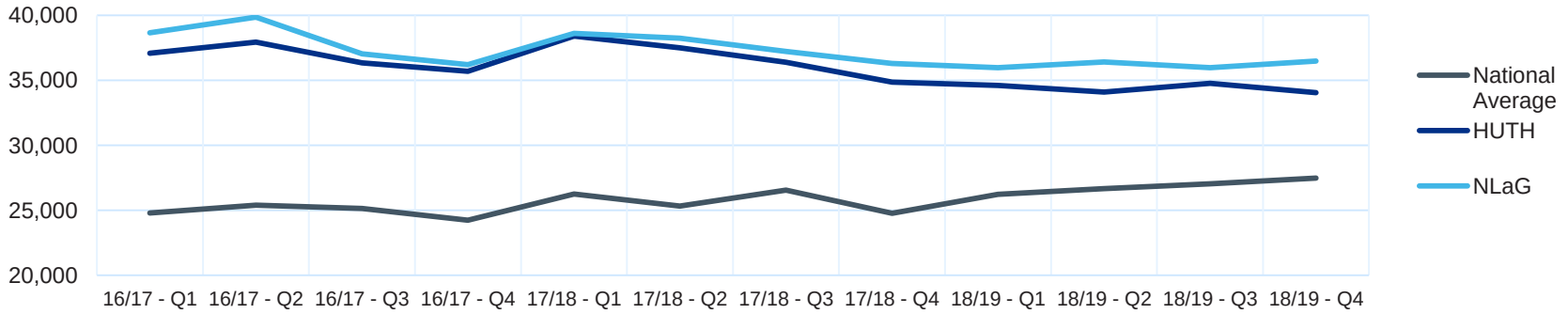
All three sites with an unselected take ED struggle to meet the four hour access standard in the face of fluctuating numbers of attendances

Both Trusts have seen fluctuations in ED attendances in recent years, however, both have significantly higher number of attendances compared to the national average. A large number of attendances combined with challenges around staffing is resulting in greater proportion of patients waiting for more than four hours.

% of patients admitted, transferred or discharged from ED within four hours



ED Attendances



Sources: Model Hospital | Analysis of Trust data | https://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/

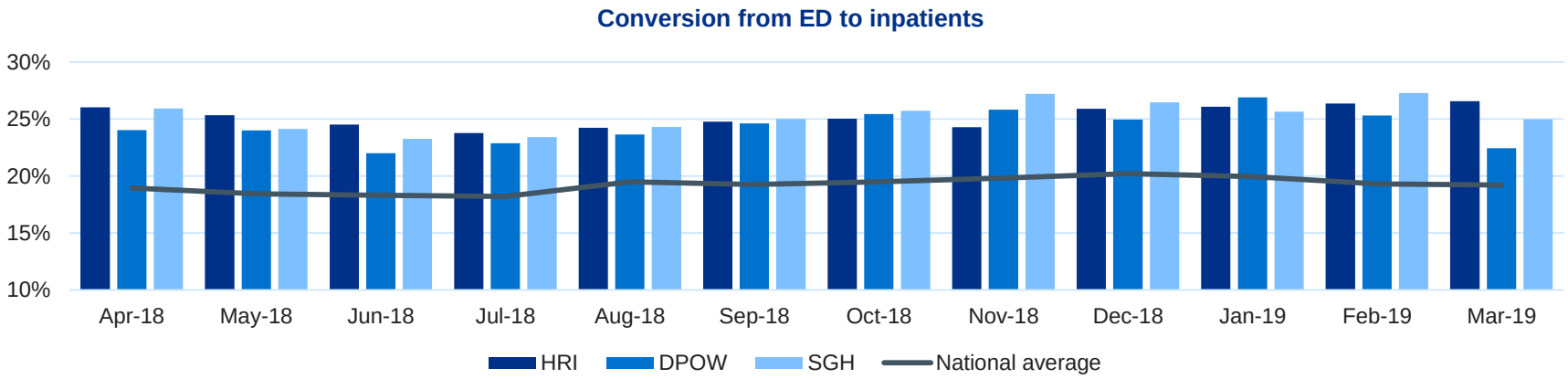
Urgent and Emergency Care

The likelihood of admission across both Trusts is approximately 25% more than the national average

All three sites have a higher conversion rate from ED to inpatients compared to the national average

All three sites admit a greater proportion of patients from the ED which could be an indication of disease case-mix, availability of alternative service models such as Ambulatory Emergency Care (AEC), workforce availability, hospital admission practices and difficulty in accessing primary care that results in deterioration of a patients' condition. Clinicians at the Clinical Design Sub Group workshops suggested that this may be particularly driven by the need for specialist input at the early patient assessment and diagnostic stages but in the absence of timely specialist input, patients would be admitted to wards.

The conversion from ED to an inpatient admission has a considerable financial impact on the cost of care to the Trust and wider health economy, and can impact on quality of care for patients. Lengths of stays may be increased with associated complications.



Sources: Model Hospital | Analysis of Trust data | https://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/

Urgent and Emergency Care

ED clinicians feel insufficiently empowered and consider that specialist input would be beneficial earlier in the care pathway

Feedback indicates that ED Consultants feel less able to admit patients

Direct clinician feedback at both sites reported that senior ED decision makers were not fully empowered to make admission decisions about patients. For example, ED decision makers must refer and wait for a specialty team review (often by a junior member of staff) prior to the patient being accepted for admission.

This impacts on smooth, timely patient flow, particularly where it is evident admission is required, which impacts on the quality of care for the patient in question and those waiting in ED.

Not all EDs have consistent access to rapid access clinics

Clinicians reported in the Clinical Design Sub Group workshops that there is differential access to rapid access clinics across the Humber, such as not being accessible to ED and patients must be referred into those by other pathways. This causes delays in patient care and unnecessary duplication of workload.

Duplication of clerkings

Clinicians felt that there is unnecessary duplication of paperwork, particularly around patient clerkings when patients moved from ED to acute wards. This takes clinicians and nursing staff away from direct patient care in ED, reducing the number of patients which can be seen.

Source: CDSG Planned Care Workshop 6th September 2019

Urgent and Emergency Care

Patients presenting to the ED in HUTH are more likely to respond to surveys about the service than those presenting to NLaG EDs

The recommend rate at NLaG is lower than both HUTH and the national average…

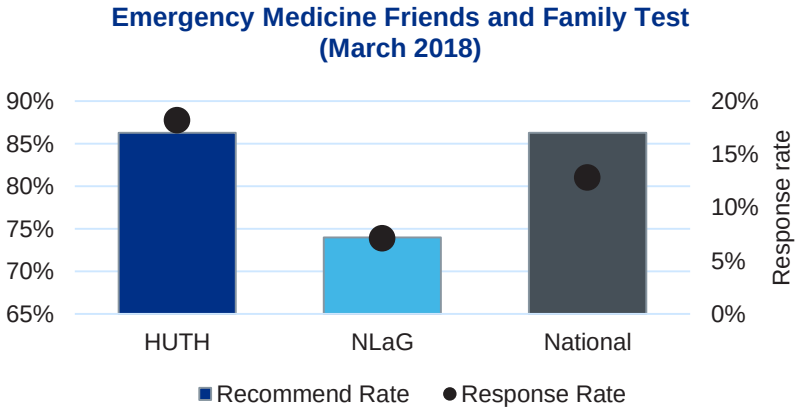
The response rate to Friends and Family tests and the proportion of patients who would recommend it are higher than the national average at HUTH.

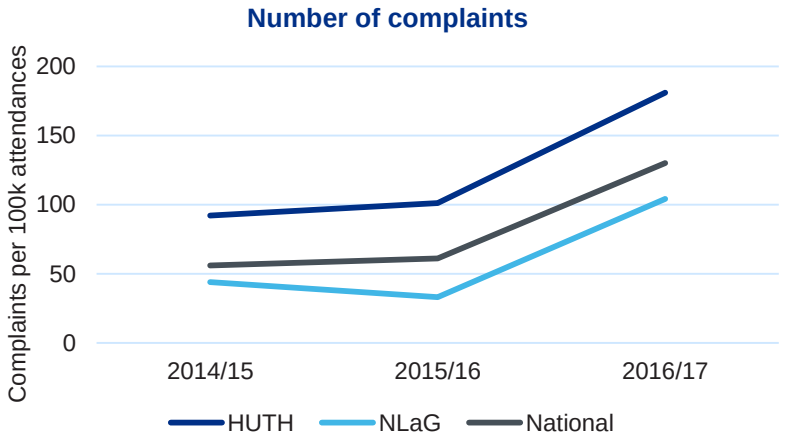
NLaG has a lower response and recommended rate compared to HUTH which suggests that patients at NLaG are less happy with the service that they receive.

…yet the number of complaints received at NLaG are lower than for HUTH and the national average

Complaints nationally have increased since 2014/15 and the Humber Trusts have followed this trend. The number of complaints at NLaG however is below those received for HUTH despite the fact that fewer people would recommend NLaG than HUTH (see above).

One might expect complaint rates to be inversely proportional to recommendation rates (i.e. more recommendations, fewer complaints). The fact that this is not the case could suggest that the population served by NLaG has lower health ambitions.





Source: Model Hospital

Urgent and Emergency Care

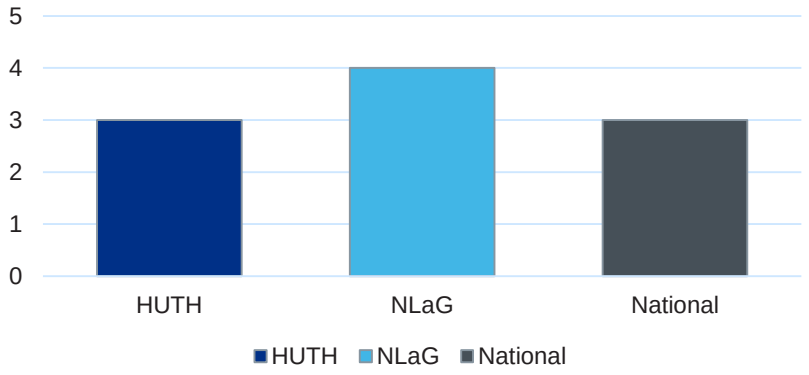
Lengths of stay at NLaG following admission from the ED are substantially longer than national averages

The average length of stay for admitted ED patients is c.1 day higher than the national average potentially causing onward challenges for patients moving through the hospital.

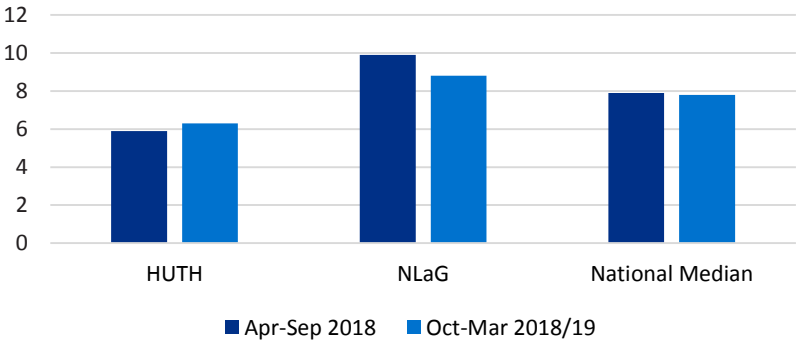
NLaG has the highest length of stay (LOS) for all patients admitted via ED and also for non-elective respiratory admissions when compared to HUTH and nationally. Cardiology is a specific outlier for NLaG. HUTH is broadly similar to the national average LOS for all patients admitted via ED but has a lower length of stay for non-elective respiratory admissions.

Clinicians in the Clinical Design Sub Group workshops reported that the higher lengths of stay may be attributed to a lack of access to specialist review closer to front door assessment units. Absence of specialists at the front door has been considered to lead to inefficiencies in use of junior and senior medical workforce. Job planning at NLaG is structured such that consultants frequently undertake afternoon ward rounds with impacts felt in terms of discharge delays for patients declared medically fit for discharge after 12pm.

Avg. LOS for all Patients Admitted via ED (2018/19)



Average LOS for non-elective Cardiology admissions (2018/19)



Source: Model Hospital

Urgent and Emergency Care

NLaG appears to struggle with implementing true ‘seven day working’

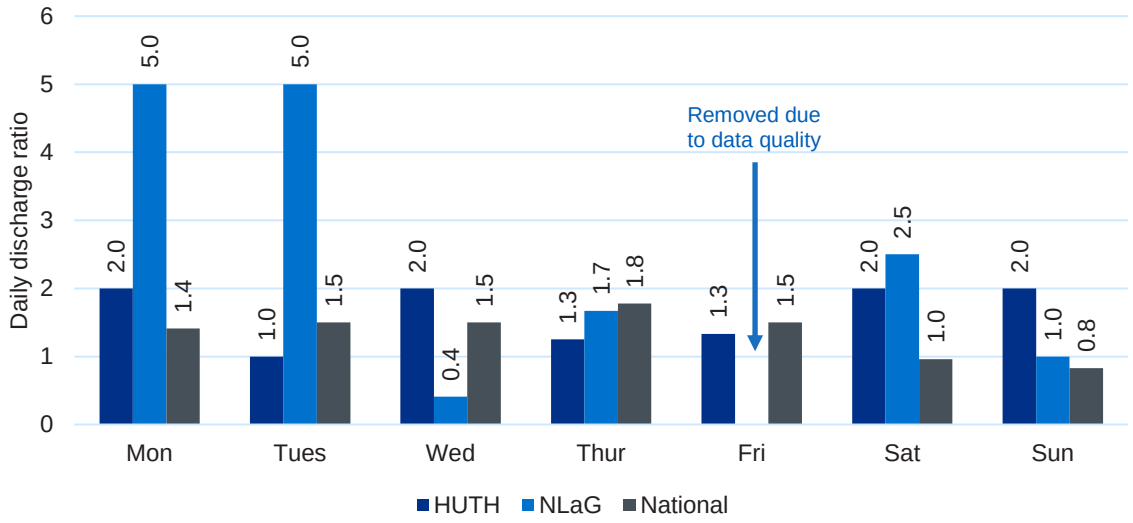
A high proportion of respiratory medicine discharges are made on Monday and Tuesday

NLaG discharges a significantly greater number of patients than it admits on Monday and Tuesday compared to the rest of the week, and across the region and nationally. More patients are admitted than discharged on Wednesdays.

This discharge pattern may be driven by low levels of weekend working and a reduced senior decision maker presence in some areas to perform daily discharges. NLaG Consultants reported that a high proportion of Consultant ward rounds are scheduled for afternoons, resulting in delayed discharge of patients. It could also be linked to the availability of out of hospital services (such as adult social care) at weekends.

HUTH shows a relatively consistent daily discharge ratio ranging from 1.00 to 2.00.

Daily discharge ratio respiratory medicine (February 2019)



How to read this data

Values lower than 1 mean that more patients were admitted to the Trust than discharged on a particular day of the week.

HUTH’s daily discharge ratio is relatively consistent ranging from 1.00 to 2.00.

NLaG’s daily discharge ratio is much more variable, ranging from 0.41 to 5.00.

Source: Model Hospital

Urgent and Emergency Care

NLaG faces relatively bigger recruitment challenges than HUTH in all but one staff category

Both Trusts experience recruitment challenges albeit not to the same extent

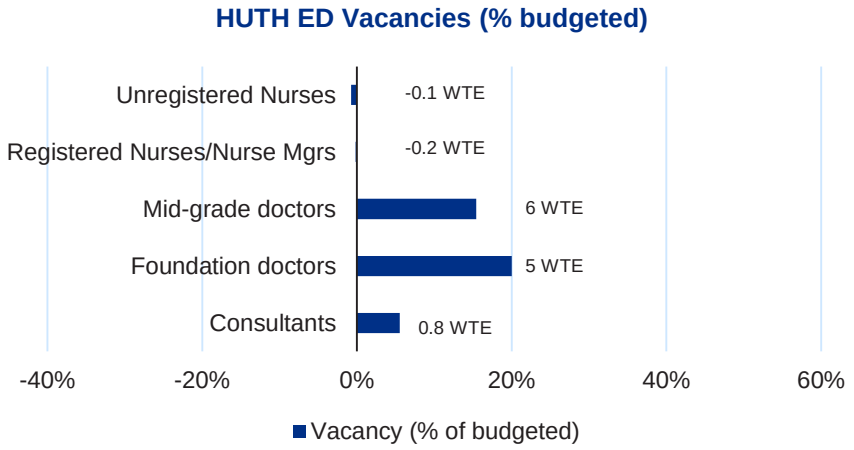
Both Trusts have high vacancy rates in ED:

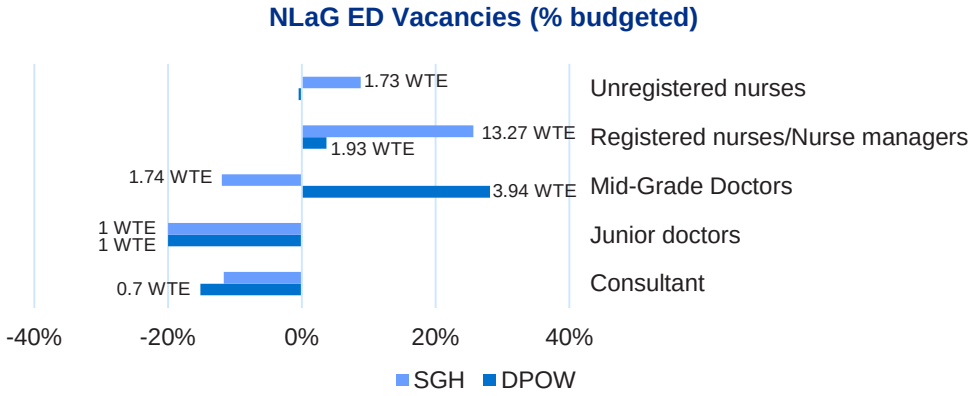
In HUTH, the vacancy rates for Consultants, Middle Grade doctors, and Foundation Year doctors are 6%, 15%, and 20% respectively according to the Trust ledger data.

In NLaG, there are stark differences between the two sites. At the SGH site there is a 26% vacancy rate for registered nurses and 9% vacancy rate for unregistered nurses.

At the same time, there is a surplus of junior doctors (20%) and a minor surplus of middle grade doctors (12%). In DPoW, the vacancy rates for registered nurses and middle-grade doctors are 4%, 28%, respectively.

Trusts will seek to compensate for these high vacancy rates in Emergency Medicine by using temporary staffing and asking substantive staff to work overtime. In the long run however, this can lead to increased financial pressures and higher stress-related sickness rates due to overworked staff.





Source: Financial Ledgers supplied by HUTH and NLaG for latest period available (18/19 period 12)

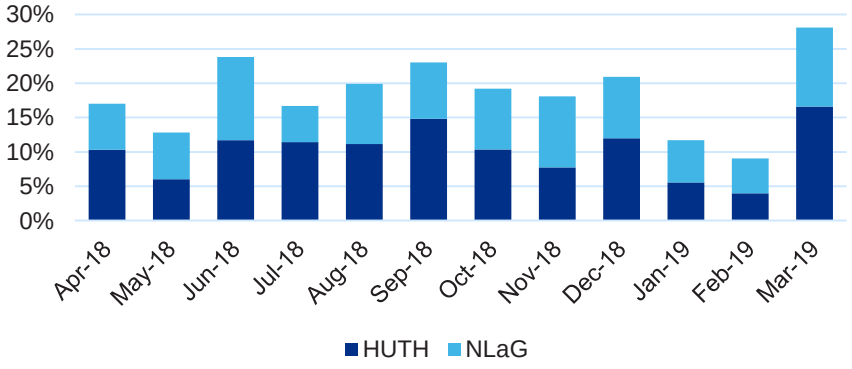
Urgent and Emergency Care

Both Trusts experience severe workforce challenges

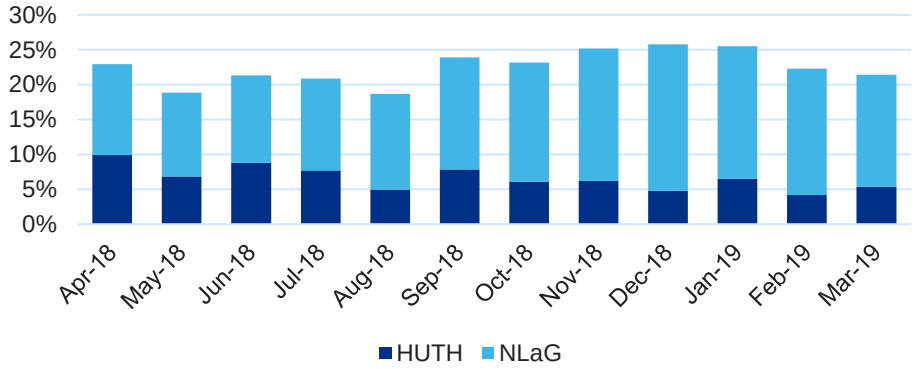
Reported recruitment challenges are corroborated when comparing to other Trusts in the region.

HUTH and NLaG are two out of 22 Trusts in the Yorkshire & Humber (Y&H) region but collectively accounted for 28.1% of regionally advertised Medical & Dental vacancies and 21.5% of regionally advertised Nursing and Midwifery positions in March 2019. This position has improved since March 2019 to 16.7% and 13.2% respectively in June 2019. As an indicator of actual vacancies, this is notable.

Medical and Dental advertised vacancies at HUTH and NLaG as a % of all Y&H advertised Medical and Dental Vacancies



Registered Nursing and Midwifery advertised vacancies at HUTH and NLaG as a % of all advertised Y&H Nursing and Midwifery Vacancies



Inability to fill vacant posts impacts on existing staff and the Trusts' reputations as employers.

In the staff survey responses for experience of the key themes of engagement, health and wellbeing, and morale, HUTH is comparable to the national average for all three areas, and NLaG is slightly below.

Sources: NHS Digital Vacancies Data | NHS Staff Survey 2018

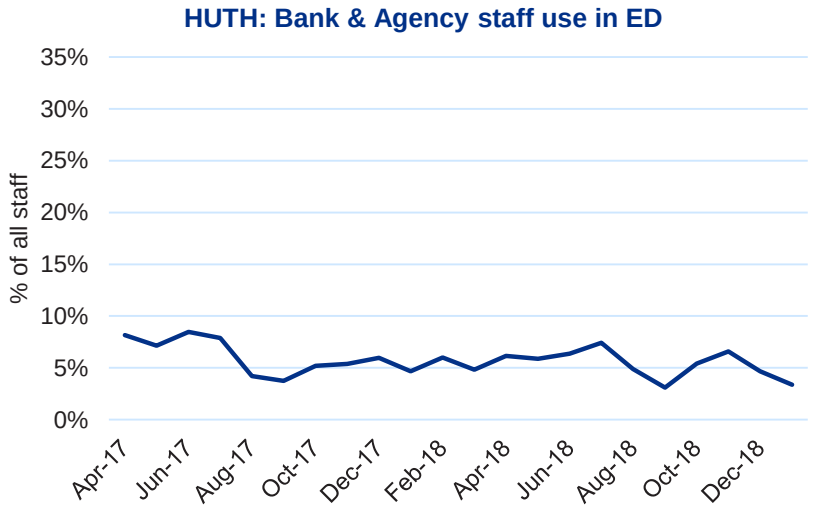
Urgent and Emergency Care

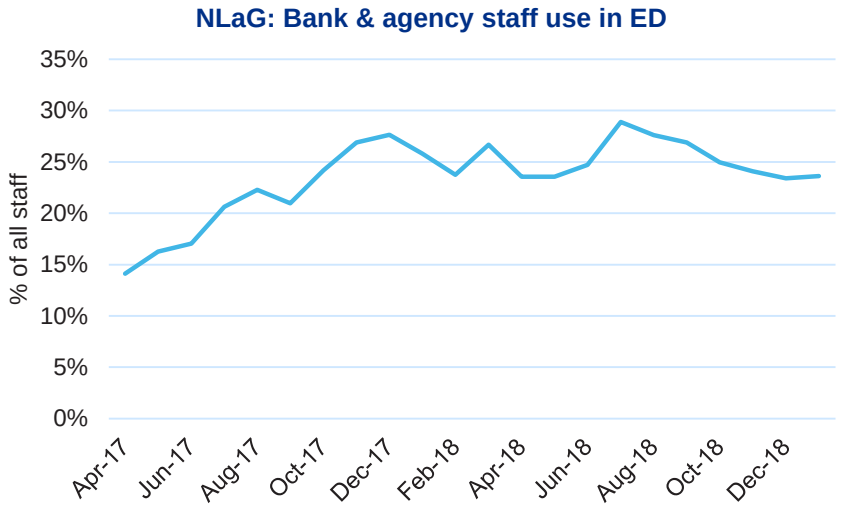
To compensate for vacancies and deal with service demand, Trusts are filling rota gaps with temporary staff…

Both Trusts use bank & agency staff but NLaG appears to rely on them for a substantive portion of service delivery

NLaG uses consistently high levels of bank & agency workforce to deliver its service – up to a quarter of its Emergency Medicine workforce in 2018 has been bank and agency staff. While bank and agency staff can help fill short term workforce gaps, they are not intended to serve as a medium and long-term solutions.

High use of bank & agency staff is associated with greater costs and potentially negative impacts on care efficiency and quality. This is because bank & agency staff tend to be more expensive than permanent members of staff and may also be less familiar with the Trust which means they will be less effective and efficient than permanently employed staff.





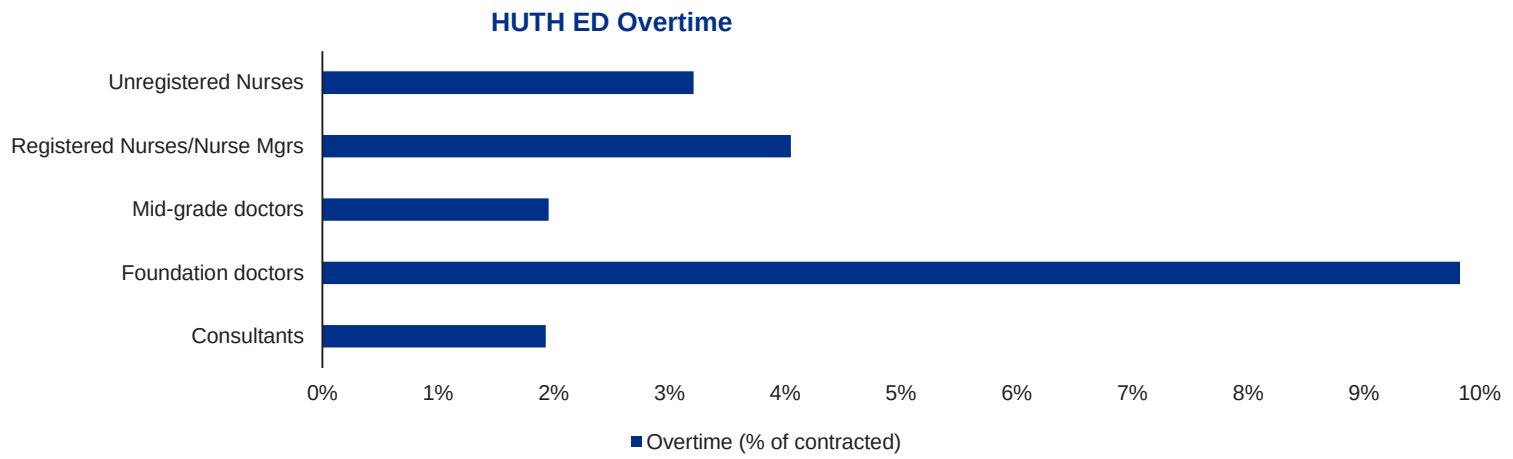
Source: Financial Ledgers supplied by HUTH and NLaG for latest period available (18/19 period 12)

Urgent and Emergency Care

… and are asking staff to work more overtime

Staff are working over their contracted hours

Both ED doctors and nurses at HUTH work overtime. At HUTH, foundation doctors reportedly work 10% overtime (though it should be noted that tailored reporting is in place for this staff group). Consultants and mid-grade doctors are reported to work on average 2%, and nurses 4%, more than time contracted. Whilst comparable data are not available for NLaG, it is unlikely that staff there do not work overtime, given the higher levels of use of temporary staff. While overtime can help fill short-term peaks in demand, it can have a negative effect on the health of employees in the long term and can lead to mistakes being made.



Source: Financial Ledgers supplied by HUTH and NLaG for latest period available (18/19 period 12)

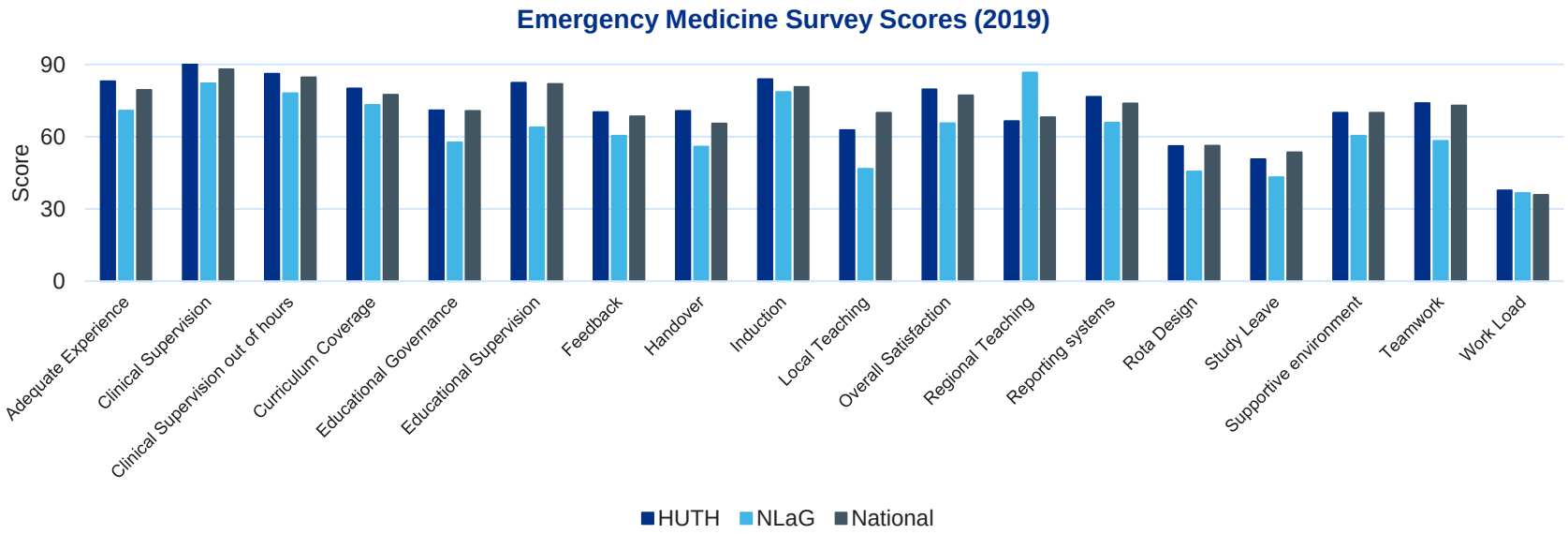
Urgent and Emergency Care

Trainee doctors' satisfaction with their placements appears to reflect staffing challenges at NLaG

Trainee doctor satisfaction in NLaG appears to be consistently lower than HUTH and national averages.

Trainees at NLaG consistently score their rotation lower than peers at HUTH or nationally, with the exception of regional teaching (better than the national average). Workload scores at both Trusts are in line with national averages. This appears to be driven by a number of factors and may result in poor morale of trainees which in turn could adversely affect quality and efficiency of care. As the results are publicly available, they are likely to contribute to the narrative that clinicians have mentioned namely that NLaG is perceived to be a less attractive place to work, leading to further recruitment challenges.

Feedback of trainees at HUTH is in line with the national average.



Source: General Medical Council (GMC) survey

Urgent and Emergency Care

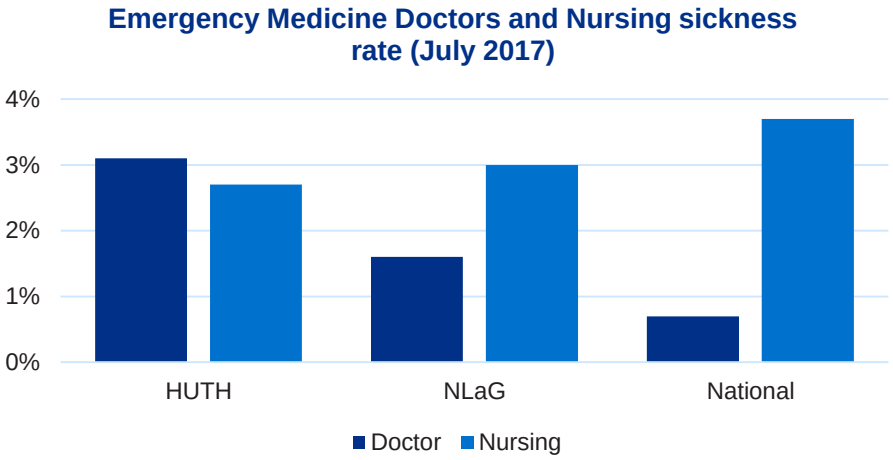
Both Trusts have higher sickness rates for their medical staff than national averages

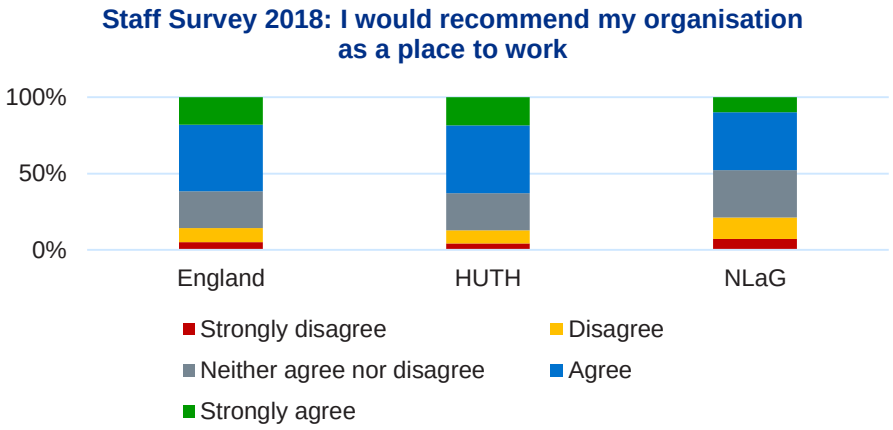
Compared to the national average HUTH and NLaG both perform worse for emergency medicine doctor sickness rates.

The sickness rates at HUTH and NLaG are higher than the national average. However, the sickness rates for nursing staff at HUTH and NLaG are lower than the national average. HUTH's doctor sickness rate is higher than the nursing rate, which is unusual as both NLaG and the national average show that the nursing sickness rate is usually greater than that of doctors.

These high rates may be related due to high workload and the need to undertake overtime: according to NLaG board papers, the highest sickness reasons across the Trust tend to be anxiety, stress, depression and other mental health issues.

In line with these results, fewer staff members in NLaG would recommend the Trust as a place to work which may also be influenced by levels of stress and having to deal with a service that struggles to attract sufficient numbers of permanent staff.





Sources: Model Hospital | Staff Survey 2018
https://www.nhsstaffsurveys.com/Page/1064/Latest-Results/2018-Results/
Please note: most recent available Model Hospital data is used

Urgent and Emergency Care

Limited access to high quality diagnostics and reporting services is a challenge across the Humber region

Radiology faces substantial workforce and infrastructure problems which negatively impact on care since it is a key interdependent clinical service for all planned care and many emergency specialties

Both Trusts face workforce challenges…

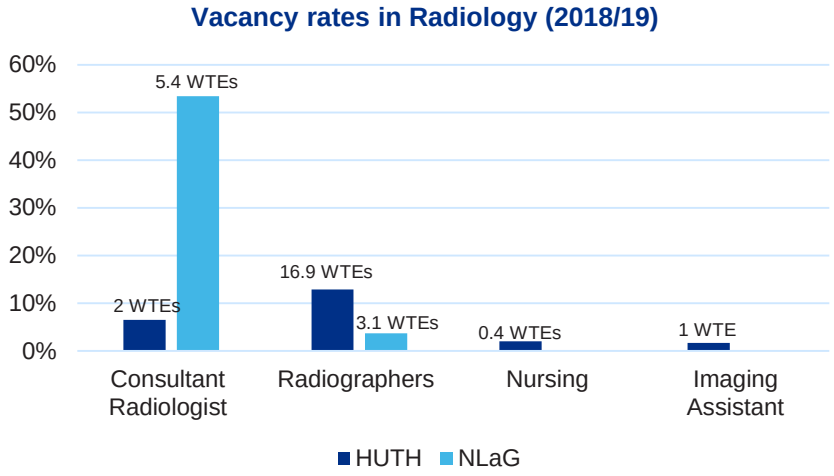
There are large vacancy rates in Radiology as well as a lack of staff for other support services (e.g. Phlebotomy). HUTH faces a 5% vacancy rate for radiology consultants with 33.9 WTEs in post. NLaG faces 53% vacancies with 10 WTE in post (as of March 2019).

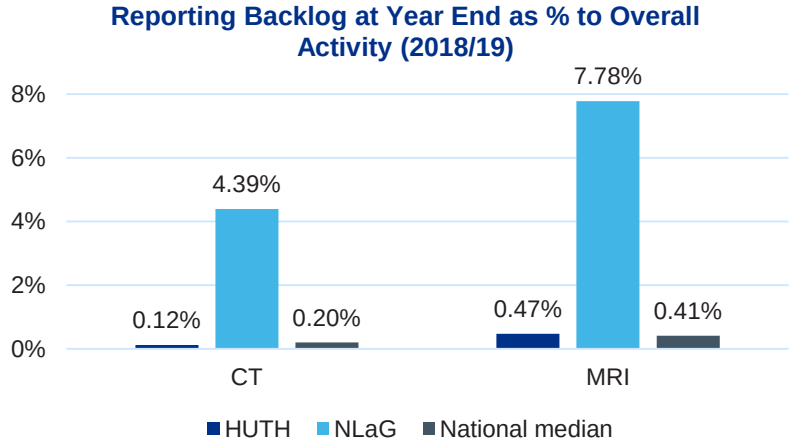
Despite these workforce pressures, both Trusts operate separate consultant on call rotas.

…and both Trusts also face old infrastructure and image reporting backlogs

Imaging equipment in the Trusts is ageing which impacts on the reliability and accuracy of the machines which in turn can lead to incorrect clinical conclusions.

	HUTH	NLaG
CT machines >10 years old	33%	0%
MRI machines >10 year old	40%	50%





Backlog is defined as reports outstanding for more than 10 days at the end of the financial year as a proportion of overall activity.

Source: Model Hospital

Maternity Services

Maternity Services

- Current service configuration and interdependencies
- Service-specific patient population health assessment
- Service quality
- Operational delivery of the service
- Service sustainability

Maternity Services

Both Trusts offer Consultant-led units of varying size but have different models of care

Both Trusts provide a comprehensive range of Maternity services across their sites. Depending on geography, there is variation in the types of choices women have

To address the health needs of the population, the two Trusts provide a full range of Maternity services on three sites:

Hull University Teaching Hospitals

Maternity services are provided at HRI. HRI has a large Obstetrician led unit and a co-located midwifery led unit that caters to low risk women. The Trust has recently upgraded their Neonatology Unit to Level 3 which now allows them to deliver higher risk births.

Northern Lincolnshire and Goole Hospitals

NLaG runs two Obstetrician led units: in DPoW and in SGH. Neither site has dedicated midwifery led units. DPoW has an LDRP model of care (see p.88). Both DPoW and SGH have Level 2 Neonatal Units. At GDH, a 'home from home unit' exists with approximately 10 births/year.

	HRI	DPoW	SGH	GDH
Obstetrician led unit	✓ *App. 4,400 births/ year*	✓ *App. 2,500 births/ year*	✓ *App. 1,600 births/ year*	✗
Co-located midwifery led unit	✓ *App. 500 births/ year*	✗	✗	✗
Home from home unit	✗	✗	✗	✓
Neonatal unit	✓ *Level 3*	✓ *Level 2*	✓ *Level 2*	✗

Maternity Services

Women of childbearing age in the Humber region have a greater degree of co-morbidity and deprivation

Women of childbearing age in the Humber region tend to live in poorer households and are less healthy than in other parts of the country

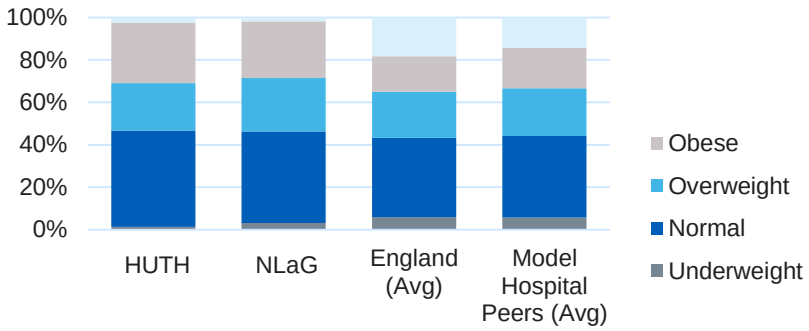
There are around **156,000 women between the ages of 15 and 45** living in the Humber region.[3]

Many of these **women live in relative poverty**: households in Hull, North and North East Lincolnshire are above the national and regional deprivation levels, with Hull being the third most deprived city in England.[3]

High levels of deprivation are also associated with a higher proportion of **women smoking during pregnancy**, compared to the national average.

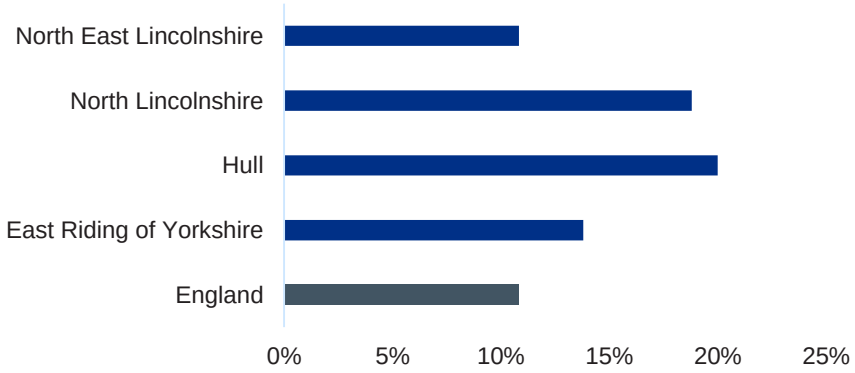
Many women also are suffering from a range of long-term conditions and lifestyle related ailments. For example, across HUTH and NLaG, **the proportion of pregnant women who are obese** is c.2/3 greater than the national average proportion. Obesity in pregnancy is associated with an increased risk of diabetes, stillbirth, complications (both obstetric and anaesthetic) during labour, and childhood obesity.

BMI in pregnant women



*BMI = Body Mass Index

Proportion of women smoking at the time of delivery



Sources: 1) "NHS Maternity Statistics, 2017-18: Maternity Services Data Set (MSDS); 2) NHS Digital Statistics on Women's Smoking Status at Time of Delivery 3) ONS data

Maternity Services

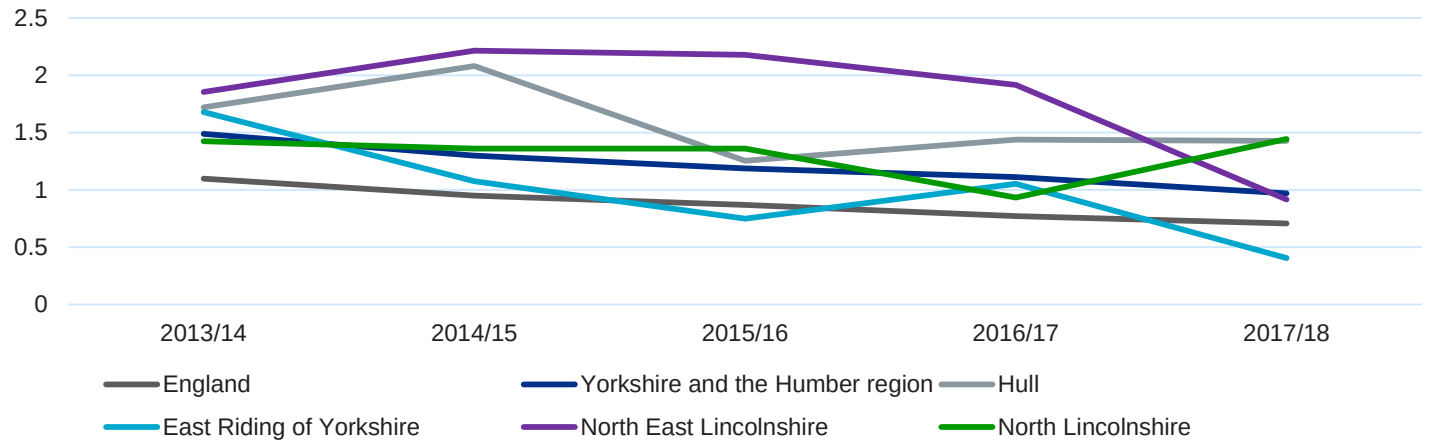
The proportion of teenage mothers and premature births is above the national average across the Humber region

The mothers giving birth in the region tend to be younger, have a more unhealthy lifestyle than in other parts of England and have relatively more babies that are born prematurely

While the **proportion of teenage births** (i.e. born to a mother below the age of 18) has been declining in some parts of the Humber region, it is **still above the national average for three out of four areas**. This is problematic because teenage mothers are more likely to give birth to babies with low birthweight; and to have stillbirths, and generally require higher levels of care.

The **proportion of mothers who smoke around the time of giving birth is also higher than the national average** in every area the two Trusts cover. This is closely associated with premature births: in **three of the four places the ratio of premature births is substantially higher** than the national average which in turn is likely to require more intensive, complex care for the baby.

Teenage mothers as a proportion of total births



Source: Smoking at time of delivery; teenage mothers; premature births (less than 37 weeks of gestation) – Fingertips data

Maternity Services

Overall CQC ratings for Maternity care at the three main sites are now good

Site	Specialty	Safe	Effective	Caring	Responsive	Well-led	Overall
HRI	Maternity	Good June 2018	Good June 2018	Good June 2018	Good June 2018	Good June 2018	Good June 2018
DPoW	Maternity	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018
SGH	Maternity	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018
GDH	Maternity	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018

Sources:
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH1419.pdf
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH2795.pdf

Maternity Services

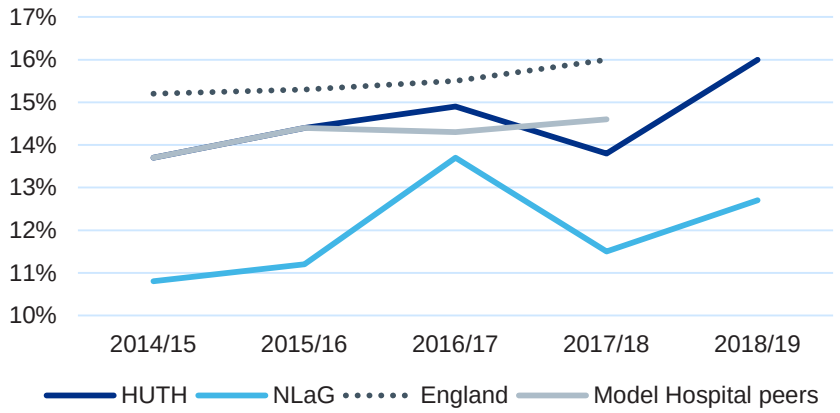
Both Trusts have a lower stillbirth rate than the national average but HUTH has greater than national average rate of neonatal deaths

Some of the clinical outcomes of Maternity care tend to be in line with national benchmarks, however there is room for improvement

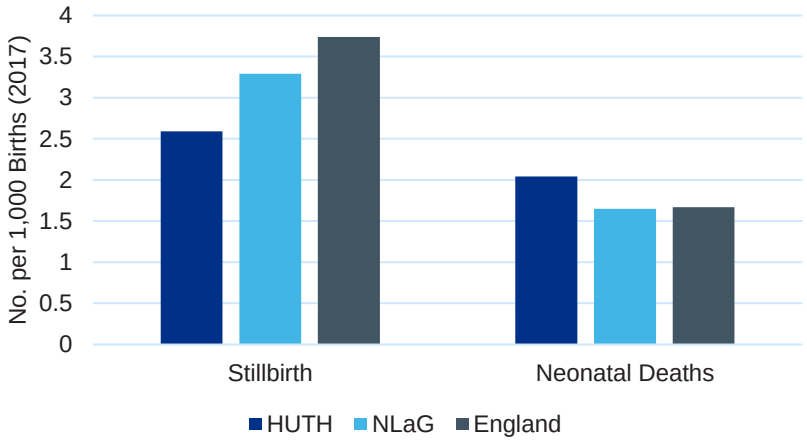
The proportion of emergency caesareans has increased nationally and among the model hospital peer group since 14/15; both HUTH and NLaG experienced a sharp increase in emergency caesareans in 16/17, which subsequently reduced in 17/18, before rising again in 18/19.

The neonatal death rate at HUTH is greater than the national average and both Trusts have a lower stillbirth rate than the national average.

Non Elective Caesareans as a proportion of total births



Still Birth and Neonatal Deaths



Sources: Reference Costs | Analysis of Trust's patient level data | MBRRACE-UK Perinatal Mortality Surveillance report for births in 2017

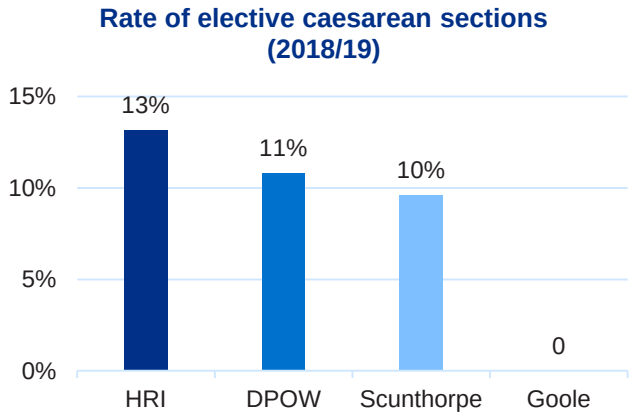
Maternity Services

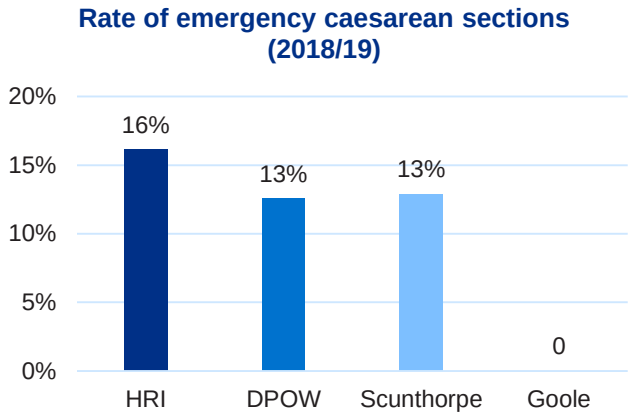
CQC ratings for Maternity care at the three main sites are now good

There is variation in clinical care offered due to high numbers of organisations and sites involved.

The hospitals in the area are in line with the national rate of caesarean section delivery at 28% of babies. Overall total rates of caesarean section by site were:

- 29% HRI
- 24% DPoW
- 23% SGH





There is internal-organisational variation in model of care offered

At NLaG, DPoW offers the Labour Delivery Recovery Postnatal (LDRP) model of care which receives better patient feedback. LDRP involves a single room for labour, delivery, recovery and postnatal care. This model helps DPoW provide a differentiated experience for women. However, the model is not currently offered at SGH or HUTH.

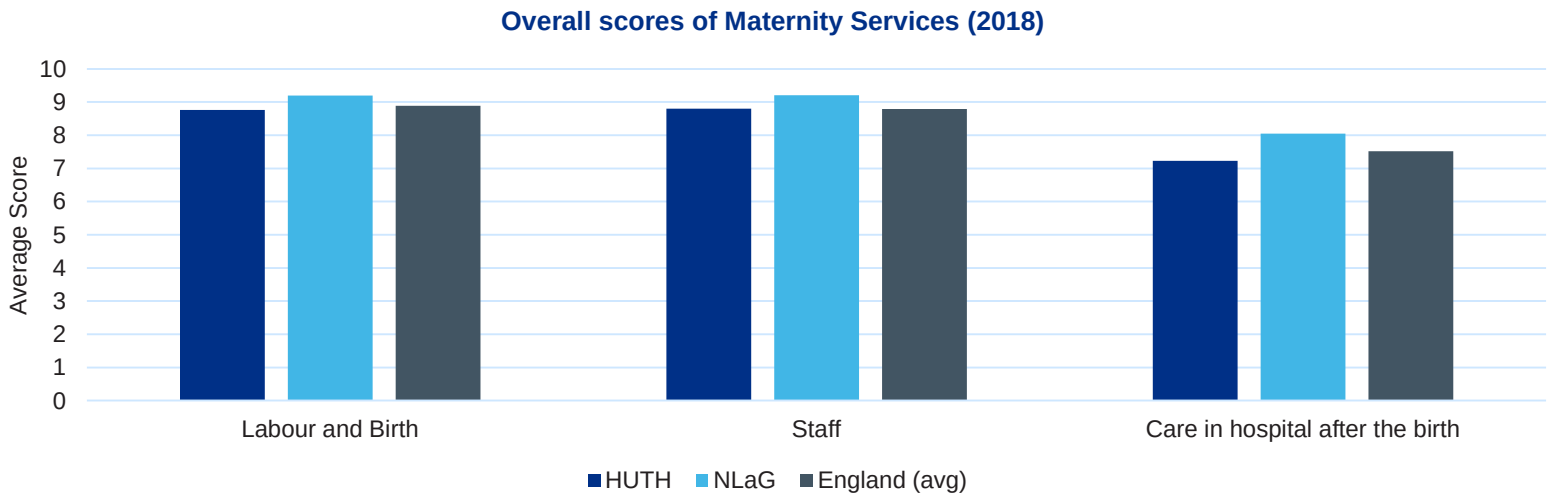
Sources: Patient level data and CQC report

Maternity Services

Both Trusts are in line with national averages for patient satisfaction

Patients tend to have a positive care experience in both Trusts

Patients generally report feeling well looked after in both Trusts, according to the national Maternity Survey. NLaG has a higher score for all areas when compared to the national average. More detailed analysis of the Maternity Survey data shows that both Trusts score highest on “clear communication” and score lowest on “being left alone.”



Source: National Maternity Survey

Maternity Services

HUTH has the highest number of births per year for the region, in excess of the combined activity of all NLaG sites. Women feel they have less choice on options than nationally

Low activity levels at certain sites

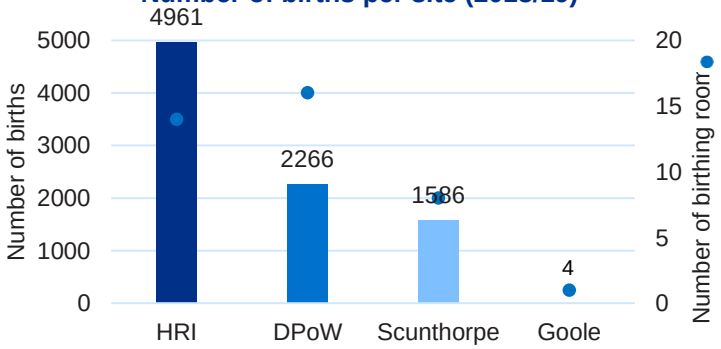
Currently births in the region are distributed across 4 sites. The Fatima Allam Birth Centre is a 3-roomed midwifery led unit at HRI and opened in April 2017. HRI's Labour Ward is the largest unit by activity, with 4,961 births per year. This is achieved through 11 labour ward rooms. HRI often runs at full capacity and has to transfer inductions out.

Out of 3856 births at NLaG, 2266 births take place at DPoW. DPoW has 16 rooms available and operates a LDRP model. SGH has 8 labour rooms. Low activity levels are seen at the 'home from home' services at GDH where ≤10 babies/year are delivered.

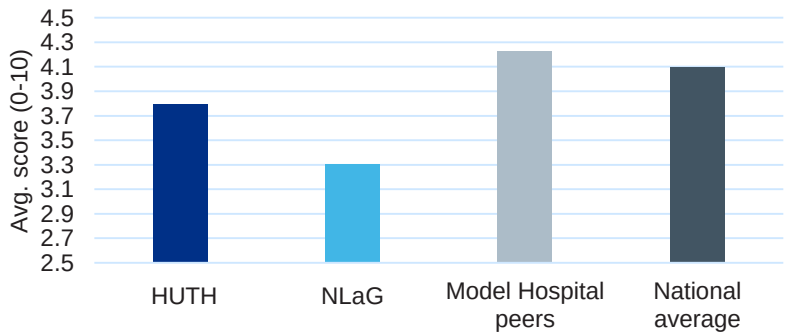
Challenge of providing women with choice

Better Birth's vision is improving choice and personalisation of maternity services so that all women are able to make choices about their maternity care, during pregnancy, birth and postnatally, and that more women are able to give birth in midwifery settings (at home and in midwifery units). At the moment, women in the region feel that they have less choice about where to give birth than nationally. This is particularly low for NLaG where, apart from the 'home from home' unit in GDH and the LDRP model in DPoW, there are no dedicated midwifery led units.

Number of births per site (2018/19)



Were you offered choice about where to have your baby?



Sources: which.co.uk website | National Maternity Survey 2018

Maternity Services

There is a variation in the activity across the three neonatal units, with SGH receiving 14 and DPoW 23 babies with birth weights <1500g

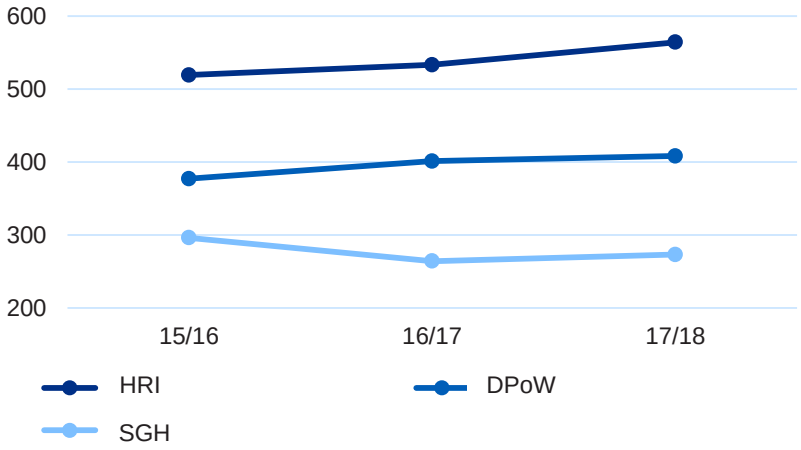
Low activity levels at certain sites

Currently there are three neonatal units in the region: two Local Neonatal Units (LNUs) (Level 2, DPoW and SGH) and one Neonatal Intensive Care Unit (NICU) (Level 3, HRI). The volume of neonatal admissions has been rising slowly in the region, with SGH receiving the lowest numbers of admissions in the region. HRI often runs at full capacity.

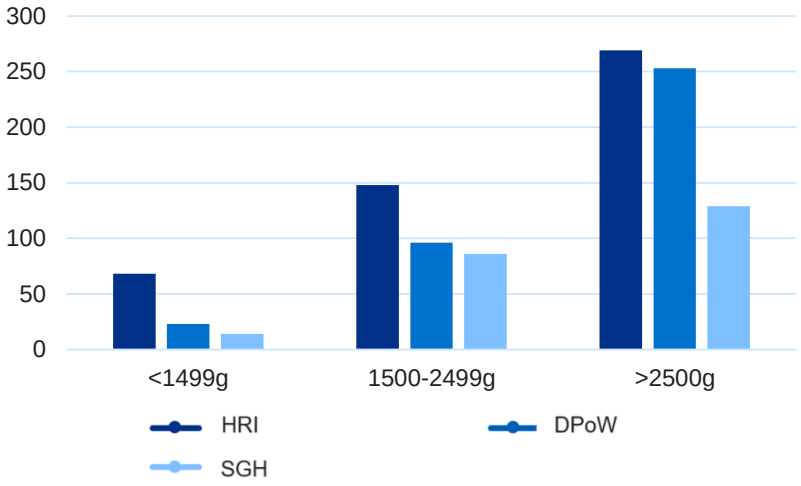
Low volumes of admissions in low weight babies

SGH and DPoW both have a low number of admissions of babies with birth weight <1500g (14 and 23 babies respectively in recent data). Recent recommendations suggest that Level 2 LNUs should admit at least 25 babies with birth weights <1500g every year, to maintain staff skills in caring for such vulnerable babies.[2]

Number of Neonatal admissions



Neonatal admissions by baby weight



Source: Yorkshire & Humber Neonatal Network Report. 2 - Arrangements for Local Neonatal Units and Special Care Units in the UK including guidance on their staffing: A Framework for Practice, November 2019, British Association of Perinatal Medicine.

Maternity Services

Midwifery workforce is not an immediate concern although both Trusts have a higher number of annual births per midwife than model hospital peers

Midwifery workforce is not an immediate challenge, however, according to the latest CQC report (September, 2018) for NLaG 15% of women do not receive 1:1 care during labour.

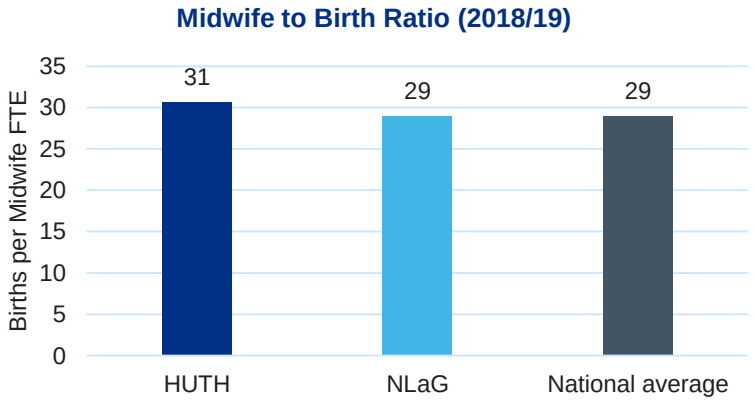
Currently the Birthrate Plus ratio of births to midwives in HUTH is higher than the national average.

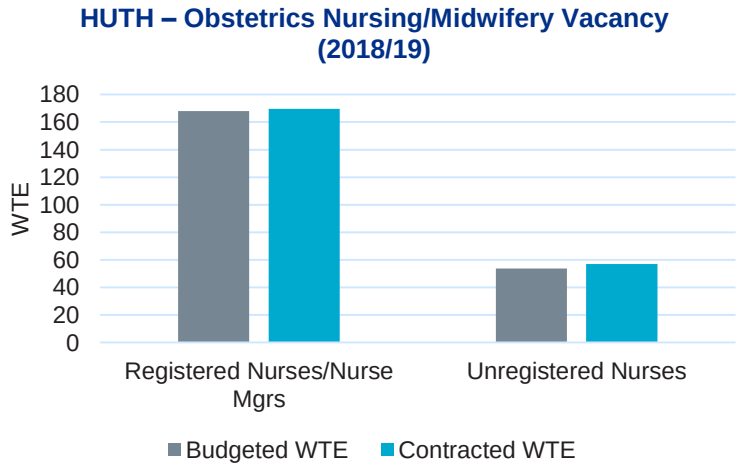
The new continuity of care standards will put additional strain on the current midwifery workforce.

Better Births continuity of carer standard (2017) sets out the need:

- For consistency of the midwife and/or obstetrician who cares for a woman throughout pregnancy, birth and post natal periods
- To include a named midwife who takes on responsibility for co-ordinating a woman's care throughout pregnancy, birth and post natal periods

The impact of the implementation of these standards will likely be that the births per midwife ratio decreases and more midwives are required to run the service. Vacancy rates will therefore increase.





Source: Data provided by Trusts

Maternity Services

NLaG runs two maternity rotas and has high vacancy rates for trainee grade doctors

NLaG runs two maternity rotas

NLaG has high vacancy rates for middle grade obstetrician trainees, particularly at SGH, which they have mitigated by employing Trust grade doctors.

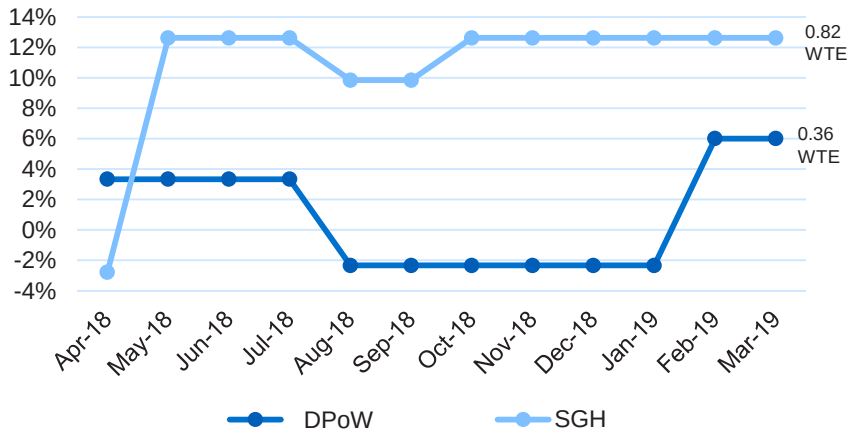
Whilst this addresses the immediate issues, lower levels of trainees coming to the area can lead to difficulties in attracting the future consultant workforce, as people are more likely to look for permanent posts in areas they are already familiar with.

CDSG clinicians suggested the following causes:

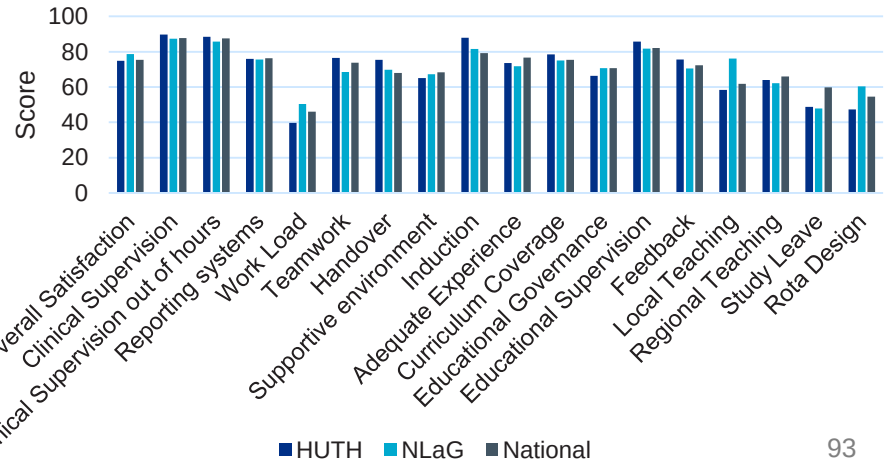
- Lack of appeal of the Y&H deanery due to poor educational offer and disperse nature of the Trust sites
- Competition from more attractive urban centred deaneries such as Sheffield and Leeds.

The results of the GMC survey indicate that both Trusts fluctuate with the national average for most domains. However, trainees have given NLaG lower scores for the amount of study leave available, for teamwork, and for regional teaching.

Trainee grade doctors vacancy rates NLaG



Obstetrics and Gynaecology Survey Scores



Source: GMC Survey Data, Trust Financial Ledger

Paediatric Services

Paediatric Services

- Current service configuration and interdependencies
- Service-specific patient population health assessment
- Service quality
- Operational delivery of the service
- Service sustainability
- Relationship with primary and community care settings

Paediatric Services

All three major sites in the health economy provide inpatient paediatric wards, elective Paediatric Surgery as well as outpatient and neonatology services

Both Trusts provide a comprehensive range of services across their sites and most care – apart from paediatric intensive care – is provided in the area

Hull University Teaching Hospitals

Paediatric services are provided at HRI. HRI is a tertiary centre and provides general acute medical and surgical paediatric care, as well as specialist services to its patients. The Trust works in partnership with other tertiary paediatric centres in the region (Sheffield Children's Hospital and Leeds Teaching Hospitals) and patients requiring Paediatric Intensive Care Unit support are treated at one of these centres.

Northern Lincolnshire and Goole Hospitals

NLaG provides the majority of its services from DPoW and SGH. Paediatricians at NLaG also provide Level 2 Neonatology care for the consultant-led obstetrics service at both sites. While some tertiary referrals are made to HRI, much of the specialist paediatric patient activity from NLaG flows are directed out of the Humber area. Both DPoW and SGH provide two High Observation Beds, four in total.

	HRI	DPoW	SGH	GDH
Inpatient paediatric unit	✓	✓	✓	✗
Short stay paediatric unit	✓	✓ *In ED*	✓	✗
Paediatric high dependency unit	✓	✗	✗	✗
Paediatric Intensive Care Unit	✗	✗	✗	✗
Day case Paediatric Surgery	✓	✓	✓	✗
Elective Paediatric Surgery	✓	✓	✓	✗
Paediatric outpatient clinics	✓	✓	✓	✓ *General paeds & diabetes clinics only*
Neonatal unit	✓ *Level 3*	✓ *Level 2*	✓ *Level 2*	✗

Paediatric Services

The young patient populations live in relatively poorer households, are in care more often and suffer from more chronic and lifestyle-related conditions

Children and young people in the area tend to live in poorer households and are less healthy than in other parts of the country

There are around **210,000 children and young people between the ages of 0 and 19** living in the region[3].

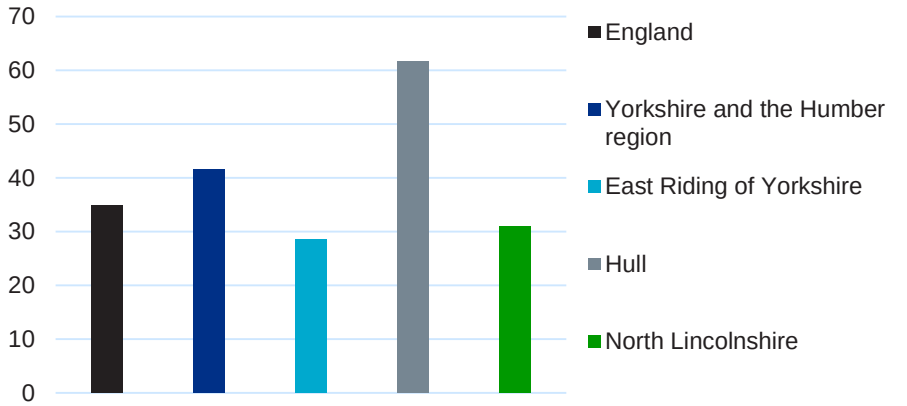
Many of these **children live in relative poverty**: the number of children living in families with low incomes is above the regional and national average for three of the four places in the Humber region[4].

There are also **over 1,600 children in care,** with particularly high concentration in the urban centres around Hull and Grimsby.

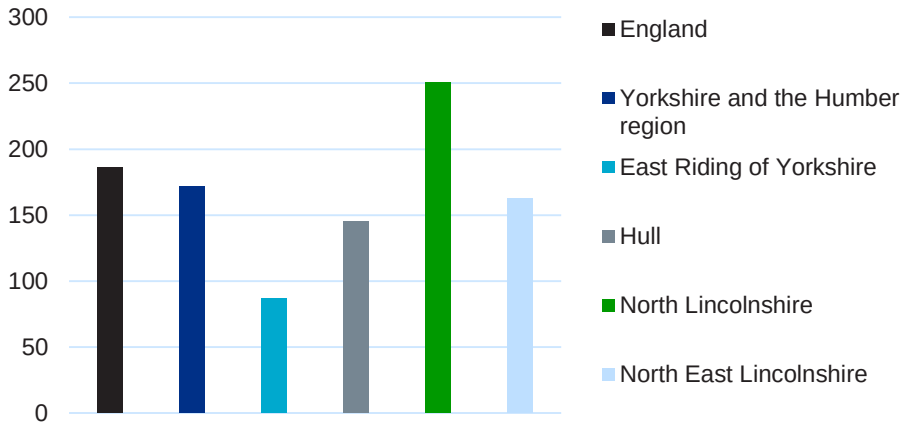
Many of these children also are burdened by a range of long-term conditions and lifestyle related ailments. For example, the **prevalence of obesity at reception and year 6 is above the regional and national averages** for three out of the four areas in the Humber region.

There are also **specific local environmental factors that can impact on child health**: Scunthorpe in North Lincolnshire for example had the highest estimated level of fine-particle air pollution in the entire country[5].

Looked After Children per 10,000[1]



Hospital admissions for asthma (under 19 years old) per 100,000



Sources: 1) Children looked after in England, Department for Education, 2018; 2) Public Health England fingertips 3) Age profile data of resident Local Authority population, 2016 Public Health England fingertips 4) Children in Low income families, PHE 5) BBC website: UK's most polluted towns and cities revealed

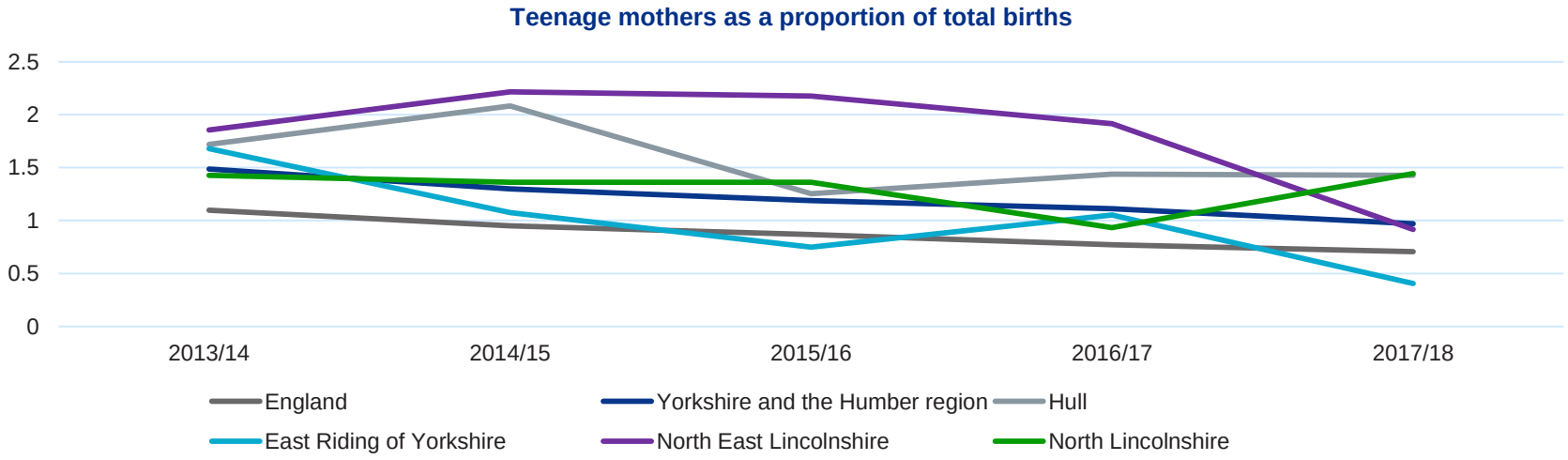
Paediatric Services

Parents of the patient populations tend to be younger themselves and make less healthy lifestyle choices than their peers elsewhere in the country

The parents of children born in the Humber area tend to be younger, have a more unhealthy lifestyle than in other parts of England and have relatively more babies that are born prematurely.

While the **proportion of teenage births** (i.e. born to a mother below the age of 18) has been declining in some parts of the Humber area, it is **still above the national average for three out of four CCG areas**. This is problematic because teenage mothers are more likely to give birth to babies with low birthweight; and to have stillbirths.

The **proportion of mothers who smoke around the time of giving birth is also higher than the national average** in every place of the Humber region. This is closely associated with premature births: in **three of the four places the ratio of premature births is substantially highe**r than the national average which in turn is likely to require more intensive, complex care for the baby.



Source: Fingertips (Public Health England) – Child and Maternal Health – Teenage Mothers

Paediatric Services

CQC rates all paediatrics areas “good” except for “requires improvement” in the domain of Safety

The CQC has rated both Trusts as good overall, but the “Requires Improvement” rating for safety raises concerns about clinical standards, and the quality of care being provided to children in the area

Site	Specialty	Safe	Effective	Caring	Responsive	Well-led	Overall
HRI	Services for children and young people	Requires improvement Feb 2017	Good Feb 2017	Good Feb 2017	Good Feb 2017	Good Feb 2017	Good Feb 2017
DPoW	Services for children and young people	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018
SGH	Services for children and young people	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018

Sources:
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH1419.pdf
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH2795.pdf

Paediatric Services

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At HUTH, amongst others, the CQC identified concerns relating to:

- Documentation and follow up of incidents including near misses
- The assessment, documentation and staff competence to manage mental health needs of children
- Medication records were not always completed appropriately
- Unfilled junior doctors posts led to threats to managing the service.

At NLaG, amongst others, the CQC identified concerns relating to:

- Non compliance with mandatory training, safeguarding level three training and appraisals
- Concerns regarding appropriate training for caring for, and risk assessment of, patients with mental health needs
- Staffing levels which do not meet national guidance in the paediatric assessment unit, or those for medical cover.

Sources:
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH1419.pdf
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH2795.pdf

Paediatric Services

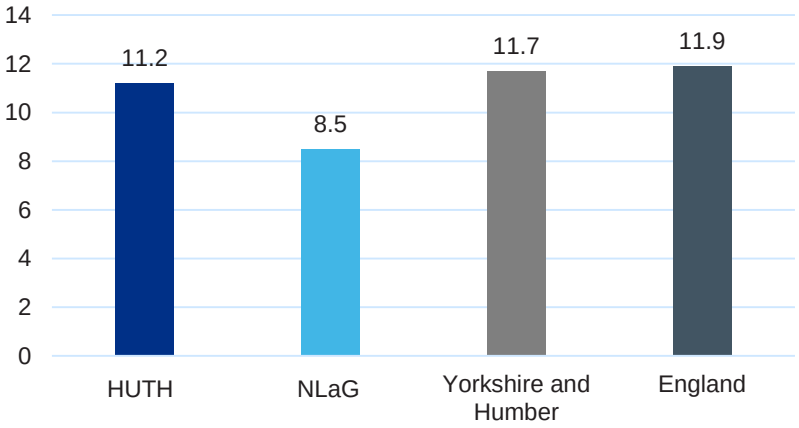
Clinical outcomes tend to be in line with national benchmarks

Clinical outcomes of paediatric care tend to be in line with national benchmarks

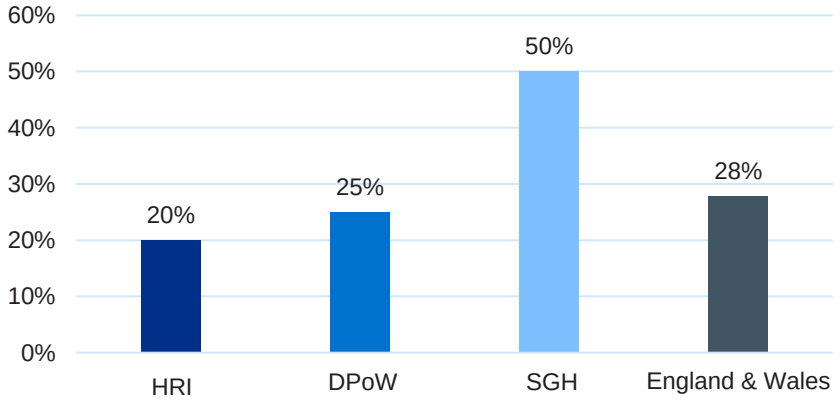
Despite the CQC's concerns regarding safety, patients generally receive good paediatric care at both Trusts when the clinical outcomes are assessed. Emergency readmission rates in children <16 years old are statistically significantly lower than the national benchmark at NLaG and within the expected range at HUTH.

The national Diabetes audit data suggests that in HRI and DPoW the HbA1c Treatment target is achieved in a lower proportion of children with diabetes than nationally, whereas SGH is performing better than England & Wales on average.

Emergency readmissions to hospital within 30 days of discharge in children (2018/19)



HbA1c Treatment Target - Type 1 Diabetes (2017)



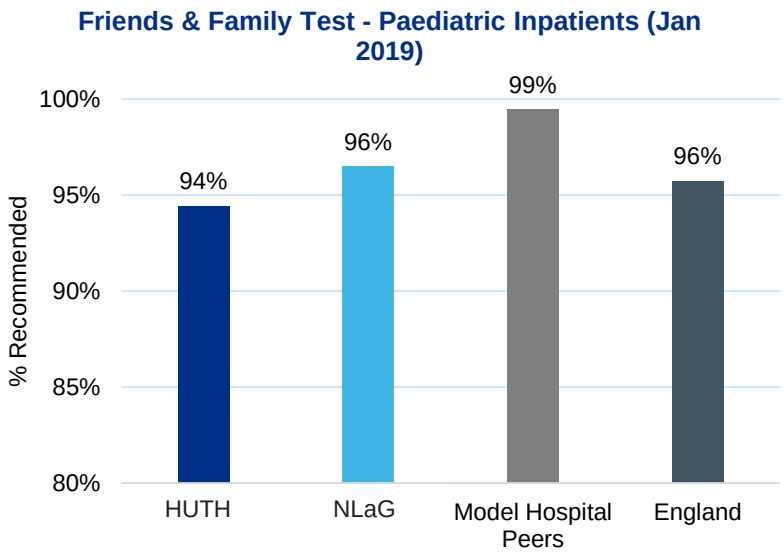
Sources: NHS Digital Clinical Indicators Data | National Diabetes Transition Audit, 2011 - 2017

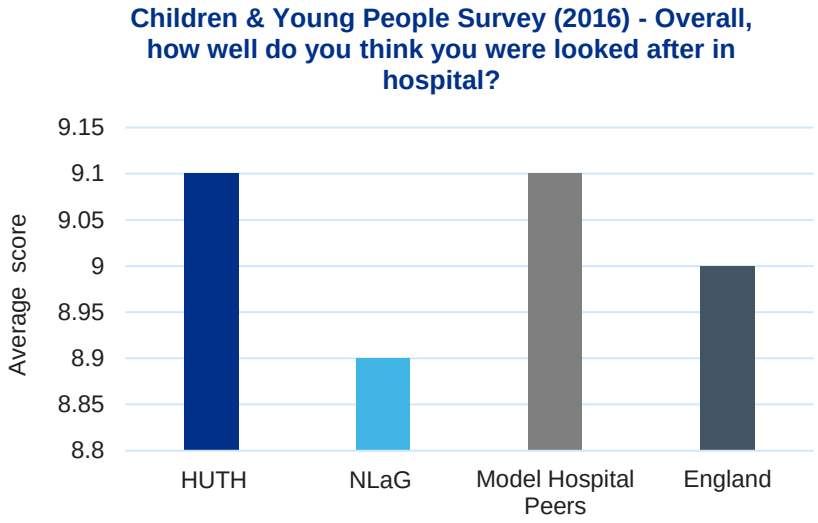
Paediatric Services

Patients and their parents perceive care to be of high quality, feel well taken care of and would recommend the service

Patients tend to have a positive care experience in both Trusts, approximately in line with national feedback

Patients generally report feeling well looked after in both Trusts and would recommend the service to their friends and family. However, in HUTH the proportion of patients who would recommend the paediatric services at the Trust to friends and family is lower than the peer and national average. On the national Children & Young People survey HUTH were scored similarly to the national average and their Model Hospital Peers, whereas NLaG were scored slightly lower.





Sources: Published Friends & Family Test data | National Children and Young People survey

Paediatric Services

Paediatric outpatient activity has risen in recent years

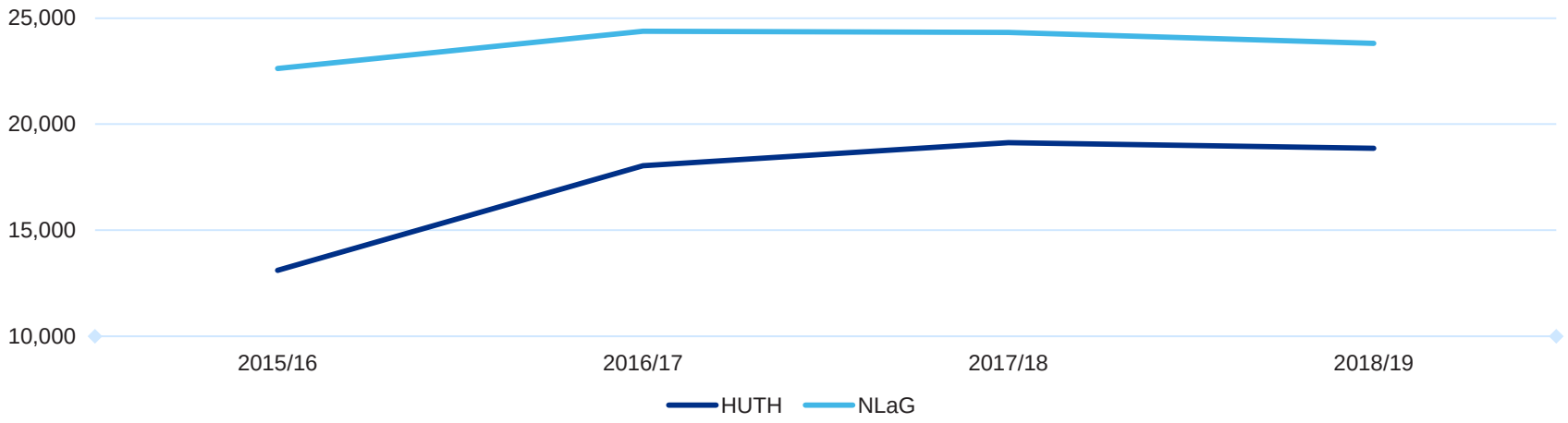
The number of referrals to paediatric outpatient clinics has been rising as has the number of outpatient attendances

The number of referrals to specialist paediatric outpatient services in both Trusts has been increasing. Outpatient attendances have steadily increased since 2015/16, plateaued after 2017/18 and are projected to remain constant.

Waiting times for paediatric outpatient appointments have also risen

Waiting times have increased at both Trusts. Clinicians report that in both Trusts, a shortage of available workforce and adequate space to run clinics are major blockages to improve the timeliness of treatment.

Number of paediatric outpatient appointments



Sources: Years 2015/16, 2016/17, 2017/18 – reference costs | 2018/19 – analysis of patient level data provided by Trusts

Paediatric Services

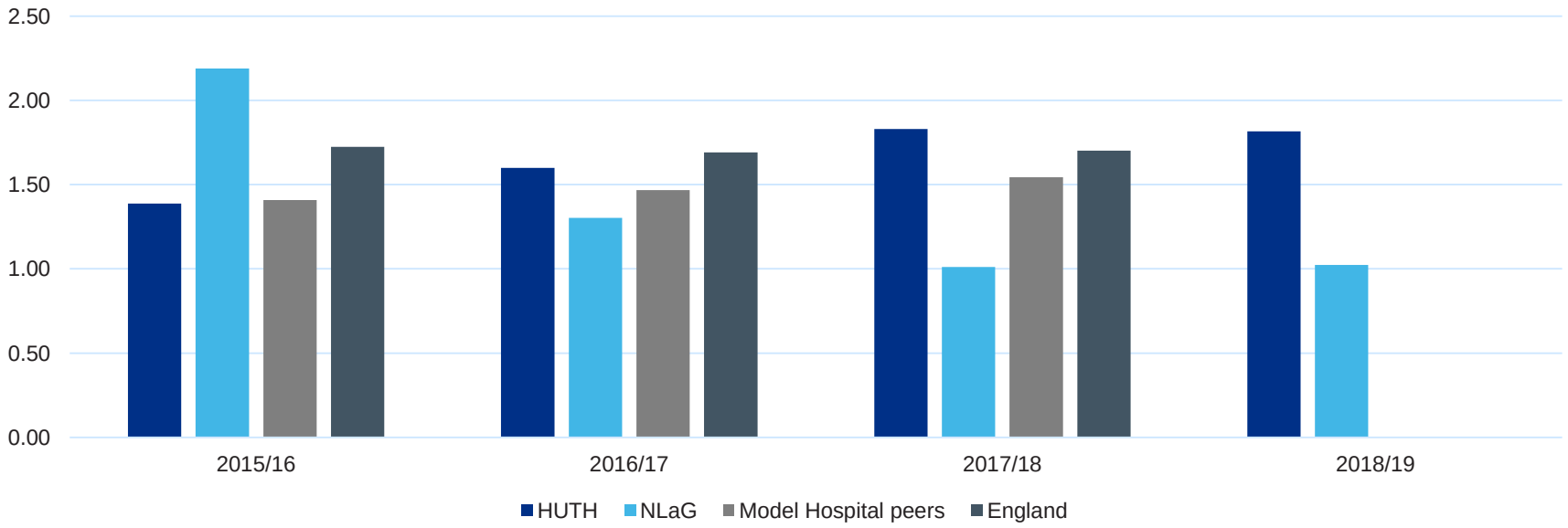
While NLaG has successfully reduced First-to-follow-up ratios over the last three years, HUTH's ratio has increased and is now higher than national, and model hospital peers

High number of outpatient follow up appointments

In HUTH the first to follow up (FFU) ratio of outpatient appointments for paediatric specialties has been rising over the last three years. In contrast, the FFU ratio in NLaG has been going down and in the most recent year of data it is lower at the Trust than that of Model Hospital Peers.

Total outpatient appointments have decreased for a number of paediatric specialties, as have first appointment. This suggests the Trusts are seeing fewer new patients but those that are seen return for more follow-up appointments.

FFU ratio for Paediatric specialties



Sources: 2015/16-2017/18 Reference Cost data | 2018/19 – Trust patient level data

Paediatric Services

Paediatric Emergency attendances are decreasing but compliance with four hour standard is falling

High but decreasing number of ED attendance

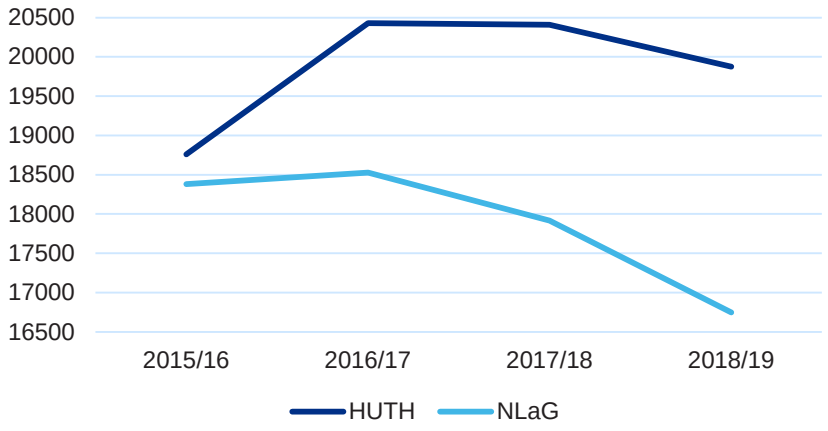
The number of ED attendances have remained fairly stable from 2015/16 to 2018/19 for HUTH, whereas they have slightly deceased for NLaG in the same period.

NLaG has had a downward trend for ED attendances in children aged 0-9 years since 2016/17.

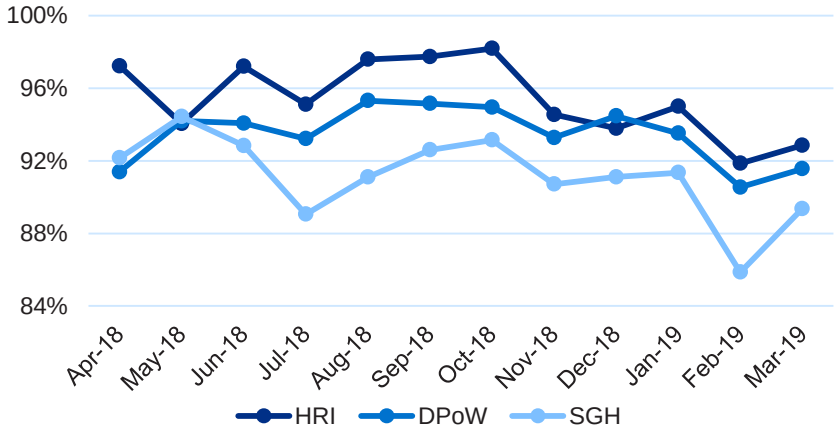
Challenge of meeting four hour waiting time standard for paediatrics

Trusts are struggling to meet the four hour ED waiting standard for paediatric attendances. SGH in particular is performing worse than HRI and DPoW. It is notable, however, that overall the performance on the four hour target for children is better than that for adults (see slide 68 for adult four hour target).

Number of ED attendances in children aged 0-9



Four hour target (all children) – 2018/19



Sources: Published HES data and analysis of Trust patient level data | Analysis of Trust data

Paediatric Services

While both Trusts aspire to meet Facing the Future standards, they struggle to comply – particularly around immediate access to senior paediatric staff

HUTH

HUTH Facing the Future audit documents (2017) show non-compliance with standards in the following key areas:

- Immediacy of access to Consultant care / general paediatric rotas having required numbers of full time equivalents (FTEs)
- Handovers being consultant led
- Lack of rapid access services
- Availability of telephone Advice and Guidance

Clinicians consider some potential root causes of non-compliance to be:

- Inability to fill training rota due to lack of appeal of the Y&H deanery school due to educational offer, as well as disperse nature of Trust sites
- Vacancies for generalist paediatric consultants
- Lack of engagement / education in both primary care and secondary paediatric care regarding Advice & Guidance services

NLaG

NLaG's documentation details areas of compliance with standards as not met, partially met and met. For those areas not or partially met, there are ongoing action plans in place.

Standards not met include:

- Staffing every ED with two registered children's nurses per shift
- Adequate Support Professional Activities job planned for Paediatric Emergency Medicine Consultants and a research lead with Paediatric Emergency Research in the UK and Ireland membership
- Evidence of an escalation policy for prioritisation for full assessment if triage waiting time exceeds 15 minutes
- Guidelines for early escalation of children with complex medical needs for senior review.

Standards partially met include:

- Dedicated Paediatric Emergency Medicine Consultants
- Staff training in infant and child basic life support
- Insufficient policies and training for supporting children with mental health and complex medical needs.

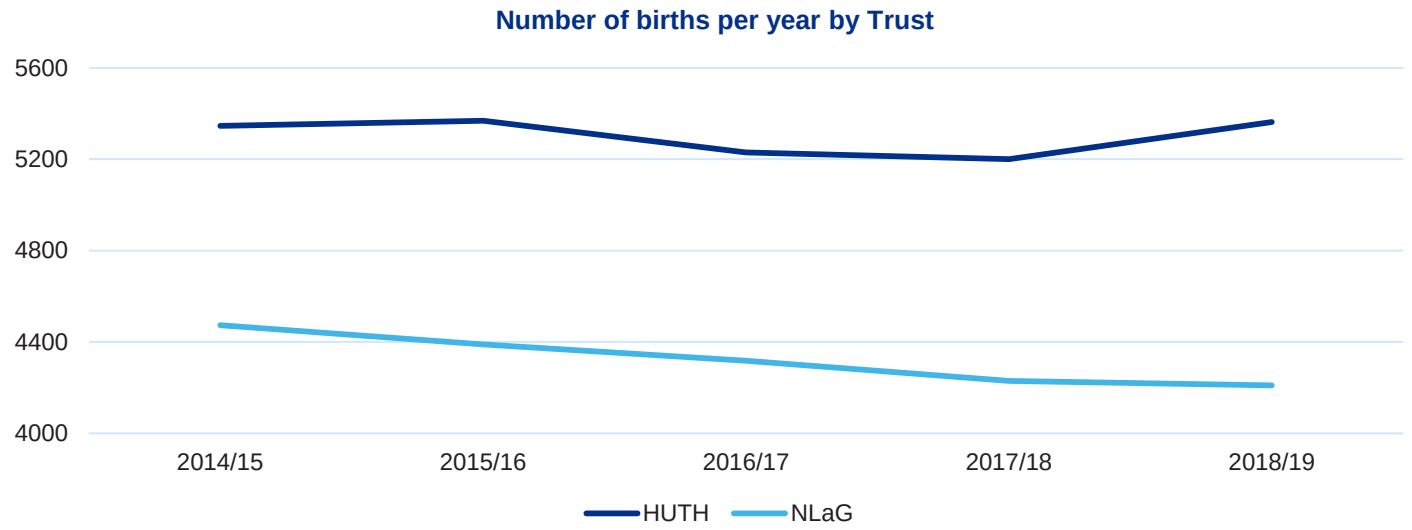
Sources: HUTH Business Case for Paediatric Integrated Care Pathway 2019 | NLaG Facing the Future Standards documentation 2019

Paediatric Services

Given the lower numbers of babies born with low weights (1500g) at NLaG, proposed new standards are unlikely to be met

Although neonatal admissions have been rising slowly in the region, the number of <1500g birth-weight baby admissions in SGH is low (14 babies). Recent recommendations suggest that Level 2 LNUs should admit 25 or more babies with birth weights <1500g to remain sustainable long term. Some root causes have been considered to be:

- Inability of the local population to provide enough births to sustain volume of activity to run two services
- Declining birth rate which could be as a result of net migration out of area.



Sources: NHS Maternity Statistics | Trust Financial Ledger

Paediatric Services

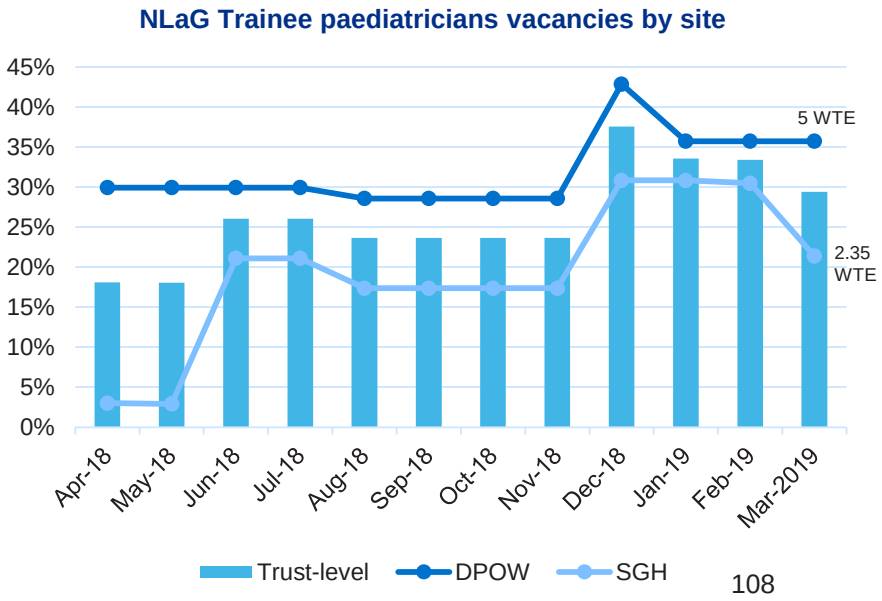
Vacancy rates and recruitment are a challenge

Difficulty of operating two separate neonatal rotas on two sites on the South bank

Duplicating full inpatient paediatric services at DPoW and in SGH requires NLaG to run two full paediatric rotas, equating to a requirement of 20 Tier 2 paediatricians. Recruiting paediatric trainees is a national problem, but is exaggerated in Humber, and rota gaps are filled with non-career grade doctors.

New standards will require separate neonatology rotas for both Level 2 units on the South Bank stretching the existing medical paediatric workforce further meaning it is even more challenging to staff the services safely.

Within the context of national shortages, HUTH is struggling to fill generalist and specialist paediatric consultant posts. Those staff who are keen to work in Humber are divided between the three main sites.



Sources: NHS Maternity Statistics | Trust Financial Ledger

Paediatric Services

Limited activity for some specialties makes it difficult to maintain high-quality, sustainable tertiary services for HUTH as well as certain specialties at NLaG

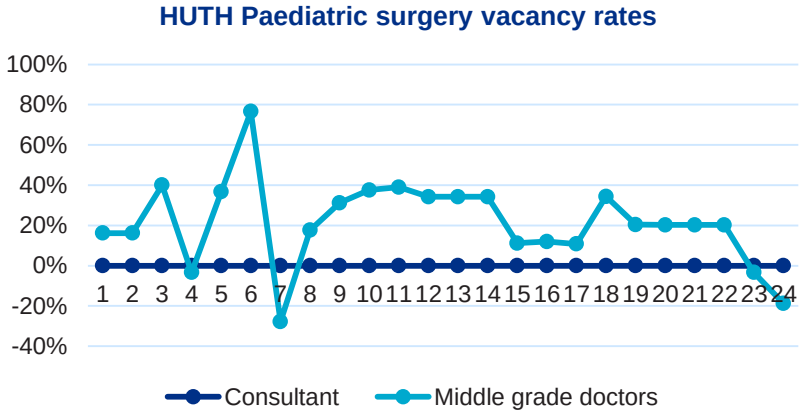
Limited activity for some specialties (Paediatric Surgery, Gastroenterology, Neurology) make it difficult to provide high-quality, sustainable tertiary services for HUTH

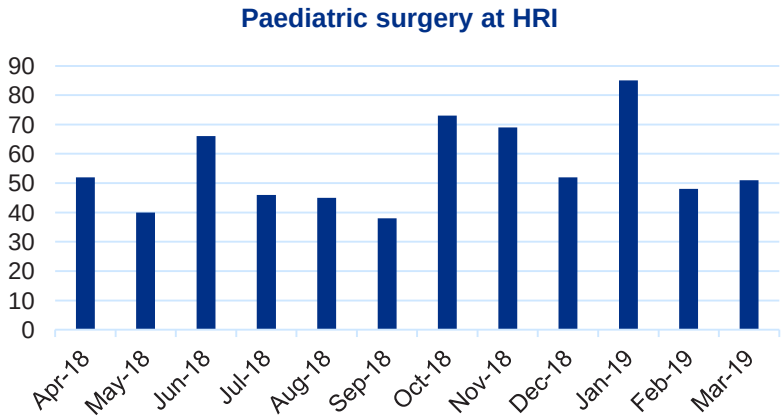
For some paediatric specialist services, there appears to be limited activity. For example, a certain minimum service volume is required to deliver a sustainable tertiary Paediatric Surgery service.

HUTH is fully staffed with four full-time consultant paediatric surgeons and five full-time paediatric middle grade positions with vacancy rates varying across the year.

Clinician feedback suggests:

- mismatched capacity and demand
- recruitment of paediatric consultants with special interests in order to make posts appealing whereas the requirement is actually for more generalist paediatric consultant capacity
- competition between specialist and generalist services for existing consultant capacity
- critical mass of population to sustain services.





Sources: HUTH Ledger data | Analysis of HUTH patient level data

Paediatric Services

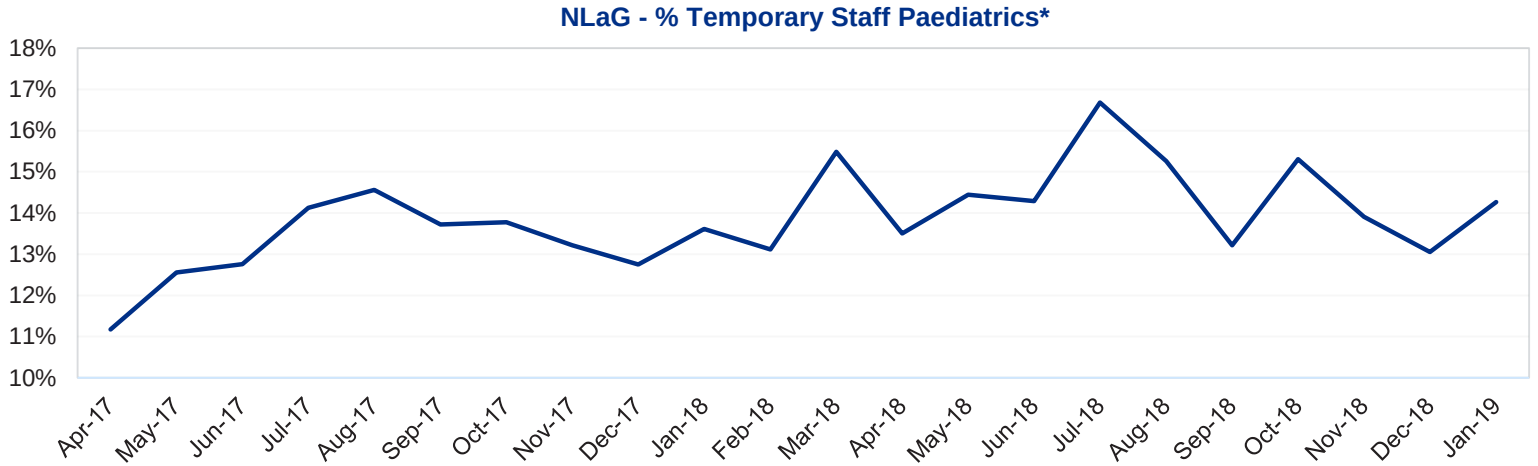
Low paediatric trainee post fill rates are a national problem but are exacerbated in Humber, especially at NLaG

Low junior doctor fill rate

There is a national issue with filling general paediatric and neonatal training posts with a national average vacancy rate of 14%. Yorkshire & Humber (Y&H) is the worst affected region, with a 49% fill rate.

As a result, there is a high proportion of temporary spend in paediatrics in NLaG with a recent accelerated upward trend which may coincide with training rotations. Trusts mitigate the impact by using staff grade doctors and Advanced Paediatric Nurse Practitioners (APNP) / Advanced Neonatal Nurse Practitioners (ANNP). Without regular paediatric trainees in the area it is reported to be more difficult to attract paediatric consultants.

According to clinician feedback, lack of appeal of the Y&H deanery is due to poor educational opportunities and the dispersed nature of Trust sites, competition from more attractive urban centred deaneries such as Sheffield and Leeds, and a decline in attractiveness of paediatrics as a specialty due to the increased Consultant workload, liability and negligence insurance.



Source: Trust Financial Ledger

* Most recent data is provided from Attain CFC up to and including January 2019

Paediatric Services

Both Trusts report workforce challenges

There are major challenges with paediatric workforce at both Trusts

Running full inpatient paediatric services requires 30 middle grade paediatric doctors across the Humber region. Recruiting paediatric trainees is a national problem, but worse in Humber, and rota gaps are filled with non-career grade doctors. New standards will require separate Neonatology rotas for both Level 2 units on the South Bank stretching the existing medical paediatric workforce further, and increasing the existing challenges around staffing the services.

Difficulty of filling both the generalist and specialist paediatric rotas in HUTH

There appears a challenge to sustain generalist paediatric services due to limited consultant workforce. As previously mentioned, there are also threats to specialist services due to low activity volumes. This is especially a problem in paediatric mental health. In recent months, 1.2 of 4 consultant paediatrician FTEs at HUTH have been vacant.

Difficulty of recruiting to community paediatrics consultant posts

Community paediatric services was incorporated into HUTH on the 1 April 2019 having previously been provided by a community provider. Workshop feedback described difficulty in recruiting to community consultant posts in HUTH. Currently 3 out of 5 community posts in HUTH are filled by locum consultants.

Source: Trust Ledger data

Paediatric Services

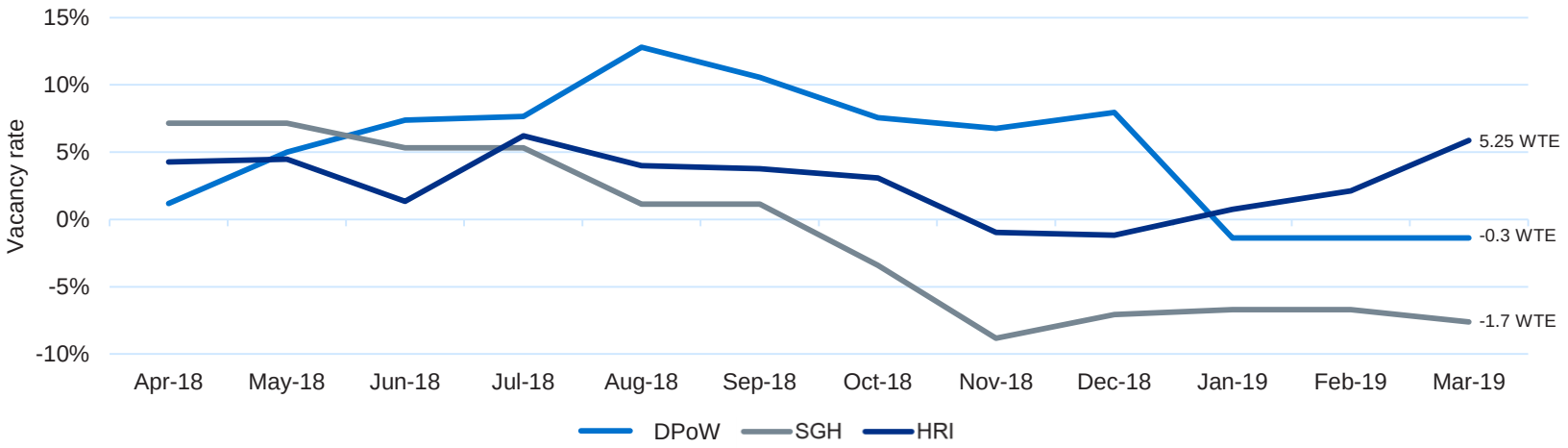
High nursing vacancy rates lead to reliance on bank and agency workers

Challenge to meet nursing standards

There is a national deficit of paediatric nurses, resulting in both Trusts struggling to meet staffing standards. Nursing vacancies result in higher use of bank & agency which is expensive and may impact quality of care.

Lack of workforce in surrounding labour market suggests that attracting the required workforce will be difficult, regardless of employer appeal.

Paediatric nursing vacancy rates over time



Source: Analysis of HUTH ledger data

Paediatric Services

Substantial emergency activity flows into NLaG from further south in Lincolnshire; HUTH loses some of its activity to York in the North

NLaG receives substantial activity from out-of-area patients; HUTH loses many patients in the North of its catchment to out of area providers

Patients from Humber were, in the majority, admitted to Humber Trusts, with the exception of East Riding (ER CCG) residents where 33.7% were admitted to another Yorkshire and Humber Trust.

During the period between 2018/19, 98% of emergency admissions to HUTH came from Humber residents. By comparison, NLaG saw only 75% of admissions come from Humber residents.

There is a significant flow of non-elective admissions into the Yorkshire and Humber area to NLaG each year which come from residents of Lincolnshire East and Lincolnshire West CCGs.

Provider	ER	Hull	NEL	NLincs
HUTH	42.5%	99.6%	0.2%	1.0%
NLaG	23.8%	0.4%	99.3%	96.1%
Other Providers	33.7%	0%	0.5%	2.9%

CCG Group	HUTH	NLaG
Hull	63%	0%
ER	32%	4%
North Lincs	2%	38%
North East Lincolnshire CCG (NEL CCG)	1%	32%
Other CCG	2%	25%

Sources: Analysis of Trust patient level data (2018/19) | Analysis of Commissioners' referral data (2018/19)

Paediatric Services

Paediatric services experience various threats to sustainability

Various challenges are faced in Humber's paediatric services. Low activity services do not represent efficient use of resources, in relation to staffing or estates; income does not match the costs of running the service

Paediatric surgery

HUTH has 4 full time paediatric surgeons, but struggles to recruit and retain additional specialist expertise, e.g. Anaesthetics and Radiology, to allow the department to work at full capacity. If these services are to continue to be available within the Humber region, the catchment area needs to be wider.

Neonatology

Currently there are three neonatal units in the region. Although neonatal admissions have been rising slowly in the region, the number of <1500g birth-weight baby admissions in SGH is low (14 babies). Recent recommendations suggest that Level 2 local neonatal units should admit 25 or more babies with birth weights <1500g to remain sustainable long term.

Sources: Patient level and Trust data | Yorkshire & Humber Neonatal Network Report

Planned Care

ENT, Gastroenterology, General Surgery, Ophthalmology, Orthopaedics, Urology

Planned Care

- Service quality: clinical outcomes
- Operational delivery of the service: outpatient activity
- Operational delivery of the service: elective inpatient activity
- Service sustainability: workforce availability
- Workforce availability: productivity and efficiency
- Diagnostics

Planned Care

Current service configuration and interdependencies

		Hull Royal Infirmary	Castle Hill Hospital	East Riding Community Hospital	Diana, Princess of Wales Hospital, Grimsby	Scunthorpe General Hospital	Goole & District Hospital
Orthopaedic surgery	Inpatient ward	✗	✓	✗	✓	✗	✓
	Day case ward	✗	✓	✗	✓	✗	✓
	Outpatient clinics	✗	✓	✓	✓	✓	✓
General surgery	Inpatient ward	✗	✓	✗	✓	✓	✗
	Day case ward	✓	✓	✗	✓	✓	✗
	Outpatient clinics	✗	✓	✓	✓	✓	✓
Gastroenterology	Inpatient ward	✓	✗	✗	✗	✗	✗
	Endoscopy unit	✓	✓	✗	✓	✓	✗
	Outpatient clinics	✓	✓	✓	✓	✓	✓
Ear, Nose and Throat (ENT)	Inpatient ward	✗	✓	✗	✓	✗	✗
	Day case ward	✗	✓	✗	✓	✓	✗
	Outpatient clinics	✗	✓	?	✓	✓	✗
Urology	Inpatient ward	✗	✓	✗	✓	✓	✓
	Day case ward	✗	✓	✗	✓	✓	✓
	Outpatient clinics	✗	✓	✓	✓	✓	✓
Ophthalmology	Inpatient ward	✓	✗	✗	✗	✗	✗
	Day case ward	✓	✗	✗	✓	✓	✓
	Outpatient clinics	✓	✗	?	✓	✓	✓

Planned Care

Surgery CQC Results

Site	Specialty	Safe	Effective	Caring	Responsive	Well-led	Overall
HRI	Surgery	Requires Improvement June 2018	Good June 2018	Good June 2018	Good June 2018	Good June 2018	Good June 2018
Castle Hill	Surgery	Requires Improvement June 2018	Requires Improvement June 2018	Good June 2018	Good June 2018	Good June 2018	Requires Improvement June 2018
DPoW	Surgery	Requires Improvement Sept 2018	Requires Improvement Sept 2018	Good Sept 2018	Requires Improvement Sept 2018	Inadequate Sept 2018	Requires Improvement Sept 2018
SGH	Surgery	Requires Improvement Sept 2018	Requires Improvement Sept 2018	Good Sept 2018	Requires Improvement Sept 2018	Inadequate Sept 2018	Requires Improvement Sept 2018
GDH	Surgery	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018	Good Sept 2018

Sources:
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH1419.pdf
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH2795.pdf

Planned Care

Outpatients CQC Results

Site	Specialty	Safe	Effective	Caring	Responsive	Well-led	Overall
HRI	Outpatients	Good June 2018	N/A	Good June 2018	Requires improvement June 2018	Good June 2018	Good June 2018
Castle Hill	Outpatients	Good June 2018	N/A	Good June 2018	Requires improvement June 2018	Good June 2018	Good June 2018
DPoW	Outpatients	Requires Improvement Sept 2018	Not Rated	Good Sept 2018	Inadequate Sept 2018	Inadequate Sept 2018	Inadequate Sept 2018
SGH	Outpatients	Requires Improvement Sept 2018	Not Rated	Good Sept 2018	Inadequate Sept 2018	Inadequate Sept 2018	Inadequate Sept 2018
GDH	Outpatients	Requires Improvement Sept 2018	Not Rated	Good Sept 2018	Inadequate Sept 2018	Inadequate Sept 2018	Inadequate Sept 2018

Sources:
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH1419.pdf
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH2795.pdf

Planned Care

Most outcomes fall below national benchmarks

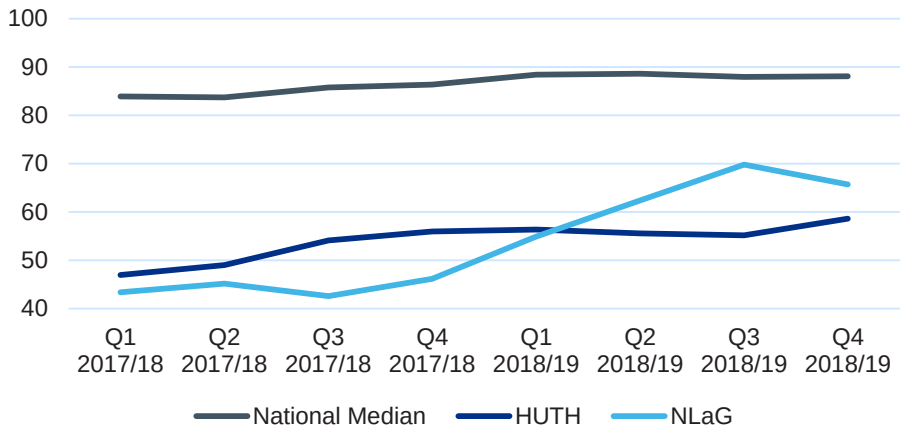
Data looking at outcomes from planned care specialties such as RTT and day surgery rates generally falls below national average, except for cancellation rates. Examples are described here:

- General Surgery patients are less likely to receive their surgery on the day of admission. Recent data shows NLaG's rates are consistently below 75%, while HUTH's do not reach 70%, in comparison to a national average of 90%. This will add to a patient's length of stay and hospital bed days. Patients in hospital are at greater risk of harm and complications, such as Venous Thromboembolic Events (VTEs), hospital acquired infections, developing delirium or medications errors.

RTT performance is poor across the Humber. Both Trusts are in the bottom quartile for the national league table.

- For multiple specialties both Trusts are below the national RTT standard

Percentage of cemented or hybrid hip replacements for patients aged 70+ (12mths to quarter end)



Orthopaedics fail to match national averages in delivery of care.

- GIRFT recommended more cemented hip fixations are performed, however despite recent improvements, both Trusts consistently fall well below the national average.
- There is an opportunity for greater standardisation and application of best practice in admitting on the day of surgery for the proportion of patients treated as day cases across the Humber.

Sources: Model Hospital | https://www.hey.nhs.uk/wp/wp-content/uploads/2019/09/Trust-Board-Papers-September-2019.pdf | https://www.nlg.nhs.uk/content/uploads/2019/07/NLG19210-FP-Highlight-Report-July-August-2019.pdf | https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/

Planned Care

Total outpatient appointments in both Trusts are generally increasing, however this may not be due to increased demand

HUTH outpatient appointments are generally increasing. Three out of six specialities have seen significant rises (Gastroenterology, General Surgery and Urology) whilst Ophthalmology and ENT have seen a small reduction in appointments

Workload between HUTH and NLaG is interdependent, as NLaG is predominantly reliant on HUTH to manage the more complex cases.

The total number of NLaG outpatient appointments is generally increasing. Whilst General Surgery and Urology have seen particularly strong increases, ENT and Orthopaedics have seen a small reduction in appointments over the last few years

NLaG saw a total of 200.6K outpatient appointments for the six Planned Care specialties in 2018/19. Orthopaedics and Ophthalmology had the highest volume of appointments.

	% change of total # of appointments 2015/16-2018/19		Net change, total number of appointments 2015/16-2018/19		Total outpatient appointments 2018/19	
Specialty	**HUTH**	**NLaG**	**HUTH**	**NLaG**	**HUTH**	**NLaG**
ENT	-1%	-3%	-311	-590	28,972	20,795
Gastroenterology	14%	4%	2,574	438	17,909	11,393
General Surgery	16%	15%	7,854	5,686	47,927	38,032
Orthopaedics	4%	-1%	3,041	-480	68,198	56,064
Ophthalmology	-2%	6%	-1,647	3,085	69,605	49,897
Urology	18%	23%	5,106	5,610	28,304	24,422
TOTAL			**16,617**	**13,749**	**260,915**	**200,603**

Note that the data contained in this piece of analysis is from two different sources, therefore, please take this into account when making comparisons

Sources: 2015/16 – Reference Costs | 2018/19 - Analysis of Patient Level Data submitted by Trusts

Planned Care

The number of first outpatient appointments has increased by almost 30,000 across the Humber in the last few years

Most specialties have shown an increase in numbers of first appointments between 2015/16 and 2018/19. Only Ophthalmology at HUTH has seen a decrease in first appointments over the last few years.

There has been a redesign of Ophthalmology services at HUTH in recent years

Urology stands out with marked increase in activity at both Trusts, with over 40% increase in Urology appointments at NLaG in three years and over 30% increase in NLaG during the same period.

ENT also stands out with marked increased activity at NLaG, 61% over the last few years and, although smaller, a still significant increase at HUTH of 27%.

	% change in # of first appointments 2015/16-2018/19		Net change, number of first appointments 2015/16-2018/19		Total number of first appointments in 2018/19	
Specialty	**HUTH**	**NLaG**	**HUTH**	**NLaG**	**HUTH**	**NLaG**
ENT	27%	61%	2,853	5,491	10,759	8,937
Gastroenterology	5%	14%	261	543	5,371	3,924
General Surgery	21%	32%	4,563	5,359	21,759	16,871
Orthopaedics	24%	17%	4,692	1,864	19,461	11,167
Ophthalmology	-15%	9%	-3,366	1,564	23,096	18,057
Urology	34%	44%	3,035	2,962	8,880	6,791
TOTAL			**12,038**	**17,783**	**89,326**	**65,747**

Note that the data contained in this piece of analysis is from two different sources, therefore, please take this into account when making comparisons

Sources: 2015/16 – Reference Costs | 2018/19 - Analysis of Patient Level Data submitted by Trusts

Planned Care

Outpatient work is high volume, and clinicians report challenges meeting the demand

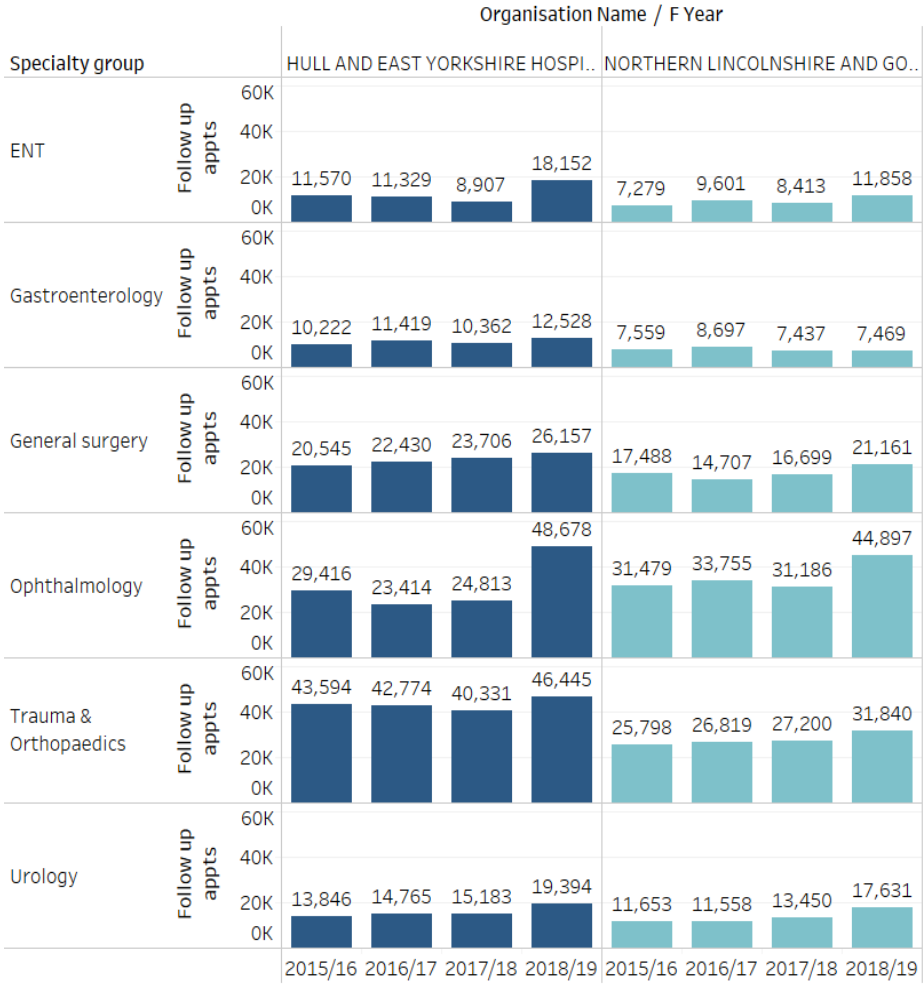
The large volume of work leads to delays in care and compromises in quality

The large volume of work is one of the reasons the Trusts across the region are non-compliant in RTT and this leads to large backlog in follow up care.

The volume of follow-up appointments was also highlighted by clinicians and managers during Clinical Design Sub Group workshops: they reported that some clinics run without the named consultant present due to workforce and/or time constraints. This may expose patients to risk, leave juniors and locum clinicians unsupported and – in the absence of the consultant – lead to patients being less likely to be discharged. There is evidence that where medical staffing has more reliance on a temporary workforce, staff maybe more reluctant to take decisions such as discharging from follow up.

Limited use is made of digital solutions

There is limited used of digital technologies to facilitate alternative and potentially more efficient means to see patients such as virtual clinics, patient led follow up, increased shared care with primary care colleagues and use of alternative practitioners.



Planned Care

Activity and performance

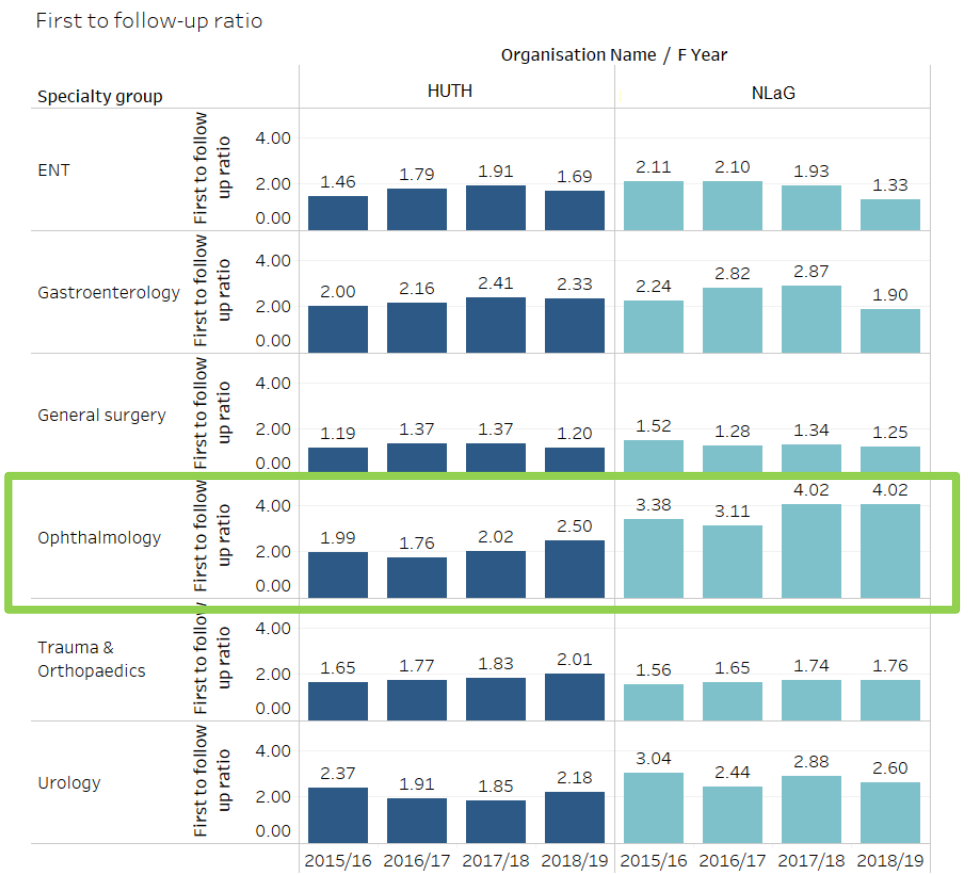
Perceived increase in demand for outpatient services

Services report experiencing an increase in demand for outpatient services year on year but the actual data provides a more nuanced picture.

The total number of outpatient appointments has actually decreased between 2015/16-2018/19 for a number of specialties (ENT and Ophthalmology at HUTH; ENT and Orthopaedics at NLaG). First appointments have also fallen in some specialties.

First-to-follow-up ratios on the other hand have increased for all but two specialties in HUTH and for two out of six specialties in NLaG.

The increase in demand that clinicians reported perceiving may be explained by continued challenges around staffing shortages, making the number of patients each clinician sees higher.



Sources: 2015/16 – Reference Costs | 2018/19 - Analysis of Patient Level Data submitted by Trusts

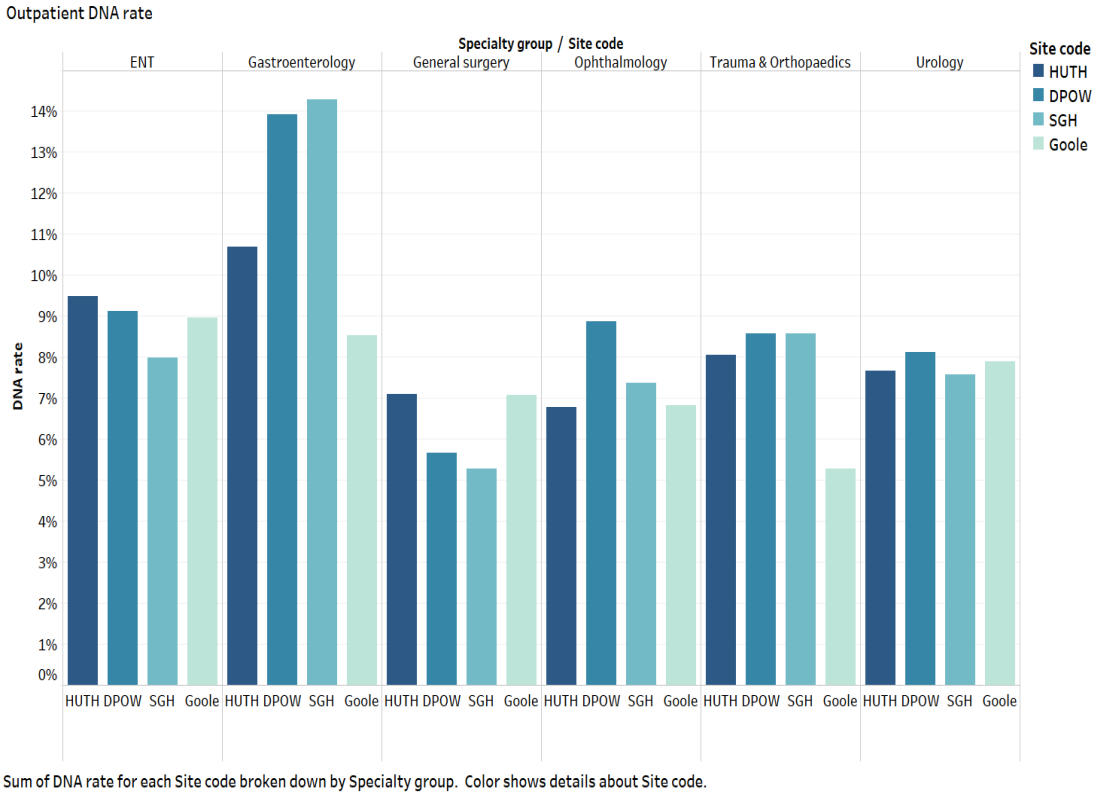
Planned Care

A particularly high proportion of Gastroenterology referrals appear to not attend (DNA) appointments in SGH and DPoW which adds to waiting lists and delay of care

There is variation in practice across a range of specialties across all of the sites. The highest proportion of DNAs is in gastroenterology across the Humber

Frequent DNAs contribute to longer outpatient waiting lists, delays in delivering medical care, additional pressures on primary care and ED and create unnecessary administrative work.

While the rates across both Trusts and all sites appear to be broadly in line, there are outliers in Gastroenterology for the two major NLaG sites, identifying scope for improvement.



Sum of DNA rate for each Site code broken down by Specialty group. Color shows details about Site code.

Sources: Patient Level Data | Clinical Design Subgroup Workshops September 2019

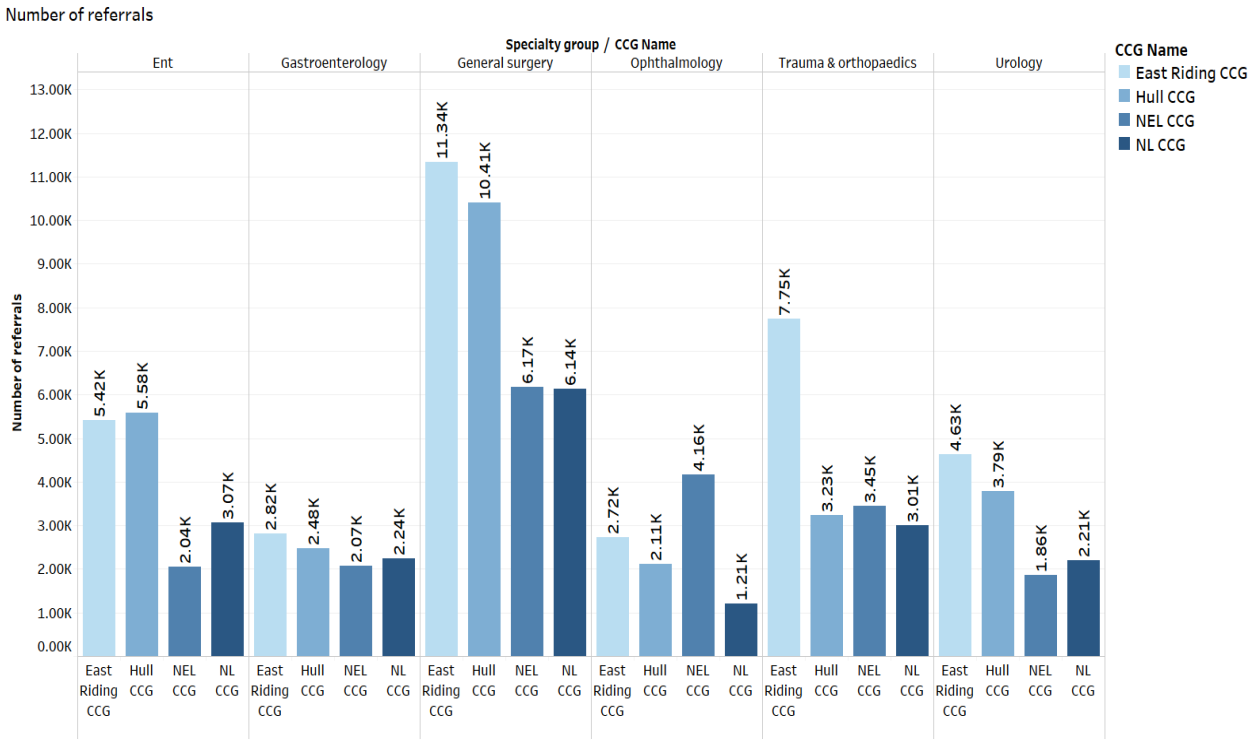
Planned Care

Outpatient referrals by specialty per year and place of referral (2018/19) shows that there are variations in referral patterns by CCG

Thousands of patients are referred for specialty care each year

When reviewed as referrals per 100,000 population, there are no clear trends in referrals from the different CCGs.

There is therefore an opportunity for changes in pathways to reduce variation across the patch.



Sum of Number of referrals for each CCG Name broken down by Specialty group. Color shows details about CCG Name. The marks are labeled by sum of Number of referrals.

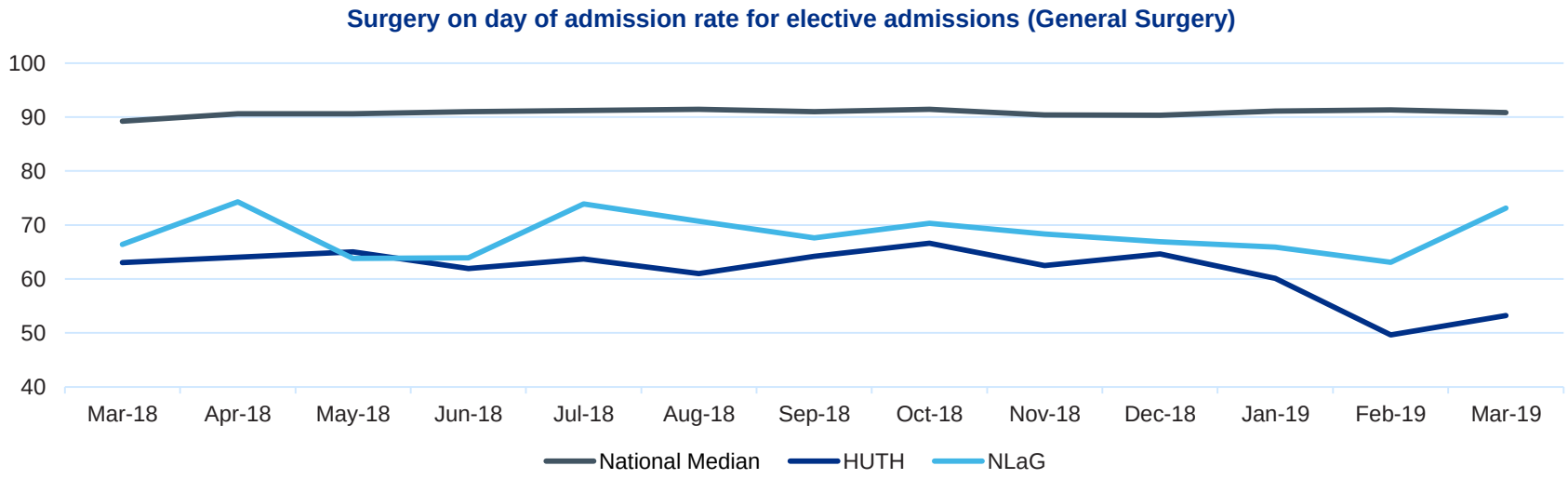
Sources: CCG data

Planned Care

The rate of admissions on the day of surgery for General Surgery are substantially lower in both Trusts compared to the national average

There appears to be a culture across both Trusts to admit patients the night before surgery leading to, on average, higher lengths of stay

Staff at HUTH report that they often admit patients the night before surgery, citing the ability for patients to get settled; do final tests; and generally poor transport links as key reasons. The degree to which this happens however is starkly different to national trends.



Source: Model Hospital
N.B Friday for NLaG was removed due to data quality.

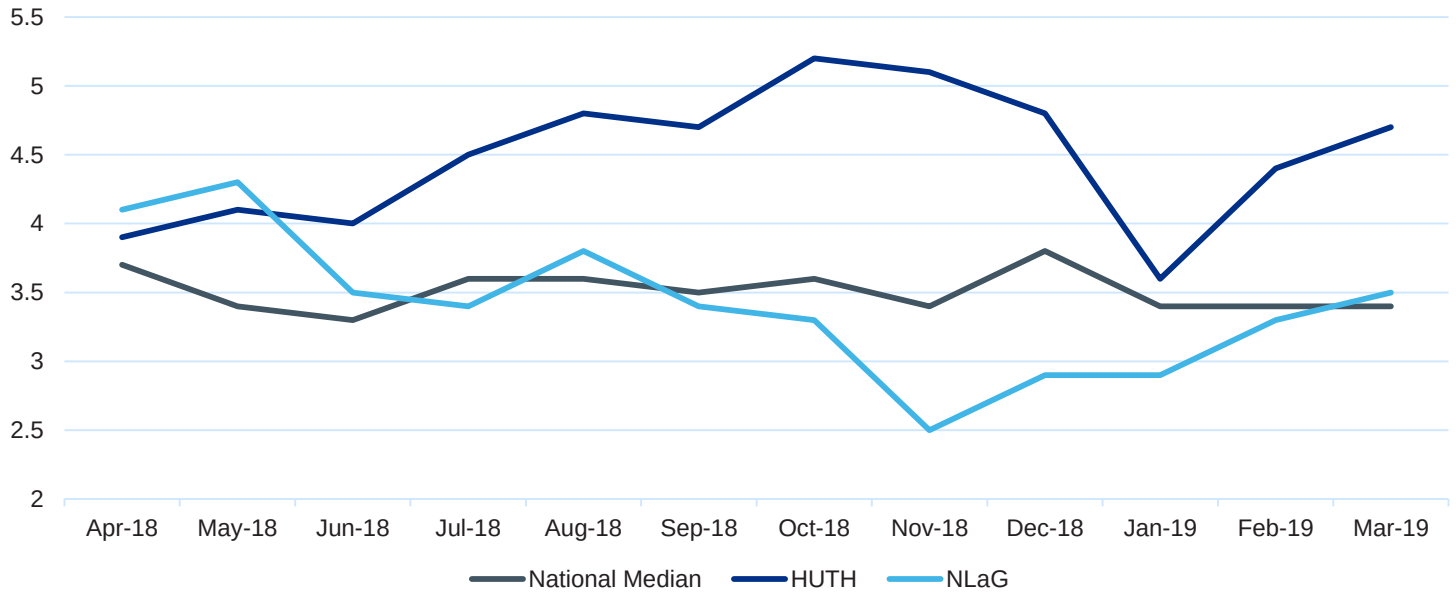
Planned Care

Differences exist in the average length of stay for General Surgery between Trusts

While the average LOS for General Surgery patients in NLaG fluctuates around the national median, HUTH patients have consistently longer lengths of stay

This may in part be driven by practices to bring patients in the night before surgery. While there may be benefits of this such as lower on the day cancellations, longer length of stay are associated with increased complications for patients such as venous thromboembolic events and hospital acquired infections. There may be opportunities to generate efficiency savings from using the bed base more efficiently and increasing the turnover by bringing patients in on the day of surgery.

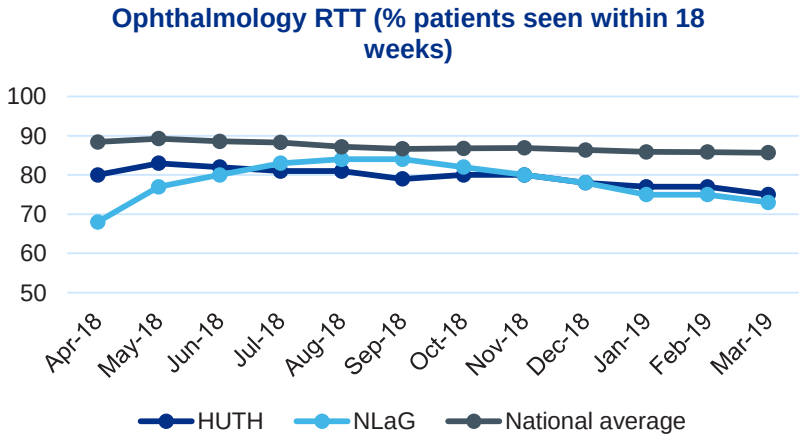
Average LOS for elective admissions (excluding day cases) – General Surgery



Source: Model Hospital
N.B Friday for NLaG was removed due to data quality.

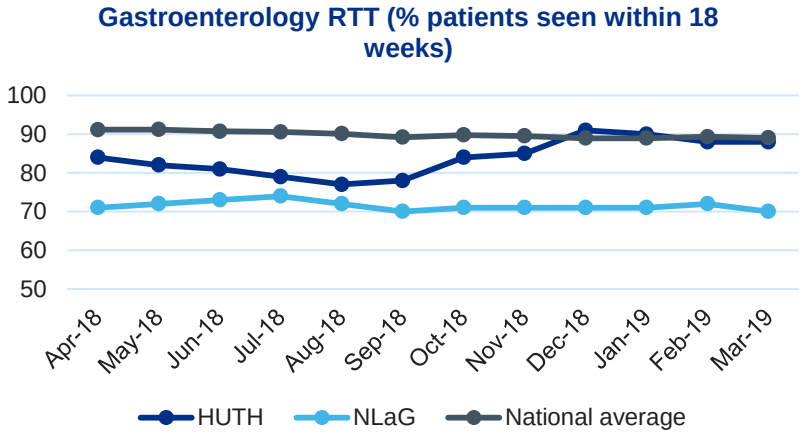
Planned Care

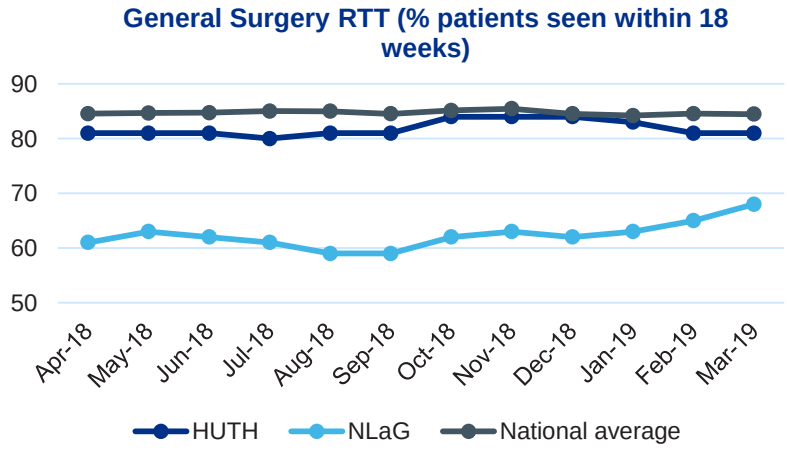
Referral to Treatment targets have consistently been below the national average for both Trusts



In the last two years, both Trusts are generally less able to treat people within the national standard of 18 weeks

Both Trusts have also been consistently below the national average. Marked deterioration of waiting times has been experienced by both Trusts in Ophthalmology which has seen an overall increase in outpatient appointments and elective activity in HUTH between 2015/16 and 2018/19 while outpatient and inpatient activity at NLaG has actually decreased over that same period.





Source: Nationally published RTT data
https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/

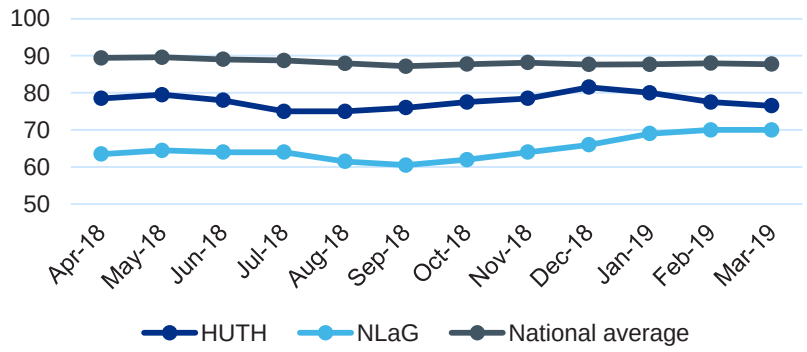
Planned Care

However, some specialties have seen service performance improvements with NLaG improving waiting times in ENT, Urology, Orthopaedic and General Surgery

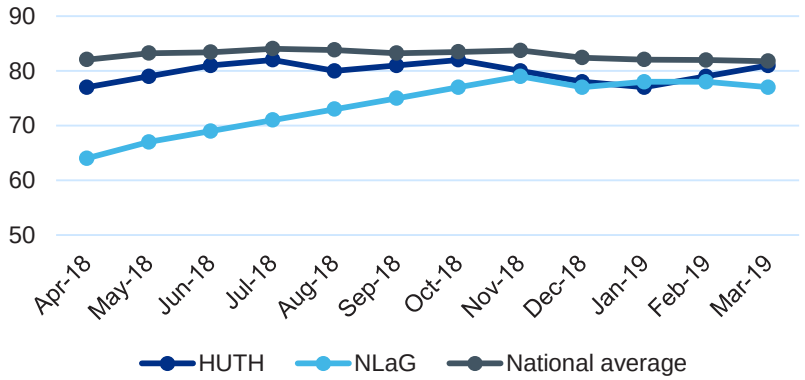
While the health economy overall has been challenged, waiting time performance in NLaG has markedly improved in four of the six specialties.

NLaG has improved its RTT performance in four out of six specialties, most notably in Urology, moving from 60% of patients seen and treated within 18 weeks of referral in March 2018 to over 85% a year later.

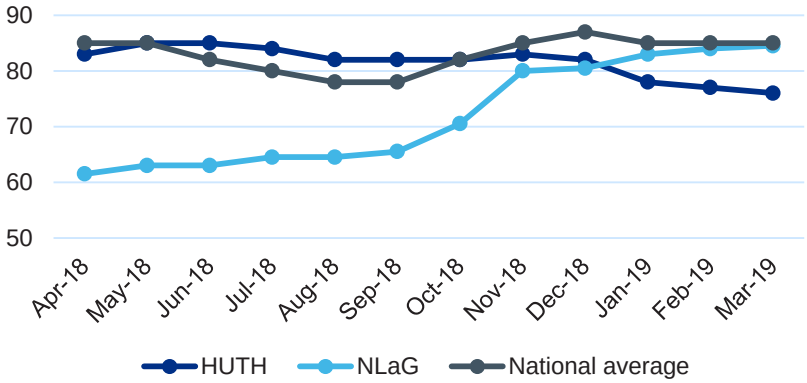
ENT RTT (% patients seen within 18 weeks)



Orthopaedic Surgery RTT (% patients seen within 18 weeks)



Urology RTT (% patients seen within 18 weeks)



Source: Nationally published RTT data
https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/

Planned Care

Workforce availability

Insufficient Workforce

There is insufficient staff at all grades and staff groups within both Trusts to meet the demand for services. Changes to the NHS Pension scheme, relative “unattractiveness” of the region as well as limited opportunities to develop and specialise have been articulated as root causes for not being able to recruit staff.

Services struggle with a high number of vacancies, particularly in ENT for NLaG, leaving gaps in rotas. High levels of overtime – particularly for medical doctors – helps cover vacancies. Trainee doctors also report high workload.

NLaG relies heavily on temporary staff to fill gaps in rotas not covered by permanent staff or overtime from current staff. This can be inferred through the staff survey, which demonstrates a high level of employees attending work in the last 3 months despite feeling unwell as they felt under pressure.

While the Trusts face recruitment challenges to different degrees, overall recruitment is challenging and this has been claimed to have a regional component:

- Lack of desirability of region
- Presence of Sheffield and Leeds as other main tertiary centres
- Limited reputation and training offer of the deanery.

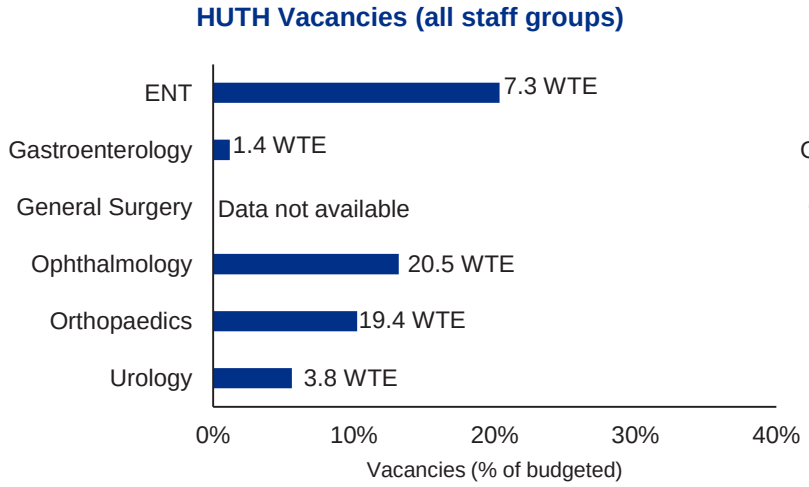
Planned Care

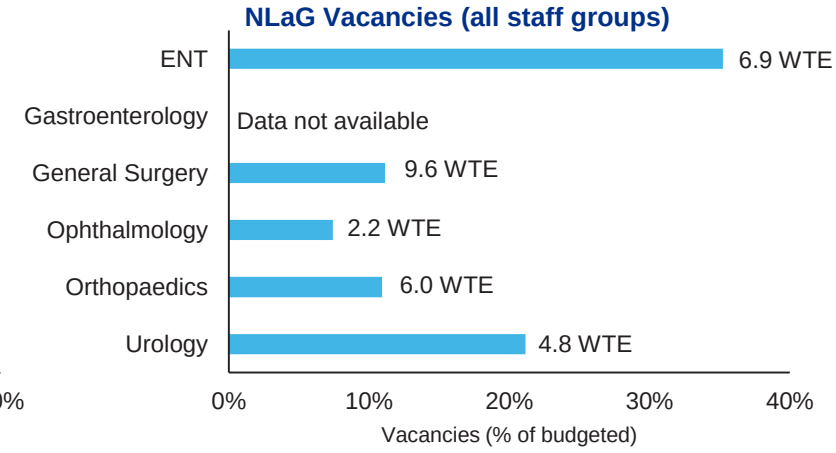
NLaG has a relatively harder time recruiting to Planned Care specialties but both Trusts carry vacancies and face difficulties attracting staff

Vacancy rates across Planned Care specialties suggest that both Trusts face challenges recruiting – albeit not to the same extent

The largest vacancy rates for both Trusts are in ENT; one in five (HUTH) and one in three (NLaG) of the budgeted roles are unfilled. Both Trusts face similar vacancy rates for Orthopaedics of c10% while vacancies for Urology appear to be almost four times higher in NLaG than in HUTH. This data suggests that whilst both Trusts carry vacancies, HUTH has a relatively easier time filling roles.

The Trusts are filling these gaps with a variety of other professionals, including allied healthcare professionals as well as existing staff working extra hours to cover gaps.





Source: Financial Ledgers supplied by HUTH and NLaG for latest period available (18/19 period 12)

Planned Care

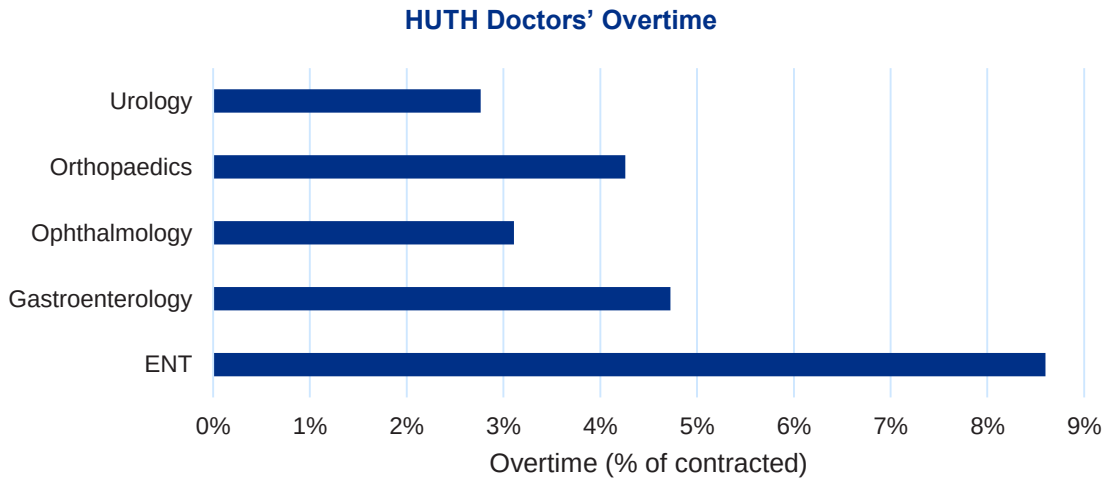
At HUTH, medical staff are working overtime to fill rota gaps which are caused by vacancies across the planned care specialties

Medical staff at HUTH are reported to work overtime which is likely due to rota gaps in planned care specialties with high vacancies

The specialty with the greatest proportion of vacancies in HUTH (ENT) also attracts the largest proportion of overtime. ENT doctors in HUTH on average work almost 10% more than their contracted hours. While this may help bridge short-term capacity peaks, regular, longer-term overtime work can lead to reduced staff morale, work-related stress, higher possibility of medical errors as well as burn out and more frequent or longer periods of sick-leave.

Nursing did not exhibit overtime which suggests that sufficient staff are in post and any shortages are likely to be covered by use of temporary staff.

No corresponding data has been supplied by NLaG.



Source: Financial Ledgers supplied by HUTH and NLaG for latest period available (18/19 period 12)

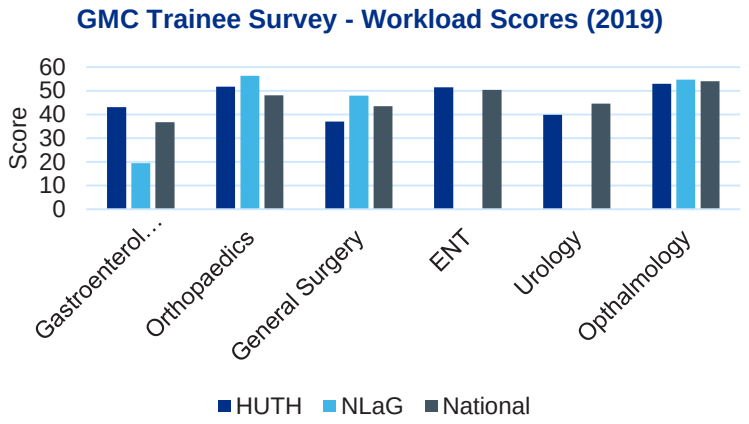
Planned Care

Trainee doctors also report high workload pressures suggesting the workforce is stretched across not just senior but also trainee doctor levels

Trainee doctors report that workload is high with biggest pressures in Gastroenterology

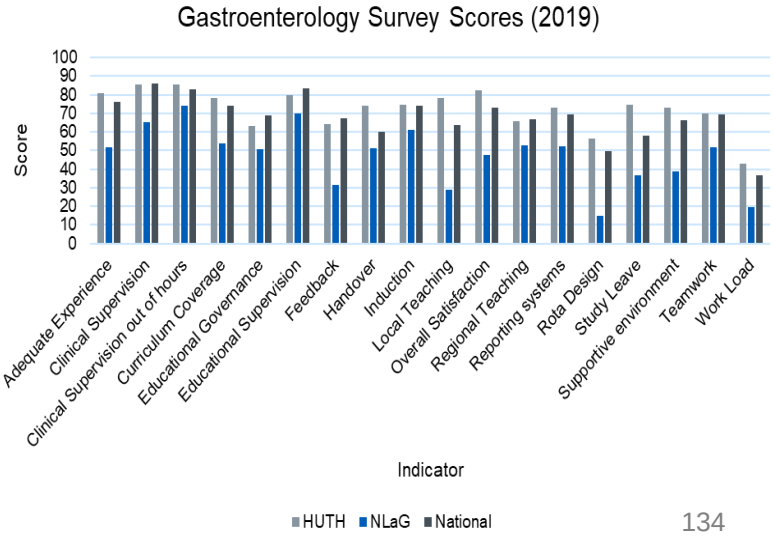
Trainee doctors' workload is high across all planned care specialties which triangulates well with the fact that all specialties see doctors working overtime and having vacancies.

In Gastroenterology, NLaG trainees are reporting unsatisfactory situations, well below HUTH and national numbers; and HUTH trainees report relatively worse workloads compared to the national picture in General Surgery and Urology.



The Gastroenterology Department in NLaG shows particularly low GMC survey results from their trainees

Gastroenterology trainee doctors in NLaG appear to have poor experiences, particularly relating to rota design, workload and feedback.



Source: GMC National Trainee Survey (2019)

Planned Care

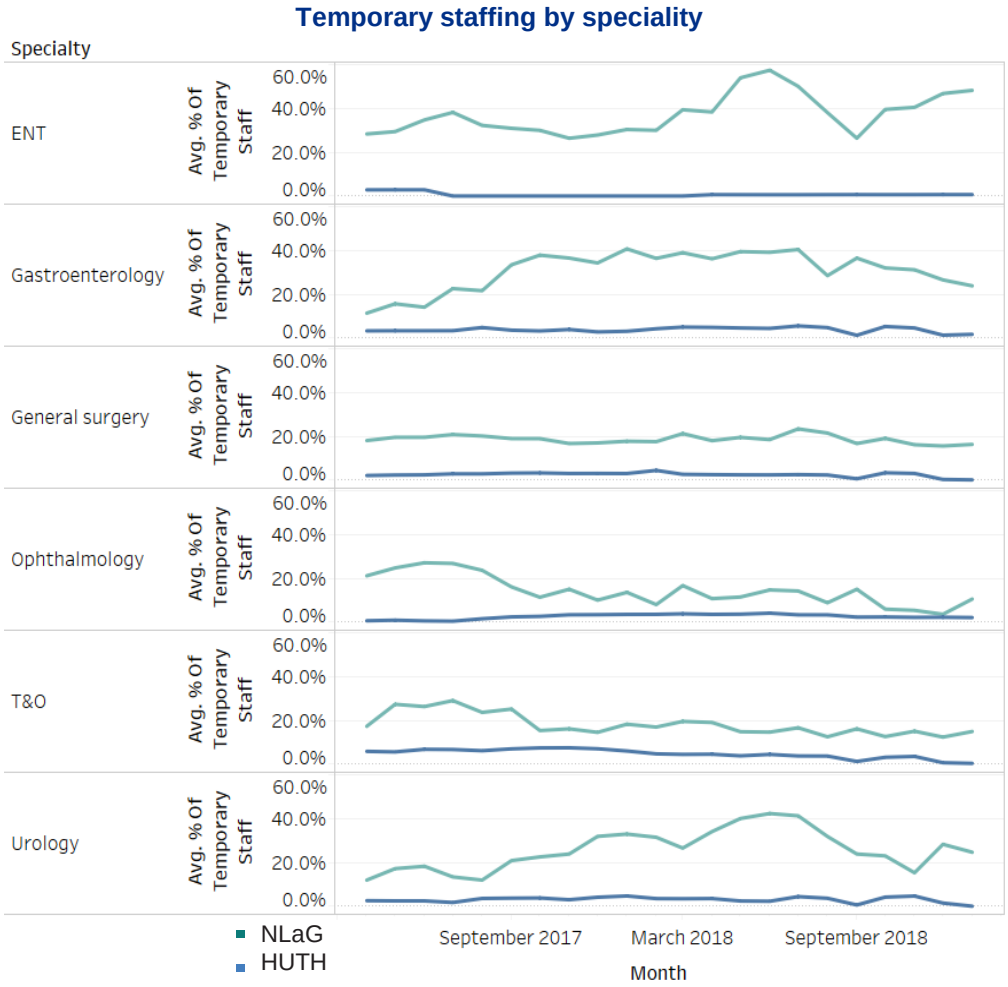
Temporary staff are used to fill gaps in rotas and compensate for pressures arising from unfilled posts across the Planned Care specialties

Both Trusts use temporary staff as part of their workforce but NLaG relies much more heavily on this solution

HUTH and NLaG use temporary staff as part of their workforce but NLaG's use of temporary staff as a percentage of total workforce is much higher.

Temporary staff are typically more expensive than permanent members of staff which will negatively impact Trust finances. Moreover, some temporary staff are also less familiar with the Trust which means they will be less effective and efficient than permanently employed staff.

Nonetheless, temporary staff such as agency, bank, or locum staff are often required to fill vacancies on a short term basis and meet immediate service demand.



Source: Figures obtained from previous analysis by Trust

Planned Care

Consistently high levels of workload impact on wider staff satisfaction, morale and wellbeing

Only a minority of staff at both Trusts think that their health and wellbeing is cared for

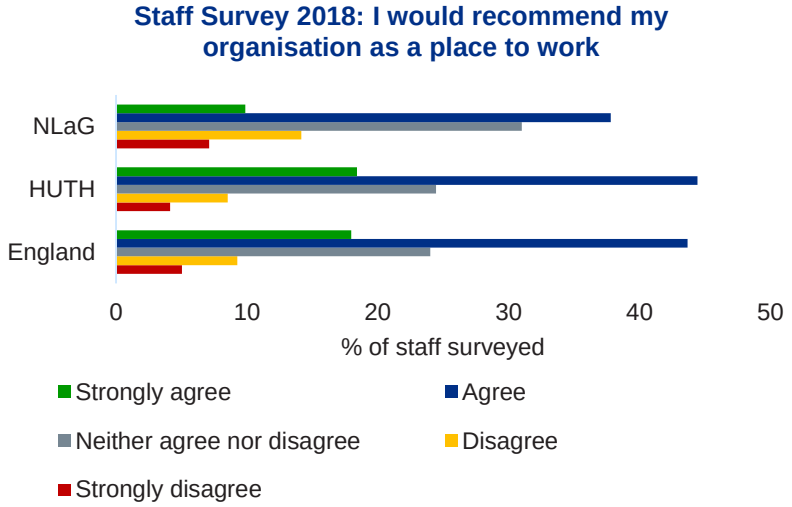
There appears to be more opportunity for Trusts to improve and take action on staff health and wellbeing.

This is particularly important in the context of seeking to mitigate the impact of high, additional workload on staff.

Both Trusts had a lower percentage of staff that thought the Trust took positive action on their health and well-being compared to the national average. For NLaG less than 1 in 5 staff felt that this was the case.

On a related measure, fewer NLaG staff would recommend their organisation as a place to work – compared to HUTH or the national average.

These staff-based results impact on a Trust's ability to recruit as potential applicants refer to and review these metrics and may be deterred by them.



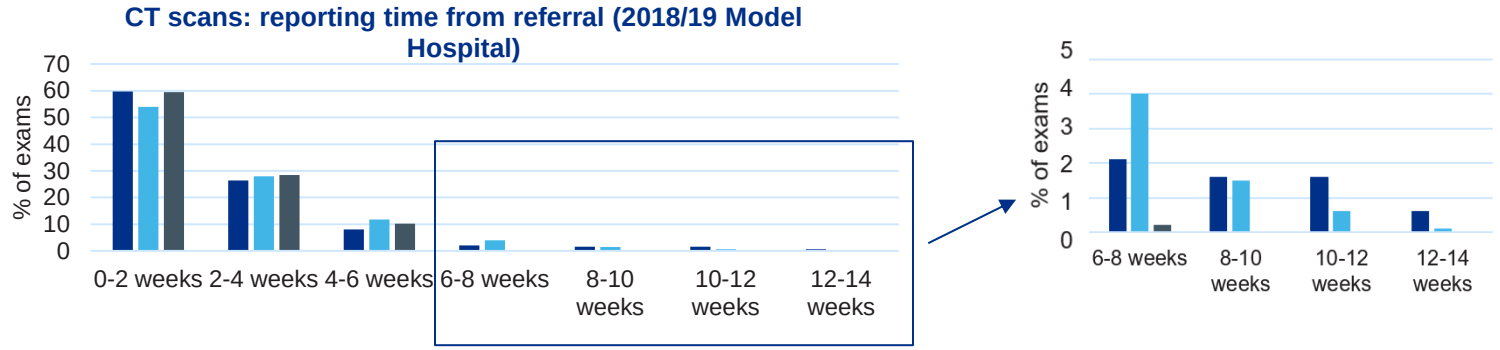
Source: Staff Survey 2018
https://www.nhsstaffsurveys.com/Page/1064/Latest-Results/2018-Results/

Planned Care: Diagnostics

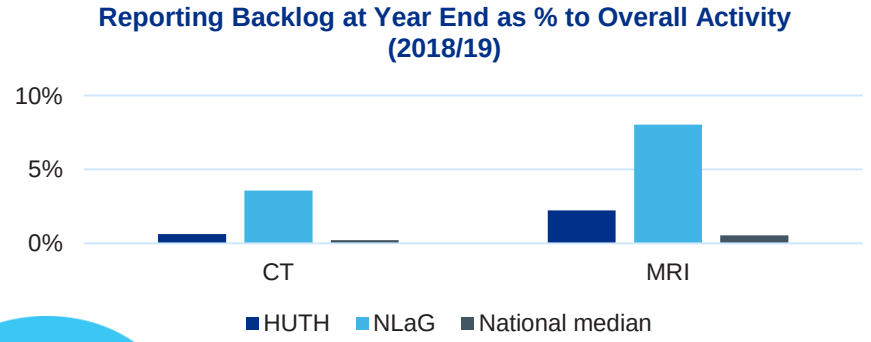
Timely access to diagnostics is a major issue for the Humber region

Radiology faces substantial workforce and infrastructure problems. It is a key interdependent clinical service for all Planned Care and many emergency specialties. This is detailed in Chapter 4 UEC.

Both Trusts perform worse than national medians at performing MRI and CT scans promptly, and also struggle with reporting turnaround…



… resulting in a high reporting backlog at year end which presents a patient safety issue



Backlog is defined as reports outstanding for more than 10 days at the end of the financial year as a proportion of overall activity.

Source: Model Hospital

Planned Care: Diagnostics

CQC Results

HUTH last had the Radiology Service assessed by CQC in 2016 and was rated as "Good". NLaG was rated as "Requires Improvement"

Site	Specialty	Safe	Effective	Caring	Responsive	Well-led	Overall
HRI	Outpatients and Diagnostics	Good	Not rated	Good	Requires improvement	Good	Good
Castle Hill	Outpatients and Diagnostics	Good	Not rated	Good	Requires improvement	Good	Good
DPoW	Diagnostics	Requires Improvement Sept 2018	Not Rated	Good Sept 2018	Requires Improvement Sept 2018	Requires Improvement Sept 2018	Requires Improvement Sept 2018
SGH	Diagnostics	Requires Improvement Sept 2018	Not Rated	Good Sept 2018	Requires Improvement Sept 2018	Requires Improvement Sept 2018	Requires Improvement Sept 2018
GDH	Diagnostics	Good Sept 2018	Not Rated	Not Rated	Requires Improvement Sept 2018	Good Sept 2018	Good Sept 2018

Outpatients and Diagnostics were rated together at HUTH

Sources:
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH1419.pdf
https://www.cqc.org.uk/sites/default/files/new_reports/AAAH2795.pdf

Planned Care: Diagnostics

Timely access to diagnostics is a major issue for the Humber region

It is difficult to share images between Trusts, despite referral pathways which rely on sharing imaging

- In the clinical design sub groups it was specifically mentioned that the lack of connectivity causes challenges in the Radiology service between Trusts, meaning images generated at one Trust cannot be easily viewed by another. This can cause concerning delays, for instance in situations when interventional radiology or urgent neurosurgical input may be needed from HUTH for an NLaG patient.

Delays accessing imaging will impact clinical care…

- At HUTH the Diagnostic 6 week wait target is not achieved. There were 9.1% breaches in July 2019, when the national standard is 1%.
- Accessing imaging for paediatric cases is another specific problem at HUTH. This may be a combination of inability to access anaesthetic support too. Problems here will further hamper the success of Paediatric Surgery and subspecialty work.

Annex

Data analysis caveats

This case for change is accurate to the extent to which the information provided to us for its production is accurate. We have not audited the information for the purposes of this work.

The analysis in this Case for Change was undertaken between September and November 2019 and used the information that was available at that time.

This Case for Change is based on a variety of data sources, including publicly available data and data published by NHS Improvement (for example, The Model Hospital). Where the data is obtained from such sources, we have assumed that the Trusts have assured the quality of input data provided prior to publication. We have not audited or otherwise tested the data obtained from such sources.

Where the data were provided to us by the organisations in scope of the review, we have assumed that the underlying data were correct and have not audited this data any further. Where any calculations were based on this data, we gathered feedback from the respective organisations on whether they agreed with the findings.

We used the most recent data that was available at the time of the analysis. We acknowledge that publicly available data are regularly updated, it was beyond the scope of this work to continue updating data once the analysis was complete.

Benchmarking by its nature offers a directional indication of potential opportunities for further exploration. Judgement is also needed to consider what can be delivered in practice. However, it offers the opportunity to identify and so consider areas of apparent variance.

Data sources (1/4)

- Attain Humber Acute Services Review Case for Change 23rd April version 6
- Burden of Disease in Northern Lincolnshire report: http://www.nelincsdata.net/resource/view?resourceId=382
- Commissioner referral data provided by the four CCGs
- Department for Environment, Food & Rural Affairs: Statistical data set: https://www.gov.uk/government/statistical-data-sets/rural-statistics-local-level-data-setshttps://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/general-practice-data-hub/quality-outcomes-framework-qof
- Department of Communities and Local Government data: https://www.gov.uk/government/collections/english-indices-of-deprivation
- Fingertips data: https://fingertips.phe.org.uk/
- GMC survey data: https://www.gmc-uk.org/education/how-we-quality-assure/national-training-surveys
- HUTH CQC report: https://www.cqc.org.uk/sites/default/files/new_reports/AAAH1419.pdf
- HUTH Hip Fracture data provided by the Trust
- HUTH ledger data
- HUTH patient level data provided by the Trust
- HUTH Trust Board Papers: https://www.healthwatcheastridingofyorkshire.co.uk/events/hey-trust-board-meetings
- Local public health HASR analysis v7 supporting data
- Maternity services survey 2018: https://www.cqc.org.uk/publications/surveys/maternity-services-survey-2018
- MBRRACE-UK: Perinatal Mortality Surveillance report for births : https://www.npeu.ox.ac.uk/mbrrace-uk/reportsNHS Staff Survey 2018 - https://www.nhsstaffsurveys.com/Page/1064/Latest-Results/2018-Results/

Data sources (2/4)

- Ministry of Housing, Communities & Local Government data: https://www.gov.uk/government/organisations/ministry-of-housing-communities-and-local-government/about/statistics
- National Children and Young People survey: https://www.cqc.org.uk/publications/surveys/children-young-peoples-survey-2016
- National Diabetes Transition Audit: https://digital.nhs.uk/data-and-information/publications/statistical/national-diabetes-audit/transition-report-14-16
- Nationally published RTT data: https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/
- NHS Digital - Access to GP services data: https://digital.nhs.uk/data-and-information/publications/clinical-indicators/nhs-outcomes-framework/current/domain-4-ensuring-that-people-have-a-positive-experience-of-care-nof/4-4-i-access-to-gp-services
- NHS Digital - Adult Social Care Outcomes Framework: https://digital.nhs.uk/data-and-information/publications/ci-hub/social-care
- NHS Digital - Clinical Indicators data: https://digital.nhs.uk/data-and-information/publications/clinical-indicators/ccg-outcomes-indicator-set/current/domain-3-helping-people-to-recover-from-episodes-of-ill-health-or-following-injury-ccg/3-2-emergency-readmissions-within-30-days-of-discharge-from-hospital
- NHS Digital - Compendium of Population Health Indicators: https://digital.nhs.uk/data-and-information/publications/ci-hub/compendium-indicators
- NHS Digital - General Practice Data Hub, Workforce: https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/general-practice-data-hub/workforce
- NHS Digital - Maturity Index: https://www.england.nhs.uk/digitaltechnology/connecteddigitalsystems/maturity-index/

Data sources (3/4)

- NHS Digital - National Child Measurement Programme: https://digital.nhs.uk/services/national-child-measurement-programme/
- NHS Digital - Quality and Outcomes Framework (QOF): https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/general-practice-data-hub/quality-outcomes-framework-qof
- NHS Digital - SHMI data: https://digital.nhs.uk/data-and-information/publications/clinical-indicators/shmi/current/shmi-data
- NHS Digital - Statistics on Women's Smoking Status at Time of Delivery: https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-women-s-smoking-status-at-time-of-delivery-england
- NHS Digital - Statistics on Women's Smoking Status at Time of Delivery: https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-women-s-smoking-status-at-time-of-delivery-england
- NHS Digital - Vacancies data: https://digital.nhs.uk/data-and-information/publications/statistical/nhs-vacancies-survey
- NHS England - A&E Attendances and Emergency Admissions: https://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/
- NHS England - Friends and Family test: https://www.england.nhs.uk/fft/
- NHS Improvement - Model Hospital: https://model.nhs.uk/
- NHS Maternity Statistics, 2017-18 - Maternity Services Data Set (MSDS): https://digital.nhs.uk/data-and-information/publications/statistical/nhs-maternity-statistics/2017-18
- NHS Staff Survey 2018 - https://www.nhsstaffsurveys.com/Page/1064/Latest-Results/2018-Results/
- NLaG CQC report - https://www.cqc.org.uk/sites/default/files/new_reports/AAAH2795.pdf
- NLaG Hip Fracture data provided by the Trust

Data sources (4/4)

- NLaG ledger data
- NLaG patient level data provided by the Trust
- NLaG Trust Board Papers: https://www.nlg.nhs.uk/about/board-meetings/
- Office for National Statistics - 2011 Census data: https://www.ons.gov.uk/census/2011census/2011censusdata
- Office for National Statistics - Population Health data: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare
- Office for National Statistics - Population Projections: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2
- Office for National Statistics - Public Health England Annual Births & Mortality Extracts: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/methodologies/mortalitystatisticsinenglandandwalesqmi
- Reference Costs data: https://improvement.nhs.uk/resources/reference-costs/
- South East Coast Clinical Senate - The Clinical Co-Dependencies of Acute Hospital Services: A Clinical Senate Review, December 2014: http://www.secsenate.nhs.uk/files/5514/2255/2355/The_Clinical_Co-dependencies_of_Acute_Hospital_Services_SEC_Clinical_Senate_Dec_2014.pdf?PDFPATHWAY=PDF
- Sports England - Active People Survey: https://www.sportengland.org/research/about-our-research/active-people-survey/
- which.co.uk website: https://www.which.co.uk/birth-choice
- Yorkshire & Humber Neonatal Network Report : https://www.networks.nhs.uk/nhs-networks/yorkshire-humber-neonatal-odn