Hospital Services Review

South Yorkshire, Bassetlaw and North Derbyshire: Considering the case for change

Report for Governing Bodies

June 2019
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1 Executive Summary

1.1 Introduction
Over the last two years, the South Yorkshire and Bassetlaw (SYB) health and care system has been considering how best to support the long term sustainability of acute hospital services in South Yorkshire and Bassetlaw, Mid Yorkshire and North Derbyshire (SYB(MYND)). This work has considered how far the system can address the challenges that it is facing through transfiguration, based on developing shared working between the Trusts within the current configuration of services, or whether the challenges of maintaining the current configuration of services is too great and change is needed to the configuration of services. The work has focused on five services which are amongst the most challenged in SYB.

Analysis of the options has now been completed, and Governing Bodies of Clinical Commissioning Groups are asked to take a decision on whether they believe that the system should continue with a focus on transformation; or whether, in addition, we should invite any of the Governing Bodies to take forward public consultation on reconfiguration.

Under the current legal accountabilities in the system, Governing Bodies are legally responsible for considering the impact on their own CCG’s population. As members of the South Yorkshire and Bassetlaw Integrated Care System, the Governing Bodies are also asked to consider the issues as they impact on the sustainability of SYB(ND) as a whole, and the JCCCG will consider this under its delegated powers to discuss the Hospital Services Programme.

1.2 Background
In 2017 the SYB system, together with Mid Yorkshire and North Derbyshire, agreed to undertake a Hospital Services Review (HSR) to look at options for improving long term sustainability.

The HSR published its final report in May 2018, and the recommendations were considered by the system. The provider and commissioner organisations in SYB and North Derbyshire (Mid Yorkshire is focusing on working within its own STP area) considered these and published a Strategic Outline Case (SOC) in October 2018. The SOC laid out three areas of work for the system to take forward, the outcome of which is laid out in this report:

- **Hosted Networks**: Developing the infrastructure to support shared working between organisations, supported by a centralised workforce function and Innovation Hub;
- **Transformation**: Developing potential workforce and service models to look at making better use of the existing SYB workforce, and developing new roles;
- **Changing the clinical model**: Modelling and exploring more sustainable options for the delivery of paediatrics, maternity and out-of-hours gastrointestinal bleeds across SYB(ND).
1.3 Summary of the Case for Change

1.3.1 Paediatrics:

- **Quality**: All Trusts meet at least 7 Facing the Future (FT) Standards, with one Trust (Barnsley) meeting all 10 standards. The most common Facing the Future standards that Trusts are struggling to meet are those around workforce. In the most recent CQC assessments, all SYB(ND) Trusts achieved 'Good' Care Quality Commission (CQC) scores for Children and Young People\(^1\), with the exception of Barnsley, which received a 'Requires improvement' score. Barnsley Hospital believe their 'Requires improvement' score may have been in large part due to a one-off event which has since been resolved.

- **Workforce**: There are significant staff shortages for middle-grade and junior doctors. Clinical Working Group (CWG) participants commented that consultants and nurses often work extra shifts in order to fill these gaps. One symptom of the extent of the pressure was that staff reported examples of study leave being declined across Trusts due to workload pressures, sometimes as a systematic approach for a period of weeks or months.

- **Interdependencies**: Rotherham, Doncaster, Bassetlaw and Barnsley have all experienced challenges in meeting the CQC standard of having two paediatric nurses present in their Emergency Department (ED) 24/7. Rotherham received an ‘Inadequate’ score in the last CQC inspection of its ED and Doncaster and Bassetlaw a ‘Requires Improvement’.

1.3.2 Maternity

- **Quality**: In the most recent CQC Maternity assessment, Doncaster & Bassetlaw and Rotherham both scored Requires Improvement. All the Trusts meet Better Births standards.

- **Workforce**: All of the Trusts are currently meeting Royal College guidelines on consultant numbers and ratios of midwives to patients. The main concern is the medium term as a significant proportion of midwives are approaching the pensionable age of 55, so significant numbers are likely to retire.

- **Interdependencies**: The main interdependencies for maternity are neonatology and anaesthetics. Bassetlaw is struggling to maintain mid-grade rotas for both of these specialties.

1.3.3 Gastroenterology and endoscopy

- **Quality**: Considering the CQC Medical Care (incl. Gastroenterology) score, only Rotherham has a score that ‘Requires Improvement.’

- **Workforce**: Rotherham has had a period of having no gastroenterologists although it is in the process of recruiting some posts jointly with Barnsley, with one substantive appointment made so far. Clinicians report that workloads have increased significantly owing to increased referrals for cancer screening.

- **Interdependencies**: The pressure on endoscopy services is contributing to poor performance on cancer waiting times in some Trusts.

\(^1\) CQC, Inspection reports, 2016 - 2019
1.4 Proposed models
The options to address the challenges have been developed through studying existing case studies across the UK and working with SYB clinicians through the Clinical Working Groups.

The proposals relate to the 5 acute Trusts in SYB, and Chesterfield: Mid Yorkshire is developing its services as part of the West Yorkshire Sustainability and Transformation Partnership.

1.4.1 Paediatrics and maternity
For each service we considered maintaining the status quo; if the status quo was not sustainable, then looking at service transformation; and if this was not sufficient to meet the challenge, reconfiguration.

- For paediatrics, we considered changing one or two inpatient paediatric units (IPs) into Short Stay Paediatric Assessment Units (SSPAUs).

- On these sites, we then considered whether obstetrics was sustainable. If it was, we proposed to support obstetrics by moving to support the neonatology service with Advanced Neonatal Nurse Practitioners (ANNP). If it was not, we looked at moving to a Standalone Midwifery Led Unit (SMLU).

1.4.2 Gastroenterology and Endoscopy
Similarly, we have tested which issues around gastroenterology and endoscopy can be addressed through transformation such as the use of Hosted Networks and greater collaboration across sites; and those where we needed to look at changing the clinical model. This can be done through a formalisation of existing transfer protocols.

1.5 Analysis and conclusions
On the 18th March, and the 1st April, the Accountable Officers (AOs), Chief Executives (CEOs) and Medical Directors of SYBND commissioners and acute providers met to discuss the results of the modelling and feedback from the public, and to identify an approach to recommend to the Governing Bodies.

In summary, the discussion concluded that:

- The system was strongly supportive of the approach to shared working between the Trusts. Work should go forward as quickly as possible on developing the Hosted Networks, as an important vehicle for transformation going forward.

- The transformation agenda should continue to go forward, in particular with a focus on strong workforce planning across the system, and development of new models of care and patient pathways, through shared working. This approach of collaboration was strongly supported by public engagement. Since it cannot be guaranteed that transformation will address all of the challenges, and unplanned workforce issues may arise, a monitoring system with early warning signals should be put in place at a system level.

- Reconfiguration was a more complex decision as laid out below, but in summary the group agreed that reconfiguration itself carried a risk of unsettling the workforce and thereby destabilising the system. The group felt that reconfiguration should only be taken forward if there was an immediate risk of safety issues or immediate sustainability issues that would justify it, as had been the case at Bassetlaw in 2016.
1.5.1 Reconfiguration of inpatient paediatrics

The group discussed the current case for change, including the workforce issues, and also discussed how far a reconfiguration solution would address these:

- The group were not aware of immediate, known safety issues at any sites. A risk of safety issues on the Bassetlaw site has previously been avoided by removing overnight stays and moving temporarily to a Paediatric Assessment Unit model. The work of the Review suggested that staffing issues remain acute, and that the same risk would arise again at Bassetlaw if Bassetlaw were to return to an overnight inpatient paediatric unit.
- The group concluded that workforce difficulties were significant and would continue to be so. Paediatrics and maternity are not the most challenged specialties, but the challenges particularly of recruiting paediatric nurses and A&E paediatric staff are well known.
- The modelling tested how far the total requirement for staff would be reduced by reconfiguration (over and above changes to skills mix within the existing configuration). Changing one or two IP paediatric units to a SSPAU results in a small workforce change for the region, although has a big impact for an individual site.
  - On an individual site, the amount of change depends on the current size and the number of patients, but could help workforce challenges by reducing staffing requirements at that site by between 20 and 46 posts.
  - However, the total saving for the system is less than that since most of the patients will still need to be cared for, even if this is on another site, so the total saving to the system is c.7 WTE middle grade and junior doctors overall. These savings come from having a rota of mid grades and junior doctors on a site able to provide care to larger numbers of patients.
- Reconfiguration is therefore most appropriate if there is a specific challenge at a particular site which is particularly hard to staff, and if other staffing options and models have been explored but cannot address the issue.
- However, AOs and CEOs were concerned, learning from the experience of the Hyper Acute Stroke reconfiguration, that embarking on a reconfiguration programme might in the short to medium term exacerbate an already difficult workforce position.
- Public engagement had also raised concerns about reconfiguration, particularly around increased travel times, although some respondents were happy to travel further for higher quality or more specialised services.
- The group therefore felt that reconfiguration up front, unless there was a demonstrable safety argument for it, would carry a high risk of destabilising the service. They also recognised that patients frequently have concerns around reconfiguration. They therefore suggested that instead the system should focus on transformation and shared working, with ongoing change to services, unless there is a demonstrable safety need on a site.
- However, the AOs and CEOs recognised that there was a risk that transformation takes time and there is a risk that new issues may emerge while it is being implemented. They therefore recommended that we should develop a system-wide approach to monitoring performance and workforce issues, that will enable us to:
  - Identify in advance any safety or sustainability issues that may be emerging, and respond appropriately; and
  - Monitor whether transformation is having the intended effect of improving sustainability.
- The paper proposes that the Hosted Networks should be asked to identify and initially monitor up to five core metrics which will capture these points; they might ultimately be monitored by the system-wide Quality Group.
Alongside this, individual Trusts are expected to have an ongoing programme of service improvement which may achieve the benefits of reconfiguration, for example through building community pathways to reduce reliance on inpatient services, though on a slower timeframe.

The only Trust where the AOs and CEOs felt that there was a level of risk that could give rise to safety concerns, which was unlikely to be addressed by transformation, was if paediatrics services at Bassetlaw were to return to an overnight inpatient paediatric unit.

Clinicians consider that the Bassetlaw service has been sustainable since the changes made in January 2017, with no detriment to clinical outcomes and no complaints related to the new model of care.

However the underlying challenges with staffing that led to the original concerns at Bassetlaw have not been resolved, as shown in the modelling around the shortfall of workforce across the system, and ongoing recruitment challenges since 2017. These are exacerbated by Bassetlaw’s geographical position which makes it more difficult to rotate staff across sites or build a locally-recruited workforce. It was felt to be unlikely that transformation alone would be able to improve the sustainability of Bassetlaw enough for it to return to running an overnight inpatient unit.

The CEOs and AOs supported Bassetlaw CCG and Doncaster and Bassetlaw Teaching Hospital in continuing to test potential partnership working with Sheffield Children’s Hospital as a way to strengthen services, but that it was not likely that this would be sufficient to support a reopening of overnight inpatient paediatric services.

Any proposed permanent change to services will need to go through public engagement, and (following discussion with the relevant Overview and Scrutiny Committee) the CCG may consider formal consultation with patients and the public. The timing of such a consultation and other issues that may also be included in a consultation process are matters for the CCG to consider.

1.5.2 Reconfiguration of maternity

The AOs and CEOs agreed that the principle of reconfiguring only if there is a risk that cannot be addressed by transformation, applies to maternity as well:

• The modelling suggests that the workforce challenges in maternity are less pressing than those in paediatrics, except in recruitment of midwives.

• Changing one or two obstetrician led units to a SMLU results in a small workforce change for the region, although has a big impact for an individual site reducing the need for clinicians.
  - The size of the workforce saving depends on the individual sites chosen but the model could help the workforce challenges through reducing staffing requirements by no longer needing to provide any obstetricians, junior doctors or mid grades (an average of around 23 posts) and a reduced need for midwives.
  - At a cross system level, the workforce challenge would be alleviated by around 5-6 junior doctors and 5-6 mid-grade posts. Depending on the sites chosen, the number of midwives needed in SYB would also go down if patients flow out of area, but commissioner spend will remain the same under these circumstances.

• Changes to obstetric services will impact on the provision of interdependent services, as explored in section 10.2 below. This paper proposes ways to mitigate these impacts, particularly by introducing a model of supporting neonatology with Advanced Neonatal Nurse Practitioners.

• The most significant challenge identified in obstetric services was at Bassetlaw, where challenges in the workforce for interdependent services (only 3 of 8 anaesthetist posts are
filled) make an obstetric service difficult to maintain. At present the Trust is managing this by routing more complex patients from Bassetlaw to Doncaster.

- This report invites the Bassetlaw commissioners, working with the Trust, to consider transformation and reconfiguration options.

1.5.3 Reconfiguration of gastroenterology and endoscopy

Across gastroenterology and endoscopy, the Hosted Networks will focus on transformation, through developing workforce solutions and shared working.

For Out of Hours gastrointestinal bleeds, it is proposed that the Hosted Network will take forward work on the development of shared, consistent out of hours protocols, to ensure that all patients have rapid and equitable access to urgent treatment if it is needed.

This would affect a small number of patients, we believe 2-3 patients per week. Proposed changes are likely to streamline and standardise transfers which already happen ad hoc, without greatly changing numbers of patients affected. Nevertheless strong engagement with patient and staff groups will be required, Any proposed permanent change to services will need to go through public engagement, and (following discussion with the relevant Overview and Scrutiny Committee, and the Joint Health Overview and Scrutiny Committee as required) the CCG may consider formal consultation with patients and the public. The timing of such a consultation and other issues that may also be included in a consultation process are matters for the CCG to consider.

1.6 Decision for Governing Bodies

Governing Bodies are asked to consider whether they agree with the conclusions reached by the AOs and CEOs above. In particular, they are asked whether they agree that an approach of focusing on transformation, and considering reconfiguration only if there is an immediate risk of safety issues, is appropriate in addressing the long term sustainability of acute services in SYB. If transformation fails to address the workforce issues in the medium to long term reconfiguration may have to be reconsidered.

They are also asked to agree the approach to monitoring the progress of transformation, and any emerging risk, that is laid out below.

Governing Bodies have agreed during their July 2019 meetings to delegate responsibility for agreeing the direction of travel laid out in this report to the Joint Committee of Clinical Commissioning Groups (JCCCG).

1.7 Next steps

There are the following key areas of next steps:

**Agreement of this paper**

- **Discussion within public meetings of the Governing Bodies**
- **Public engagement**: public engagement on the direction of travel laid out in this paper will take place in parallel with the GB discussions, so that the public discussion at JCCCG can be informed by this
- **Discussion and agreement of the proposed way forward by the JCCCG**

**Taking forward transformation**
• **Taking forward development of the level 1 Hosted Networks.** Recruitment to the Hosted Networks has already begun and the intention is to define their work programme over the summer. Where there is a need for public or patient engagement in any element of the work programme, this will be overseen by the Integrated Care System (ICS) communications team. Trusts will also lead engagement with staff as required.

• **Taking forward development of the level 3 Hosted Network for paediatrics.** A paper is going to the Board of SCH and DBTH in June and a work programme, and engagement with staff, will follow from that.

• **Developing monitoring.** As part of development of the Hosted Networks, clinicians and managers will be asked to help develop an approach to monitoring progress against transformation, and identify concerns with safety and sustainability. This will form part of wider work on monitoring within the ICS.

• **Taking forward other elements of transformation.** Each Trust is taking forward its own internal transformation programme.

**Taking forward reconfiguration**

If any CCG decides to take forward reconfiguration, this will require:

• **Full equalities impact assessment (EIA) led by the CCG.** The ICS has considered equalities issues at each stage but CCGs have a statutory responsibility to undertake a full EIA for any consultation that they will be leading;

• **Engagement with the relevant Health Overview and Scrutiny Committee,** and engagement for information with the Joint Health Overview and Scrutiny Committee;

• **Engagement with the North of England Clinical Senate** (and/or the Yorkshire and the Humber Clinical Senate) around any suggested reconfiguration changes.

• **Public consultation** in line with legal requirements.
The process to date and the scale of the challenge:

In this section we will consider the following:

- The background of the Hospital Services Review, including the original case for change identified and the outcomes of the Strategic Outline Case
- The national picture of workforce, funding and demand challenges
- The refreshed case for change for services against the five evaluation criteria, taking into account research, 1-1 interviews with Trusts and Clinical Working Group discussions
2 Background

2.1 The Hospital Services Review (HSR) Process

In 2016, the South Yorkshire and Bassetlaw (SYB) healthcare system published its Sustainability and Transformation Plan (STP). While SYB has some excellent hospital services, the STP identified concerns about the long term sustainability of the acute sector in South Yorkshire and Bassetlaw. Key challenges identified were mounting demand, workforce pressures, and inequalities across the region in patients’ access to and outcomes of care.

Following the STP, the SYB system, together with Mid Yorkshire and North Derbyshire (MY and ND), agreed to undertake a Hospital Services Review (HSR) to look at options for improving long term sustainability.

2.1.1 Identifying the services highlighted in the Review

The HSR found that a number of acute services across SYBMYND were facing significant sustainability challenges. The HSR identified those services which were facing the most acute challenges, and selected five significantly challenged services as the focus of the Review:

- Urgent and Emergency Care (1st least sustainable)
- Gastroenterology and Endoscopy (2nd least sustainable)
- Stroke (the acute pathway, supporting HASU) (4th least sustainable)
- Acute Paediatrics (Care of the Acutely Ill Child) (11th least sustainable)
- Maternity (Neonatology was 15th least sustainable)

Maternity was included because of its interdependencies with paediatrics and neonatology.

2.1.2 Recommendations and the Strategic Outline Case

The HSR published its final report in May 2018, and the commissioners and providers responded in a Strategic Outline Case in October 2018 which agreed the following direction for South Yorkshire and Bassetlaw, and Chesterfield (Mid Yorkshire is following a different strategy as part of a different STP area):

- **Shared working between acute providers**: Hosted Networks, a Workforce Hub and an Innovation Hub will be set up to support shared working.
- **Service transformation**: The system will look at improving services within their current configurations through transformation.
- **Reconfiguration**: If Transformation does not go far enough, changes to the clinical model will be considered:

2 The findings of the assessment are published in the Stage 1A Report of the HSR, available at: [https://www.healthandcaretogethersyb.co.uk/application/files/7515/0903/4254/Hospital_Services_1a_Report.pdf](https://www.healthandcaretogethersyb.co.uk/application/files/7515/0903/4254/Hospital_Services_1a_Report.pdf)
- **Paediatrics**: The system will consider changing 1 or 2 inpatient paediatric units into Short Stay Paediatric Assessment Units (SSPAUs).
- **Maternity**: Where inpatient paediatrics is changing, the system will look at changing obstetrics services into Standalone Midwifery Led Units (SMLUs), and also explore clinical models that would allow a site to retain obstetrics even if it no longer had 24/7 inpatient paediatrics.
- **Gastrointestinal bleeds**: The system will look at formalising the protocols for out of hours transfers from sites which cannot offer 24/7 GI bleed rotas.
3 The case for change: across all services

In considering the next steps for the system, the ICS has revisited the original case for change, to identify whether any of the challenges identified at the beginning of the HSR have been resolved or exacerbated, or any new challenges have emerged.

3.1 Challenges in the NHS at national level

3.1.1 Workforce

- The NHS employed over one million staff as of July 2018.
- There have been more than 100,000 vacancies reported by Trusts, a number that is expected to rise over the coming years.
- 2018 was the second consecutive year during which the number of applications and acceptances to nursing degrees in England has fallen, this is in large part attributed to the changes in funding offered to nursing trainees. Additionally, c. 24% of those starting a nursing degree either did not graduate in the given time frame, or failed the course.
- The number of hospital based doctors has increased since 2017 (this varies by specialty).³
- Attrition rates within the NHS have continued to increase since 2008.
- Staff face increasing pressures at work - the NHS England staff survey conducted in 2017 found that close to 4/10 staff (38%) had experienced work-related stress over the last 12 months, a 2% increase on the previous year.⁴

3.1.2 Financial Pressures

- The NHS is under growing financial pressure. Between 2010/11 and 2014/15, health spending increased by an average of 1.2 per cent a year in real terms and increases are set to continue at a similar rate until the end of this Parliament.
- The £20bn announced for the NHS is not anticipated to fully close the projected funding shortfall, being spread out over 5 years to 2023/24.
- This will mean an average increase on the NHS’s budget of around 3.4% a year in real terms. When this increase is considered in the context of the whole Department of Health budget, the Nuffield Trust think tank has said that this is increase is more likely to be around 3% a year.⁵
- The Institute for Fiscal Studies (IFS), have said that increases of at least 4% a year on average are needed in order to meet the NHS’s needs and see any improvement in its services.⁶

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³ The Health Foundation, NHS staffing trends, 2018
⁴ NHSE, NHS staff survey, 2018
⁵ Nuffield Trust, Funding settlement a big step forward, 2018
⁶ Institute for Fiscal Studies, What does the NHS funding announcement mean for health spending in England?, 2018
3.1.3 Demand pressures

- Between 2003/4 and 2015/16, the number of attendances at major A&Es increased by 18 per cent, from 12.7 million to 15 million. Admissions via major A&E departments rose by 65 per cent over the period, from 2.5 million in 2003/4 to 4.1 million in 2015/16.

- One reason for the growth in hospital activity is population growth - between 2003 and 2015, the population of England increased by 10 per cent, from 49.9 million in 2003 to 54.8 million in 2015.

- Additionally there have been demographic changes - between 2003 and 2015, the number of people aged over 85 has increased by nearly 40 per cent.

- King’s Fund research suggests that other factors that may be driving up demand include patients’ rising expectations, earlier referrals from GPs for suspected cases of cancer, and advances in technology.\(^7\)

3.2 Challenges identified within South Yorkshire and Bassetlaw

The main challenges facing each of the five services in 2017 were identified in the Hospital Services Review through the Clinical Working Groups, engagement with patients and the public, and performance and workforce data provided by the Trusts. The main challenges that emerged were around workforce, unwarranted clinical variation and innovation, and were laid out in published reports.\(^8\)

3.3 Public engagement on the challenges

During the Hospital Services Review, the HSR team undertook a number of large public engagement events, as well as sessions in each of the Places in SYB. During the drafting of the SOC, and in public engagement between October 2018 and April 2019, the emphasis was on engaging with people from seldom heard groups, and stakeholders who would be particularly affected by changes to the services identified here, such as mother and toddler groups.

The engagement has been reviewed and recorded by an independent organisation, and all of the reports it has written for the HSR as well as other material from the patient and public engagement are available on the ICS website.\(^9\)

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\(^7\) King’s Fund, How hospital activity in the NHS in England has changed over time, 2016

\(^8\) A full report of the challenges identified by the HSR is available in the Stage 1B Report available at: https://www.healthandcaretogethersyb.co.uk/application/files/9615/1809/8702/Hospital_Services_Review_1b_report.pdf

\(^9\) All of the reports of public engagement so far can be found under ‘all the documents’ at https://www.healthandcaretogethersyb.co.uk/what-we-do/working-together-future-proof-services/looking-at-hospital-services. The most recent report covers wider public engagement for the ICS as well as the HSR and is published at https://www.healthandcaretogethersyb.co.uk/application/files/3615/5264/4308/SYB_HSR_engagement_approach_Dec_April.pdf
The engagement was used to find out what service users and the public consider important for their local health services and to get their views on the specific models put forward. The views of the public have been used to shape the models, and views on specific models are described throughout the paper.

Some of the key points made on the overall challenges to the NHS are:

- **Quality**: Key priorities for respondents were a consistent quality of care across sites, and the importance of compassionate and caring staff. Many participants cited soft skills as an important factor to consider for the quality of care.

- **Workforce**: Some members of the public had a preference for specialist staff (although some participants spoke highly of experiences with for example nurse practitioners). There was a strong theme that the NHS needed more staff and that staff should be better valued.

- **Affordability**: In considering the evaluation criteria, many members of the public felt that the affordability of services should not be a priority in deciding the future of services, though some felt effective management of funding to avoid wasting money should be a priority.

- **Access**: Access was a major theme across the public engagement. In the engagement phase October 2018-April 2020, 6 in 10 participants expressed a preference for local services. A further 3 in 10 participants mentioned the importance of effective and affordable transport in their local area, in order to access the care they need. This theme was emphasised by the public group on transport, which was set up in response to public feedback on the HSR and the SOC.

- **Interdependencies**: Interdependencies was voted by public respondents to be one of the most important themes to consider when evaluating change. Views were divided between participants who believed that all interdependent services should be provided locally, and those who thought that it was important to have access to all interdependent services but they did not necessarily have to be local.

The ways in which public engagement has shaped the specific options is explored throughout this paper, and is laid out in more detail in Annex F.
4 The Case for Change: Care of the Acutely Ill Child

4.1 Findings in the original HSR case for change

Acute paediatrics was cited frequently in the Trust interviews and was felt to be the biggest workforce risk across the review footprint by Doncaster and Bassetlaw Trust and a moderate risk by Rotherham and Sheffield Children’s Hospital. In an aggregated assessment of the sustainability of services in SYB(ND) CAIC scored 11th. The service was a priority for commissioners, driven by workforce shortages (particularly at consultant and middle grade), which were recognised nationally and by the local Health Education England leads as well as the by the individual Trusts, and low activity levels at some sites (particularly overnight). The CQC had raised concerns about services for children and young people at two trusts.

There was agreement that the HSR would support the recent establishment of the Managed Clinical Network in acute paediatrics and that new models of community based provision should be explored. There was agreement that this service was a high priority for shortlisting.

4.2 National paediatrics workforce challenges

While there is slight growth in the number of Paediatric nurses nationally, there are still large gaps in the Paediatric medical workforce nationally, that are more pronounced outside of London. Considering falling national trainee numbers there are concerns that the number of current and future estimate Paediatric trainees will not be able to meet future demand and close current workforce gaps.

In the year to July 2018, the number of nurses and health visitors in children’s health grew by 2.2%. Contrastingly, there has been a slight decrease (0.4%) in the number of community nursing support workers for Paediatric care. The number of nurses working in children’s care (registered to the Nursing and Midwifery council) has increased from c. 45,000 to c. 51,000 from 2013 to 2018.10

Between 2013 and 2015, the UK Paediatric consultant workforce grew from 3718 to 3996, a rise of 7.5%. However, at least 752 WTE extra consultants are required to meet the RCPCH Facing the Future, and specialist services standards. Advanced nurse practitioners are employed by 60% of children’s hospital services, in an attempt to meet demand.11

4.3 Public views on paediatrics

The ICS has undertaken engagement with patients and the public, including with the Youth Forum at Sheffield Children’s Hospital whose members come from all over SYB. More detail is at Annex F. Key points around the case for change for paediatric services were:

- Care is often excellent and staff are compassionate and friendly, although very busy.
- The physical environment in some Trusts could be more welcoming for children and their families.

10 Royal College of Nursing, The UK labour market review, 2018
11 RCPCH, The Paediatric workforce report, 2018
4.4 Metrics used to assess performance

We have conducted a detailed assessment of Trusts, against approximately 30 metrics at Trust level. This is contained in the case for change report for each Trust and in the detailed case for change Appendix (Annex B). Included below is a snapshot view of these metrics at the system level.

4.4.1 Quality

We will measure Quality by considering the question: Is quality of care optimised by promoting delivery of national good practice and guidance, and contributing to maintained or improved outcomes?

This takes into consideration the following:

- Are SYB(ND) Trusts able to meet national clinical guidelines and standards?
- Are patients satisfied with the quality of care offered?

It includes the following measures:

- CQC Assessment
  The CQC score looks at safety, effectiveness, care, responsiveness and leadership of a service.
- Facing the Future Standards
  We have looked at the number of the Acute Facing the Future standards each Trust meets, as defined by RCPCH
- Patient feedback
  We have conducted a qualitative evaluation of NHS choices submissions, as well as public engagement during the Hospital Services Review. To quantitatively assess patient feedback for CAIC services across SYB(ND) Trusts, we have calculated an average of the scores achieved in the Children and Young People’s (CYP) survey.

4.4.2 Workforce

Workforce is measured by considering the question: Does the option ensure there is a sustainable workforce of the right number and skill set?

This takes into consideration the following:

- Do Trusts have sufficient workforce in place to provide a safe service?
- Is the existing workforce satisfied with their workplace environment and workload?
- To what extent do Trusts rely on locum / temporary staff?

This includes the following measures:

- The scale of the workforce gap
  We have tried to evaluate the scale of the gap between the staff currently in post and what would be required. Due to the difficulties in attaining consistent funded establishment values across Trusts, we have had to model the required establishment using assumptions developed by clinicians.
  We have calculated the workforce gaps at each grade between:
The current staff in post and the number of staff required to sustainably staff units based on assumptions developed and refined with clinicians through a series of Clinical Working Groups;

- The further gap between the number of staff required to sustainably staff units and the Royal College guidelines.

- Staff satisfaction - GMC trainee staff survey
  The General Medical Council (GMC) trainee staff survey asks questions around overall staff satisfaction and workload satisfaction, with both metrics scored out of 100. A higher score for workload satisfaction indicates a more manageable workload.

### 4.4.3 Affordability

Affordability is measured by considering the question: Does the option cost no more than the current service?

This takes into consideration the following:

- How much activity do Trusts carry out?
- How efficient are the services the Trusts provide?

This includes the following measures:

- Reference Cost index
  We have used reference cost index (RCI) to assess the affordability of each service at each Trust. RCI is a measure of relative efficiency comparing the actual cost of activities in comparison to the expected cost; an RCI value above 100 means relatively inefficient services, whilst an RCI value below 100 means relatively more efficient services.

- Pay cost modelling
  Using the model described in the workforce section, we have calculated the number of staff required at each grade (and their corresponding pay costs) to sustainably staff units based on assumptions developed and refined with clinicians through a series of Clinical Working Groups.

### 4.4.4 Interdependencies

Interdependencies are measured by considering the question: Are the necessary supporting services appropriately available?

This takes into consideration the following:

- Are interdependent services that need to be provided available onsite?
- What would the impact be to interdependent services at all Trusts if the clinical model were to change?

This includes the following measures:

- Assessment of CQC scores and provision of key interdependent services
  Paediatrics has a large number of interdependent services, notably Urgent & Emergency Medicine, Paediatrics & Neonatology.

### 4.5 The picture in SYB(ND) currently

The table below summarises Trust performance against the measures described above.
The quality of CAIC services in SYB(ND) is currently good on most sites, but we are facing some sustainability challenges in our systems. In the most recent CQC assessments, all SYB(ND) Trusts achieved ‘Good’ Care Quality Commission (CQC) scores for Children and Young People, with the exception of Barnsley, which received a ‘Requires improvement’ score. This was identified by the Trust as being due to a one-off incident and the issues raised have now been resolved.

Only one Trust (Barnsley) is currently meeting all 10 Facing the Future (FTF) standards. Two trusts (Rotherham and Chesterfield) are meeting 7 standards, and the remainder meet 8 (Doncaster and Bassetlaw) and 9 (Sheffield Children’s Hospital) FTF standards, respectively. The most common Facing the Future standards Trusts are struggling to meet involve workforce considerations and are listed below:

- **FTF Standard 1:** Consultant is present at peak times, 7 days a week
- **FTF Standard 3:** Every child is seen by a consultant Paediatrician within 14 hours of admission
- **FTF Standard 8:** All training rotas made up of 10+ WTE posts, all compliant with EU and UK working regulations

CAIC is also currently included on the risk register for most Trusts including Doncaster and Bassetlaw, Rotherham (concerning an inability to identify and treat deteriorating children waiting in the UECC area), Barnsley (concerning an inability to recruit Paediatric nurses into vacancies on ward 37; and governance, leadership and relationships within the team and service) and Sheffield (concerning an inability to fill junior posts).

Patient feedback for Paediatrics across SYB(ND) is very good.

Staff feedback is more variable. GMC trainee staff satisfaction scores for workload (an average of 45/100 across Trusts in SYB(ND)). During the Clinical Working Groups staff referred to recent occasions when study leave had been cancelled across the organisation. Staff also report significant levels of substantive staff working extra shifts. These shifts are not recorded in agency or staff bank data and so were not captured in the data collection done for the Hospital Services programme; it was therefore not possible to identify the extent of this.

Rotherham has significantly higher reference costs than the other Trusts. The Trust believes this to be because community services are included within its reference costs.
4.5.1 The current situation at Bassetlaw

During 2016, a shortage of specialist paediatric medical and nursing staff adversely affected provision of overnight services at Bassetlaw Hospital for a number of months, and despite efforts to recruit to vacancies, these were not successful. The situation was exacerbated suddenly by several staff leaving at the end of the year. As a result, the Trust felt that it could not safely continue to provide inpatient paediatric services at Bassetlaw.

12 Latest publically available data from CQC, NHS Children and Young People’s Survey, Reference Cost Index data; Facing the Future data based on Trust self evaluation; workforce data based on workforce modelling using assumptions from clinicians
Following discussion with the Bassetlaw Overview and Scrutiny Committee the Paediatric Ward at Bassetlaw Hospital changed in January 2017 to provide an enhanced day time urgent assessment and treatment service, seven days a week.

Although the overnight service could not be maintained, acute paediatrics were enhanced and are available from 8am to 10pm, seven days a week, creating a ‘consultant-led Paediatric Assessment Unit’. Any children requiring an overnight stay are transferred to neighbouring Doncaster Royal Infirmary (DRI). Urgent transport for the children who do require an overnight stay is available, and is being jointly commissioned by Bassetlaw Clinical Commissioning Group (CCG) and the Trust.

The new model of care is consistent with Royal College of Paediatric and Child Health guidance. At the time of the change, the number of children who required overnight stay had fallen in recent years with the ward, A3, caring for an average of six children. Data shows that the number of patients transferred per week from Bassetlaw to Doncaster has risen from an average of 6 to an average of 15. Almost 85% of all patients stay one night or less and most children will benefit from an enhanced assessment and treatment service.

The closure of overnight Paediatric services at Bassetlaw remains on the risk register for Doncaster and Bassetlaw. It is closely monitored to ensure the safety of services, with a number of controls and assurances in place, namely:

- **Controls:**
  - Consultant led paediatric assessment unit in place
  - Arrangements for transferring overnight stays to DRI
  - Communication with CCG and HOSC
  - Arrangements with Sheffield Children’s Hospital
  - Ongoing paediatric nurse recruitment

- **Actions to address:**
  - Regular recruitment exercises
  - Review of paediatric competencies for ED - Additional training for Adult Nurses in Bassetlaw ED
  - Continue to advertise nursing posts
  - Paediatrics being reviewed as part of Hospital Services review

### 4.6 Future demand for Care of the Acutely Ill Child services

#### 4.6.1 Current activity

Through discussions with Clinical Working Groups (CWGs) and paediatric Medical Directors, we have ascertained that there are an increasing number of GP referrals to SSPAUs across SYB(ND), with one Trust estimating c. 70% of their SSPAU admissions are from GP referrals. This indicates there is a large proportion of paediatric patients who could be assessed and treated in the community, but are instead being directed to SSPAUs, which are already stretched in terms of activity and workforce. Rotherham has a very low number of SSPAU admissions, which may be due to the success of their paediatric community care programmes.

The same discussions have highlighted the increased proportion of complex cases being admitted for acute paediatric care, predominantly due to public health factors such as obesity and deprivation leading to increased comorbidities. However, using the case studies of Mid Yorkshire and Bassetlaw who have changed their Inpatient Units to SSPAUs, the number of patients who may actually require overnight stay tend to be low.
The activity levels across each Trust in SYB(ND) for CAIC services are shown in Figure 1, using the metrics of non-elective IP admissions for 2018/2019 and average length of stay.

<table>
<thead>
<tr>
<th></th>
<th>Barnsley</th>
<th>Bassetlaw</th>
<th>Chesterfield</th>
<th>Doncaster</th>
<th>Rotherham</th>
<th>SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population under 18y/o (2017/18)</td>
<td>52,858</td>
<td>24,530</td>
<td>53,563</td>
<td>69,325</td>
<td>60,070</td>
<td>123,891</td>
</tr>
<tr>
<td>Total Paediatric admissions (2017/18)</td>
<td>6,658</td>
<td>1,330</td>
<td>4,573</td>
<td>11,185</td>
<td>5,320</td>
<td>13,569</td>
</tr>
<tr>
<td>Number of admissions with LOS &lt;1 day</td>
<td>4,202</td>
<td>1,134</td>
<td>2,376</td>
<td>7,757</td>
<td>3,637</td>
<td>-</td>
</tr>
<tr>
<td>Average length of stay (days)</td>
<td>2.1</td>
<td>2.1</td>
<td>2.3</td>
<td>2.6</td>
<td>2.2</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Figure 2: CAIC activity levels and under 18 y/o population data across SYB(ND)\textsuperscript{13,14}

### 4.6.2 Demand for future services

Overall, the demand for acute paediatric services is expected to increase over the next five years. Based on the population growth (ONS) and non-demographic growth assumptions, we expect demand for paediatric services to grow by 2.7% on average in the next five years.

Currently, there is a sufficient under 18 population to sustain appropriate levels of patient flow to facilitate training in SYB(ND) hospitals to ensure the workforce remain proficient in paediatric care.

The graph below (Figure 3) shows the predicted inpatient unit and SSPAU admission levels on the left axis, with the percentage change year on year shown on the right axis.

The demand figures for Bassetlaw have been tested against a number of different scenarios around population growth. The under 18 population of Bassetlaw is currently noticeably smaller than the other SYB(ND) Trusts (due to being smaller in size, and having an ageing demographic). However, Bassetlaw is anticipating significant growth over the next two decades. The draft Bassetlaw Development Plan\textsuperscript{15} calls 6,630 new homes to be built in the area by 2035. The majority of these homes are intended to provide housing for local people: the Bassetlaw Plan states that 306 of the 390 homes which are being created each year will be needed to

\textsuperscript{13} SYB(ND), Trust data returns, 2019

\textsuperscript{14} NHS, CCG Population data, 2019

meet demographic growth in the existing population, suggesting that around 84 houses per year will be created to attract new population.

Whilst the precise impact of housing developments on paediatric services cannot be precisely quantified, it is known that a relatively small population of children require hospital care, and the impact will be marginal. The modelling that has been done of a range of different scenarios indicates that this is not expected to result in a ‘step change’ in demand in Bassetlaw.

4.6.3 Future workforce

Using the HEE workforce growth assumptions, we expect the workforce to grow, on average, in the next 5 years (Figure 4):

- 1.3% p.a. for junior doctors
- 5.3% p.a. for paediatric nursing staff

Although the number of paediatric nurses is expected to grow faster than the number of paediatric admissions (c.5% p.a. growth in nursing staff vs. and expected c.3% growth in activity), given the current shortage of paediatric nurses, this may not be enough to ensure appropriate staffing. Moreover, although this increase will help to alleviate some of the workforce issues currently experienced in SYB(ND), the rate of growth will not match the growth in demand when current workforce shortfalls are taken into account. This risks creating a decline in the quality of paediatric care provided across SYB(ND), if no action is taken to counter insufficient staffing across the region.

Figure 3: Predicted growth in demand over the next 5 years for CAIC services\textsuperscript{16}
Figure 4: Predicted increase in CAIC workforce over the next 5 years\textsuperscript{17}

\textsuperscript{16} Based on ONS population growth assumptions
\textsuperscript{17} Based on data provided by HSE
The implementation of Better Newborn Care guidelines, if implemented, could cause further workforce pressures in acute Paediatrics. The guidelines state that for L1 and L2 Neonatal units, a junior doctor must be immediately available for neonatal care, which will necessitate a separate rota to paediatrics. Busier neonatal units will require a separate middle grade rota, whilst the busiest units will require a separate consultant rota (as is the case currently). The splitting of the rota which currently covers both paediatrics and neonatology would, if it is agreed by commissioners, further exacerbate the junior and middle grade doctor shortages experienced in paediatrics across SYB(ND).
5 The Case for Change: Maternity

5.1 Findings in the original HSR case for change
Maternity was included in the HSR because of its interdependencies with paediatrics and because it was a high priority for commissioners. There were a number of workforce shortages across the footprint and some requirements from the national strategy had not been met. At the time, the CQC rated Maternity at three of the acute sites, across two trusts, as ‘Requires improvement’.

In an aggregated assessment of the sustainability of services in SYB(ND) CAIC scored 11th and Neonatology scored 15th.

5.2 National maternity workforce challenges
The midwifery workforce is aging and close to the pension age of 55 nationally, leading to an impending shortfall in experienced staff. The number of Midwives increased by just 0.9% in the year to July 2018. There has also been a 0.2% decrease in the number of community nursing support workers for Maternity care. Additionally, the average attrition rate from Midwifery degrees is 21%. The number of midwives nationally is not increasing at a rate fast enough to meet changes to guidance introduced through the Continuity of Carer guidelines.

The medical workforce is also under pressure. The Maternity audit in 2017 found that 88% of Maternity units had gaps in the rota for middle grade Obstetricians, with 83% of Maternity units requiring locum staff to cover their middle grade rota. With a large proportion of the Maternity workforce being female, more could also be done to provide alternative and more supportive working arrangements for staff as they progress through their careers.

5.3 Public views on the Case for Change
The ICS has undertaken significant amounts of public engagement with women who use maternity services and their families, both through the Hospital Services Programme and through the Local Maternity System. More detail is at Annex F. Key points around the Case for Change were:

- Many women reported excellent experiences and good care
- The main concern that was raised by women was that staff were very busy. Some patients reported a change of staff or too few staff present during labour, particularly amongst midwives.

5.4 Metrics used to assess performance
We have conducted a detailed assessment of Trusts, against approximately 30 metrics at Trust level, is contained in the case for change report for each Trust and in the detailed case for

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18 RCOG, Workforce report, 2017
change in Appendix B. Included below is a snapshot view of these metrics at the system level.

5.4.1 Quality

We will measure Quality by considering the question: Is quality of care optimised by promoting delivery of national good practice and guidance, and contributing to maintained or improved outcomes?

This takes into consideration the following:

- Are SYB(ND) Trusts able to meet national clinical guidelines and standards?
- Are patients satisfied with the quality of care offered?

It includes the following measures:

- CQC Assessment
  The CQC score looks at safety, effectiveness, care, responsiveness and leadership of a service.
- Patient feedback
  We have used the NHS Friends and Family test for Maternity to assess how patients perceive the quality of the Maternity services at each Trust. The scores (% of people who would recommend the service) are broken down into antenatal care, care during birth, postnatal ward care and postnatal community care.

5.4.2 Workforce

Workforce is measured by considering the question: Does the option ensure there is a sustainable workforce of the right number and skill set?

This takes into consideration the following:

- Do Trusts have sufficient workforce in place to provide a safe service?
- Is the existing workforce satisfied with their workplace environment and workload?
- To what extent do Trusts rely on locum / temporary staff?

This includes the following measures:

- The scale of the workforce gap
  We have tried to evaluate the scale of the gap between the staff currently in post and what would be required. Due to the difficulties in attaining consistent funded establishment values across Trusts, we have had to model the required establishment using assumptions developed by clinicians.
  We have calculated the workforce gaps at each grade between:
    - The current staff in post and the number of staff required to sustainably staff units based on assumptions developed and refined with clinicians through a series of Clinical Working Groups
    - The further gap between the number of staff required to sustainably staff units and the Royal College guidelines
- Staff satisfaction - GMC trainee staff survey
  The General Medical Council (GMC) trainee staff survey asks questions around overall staff satisfaction and workload satisfaction, with both metrics are scored out of 100. A higher score for workload satisfaction indicates a more manageable workload.
5.4.3 Affordability

Affordability is measured by considering the question: Does the option cost no more than the current service?

This takes into consideration the following:

- How much activity do Trusts carry out?
- How efficient are the services the Trusts provide?

This includes the following measures:

- **Reference Cost index**
  
  We have used reference cost index (RCI) to assess the affordability of each service at each Trust. RCI is a measure of relative efficiency comparing the actual cost of activities in comparison to the expected cost; an RCI value above 100 means relatively inefficient services, whilst an RCI value below 100 means relatively more efficient services.

- **Pay cost modelling**
  
  Using the model described in the workforce section, we have calculated the number of staff required at each grade (and their corresponding pay costs) to sustainably staff units based on assumptions developed and refined with clinicians through a series of Clinical Working Groups.

5.4.4 Interdependencies

Interdependencies are measured by considering the question: Are the necessary supporting services appropriately available?

This takes into consideration the following:

- Are interdependent services that need to be provided available onsite?
- What would the impact be to interdependent services at all Trusts if the clinical model were to change?

This includes the following measures:

- **Assessment of CQC scores and provision of key interdependent services**
  
  Paediatrics has a large number of interdependent services, notably Urgent & Emergency Medicine, Maternity & Neonatology.

5.5 The picture in SYB(ND) currently

The table below summarises Trust performance against the measures described above.

- The quality of Maternity services in SYB(ND) is currently good on most sites, but we are facing some sustainability challenges in our systems. Bassetlaw is of particular concern, as it is struggling to maintain a 24/7 Anaesthetics service which is a key interdependency for Maternity (only 3 out of 8 middle grade anaesthetist posts are filled). Doncaster & Bassetlaw and Rotherham both have ‘Requires improvement’ CQC scores for Maternity.

- Patient feedback for Maternity across SYB(ND) is excellent, but GMC trainee staff satisfaction scores for workload (an average of 49/100 across Trusts in SYB(ND) and evidence around the extra shifts staff work suggest that the quality of the service is very dependent on staff members working overtime and going the extra mile to provide a good quality of care.
The CQC scores for Maternity\(^\text{19}\) are varied across SYB(ND). Sheffield Teaching achieved an 'Outstanding' score, Barnsley and Chesterfield achieved a 'Good' score, whilst Doncaster & Bassetlaw and Rotherham achieved a 'Requires improvement' score.

Considering the CQC reports, Doncaster & Bassetlaw’s CQC score was due to workforce shortages. Similarly, Rotherham’s score referred to the fact that midwives were frequently deployed from other areas to support the delivery suite, and there had been a reduction in specialist midwives to meet the needs of vulnerable women.

There is currently a shortfall in workforce across the system for Maternity. As with Paediatric care, it has been noted that the excellent patient feedback received is heavily dependent upon permanent staff going the extra mile to provide a good quality of care, through working overtime to cover gaps in the rota.

Many Trusts have expressed their concern around the difficulty in recruiting Midwives and middle grade doctors, which has led to spend on locum staff in Maternity departments across SYB(ND). Additionally, larger Trusts have inevitably developed efficiencies of scale, making them more cost effective overall.

One major piece of guidance which could significantly disrupt the sustainability of the status quo is Better New born Care. This guidance requires that neonatology and paediatrics services have separate mid-grade rotas, rather than relying on a shared mid-grade rota as is currently the case in every SYB(ND) site (other than Sheffield Teaching Hospitals and Doncaster).

\(^{19}\) CQC, Inspection reports, 2016 - 2019
Some Maternity Medical Directors stated that the overall activity levels across SYB(ND) are decreasing. Despite this overall decrease in activity, there continues to be an increase in demand for consultant-led services due to a larger proportion of expected high-risk pregnancies (up to c. 65% for some Trusts). High-risk pregnancies are usually due to public health factors such as obesity or smoking at the time of delivery. The trend of increasing demand due to public health factors is seen across services within SYB(ND).

The activity levels across each Trust in SYB(ND) for Maternity services are shown below in Figure 4, showing the total number of births for 2018/2019 and the average length of stay:

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20 Latest publicly available data from CQC, NHS Friends and Family Test, Reference Cost Index data; workforce data based on workforce modelling using assumptions from clinicians
### Average yearly change in birth rate (since 2013/14)

<table>
<thead>
<tr>
<th></th>
<th>+0.9%</th>
<th>+0.1%</th>
<th>-1.7%</th>
<th>-0.7%</th>
<th>-0.6%</th>
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</table>

### Activity levels (number of births 2018/19)

<table>
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<tr>
<th></th>
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<th>2719</th>
<th>3216</th>
<th>1488</th>
<th>2697</th>
<th>6667</th>
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### Proportion of expected high-risk births

<table>
<thead>
<tr>
<th></th>
<th>65%</th>
<th>35%</th>
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<th>N/A</th>
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<th>60%</th>
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### Average length of stay (days)

<table>
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<tr>
<th></th>
<th>2.1</th>
<th>2.0</th>
<th>2.4</th>
<th>2.2</th>
<th>2.3</th>
<th>2.6</th>
</tr>
</thead>
</table>

**Figure 6: Maternity activity levels across SYB(ND)**

Overall, the demand for maternity services is expected to increase over the next five years. Based on the population growth (ONS) and non-demographic growth assumptions, we expect the number of births to grow by 2% on average in the next five years.

We have assumed that the additional houses being built at Bassetlaw, of which 84 per year are intended to encourage population growth over and above demographic growth in the area, will account for a small increase in births but not at levels that could affect the direction of travel laid out in this report.

The graph below (Figure 7) shows the predicted Maternity admission levels on the left axis, with the percentage change in admissions year on year shown on the right axis. The number of Midwives is expected to grow at 0.8% p.a., which is a slower growth rate than the growth rate of Maternity admissions; therefore there is likely to be a shortfall in maternity staffing over the next five years. Although some SYB(ND) Trusts are seeing a decrease in overall activity levels, any increase in the proportion of women who require consultant-led services during their birth, may lead to increased pressures on the consultant workforce.

Using the HEE workforce growth assumptions, we expect the workforce to grow, on average, in the next 5 years (Figure 8):

- 0.8% p.a. for midwifery
- 1.3% p.a. for junior doctors

Although this increase will help to alleviate some of the workforce issues currently experienced in SYB(ND), the rate of growth does not match the growth in demand; this also does not take into account current workforce shortages.

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21 SYB(ND), Trust data returns, 2019
There are also significant concerns around the ageing midwife workforce, and the declining number of midwifery trainees. Continuity of Carer guidelines are also expected to have an impact on the maternity workforce. The guidelines necessitate a different way of working for midwives, who may be on call up to 2 or 3 times a week and teams of midwives will work with the same women throughout their pregnancy, increasing the need for community midwifery. Medical directors for maternity have concerns that the Continuity of Carer targets could significantly destabilise the maternity workforce, due to the increased requirement for midwives, as well as the potential effects of different ways of working might have on midwifery retention rates.

22 Based on population growth assumptions
23 Based on data provided by HSE
6 The Case for Change: Gastroenterology and Endoscopy

6.1 Findings in the original HSR case for change
The scope of this service includes urgent and emergency gastroenterology (GI bleed services and the structure of acute rotas) as well as elective endoscopy services.

The service was raised as a sustainability concern by three Trusts (Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust, Sheffield Children’s NHS Foundation Trust, Rotherham NHS Foundation Trust) primarily due to difficulties with staffing the service, with some GI bleed services run entirely by locum staff. It is also a service on which many other hospital services rely, particularly because it has close links with the emergency / acute medical rota, and previous attempts to look at GI bleeds services in isolation (via the Working Together Vanguard) have struggled because they impinge upon acute rotas. In an aggregated assessment of the sustainability of services in SYB(ND) Gastroenterology scored 4th. The inclusion of emergency medicine as part of the review, provided an opportunity to revisit this work and incorporate the clinical co-dependencies.

Endoscopy is also a priority for Commissioners and trusts, driven by workforce shortages, a growing workload and consequent capacity issues. Commissioners also recognised the importance of the service in respect of the link to early access in cancer pathways and an extension of screening programmes in local out of hospital pathways.

6.2 National gastroenterology workforce challenges
There are challenges with growing the gastroenterology workforce to meet guidance from the RCP around the number of gastroenterologists required to match population levels. Additionally, to add to this challenge, the workforce faces growing levels of demand from increased screening requirements and referrals from Primary care.

As of September 2017, there were c. 1500 substantive gastroenterologists and hepatologists in the UK, a 1.6% expansion from 2016. The mean expansion rate is unchanged during the last 10 years. Additionally, 54% of advertised consultant posts in 2016 to 2017 were unfilled suggesting expansion is less than it could be.²⁴

6.3 Feedback from public engagement
The ICS team engaged with the public and patients around gastroenterology services. The main points that were made around the Case for Change were:

- Concerns around communications and information for patients. In engagement with seldom heard groups, including people from minority ethnic groups, two respondents reported difficulties in communicating with staff which, they reported, had led to patients being discharged without a clear diagnosis or treatment.

²⁴ British Society of Gastroenterology, Workforce report, 2018
A significant number of gastroenterology patients are suffering from liver disease associated with alcohol addiction. Some patients referred to a lack of support in managing their addiction or understanding their circumstances during their hospital stay.

More detail on the response to the public engagement is in Annex F.

6.4 Metrics used to assess performance

We have conducted a detailed assessment of Trusts, against a number of metrics at Trust level, which is contained in the case for change report for each Trust and in the detailed case for change Appendix (Annex B). Included below is a snapshot view of these metrics at the system level.

6.4.1 Quality

We will measure Quality by considering the question: Is quality of care optimised by promoting delivery of national good practice and guidance, and contributing to maintained or improved outcomes?

This takes into consideration the following:

- Are SYB(ND) Trusts able to meet national clinical guidelines and standards?
- Are patients satisfied with the quality of care offered?

It includes the following measures:

- CQC Assessment
  The CQC score looks at safety, effectiveness, care, responsiveness and leadership of a service.
- JAG Accreditation
  We have noted which Trusts meet the criteria for JAG accreditation. JAG Accreditation means that an endoscopy service has displayed competence in delivery against a set of safety criteria.
- Patient feedback
  We have conducted a qualitative evaluation of NHS choices submissions, as well as public consultation during the Hospital Services Review.

6.4.2 Workforce

Workforce is measured by considering the question: Does the option ensure there is a sustainable workforce of the right number and skill set?

This takes into consideration the following:

- Do Trusts have sufficient workforce in place to provide a safe service?
- Is the existing workforce satisfied with their workplace environment and workload?
- To what extent do Trusts rely on locum / temporary staff?

This includes the following measures:

- Fill ratios
  We have considered the fill ratios of Gastroenterology posts based on the approximation by the British Society of Gastroenterology who have recommended 1 Gastroenterologist for every 42,000 members of the population.
- Staff satisfaction - GMC trainee staff survey
The General Medical Council (GMC) trainee staff survey asks questions around overall staff satisfaction and workload satisfaction, with both metrics scored out of 100. A higher score for workload satisfaction indicates a more manageable workload.

6.4.3 Affordability

Affordability is measured by considering the question: Does the option cost no more than the current service?

This takes into consideration the following:
- How much activity do Trusts carry out?
- How efficient are the services the Trusts provide?

This includes the following measures:
- Reference Cost index
  We have used reference cost index (RCI) to assess the affordability of each service at each Trust. RCI is a measure of relative efficiency comparing the actual cost of activities in comparison to the expected cost; an RCI value above 100 means relatively inefficient services, whilst an RCI value below 100 means relatively more efficient services.

6.4.4 Interdependencies

Interdependencies are measured by considering the question: Are the necessary supporting services appropriately available, or are concerns with gastroenterology and endoscopy impacting on other services?

This takes into consideration the following:
- Are interdependent services that need to be provided available onsite?
- What would the impact be to interdependent services at all Trusts if the clinical model were to change?

This includes the following measures:
- Assessment of CQC scores and provision of key interdependent services
  Gastroenterology has a large number of interdependent services, notably Urgent & Emergency Medicine.

6.5 The picture in SYB(ND) currently

The table below summarises Trust performance against the measures described above.

- The quality of Gastroenterology and Endoscopy services in SYB(ND) is currently good on most sites, but are facing increasing pressures and strain. Rotherham is of particular concern, as at the beginning of the review there were no permanent Gastroenterologists working at the Trust, with all work being carried out by locum staff. Since then, the Trust, working with Barnsley, has successfully recruited two permanent Gastroenterologists, and are in talks with Barnsley to develop a formalised partnership. However, Rotherham still has a ‘Requires improvement’ CQC score for Medical care (including Gastroenterology).
- Patient feedback for Gastroenterology across SYB(ND) is excellent, but staff satisfaction scores for overall satisfaction and workload suggest that the quality of the service is very dependent on staff members putting in extra work to ensure a good quality of care is provided.
There are substantial workforce shortages for Gastroenterology services across SYB(ND) on particular sites and for Out Of Hour Gastrointestinal Bleed (OOH GI Bleed) Services. The required number of staff is calculated on a basis of having 1 Consultant Gastroenterologist for every 42,000 people in the population (based on the RCP guideline). We have calculated “fill ratios” comparing the staff in post to the numbers required based on the RCP guidelines.

Fill ratios for Out Of Hours Gastroenterology services highlight that there are shortages in the number of consultants, when compared to the same RCP guideline. The fill ratios indicate that Rotherham and Chesterfield do not have the required number of Gastroenterologists available to work on OOH Gastrointestinal Bleeding (a main cause for concern) both having a fill ratio of only 0.6, vs an average across the other three Trusts of 1.1.

The Clinical Working Groups have expressed significant concern around the future sustainability of the workforce, due to the low numbers of trainees rising through the ranks. Many CWG participants expressed their concern around the lack of permanent Gastroenterologists at Rotherham and how this shortage was creating further demand at all other SYB(ND) sites, due to the central location of the Rotherham site within South Yorkshire.

<table>
<thead>
<tr>
<th>Quality</th>
<th>CQC Medical Care (incl. Gastroenterology) score (In most recent assessment)</th>
<th>JAG Accreditation status</th>
<th>Patient feedback (NHS Choices Survey; Average score)</th>
<th>Workforce</th>
<th>Affordability</th>
<th>Interdependencies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Trust Average</td>
<td>Barnsley</td>
<td>Chesterfield</td>
<td>Doncaster</td>
<td>Bassetlaw</td>
<td>Rotherham</td>
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<tr>
<td></td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Requires Improvement</td>
<td>Good</td>
</tr>
<tr>
<td>CQC Medical Care (incl. Gastroenterology) score</td>
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<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>94%</td>
</tr>
<tr>
<td>JAG Accreditation status</td>
<td>Criteria met</td>
<td>Criteria met</td>
<td>Criteria met</td>
<td>Criteria met</td>
<td>Criteria met</td>
<td>Criteria met</td>
</tr>
<tr>
<td>Patient feedback (NHS Choices Survey; Average score)</td>
<td>99%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>94%</td>
</tr>
<tr>
<td>Workforce</td>
<td>Fill ratio for in hours Gastroenterology Services (based on requirement for 1 Consultant for every 42,000 people; 1 indicates a perfect fill ratio; below 1 indicates a poor fill ratio)</td>
<td>Fill ratio for Out of Hour GI Bleed Services (based on requirement for 1 Consultant for every 42,000 people; 1 indicates a perfect fill ratio; below 1 indicates a poor fill ratio)</td>
<td>Overall workplace satisfaction (Based on GMC trainee staff scores for Acute Medicine; out of 100)</td>
<td>Overall workload satisfaction (Based on GMC trainee staff scores for Acute Medicine; out of 100)</td>
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<td></td>
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<td>1.5</td>
<td>1.0</td>
<td>1.3</td>
<td>2.0</td>
<td>2.0</td>
<td>1.4</td>
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<td>37.8</td>
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<tr>
<td>Affordability</td>
<td>Gastro Reference Cost Index (Index above 100 is relatively inefficient, below 100 is relatively efficient)</td>
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<td></td>
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<td>90</td>
<td>115</td>
<td>126</td>
<td>126</td>
<td>107</td>
</tr>
<tr>
<td>Interdependencies</td>
<td>CQC Urgent and Emergency Services score (In most recent assessment)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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25 RCP, Consultant physicians working for patients, 2011
6.6 Future demand for Gastroenterology services

The demand for Gastroenterology has significantly increased over the past few years, with one Trust experiencing threefold increase in demand in as many years. The reasons for this large increase are believed by SYB clinicians to be the following:

- The bowel cancer screening programme has increased the demand for endoscopy services
- An ageing population will typically require more Gastroenterology services
- The drop in threshold for referrals from GPs has led to a huge surge in demand for endoscopy services over the past couple of years

Gastroenterologists expect that the demand for Gastroenterology services will only continue to increase in the next five years. If the threshold for bowel cancer screening becomes lower, this will create another large increase in demand for the service in SYB(ND). Some Gastroenterologists have commented that removing bowel cancer screening from the scope of Gastroenterology services would make the service’s workload significantly more manageable.

Additionally, GPs are becoming increasingly risk averse, which also leads to increased referrals for Gastroenterology services. It is also predicted that the occurrence of cancer will increase over the next 5 years, leading to increased requirement for Endoscopy services.

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26 Latest publically available data from CQC, NHS Choices, Reference Cost Index, GMC trainee survey data; workforce data based on analysis using population data and RCP guidance. The Doncaster and Bassetlaw services are the same service, ie Bassetlaw out of hours GI bleeds go to DRI.


7 The Case for Change: Summary of pressures on individual sites

The specific challenges within individual services contribute to an overall sense of the pressures that the Trusts are facing across the Board.

The HSR recognises that, across services, quality is currently good. SYB is performing well against the majority of quality metrics such as the A&E waiting times, and in a recent review meeting with national regulators was found to be one of the best performing systems nationally across the board. Individual trusts are national leaders in some specialties. This good performance is the result of significant hard work by staff across the system, and excellent service management in some areas.

While SYB has much to be proud of, there are nevertheless significant pressures, and going forward, trends in demand, financial pressure and the predicted shortage of medical and nursing workforce globally, continue to point to significant challenges facing the system as a whole as well as individual trusts.

This section sums up, in brief, the key challenges that the HSR has identified in each of the Trusts, in relation to the services in the HSR.

7.1 Barnsley Hospital NHS Foundation Trust
- The CQC score for Paediatrics was 'Requires improvement' in the most recent inspection, however this may have been due to a one-off incident.
- Barnsley achieved all 10 of RCPCH’s Facing the Future (FTF) standards in 2018, and were used as an example of an excellent CAIC service in the latest national FTF report.
- There has recently been a shortage of Paediatrics nurses due to retirement and maternity leave – this means that only 18 out of 22 beds can be used.
- The hospital has recently acquired funding for refurbishment of its A&E department which will allow for the co-location of its Paediatric Assessment Unit in the A&E village, easing pressures on staffing by allowing them to double up A&E paediatric nurses in the A&E.
- The department has a steady workforce who are loyal and have several specialist capabilities, helping the department to achieve a Good CQC score for its Maternity services.

7.2 Chesterfield Royal Hospital Trust
- In order to meet Facing the Future standard 6 (Access to the opinion of a Consultant Paediatrician throughout open hours) additional Consultant capacity would be required.
- Chesterfield aims to develop a recruitment program to address the middle grade doctor shortage. It has also developed a ‘Resident Consultant’ position made up of more “junior” Consultants (less than 5 years in grade) to support the overnight middle grade rota.
- There is some pressure on space for outpatient clinics.
- The workforce for CAIC is very stable and robust, with no large recruitment issues seen. Medical trainees typically apply for permanent positions at the Trust due to the good quality of care provided. There are 0.9 WTE vacancies for band 1-4 nurses and 0.5 WTE vacancies for band 5-6 nurses.
- The department has a steady workforce who are reliable and loyal. The trust believes medical staff actively apply to the Maternity unit due to the excellent level of care they provide.
7.3 Doncaster Royal Infirmary

- Doncaster & Bassetlaw are struggling to maintain a sustainable Paediatrics and Maternity rota across both sites, placing significant strain on their workforce.
- Doncaster & Bassetlaw has the lowest Paediatric workload satisfaction GMC junior doctor survey score across SYB(ND) at 37.9 compared to an average of 44.1.*
- The CQC score for A&E services for Doncaster and Bassetlaw remains at Requires improvement in 2019, partially due to insufficient Paediatric nurse presence.
- Doncaster did not receive national funding for the backlog maintenance that it required, and is looking at other ways to fund necessary changes to the women and children’s hospital. Changes are likely to be needed with or without new activity.

7.4 Bassetlaw District General Hospital

- Bassetlaw closed its paediatrics unit to admissions overnight in January 2017 due to a lack of nursing staff. This happened quickly through a number of staff retiring and leaving, and it has since proven very difficult to replace these staff.
- Prior to the changes, Bassetlaw transferred about 4 patients a week to Doncaster; since the change in service this has been around 15 patients per week.
- Feedback following the change in pathway has been generally positive. There has been no detriment to clinical outcomes at Bassetlaw and no complaints related to the new model of care.
- The Trust currently cannot reliably maintain a Maternity service overnight due to insufficient numbers of middle grade doctors on the Anaesthetics rota at Bassetlaw (only 3 of 8 positions filled).
- There are large vacancies across Neonatology at Bassetlaw.
- The service struggles with capacity and workforce issues – patients have had to be diverted to neighbouring hospitals on multiple occasions over past year.

7.5 Rotherham NHS Foundation Trust

- Rotherham has started to make some changes and address CQC concerns, improving its Children and Young Person’s CQC score to ‘Good’. The Trust’s Maternity score is ‘Requires Improvement’ and Urgent and Emergency Care Services CQC scores remain at ‘Inadequate’ although Rotherham reports that the concern around paediatric nurses in A&E has now been addressed.
- Rotherham experiences significant difficulty in hiring medical trainees; they believe this is because many trainees in the region apply to Sheffield due to the attraction of a larger city and a hospital with more specialties.
- The CQC score for Rotherham’s Maternity services was Requires improvement in 2019 which the Trust is seeking to improve.
- Rotherham received the lowest score in the 3 categories of the NHS Maternity survey in SYB(ND), looking at labour & birth, staff and post birth hospital care.

7.6 Sheffield Children’s Hospital NHS Foundation Trust

- Sheffield Children’s Hospital has more sustainable levels of staffing across most departments than the DGHs.
Sheffield is working collaboratively across SYB(ND) and with Leeds Teaching Hospitals to mitigate workforce shortages where possible.

The key difficulties that SCH faces include staffing departments with trainees, given the six month cycle for trainees which limits the ability to plan the workforce.

While most departments are staffed sustainably, there is no spare capacity, so there is limited flexibility to deal with absences or leave.

Sheffield wants to grow its Emergency Department and CAU as they often operate over-capacity.

### 7.7 Sheffield Teaching Hospital NHS Foundation Trust

- As with SCH, STH has more sustainable levels of staffing in its maternity services than the majority of the DGHs.
- Sheffield Teaching Hospital faces significant pressure supporting DGHs across SYB(ND) and receiving a large number of transfers from the wider system.
- As with the rest of SYB(ND), the Trust is apprehensive about the additional Midwifery staff required as part of the implications of the Continuity of Carer guidelines.
- The CQC score for the Sheffield Maternity services was Outstanding in 2018.
- The increasing complexity of pregnancies across the region is leading to an increased demand for consultant-led services, despite the overall demand falling.
- Providing continuity of carer will be a big challenge for Sheffield moving forward as this is a different way of working for Midwives, who may be on call 2 to 3 times a week.

Therefore, given the challenges faced by the system, changes will need to be made to the way services are delivered through with Trusts working together to develop appropriate system-wide service Transformation solutions such as developing staff networks and increasing university intakes for essential roles. Where these do not go far enough to solve the challenges raised by the Case for Change, changes to the clinical model through reconfiguration will need to be considered.
Considering the options going forward

In this section we will consider the following:

- The most appropriate options identified for Paediatric and Maternity services in terms of ways forward to resolve challenges addressed by the case for change

- The most appropriate options identified for Gastroenterology services in terms of ways forward to resolve challenges addressed by the case for change

- How we can monitor for early warning signals going forward
8 CAIC and Maternity: the opportunities for change

Working with the SYB(ND) Clinical Working Groups, we have considered options to address the existing and growing challenges in paediatrics and maternity. Given clinical interdependencies, the work has considered the impact of changes to Paediatrics on Neonatology and Maternity Services and vice versa. We have considered 3 levels of change, bearing in mind that different solutions may be appropriate for different sites.

1. Maintain the status quo

   *The status quo was deemed to be unsustainable in the first phases of the Hospital Services Review.*

   If this does not resolve the challenge...

2. Service transformation

   Providing services to patients closer to home or on the same acute sites as they currently receive it, but with new ways of working.

   If this does not resolve the challenge ...

3. Change the clinical model of Paediatric services on one or two sites

   Some of the most severely ill children receive services on different, more specialist sites.

   If this does not resolve the challenge ...

4. Change the clinical model of both Paediatric and Maternity services on one or two sites

   Some of the most severely ill children and most complex mothers and babies receive services on different, more specialist sites.

8.1 Evaluation criteria

In order to assess which of these approaches is appropriate for each site in SYB, we have evaluated the options against five criteria, which were identified through engagement with the public, clinicians and leaders in the SYB system.

- **Workforce:** This criterion considers the ability of the site to attract and sustain an appropriate workforce. This will be partially influenced by local geography and the availability of an appropriate pool of potential staff, and will also be influenced by the potential for shared working across other sites. Some staff groups, such as consultants, can more easily work across sites than others.

- **Quality:** This criterion considers the fact that in order to maintain a good quality of service, the site needs to sustain a level of activity which allows staff to maintain their skills, and to ensure that trainees receive adequate exposure to a range of work. For elective services, patients can be redirected, but the activity levels for urgent care are more likely to be determined by the size of the local population.

- **Access:** Important dimensions of this criterion include the additional travel times for patients and families of making any change, whether there is another site close enough to provide a safe alternative, and whether a particular population will be disadvantaged by changes at a particular site.
• **Affordability**: This criterion considers whether the way services are delivered is affordable and financially sustainable.

• **Interdependencies**: This criterion considers whether interdependent services are of a sufficiently high quality and sustainable.
9 CAIC and Maternity: Transformation

The starting point for the Hospital Services Review was to test out how far the Trusts could go in making services more sustainable within the same configuration of acute services.

Reconfiguration carries a number of risks and disadvantages, so the Clinical Working Groups have focused closely on exploring ways that the system can improve sustainability without changing the services that are offered on a particular site. The work on transformation within the HSR has focused on two areas:

- Building infrastructure to support transformation between the Trusts
- Identifying specific proposals or areas of focus for transformation.

9.1 Building the infrastructure to support transformation

The Clinical Working Groups identified a number of opportunities to improve services through shared working.

Some infrastructure already exists to support this joint working, including the Managed Clinical Networks for Care of the Acutely Ill Child and Children’s Surgery and Anaesthesia, and the statutorily mandated Local Maternity System. (The Operational Delivery Networks, such as the Neonatology ODN, operate on a regional footprint and are outwith the scope of this work.)

However, the Clinical Working Groups said that the existing groups have had varying levels of success, and encountered some common barriers. While the LMS has the weight of statutory requirements behind it, some of the MCNs have struggled to gain sufficiently senior buy in, and to make decisions enforceable across Trusts.

In response to this, the Hospital Services Programme has proposed and is now setting up a series of Hosted Networks, one for each of the 5 services included in the Hospital Services Review. Three levels of the Hosted Networks have been identified:

- Level 1 will focus on shared approaches to workforce, clinical standardisation and innovation;
- Level 2 will involve a higher level of sharing resources across the system;
- Level 3 will consist of a closer relationship with one Trust providing or supporting services on another Trust’s site(s).

The system is in the process of developing level 1 networks for maternity, paediatrics, gastroenterology, stroke and Urgent and Emergency Care, and is exploring a level 3 network in paediatrics between two Trusts.

The level 1 networks will be formal collaborations between the Trusts, chaired at Chief Executive (CEO) level, with work programmes signed off at the level of the Health Executive Group (HEG) and with monthly reporting on progress to CEOs at the Acute Federation and ultimately at the HEG. They are intended to have a high profile within the organisations and a senior level of oversight to drive delivery.

The Networks are being resourced with 4 PAs of clinical leadership time, 0.5 of a Network Manager, and a small team of analysts and analytical support to ensure that they have the resources they need to deliver their work programme.

9.2 Identifying areas for focus for transformation
The Integrated Care System as a whole covers a large transformation programme, which includes transformation in public health and prevention, mental health, primary care services, community services, the digital agenda and workforce.

This section focuses on the transformation that relates specifically to acute services. It covers

- The work programme in the ‘level 1’ Hosted Networks
- The work programme in the ‘level 3’ Hosted Networks
- Other areas of work ongoing within individual Trusts
- Other areas of work ongoing at ICS level.

9.2.1 Work programme of the level 1 hosted networks

The work programme of the level 1 Hosted Networks will cover workforce, clinical standardisation and innovation. The work programmes are in the process of being developed, and will not be signed off until the new Clinical Lead is in place and can provide input. However, the main common themes that are emerging are:

- **Workforce planning**: All of the Networks have identified proper workforce planning as one of their key deliverables. At present workforce planning tends to be based on what has been provided historically. Work is ongoing around developing new roles, in specific services or Trusts, but this is not consistent or system-wide. The Networks will work with the Local Workforce Advisory Board to develop workforce planning.

- **Workforce data**: A major challenge is the lack of consistent, shared workforce data. Resources are available to recruit two dedicated workforce analysts and two generalist analysts to support Trusts in building and cleaning the workforce data. One of the proposals included below is for a system-wide collection of ‘early warning’ data which would include essential metrics such as shifts covered by non-substantive staff.

- **Recruitment and retention**: The networks are already beginning to discuss some shared recruitment activity, and this will be expanded.

- **Clinical standardisation**: Most of the networks are planning to identify some early wins, by identifying specific clinical protocols that can be agreed and implemented across the Trusts. More ambitiously, the Networks have the potential to standardise approaches to shifting care out of hospital, for example developing consistent rehabilitation pathways for stroke, and Hospital@Home models for paediatrics.

- **Innovation**: all of the networks are looking at innovative approaches to services, and how good practice might be spread by benchmarking performance and sharing ideas.

9.2.2 Work programme of the level 3 Hosted Networks

The ICS has also discussed mechanisms for closer working. At this point, none of the Trusts are looking to move to a level 2 Hosted Network, which would involve systematic pooling of resources and workforce across the whole of SYB. However, the system is exploring the possibilities of a level 3 network, which would involve one Trust which has a particular strength in a specific service providing or supporting the provision of that service on another Trust’s site(s).

Sheffield Children’s Hospital and Doncaster and Bassetlaw are working together to explore the possibilities of a level 3 network. The work will look at how SCH might use its specialist expertise and its strong reputation to support paediatric services on the sites of Doncaster Royal Infirmary and Bassetlaw Hospital.
9.2.3 Other areas of work ongoing within individual Trusts

All of the individual Trusts are already pursuing programmes of transformation that are intended to address some of the challenges identified in this report. In particular, action is going forward to address challenges in the paediatric and maternity workforce:

- Barnsley has recently received funding to renovate its Emergency Department. This will allow for the co-location of its Paediatric Assessment Unit with its ED, meaning that the same two paediatric nurses can cover both and the site can meet this CQC standard.
- Rotherham is further developing integrated community pathways working closely with partners across the Place and has reduced reliance on inpatient beds.

These are examples of ways in which it may be possible for the Trusts to address the challenges here within the current acute configuration. In the longer term, new models of care such as Hospital@Home could significantly reduce the need for inpatient beds on hospital sites, although the impact of this on workforce requirements remains to be seen.

9.2.4 Other areas of work ongoing within the ICS

Work is ongoing across the ICS to take forward transformation. Particularly relevant to the issues contained in this report is the work on the digital agenda, workforce, and primary care:

- There is work to develop the digital infrastructure that the system needs to support shared working, although the lack of capital resources available nationally is challenging.
- The ICS has established a new Workforce Hub which brings together the resources currently available in the system to strengthen workforce planning. This is at an early stage but will gradually build the workforce capacity of the system.
- Work is ongoing to develop primary care networks. There is work ongoing in each Place to shift activity closer to home although this will require additional support.

9.3 How likely is transformation to address the challenges?

At the session on the 1st April, the Accountable Officers, Chief Executives and Medical Directors of the acute providers considered whether the transformation agenda would go far enough to address the challenges. The group discussed the potential impact on quality and safety, workforce, access, affordability and interdependent services.

The group concluded that at this stage it is not clear whether the work that Trusts are taking forward together and individually will address the scale of the challenge in full.

There is encouraging progress, and some of the evolutionary changes that Trusts are making – such as shifts out of hospital and changes to the configuration of the estate – could help to put the services on a sustainable footing individually. However, given the rapidly changing situation at national level and the dynamic nature of workforce issues the ICS cannot guarantee that action will be able to combat all the challenges of growth in demand and national workforce shortages that are likely to emerge.

In this context, the AOs and CEOs weighed up the risks of taking a transformation approach compared with reconfiguration. As discussed in the next section, reconfiguration of services has the potential to reduce the demand for workforce by consolidating services, while transformation largely retains the current configuration.

The preference of the AOs and CEOs was to fully implement transformation before attempting reconfiguration, unless there was a safety issue on a site. However they felt that if the system was to go down this route, it would need to have the tools to monitor the impact of transformation at a system level, and also to have an early warning system if safety issues were emerging. This is discussed in detail in chapter 15.
In the event of these metrics showing a significant problem, or a major concern emerging unexpectedly, the system will work to address this to ensure the safety of patients.

10 CAIC and Maternity: Reconfiguring Services

The Hospital Service Programme has considered the options around reconfiguration of maternity and inpatient paediatrics services.

Reconfiguration was considered because, unlike transformation which continues to provide the same number of units for a particular service across the system, reconfiguration allows for units to be consolidated. This can lead both to a saving in the number of staff needed overall, and to greater resilience in the remaining units which are larger and have a larger rota of staff to draw on in the event of workforce shortages.

The following chapters describe:
- Chapter 10: the models for reconfiguration
- Chapter 11: the advantages and disadvantages of reconfiguring inpatient paediatrics
- Chapter 12: the advantages and disadvantages of reconfiguring maternity

10.1 Models that the Hospital Services programme has considered

The HSR recommended that the system should look at 2 possible areas for reconfiguration:
- Changing inpatient paediatric units on one or two sites into Short Stay Paediatric Assessment Units (SSPAUs);
- If necessary, changing the obstetric unit on one or both of those sites into a Standalone Midwifery Led Unit (SMLU).

Concerns about SMLUs raised by the public and clinicians led the Boards and Governing Bodies to ask the Hospital Services Programme to explore options which would enable a site to retain obstetrics even if it no longer had 24/7 inpatient paediatrics onsite. This is described in section 10.2.

10.2 Changing Inpatient Paediatric Units on 1 or 2 sites

In this model:
- The inpatient paediatric unit on a site is converted a Short Stay Paediatric Assessment, Unit (SSPAU), open 12, 14 or 16 hours a day
- Obstetric services and neonatology services remain onsite. This is achieved by supporting the neonatology rota with Advanced Neonatal Nurse Practitioners (ANNPs) rather than paediatric middle grade staff and junior doctors

![Figure 10: Proposed clinical model on a site where Paediatric Services are unsustainable](image)
In this model, children arriving at the site or picked up by ambulance outside of opening hours are transferred to a paired site overnight, if required, based on clinical judgement. Children are also triaged as appropriate throughout the day if it becomes evident that they will require overnight care.

The model minimises the number of children requiring inpatient care by strengthening care closer to home. A Hospital@Home model operates, with a triage system that diverts children to care in their own home wherever possible, and community services are strengthened.

Where possible, depending on site layout and capital investment, the PAU is co-located with paediatric A&E so that two paediatric nurses in the PAU can also cover the A&E during the day, reducing the number of staff needed to meet CQC requirements.

In order to maintain a neonatal service on the site where CAIC services are found to be unsustainable, the middle and junior grade rotas are supported by the development of Advanced Neonatal Nurse Practitioners (ANNPs).

### 10.2.1 Requirements to make the model work

The model would require investment into out of hospital services, to support as many children as possible to be treated closer to home.

The model also requires work at a cross-system level to recruit and train ANNPs over a period of several years. The planning approach should learn from best practice in other healthcare systems, where promising Band 5 nurses are recruited and given accelerated training and support to get them to ANNP level, rather than relying on an existing workforce of experienced nurses.

Learning from existing sites such as Doncaster where ANNPs are used indicates that in order for this model to be successful it would need to be a system-wide approach, with a critical mass of ANNPs and clear cross-system development and career paths for them.

### 10.2.2 Patient and public feedback on the model

The public engagement included extensive discussion, with a range of different groups, around the option of moving from an inpatient unit to a Short Stay Paediatric Assessment Unit. The engagement included sessions with mothers, at mother and baby groups, and with working parents at some of the major employers in SYB.

More detail on the public engagement and the Hospital Services Programme’s response to it is at Annex F.

The key themes that emerged were:

- Some parents were concerned above all to ensure that their child received appropriate specialist care, and were willing to travel further to ensure that this happened.
- Some parents felt that all specialist services should be provided on all sites and expressed concern about parents having to travel to units further away, particularly if they had other children who they could not leave. Some respondents from Bassetlaw felt strongly that the inpatient unit should be reinstated.

The public engagement did not include neonatology, since the proposed shift to an ANNP model does not change the care that babies would receive. ANNPs are trained in neonatology to the same level as a junior or mid-grade doctor, with the difference being that they are neonatology specialists rather than paediatric generalists.
10.3 Changing inpatient paediatrics services and obstetric services on 1 or 2 sites

Where neither inpatient paediatrics and maternity services (and / or their interdependent services) can be sustained on a site through a system-wide approach, this model involves changing the clinical model of both paediatric and maternity services on one or two sites:

- Changing the inpatient paediatric unit on a site to a SSPAU; and
- changing the obstetrics unit to a Standalone Midwifery Led Unit (SMLU); and
- removing Neonatal services from the site.

The design of the paediatrics service is as per section 10.2

The Midwife-led unit is open 24/7 with no obstetrician involvement, for expected low-risk pregnancies only, where low risk is defined as:

- 37 – 42 weeks of gestation
- expected normal birth
- expected no intervention
- estimated good birth weight
- Mother is non-smoker
- Mother is not obese
- Mother does not have diabetes

24/7 Ambulance transfer service is available in the event of unforeseen complications, with clear transfer protocols and agreements in place with both the ambulance service and the receiving site, to transfer women to a paired site if there appear to be complications.

Antenatal and post-natal services continue to be provided on the SMLU site.

10.3.1 Patient and public feedback on the model

There was considerable public engagement around the proposed SMLU model. More detail is at Annex F.

In summary, the views of the public were as follows:

- Some respondents, particularly women who have themselves had midwife-led births, supported a Standalone Midwifery Led Unit.
- Some respondents expressed concern about the safety of the model, if a woman got into difficulties during labour.
Some respondents raised concerns about midwife led units even alongside an obstetric unit, and suggested that all births should be in obstetric units in the interest of patient safety. These respondents tended also to be opposed to home births.

Some respondents raised concerns that families would have to travel further away in order to visit.

Some respondents were concerned that a woman would also have to travel to the further site for ante- and post-natal care, which could be particularly difficult if she had to navigate public transport while pregnant or with a pushchair.

10.3.2 Requirements to make the model work

The benefit of a SMLU is that it enables some women in a community to continue to give birth in their local hospital, even if that hospital cannot safely maintain the rotas of obstetric, anaesthetic or neonatology staff that would be necessary to provide obstetrics.

The SMLU model has been identified in the national report Better Births as being safe, and evidence from NICE guidance\(^{30}\) indicates that the outcomes in SMLUs tend to be better than in obstetric units or Alongside MLUs. This is dependent on the correct triage protocols being in place, to direct patients to the appropriate setting.

The main concern around the SMLU model is that it is able to accept only a proportion of patients (those who are low risk); and beyond this, there is a likelihood that some women who would be eligible for a SMLU will prefer to give birth on a site with an obstetric unit.

A site running a SMLU will therefore need to recognise that it may have a higher cost per birth than an obstetric unit; but this must be considered in the context of the wider costs to the site and the safety risks of trying to support an unsustainable unit, and the service limitations of there being no maternity services available on a site.

\(^{30}\)NICE, Intrapartum Care for Women and Babies, 2014. [https://www.nice.org.uk/guidance/CG190](https://www.nice.org.uk/guidance/CG190)
11 The advantages and disadvantages of making changes to paediatrics

The Hospital Services team have undertaken detailed analysis of the models proposed above. The models have been assessed against the five evaluation criteria for the HSR, which were agreed in discussion with patients and the public; representatives from seldom heard groups; clinicians; and system leaders:

- Quality and safety: qualitative assessment
- Workforce: quantitative, site-specific modelling
- Access: quantitative, site-specific modelling of travel times
- Affordability: quantitative, site-specific modelling of costs
- Interdependencies: qualitative assessment.

The detailed methodology and results are laid out in the annexes, with key findings summarised below.

11.1 Quality and safety

Changing a challenged, understaffed service into a SSPAU, with the most seriously ill patients being seen in a larger specialist unit, can have a demonstrable effect on improving quality. An example of improvement in quality of care through moving to a SSPAU from a very fragile inpatient paediatrics service can be seen at Bassetlaw. Clinicians consider that the Bassetlaw service has been sustainable since the changes made in January 2017, with no detriment to clinical outcomes and no complaints related to the new model of care.

Moving to an SSPAU model requires a number of safety and quality protocols to be in place, to ensure that any child arriving on the site who is seriously ill can be stabilised and rapidly transferred.

11.1.1 Quality and safety of services at Bassetlaw

The model of care currently being provided at Bassetlaw is consistent with guidance from the Royal College of Paediatrics and Child Health.

Data shows that the number of patients transferred per week from Bassetlaw to Doncaster has risen from an average of 6 to an average of 15. Almost 85% of all patients stay one night or less and most children will benefit from an enhanced assessment and treatment service.

The closure of overnight Paediatric services at Bassetlaw remains on the risk register for Doncaster and Bassetlaw, with a number of ongoing monitoring processes in place. The service is providing a higher quality of service, as measured by appropriate levels of staffing, than was that case prior to the change.

11.1.2 Discussion at 1st April session

The AOs, CEOs and Medical Directors weighed the relative quality and safety implications of changing the clinical model, against the implications of not changing it.

- Safety of the SSPAU model: the SSPAU model is accepted as being a safe way to run services, provided that the necessary transfer protocols and support are in place, and it is accepted as being the appropriate model in some circumstances.
The CEOs and Medical Directors who attended the session on the 1st April were of the view that, while there were obvious sustainability challenges in the system, there were no current safety concerns on any of the SYB sites.

Bassetlaw had addressed potential safety concerns by making the changes in January 2017, and now had a good quality service, as a result of moving to the SSPAU model.

The group discussed whether they believed that the availability of workforce had been, or could be, addressed to the point where Bassetlaw would be able to return to an inpatient paediatrics unit without encountering the same quality and safety concerns as had arisen previously. The detail of the workforce discussion is included in the next section; but in summary, in the context of the local population and increasing national pressures, Doncaster and Bassetlaw acute providers and commissioners do not believe that the additional workforce necessary to make services safe in a 24/7 inpatient paediatrics unit will be likely to become available.

The review has also looked at the growth of activity over the short to medium term. The population of Bassetlaw is intended to rise over the next 20 years, but the impact of this on activity levels in maternity and paediatrics is expected to be relatively small. The challenges arising from low activity levels at Bassetlaw will be partially addressed but Bassetlaw is likely to continue to be one of the smaller units in SYB.

Doncaster and Bassetlaw are looking to work with Sheffield Children’s Hospital in a level 3 network, to strengthen services, to optimise the SSPAU model.

Some of the sites (Rotherham and Doncaster) have been identified by the CQC as having some quality concerns in particular around paediatric nurses in A&E. However Rotherham felt that the issues identified had been addressed or were in the process of being addressed.

Barnsley received a Requires Improvement rating for its paediatrics but believes that it has addressed the issues, which related to a specific incident at the time of the inspection.

The AOs, CEOs and Medical Directors therefore believed that the immediate and medium term safety and quality issues would be better served by focusing on transformation rather than reconfiguration.

The exception to this was Bassetlaw, where the group took the view on quality and safety grounds that Bassetlaw CCG should be invited to consider that it is unlikely that it will be possible to re-introduce overnight inpatient paediatric beds, and whether any further options, which improve the patients’ experience are possible. This could be pursued as a part of the level 3 hosted network model with Sheffield Children’s Hospital.

11.2 Workforce

11.2.1 Workforce impact of changing the clinical model

The Clinical Working Groups helped to identify how changing the clinical model results in savings to the number of workforce required for both Paediatrics and Maternity, and by grade:

- Paediatrics SSPAU model:
  - Consultants: The number of consultants does not reduce if an inpatient unit becomes an SSPAU, since the same number of consultants are needed to provide day time
cover, and the difference is that they no longer have to cover an on-call overnight rota.

- Middle grade and junior doctors: The number of middle grade and junior doctors reduces because they need to be present on site for a shorter duration of time.
- Nurses: The number of nurses reduces with the number of beds. On a regional level, any reduction in the number of nurses is due to patients leaving SYB for care.

- Maternity SMLU model:
  - Consultants: Consultants are no longer required to provide care at an SMLU.
  - Middle grade and junior doctors: Middle grade and Junior doctors are no longer required to provide care at an SMLU.
  - Midwives: The number of midwives reduces with the number of births that are transferred to other sites due to higher complexity. 1 registered midwife is required for every 28 births. On a regional level, any reduction in the number of midwives is due to patients leaving SYB for care.

### 11.2.2 How the workforce changes were calculated

The modelling had three elements:

1. **Collecting the data**: The Hospital Services team have worked with clinicians across all of the sites to identify their current numbers of staff in post. This data was correct and signed off by Medical Directors as of 2nd April 2019; given the changing nature of workforce data, it will continue to fluctuate but changes are likely to be marginal. The HS team also collected data on agency and staff bank usage. Please note that the HS team were not able to collect consistent data from all trusts on the amount of additional shifts worked by substantive staff, so this is not included. Clinicians have challenged the low level of bank and agency shown here, and have suggested that a significant number of additional hours are worked by substantive staff working additional shifts.

2. **Impact on individual sites**: The HS team modelled the number of staff who would be required on each site if the clinical model changed from inpatient paediatrics to a SSPAU on that site. The team did not model the impact of moving to an SSPAU at Sheffield Children’s Hospital, which was designated as a fixed site. The explanation of how SCH was identified as fixed can be found in annex D.

3. **Impact on the system as a whole**: The team also then modelled the total, net impact on the system as a whole. The model assumes that patients would transfer to the hospital that is the next closest to their home (see section 11.3). This would result in some other sites becoming larger, needing to expand their numbers of nurses, and in some cases (if they are at a tipping point) to expand their number of consultants. Some activity is also likely to flow out of South Yorkshire and Bassetlaw, as patients’ next closest hospital would be over the border.

### 11.2.3 Impact on individual sites

The following table shows the total number of staff currently on each site, and the number that would be needed if the model changed from inpatient unit to a SSPAU.

The detailed slides of the data are attached in Annex A.
11.2.4 Impact on the system as a whole

The Hospital Services team modelled the impact of making all the possible permutations of changes, for changing services at one site and changing two sites. This results in 30 possible permutations. The full breakdown of all the possible changes is laid out in the annex.

For illustrative purposes, this table shows the potential range of impacts for the system: the smallest to the largest potential saving for the system.

<table>
<thead>
<tr>
<th>Change in number of posts needed</th>
<th>Impact of changing one site</th>
<th>System-wide impact of changing 2 sites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Impact of option involving minimum change</td>
<td>Impact of option involving maximum change</td>
</tr>
<tr>
<td>Consultants</td>
<td>Require additional 5.2 WTE</td>
<td>Reduce by 3.6 WTE</td>
</tr>
<tr>
<td>Mid Grades</td>
<td>Require additional 5.6 WTE</td>
<td>Reduce by 3.6 WTE</td>
</tr>
<tr>
<td>Junior doctors</td>
<td>Require additional 3.3 WTE</td>
<td>Reduce by 3.7 WTE</td>
</tr>
<tr>
<td>Nurses</td>
<td>Require additional 0.1 WTE</td>
<td>Reduce by 35.7 WTE</td>
</tr>
<tr>
<td>Change in number of posts needed</td>
<td>Require additional 11.1 WTE</td>
<td>Reduce by 46.6 WTE</td>
</tr>
</tbody>
</table>

Bassetlaw is shown as needing more staff than is currently the case because the existing staffing levels are below those identified as optimal by the Clinical Working Groups.

Based on trust submitted data-returns and workforce modelling conducted based on assumptions developed by clinicians.
11.2.5 Comparison with the number of staff needed in the system

One of the main tasks that the Hospital Services team asked the Clinical Working Groups to carry out was to identify how many staff they felt that the system would need, in order to deliver a sustainable workforce.

This request emerged out of comments from system leaders and clinicians during the Hospital Services Review. The HSR compared the number of staff who are currently in post with the number that would be needed in order to meet Royal College guidelines.

During the HSR, and the production of the Strategic Outline Case, the Hospital Services team received feedback that the Royal College guidelines were seen as being generous, and highly ambitious given national pressures on staffing. While they were considered to be best practice, system leaders and clinicians believed that a safe and sustainable service could be delivered without meeting them.

The Hospital Services team therefore worked with the Clinical Working Groups, over a period of four months, to identify what a realistic number of staff would look like for a sustainable workforce for the system. The attendees of the CWGs were asked to identify how many staff would be needed, to have a workforce where

- all shifts could be covered by substantive staff within their contracted working hours
- all staff were able to take their annual statutory and mandatory training
- all staff were able to take their annual leave, and study leave where relevant.

The methodology and the number of staff that was identified by the Clinical Working Group as necessary to meet these requirements is laid out in detail at Annex A.

The following bar chart shows

- the total number of staff currently in the system for paediatrics;
- the number that would be needed to meet the ‘sustainable workforce’ identified by the CWGs;
- the number that would be needed to meet the Royal College Guidelines; and
- how far the change to the model on one or two sites might take you towards closing the gap.

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33 Based on workforce modelling conducted based on assumptions developed by clinicians
Figure 14: Workforce numbers showing the number of staff in post, agency & bank staff, staff required to meet demand under the current configuration and the Royal College guidelines

Note that clinicians have suggested that at least part of the gap shown here is currently filled by substantive staff working extra shifts; however the data to test this has not been available.

11.2.6 Discussion at the session on 1st April

The AOs, CEOs and MDs discussed the potential workforce impacts of changing the clinical models as laid out above.

- **Extent of the workforce challenge:** The group discussed how urgent the current challenge in the paediatric workforce is. While the group agreed that paediatrics is facing a significant challenge, and national projections show a continued shortage of paediatric nurses and consultants, they did not feel that paediatrics was currently the most significant workforce challenge that the system was facing.

The group also felt that none of the individual sites had serious enough workforce challenges to require immediate changes that would reduce the number of workforce needed on a particular site. However the shortfalls identified above suggested that it would be difficult to return Bassetlaw to an inpatient paediatric unit.

- **Bassetlaw:** The modelling above suggested that in order to move back to a model of inpatient paediatrics, Bassetlaw would require a significant number of additional staff.

The group discussed the options available at Bassetlaw, testing out whether there would be a way to find these additional staff:

- **Increasing the recruitment of staff.** Since January 2017 Bassetlaw has continued to try to recruit workforce, but has found it challenging. The Trust is exploring shared
working with Sheffield Children’s Hospital; there may be ways to make posts at Bassetlaw more attractive, for example by offering the opportunity to work on rotation in the specialist hospital. Improving the reputation of the unit, through the link with SCH, could also be attractive.

However, while this is likely to be attractive for those individuals and grades of staff who are mobile across sites, staff told us during the Clinical Working Groups that many staff, particularly at lower grades, prefer to work on one site, usually close to home. While the SCH link might be attractive for some staff, it was unlikely to address challenges for all staff.

One of the contributing factors to staffing difficulties at Bassetlaw is the difficulty of developing a large enough pool of local staff, given Bassetlaw’s geographical position and relatively low population. The availability of working-age, economically active adults in Bassetlaw – which could potentially include healthcare staff - is one of the issues being tackled by the Bassetlaw Development Plan. However, the Development Plan is anticipated to increase the population gradually up to 2035; combined with the lead in times to train new staff, the Trust does not anticipate that the workforce availability in the short to medium term will be sufficient to address the challenges. It is possible that in the longer term, the increase in population might improve the situation to the point that sufficient staff are available.

- **Working across sites.** Attendees discussed whether, under the transformation agenda for SYB, staff might work across the Doncaster and Bassetlaw sites. This is being developed but is effective largely at consultant level; it generally has little impact on the need for nurses, since nurses are usually required to be present onsite full time.

- **Transferring staff between sites.** The group explored whether it would be possible to transfer staff from sites which were comparatively well staffed to support Bassetlaw. However, all of the sites in SYB are facing shortfalls of their own. Since Bassetlaw is the smallest site in SYB (and is likely to continue as such at least in the medium term), concern was expressed about the relative numbers of patients who would be affected if the workforce on a larger site were reduced in order to transfer them to a smaller site.

For all sites other than Bassetlaw, the group felt that they would wish to concentrate on improving the workforce through transformation, with an emphasis on improving recruitment, and making changes to the clinical model (such as co-locating the PAU and A&E, and shifting activity out of hospital) which would ease some areas of the workforce pressures.

In Bassetlaw, transformation would need to be taken forward, but there were also concerns about reconfiguration. The group felt that the SSPAU model was sustainable with the current workforce but that returning to an inpatient paediatric model was unlikely to be.

### 11.3 Affordability

The Hospital Services team have considered the impact on affordability, both quantitatively and qualitatively.

Key areas of potential costs include:

- Potential savings from creating larger, more efficient units
- Capital costs from the need to develop new, larger units.

**Savings**

*Workforce:*
The analysis noted that the reduction in number of staff is small at the level of the system, although it can have a significant impact on a particular site. The savings on workforce are therefore likely to be small.

The modelling identified that the gap between the current substantive staff, and the number of staff that would be necessary to meet the ‘sustainable’ levels of staff identified by the Clinical Working Groups, was around £10m p.a.

Activity levels:

The analysis also looked at whether the increase in activity would result in more efficient services. The modelling at Annex A identifies the impact of activity changes from different models of care. The financial impact of different models depends on the one hand on whether consolidating demand results in reduced workforce costs, and on the other hand whether it generates additional capital costs.

The team have also considered the impact of demographic and non-demographic change. In particular, the group considered the implications for Bassetlaw. Bassetlaw is currently a small unit, and the review has considered whether the increase in activity that is likely to result from new housing in the Bassetlaw area will substantially increase the demand for paediatrics services. The impact of new housing at Bassetlaw is 84 houses a year over and above the normal demographic growth that all the SYB Trusts are likely to see (around an extra 192 residents each year, over and above the baseline population growth).

Capital costs

The modelling considered the level of capital investment that would be required to support these changes. The main site where capital investment would be required in order to support changes to paediatrics was at Doncaster, where refurbishment of the current women and children’s facilities is part of an ongoing programme for which national support is being sought. A number of the other sites, including Sheffield Children’s Hospital and Barnsley identified spare bed capacity that could be used if they were to receive additional paediatric activity.

11.3.1 Discussion on the 1st April

The AOs, CEOs and MDs noted that in the short to medium term, changes to the clinical model would be unlikely to result in significant savings.

They felt that there was not a strong financial argument for reconfiguration, but neither were there significant financial barriers.

11.4 Access

One of the issues that was raised most frequently by members of the public throughout the public engagement and in the Citizen’s Panel was the importance of access to sites, particularly travel times for patients and their families.

The ICS set up two groups, of professionals working in transport-related organisations, and of members of the public drawn from across the geography of the ICS, to explore the issues around access and in particular around transport.

The input from these groups helped to identify access-related issues such as the cost and availability of parking on hospital sites, public transport use for patients with limited mobility (in particular the needs of patients who use wheelchairs), and the timing of appointments.

These issues will be explored in further detail if there is a decision to proceed with reconfiguration at any site. They have already been addressed at Bassetlaw, at which Bassetlaw
CCG and the Trust share the costs of an additional ambulance to be on standby in case of a patient needing transfer to Doncaster Royal Infirmary.

### 11.4.1 Modelling of travel times data

The Hospital Services team has engaged with the professional and public groups identified above; with Yorkshire Ambulance Services and the East Midlands Ambulance Service; and with Public Health England, to undertake modelling of travel times between Trusts. The approach has been discussed with the public travel and transport group; if any CCG decides to proceed with reconfiguration, there will need to be further detailed discussion with this group.

Travel times by private car and public transport were analysed using data from Google maps, which automatically identifies the quickest route between sites:

- **Time:** On advice from the travel and transport professional group, the Hospital Services team analysed the travel times from all SYB(ND) population Lower Super Output Area (LSOA) to the nearest, second nearest and third nearest hospital sites at four times of day (8am morning rush hour, 12 noon middle of the day, 5pm evening rush hour, and 1am in the middle of the night). The nearest trust was calculated by the site which was quickest to reach; in some cases this means that patients are not counted as transferring to their geographically nearest Trust.

- **Routes:** Using Google data, the analysis identified the time that it would take for a patient to travel to the hospital site closest to their home. It also considered the time it would take to travel to the patient’s second and third closest sites (where closeness is measured in time taken to reach) from their home. We used this data to consider the relative increase in travel times from a patient’s home to their second closest site if their closest site were no longer available.

- **Equalities:** We have then overlaid this data with the Index of Multiple Deprivation (IMD) level data for each LSOA that shows the relative income decile each LSOA sits in. Using this, we have compared the travel times and potential travel time increases for the most and least deprived populations to ensure that the lowest income populations are not made disproportionately worse off by any changes.

The analysis is laid out in detail in annex A. The map below summarises, in one graphic, the average change in travel times for patients in SYB. Note that for summary purposes this averages across different times of day.
The travel time analysis has not at this point modelled exact ambulance travel times, as this would require additional, specialised modelling. However the ambulance services have their own approximate average travel times. The Hospital Services team has used some average times used by Embrace to assess journey time.

A number of conclusions emerged from this analysis, in conversation with the Clinical Working Groups; the patient group on travel and transport; and the expert group:

- The minimum increase in travel times is no change to travel time, where a patient lives equidistant between two sites. The maximum increase in travel times is for patients living in Doncaster who cannot access private transport.

- The chart above illustrates that most patients are able to access their closest Trust within two hours. However the public transport travel times are typically over double that of private travel times.

- On average, the absolute increase of travel times tends to be less for patients from lower income groups than from wealthier groups; this reflects the fact that the majority of poorer people live in urban areas, and so are closer to hospitals and transport routes, while a significant proportion of those people living in rural areas are from higher income groups.

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35 Google travel times, Data extracts, 2018
Hospital Services Review: Report for Governing Bodies

- However, there are a number of people on lower incomes living in rural areas. We recognise that the impact of changes in travel times will be felt most strongly by these groups, who will be furthest from public transport.

11.4.2 Modelling of patient flows

The Hospital Services has also undertaken some initial modelling of where in the system patients would travel to, if services were to change on a site or sites.

There are multiple ways of modelling patient flows:

1. Patients travelling from their own home by private transport, and choosing to go direct to their next nearest hospital;
2. Patients travelling from their own home by ambulance, and being transferred to a destination determined by clinical protocols, which may or may not be the next nearest site;
3. Patients travelling to their nearest hospital, and then being transferred to another site, determined by clinical protocols, which may or may not be the next nearest site.

In reality, the situation would be a mix of these. The Hospital Services team has so far modelled 1). If reconfiguration is taken forward, further detailed modelling will be done with the ambulance services to model 2), and to develop the clinical protocols for transfer for model 3).

Therefore the analysis of patient flows is incomplete at this point, so elements of the modelling (such as the impact on activity levels) could change significantly depending on the clinical partnerships that emerge. For example, a Trust might choose to form a partnership with a Trust further away, which has spare capacity or offers a different service portfolio, rather than its nearest neighbour.

As such, the analysis carried out so far is indicative, and the results are not expected to represent what would happen in reality. If reconfiguration were to be agreed as the way forward, further modelling would be done building on the analysis done so far.

11.4.3 Discussions at the session on 1st April

The AOs and CEOs expressed their preference was for providing care as close to home as possible which suggested transformation rather than reconfiguration if this could be made safe.

11.5 Interdependencies

The Hospital Services team has also considered the impact on interdependent services. The most important of these is the interdependency with obstetrics, which has been addressed through the proposed model using Advanced Neonatal Nurse Practitioners.

The ANNP model has been used successfully in some trusts around the country. Doncaster currently uses ANNPs to support its neonatology services, and Lincoln have worked with the Royal College of Paediatrics and Child Health to agree a safe ANNP-supported model.

A further interdependency is that with paediatrics staff working in A&E. National guidance requires 2 paediatric nurses to be working in A&E at all times. This has proven challenging across SYB owing to a national shortage of paediatrics nurses. It is being addressed in Barnsley by co-locating the SSPAU with the A&E, allowing the same staff to cover both services.
11.5.1 Discussions at the session on 1st April

The AOs and Chief Executives raised concerns that it would be difficult to recruit sufficient ANNPs, and that there would be competition with existing recruitment to traditional staff roles. However they felt that there might be space to develop advanced roles alongside traditional roles as part of the transformation agenda.

11.6 Summary

Overall, the AOs and CEOs’ preference was to take forward transformation as opposed to reconfiguration at this stage. Transformation should include new approaches such as co-locating A&Es and SSPAUs, and shifting activity out of hospital, which might partially help to reduce workforce pressures, and the development of new roles.

However, the AOs and CEOs recognised that there was a risk that transformation might not go far enough, or fast enough, to address the emerging challenges in the system. They therefore said that the system would need to develop an approach to monitoring the effectiveness of transformation, and to identifying any concerns with performance before these could become significant.

This monitoring and ‘early warning’ approach is discussed in chapter 15.

CCG Governing Bodies are asked to consider the analysis laid out above, and consider whether they agree with the view taken by the AOs and CEOs. Governing Bodies are asked to consider the medium term advantages and disadvantages, as well as the long term sustainability of the system.
12 The advantages and disadvantages of making changes to obstetrics

The Hospital Services Programme considered whether it would be necessary to make changes to obstetrics on any site in South Yorkshire and Bassetlaw.

The modelling looked at the implications of making changes on all sites, other than the specialist maternity unit at Sheffield Teaching Hospital which was identified as a fixed site.

Feedback from Governing Bodies and Boards was that a Standalone Midwifery Led Unit should be considered only if obstetrics, or its interdependent services, could not be provided safely on the site. Obstetrics is being provided safely on most sites so there was not a detailed discussion of this option at the session on 1st April.

12.1 Quality and safety

National evidence, from NICE (2014) and the national report Better Births, has found that Standalone Midwifery Led Units are safe, and in fact have better reported outcomes than obstetric-led units, provided that the right triage and transfer protocols are in place.

However, feedback from CCG Governing Bodies and Trust Boards, at the time of publication of the Strategic Outline Case, pointed to concerns around the sustainability and cost-effectiveness of the Standalone Midwifery Led Unit model. Some SMLUs across the country have found that the number of women choosing to attend them has dropped to the point that the unit becomes unsustainable.

Some members of the public also raised concerns about how safe and how desirable the model would be, although some members of the public (particularly women who had themselves had midwife-led births) were supportive.

For this reason, the Hospital Services Programme focused on developing a model that would allow obstetrics to remain on a site even if the site no longer provided 24/7 inpatient paediatrics. A Standalone Midwifery Led Unit would only be considered if obstetrics, and / or its interdependent services of neonatology and anaesthetics, could not be provided safely on the site.

Thus a SMLU model would only be considered if it was a safer alternative than maintaining an obstetrics unit on the site.

12.1.1 Safety of SYB services

The Hospital Services Programme found that the obstetrics workforce on most sites looked relatively well staffed (see section 12.2 below).

In review meetings with the Trusts, most Trusts reported that their interdependent services (neonatology and anaesthetics) were also able to staff themselves to safe levels.

The exception to this was Bassetlaw, which is encountering difficulties in sustaining rotas for anaesthetics on the Bassetlaw site, with only 3 out of 8 posts filled. Doncaster and Bassetlaw are working with commissioners to consider a range of options around how anaesthetics might be made safe on the site.

12.2 Workforce

The majority of Trust are currently staffing their maternity services as closely as possible to the national guidelines:
All of the Trusts are meeting guidance on the number of hours of consultant presence required for their size of unit;

All of the Trusts are achieving the national guidance on 1 midwife to every 28 births.

The bar chart below shows the current staff in post compared with the numbers necessary to deliver a sustainable workforce and to deliver the Royal College guidelines in full.

![Bar chart showing staff numbers](image_url)

**Figure 16: Workforce numbers showing the number of staff in post, agency & bank staff, staff required to meet demand under the current configuration and the Royal College guidelines**

### 12.3 Affordability

Affordability represents a significant challenge to any reconfiguration of maternity services, since moving to a SMLU requires significant volumes of activity to move to another site:

#### 12.3.1 Capital costs

The majority of maternity units in the system are running at or near full capacity, meaning that transferring large volumes of activity would require new capital build at the site.

Doncaster and Bassetlaw are facing particular challenges to their estate, which has a significant amount of backlog maintenance. The ICS is currently working with DBTH to identify how the system might support DBTH in gaining access to national funding to address its backlog.

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36 SYB(ND), Trust data returns, 2019
maintenance issues, and improve the estate for women and children’s services on the Doncaster Royal Infirmary site.

12.3.2 Financial sustainability of a Standalone MLU

The Hospital Services team looked at the volume of maternity activity which might remain on a site if it shifted from offering an obstetrics service to a SMLU.

<table>
<thead>
<tr>
<th></th>
<th>Barnsley</th>
<th>Bassetlaw</th>
<th>Chesterfield</th>
<th>Doncaster</th>
<th>Rotherham</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total current number of births (18/19)</td>
<td>2842</td>
<td>1488</td>
<td>2719</td>
<td>3216</td>
<td>2697</td>
</tr>
<tr>
<td>High risk women not eligible for SMLU</td>
<td>1622</td>
<td>1126</td>
<td>1931</td>
<td>2526</td>
<td>1853</td>
</tr>
<tr>
<td>Total number of births lost by transitioning from OLU to SMLU (assuming 30% of eligible women choose SMLU)</td>
<td>(2516)</td>
<td>(1391)</td>
<td>(2509)</td>
<td>(3032)</td>
<td>(2472)</td>
</tr>
<tr>
<td>Estimated number of births if an SMLU</td>
<td>326</td>
<td>97</td>
<td>210</td>
<td>184</td>
<td>225</td>
</tr>
<tr>
<td>Expected intrapartum transfers from SMLU at site to neighbouring Trusts</td>
<td>(81)</td>
<td>(24)</td>
<td>(53)</td>
<td>(46)</td>
<td>(56)</td>
</tr>
</tbody>
</table>

Figure 17: Activity numbers and modelling to develop assumptions around potential SSPAU activity

The small number of births identified here clearly represents a financial challenge, as the volumes of activity need to be sufficient to maintain a viable rota of midwives. However this needs to be offset against the costs of for example maintaining locum rotas in other interdependent specialties or obstetrics, if there are challenges in maintaining those services.

The Bassetlaw maternity service is likely to see a small increase in demand as a result of the new housing that is being built in Bassetlaw (see Annex F). However the numbers are unlikely to make a significant difference to the levels of demand.

12.4 Access

Members of the public identified access as a key concern around changes to maternity services. They raised concerns about pregnant women having to travel further for ante- and post-natal appointments, and the risk of women having to be transferred during a birth.

12.4.1 Travelling for ante- and post-natal services

Under the model, ante- and post-natal services would continue to be provided on the SMLU site, including outreach clinics with consultants, so the model could be designed in a way to minimise any additional travel for pregnant women.

12.4.2 Transfer during a birth

Triage protocols ensure that patients who can be identified as being at risk have already been transferred to the obstetric-led unit.
In the event that unforeseeable complications develop during labour, existing SMLUs around the country have developed a range of safeguards which include having ambulances on standby.

12.5 Interdependencies
Obstetric services are interdependent with

- anaesthetics, which must be provided 24/7 in case a woman requires a caesarean section;
- neonatology services, in case the baby gets into difficulties and requires resuscitation.

Neither of these is provided alongside a SMLU, since the women giving birth in a SMLU are those very low risk women and babies which have been identified of having minimal risk of needing either service.

12.5.1 Interdependencies in South Yorkshire and Bassetlaw
Bassetlaw is currently struggling to recruit sufficient staff to support a 24/7 anaesthetics rota; only 3 out of 8 middle-grade posts are currently filled with substantive employees.

12.6 Summary
Overall, SYB obstetrics services appear to be safe and sustainable. The main sustainability challenge is the interdependent services at Bassetlaw.

Doncaster and Bassetlaw are currently working with commissioners, and with Sheffield Children’s Hospital, to explore options to support anaesthetics and neonatology, including the configuration of services.
13 Gastroenterology and Endoscopy: the opportunities for change

The gastroenterology family of services is relatively diverse. The Clinical Working Group explored several areas, which are facing different challenges and require different solutions:

- Elective endoscopy;
- General (medical) gastroenterology; and
- Out of hours services for gastrointestinal bleeding.

13.1 Elective Endoscopy

Elective endoscopy is a service which needs to be provided on all sites, as an essential diagnostic tool to support the wider system. Endoscopy is a crucial diagnostic element within pathways for patients with suspected upper and lower GI cancers, and therefore plays a vital role for the system in achievement of access standards for those. Endoscopy is also a major plank of screening programmes which mitigate the flow of patients onto active cancer pathways.

Endoscopy capacity was frequently raised by the Clinical Working Group as an area of potential concern. Capacity issues can be predicated both upon workforce and upon physical capacity to absorb more work. Endoscopy services are subject to stringent accreditation processes via JAG and are heavily influenced by capital issues, both in terms of estate and equipment.

The system therefore considered approaches that could support the service through transformation and shared working, particularly through the Hosted Network. The Endoscopy Review recently undertaken by the ICS (and looking at endoscopy alongside reviews of other diagnostic services) will be a major asset to the Hosted Network, and the HN will be responsible for developing and overseeing implementation work in response to the recommendations of the Endoscopy Review. The work programme for this area within the Hosted Network is being developed, but should include:

- A response to, and building upon, the cross-system review of endoscopy workforce and capacity, with the aim of making better use of spare capacity within the system if / where this exists. The Endoscopy Review is due to publish in summer 2019.
- Development of a co-ordinated approach to train additional non-medical endoscopists. The Endoscopy Review is likely to recommend the creation of a multi-professional Endoscopy Training Academy, building upon the model developed for reporting radiographers.
- Further consideration, recommended by the Endoscopy Review, of potential for shared procurement of endoscopy equipment, enabling financial savings whilst also further facilitating the adoption of common clinical practices.

13.2 General Medical Gastroenterology

General medical gastroenterology services, both inpatient / non-elective and outpatient, will be retained on every site. However, this is set within a context of workforce shortages for gastroenterologists; work over the last 5 years (for the Working Together Vanguard) and for the Hospital Services Review suggests that the consultant staffing situation can be relatively volatile, with the picture changing from year to year.

Close cooperation is being established between Barnsley and Rotherham to develop a resilient and sustainable medical gastroenterology service at both sites. Prior to this relatively recent
collaboration, Rotherham had for some time been entirely reliant upon locum consultant cover to deliver its gastroenterology service.

Feedback from other Trusts to the Clinical Working Group had suggested that there was pressure on e.g. general gastroenterology outpatient waiting lists, potentially exacerbated by the requirement for specialist outpatient services (e.g. hepatology, nutrition) and the capacity to run all of these in parallel.

The work programme for this area within the Hosted Network is being developed, but should include:

- A cross-system review of workforce and capacity, to augment the work already undertaken around endoscopy and GI Bleeds. Links to acute medical rotas and the situation in outpatient settings should be included in this work.
- Over time, a view of the ability and necessary steps to take forward the separation of General Internal Medicine and Gastroenterology rotas should be formed.
- Supporting Trusts to form bilateral partnerships e.g. building upon the work between Barnsley and Rotherham.

### 13.3 Out of hours GI Bleeds

At present, not every site across SYB(ND) is able to provide a 24/7 or Out of Hours GI Bleeds service. Currently, both Rotherham and Bassetlaw have transfer protocols in place to send patients to Doncaster if they need urgent GI bleed services out of hours. There remains some uncertainty as to whether Doncaster themselves are always able to provide out of hours access to expertise in managing GI bleeds.

Whilst the ability of individual sites to provide cover has changed over time with fluctuating consultant establishments, overall this has been the situation in SYB(ND) for at least five years, and suggests inequity in treatment and potentially in outcomes for some of our patients.

At present, alongside the agreements within DBTH and between Doncaster and Rotherham, there are in practice also a significant number of (essentially ad hoc) transfers into STH, which maintains a 24/7 consultant gastroenterology rota.

The Hospital Services team reviewed the options of

- Attempting to establish 24/7 GI bleed services on all sites; or
- Formalising and strengthening the a model of protocol-driven transfer between sites.

An analysis of the options against the HSR evaluation criteria is as follows:

#### 13.3.1 Advantages and disadvantages of service change

<table>
<thead>
<tr>
<th>Establish 24/7 GI bleed services on all sites</th>
<th>OOH protocol-driven transfer between sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality</td>
<td></td>
</tr>
<tr>
<td>X Some sites have recently received 'requires improvement' CQC scores</td>
<td>✓ Clinical outcomes should be preserved or improved as all patients access expert opinion and intervention</td>
</tr>
<tr>
<td>X Workforce issues can restrict the access to expert intervention</td>
<td></td>
</tr>
<tr>
<td>Workforce</td>
<td></td>
</tr>
<tr>
<td>X Providing sufficient expert workforce to cover 24/7 rotas at some sites is not possible due to recruitment issues and workforce gaps</td>
<td>✓ This model fits demand to workforce (which is feasible), rather than vice versa (which is not)</td>
</tr>
<tr>
<td>X Bleed services should be consultant-led, and out of hours services largely</td>
<td></td>
</tr>
</tbody>
</table>
**Hospital Services Review: Report for Governing Bodies**

consultant-delivered: therefore not feasible to rely solely on a wider pool of clinical endoscopists

<table>
<thead>
<tr>
<th>Affordability</th>
<th>☒ High locum staff spend at some sites due to substantive workforce unaffordability is financially unsustainable</th>
<th>☑ Locum costs at unsustainable sites could be reduced</th>
<th>☒ Costs associated with ambulance transfers may increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>☑ Patients would access care at all sites; i.e. transfers would be minimised or removed</td>
<td>☒ Some patients may need to travel further for GI Bleed services at some times of the week</td>
<td>☑ Patients are guaranteed to have access to expert OOH services</td>
</tr>
<tr>
<td>Interdependencies</td>
<td>☑ Interdependent services (e.g. general surgery, TIPS, &amp; IR where they exist on that site) would be unaffected</td>
<td>☑ Interdependent services (e.g. general surgery, TIPS, &amp; IR where they exist on that site) would be unaffected. TIPS and IR would be highly unlikely to be present on sites which cannot maintain a 24/7 rota</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 18: Table showing an assessment of the advantages and disadvantages of changes to the GI Bleeds OOH clinical model vs retaining presence on all sites**

Based upon this, and upon the relatively small numbers of patients likely to be affected (see below), the Clinical Working Group considered that the safest and most efficient model would be to continue with the current model of transferring patients out of hours, but to develop more formalised transfer protocols to support these services.

**13.3.2 Proposed standardised model for transfer of patients**

We therefore propose the following clinical model where the Gastroenterology Hosted Network (in partnership with transport services) will develop Clinical Pathways and associated Standard Operating Procedures for the following:

- **The transfer of urgent bleed patients from a site without rota cover to a predetermined site with cover:**
  - Pairings will be agreed via the HN and reviewed on an annual basis
  - The Standard Operating Procedure (SOP) should include provision for short-notice / unexpected rota gaps
  - This should ensure that there is never a situation where a site is uncovered either under its own resources or via a pairing / transfer arrangement

- **The stabilisation and transfer of highly complex bleed patients:**
  - This may include those requiring interventional radiology support or other pre-defined cohorts (NB: increasingly bleeds can be stabilised without IR, the number requiring IR is anticipated to be very low)
  - Patients will be transferred to one or more predetermined specialist sites who can offer the appropriate therapeutic input

If a site is not deemed 24/7 bleed rota compliant (“Site 1” as in Figure 19, below):

---

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They will provide the comprehensive bleed service at their own site, working to the HN Clinical Pathway, in a predictable and published pattern, to the greatest extent possible.

This should avoid over-ambitious assessments of their own capacity; the HN will be the final arbiter on this.

Where not covered internally, they will adopt the SOPs for transfer of urgent bleed patients, working with a predetermined partner site.

They will utilise the transfer protocol for complex patients if they are not able to provide the relevant highly specialist care.

If a site is deemed 24/7 bleed rota compliant (“Site 2” as in Figure 19, below):

- They will provide the comprehensive bleed service at their own site, working to the HN Clinical Pathway.
- The site/Trust may act as the partner for a site without a compliant rota under a pairing arrangement.
- They will utilise the transfer protocol for complex patients if they are not able to provide the relevant highly specialist care.

The HN will act as the first-line arbiter for disputes, will run the regular rota review process, will review and sign off guidelines and SOPs on a scheduled basis, and will provide an audit mechanism for the regional out of hours bleeds service.

Sites will be paired as in Figure 15 below, with patients transferred from a site without bleeds cover to a pre-determined site with cover, according to pre-agreed protocols and based on clinical judgement, once stabilised.

**Figure 19:** An illustration of the proposed changes to the OOH GI Bleeds clinical model through the pairing of sites

### 13.3.3 Number of patients likely to be affected by this

Numbers are affected are likely to be low. Our hospitals see around 36 new GI bleed cases per week, but only around a quarter of these (9 to 10 patients) present out of hours. Data on GI bleeds activity is limited due to the low volumes, and most of our Trusts do have cover most of the time, so only a relatively small proportion of these will transfer.

In one short 2014 study undertaken by SYB(ND) Trusts, only one patient per week presented out of hours without bleed cover – but this was only for a fortnight and one Trust did not send...
data. We believe that two to three patient transfers a week is the maximum likely, based upon the best current data, and based upon conversations with the Clinical Working Group. Our proposed new model is not likely to increase these numbers. It is important to recognise that most patients presenting out of hours without bleeds on call will transfer anyway. Our proposal just aims to strengthen the safeguards around this.

13.3.4 Public consultation

The proposals above in many ways simply codify and streamline existing practice. Transfers will now be governed by clear clinical protocols (including scoring) and by standard operating procedures, and will be overseen by the Hosted Network. Proportionate staff and patient engagement will be necessary going forward and a final decision on whether to proceed with engagement or consultation would need to be taken in discussion with the Joint Health Overview and Scrutiny Committee.
14 Equalities implications
The equalities implications have been considered throughout the work that has been done to address the models.

The key points made by attendees are summarised below. A more detailed analysis of how the equalities issues have been addressed is included at Annex F.

14.1 Engagement with the seldom heard groups
During 2018 and 2019, there has been engagement with representatives from a wide range of seldom heard groups, including BME groups, LGBT groups, members of the Deaf community, people with disabilities, travellers, asylum seekers and others. A full, independent report of this engagement is published on the ICS website.

The concerns that were raised by these groups have been fed back to the Clinical Working Groups, and have been considered throughout the project.

14.2 Implications for different equalities groups
A full Equalities Impact Assessment would need to be taken forward by any CCG which was looking to take forward reconfiguration. The current report has therefore not carried out a formal EIA. However, equalities issues have been considered during the report, and the key issues which have emerged are summarised below.

14.2.1 Pregnancy and maternity
The services considered here (maternity and paediatrics) are likely to impact most significantly on women. The ICS has spoken with a number of mother and toddler groups in order to identify specific issues. Key concerns, which have shaped the conclusions of the report, included concerns raised by women who struggled to visit a child in hospital while other children were at home requiring care.

14.2.2 Age
Most of the services discussed in this report are focused on younger people, but changes to GI bleeds services would be likely to impact more on older people. The public travel and transport group discussed the challenges for older family members in visiting a site further away.

14.2.3 Disability
People with disabilities reported that the key issue was around access, particularly for those who used public or community transport.

Access went beyond transport issues: respondents from the Deaf community referred to the shortage of translators for Sign Language while respondents with autism and learning difficulties described information received from the hospital as being difficult to interpret.

14.2.4 Race
The majority of the issues reported by people from ethnic minority groups tended to be around the quality of care and the way in which care was delivered. A number of respondents described communication difficulties and a shortage of translators, while a few reported specific stereotypes: some women of Indian and Asian heritage, for example, warned against cultural stereotypes that assume that Asian families will want to care for family members at home.
14.2.5 Religion or belief

The public engagement included groups of men and women from a range of religions, including groups of older Muslim women. Several of the group members reported finding it difficult to access healthcare, largely because of language and cultural barriers.

14.2.1 Sexual orientation and gender identity

LGBT respondents similarly focused on the delivery of services and the attitudes of healthcare staff, rather than on the design of services. Some reported specific negative experiences although most were positive.

14.2.2 Lower socioeconomic groups

Although socioeconomic disadvantage is not identified as one of the protected characteristics, public respondents made the point that changes in access would impact particularly on the poorest since they are least likely to have private cars.
15 Monitoring and early warning signals

15.1 Objectives of monitoring

During discussions of whether the system should pursue transformation or reconfiguration, one of the key points raised was that if the system is to focus on transformation rather than reconfiguration, it must be able to identify whether transformation is being successful, or whether any more immediate action needs to be taken.

The AOs, CEOs, and Chairs of the acute providers asked that the Hospital Services team consider how the system might put in place a monitoring and ‘early warning’ process. This would aim to capture:

- Whether the work on transformation is having an impact on improving services; AND
- Whether there are any serious issues emerging in these services which might necessitate more immediate action.

This work needs to be seen in the context of wider monitoring of performance in the ICS.

15.2 Context

The NHS is currently at a moment of transition. Legally, the system is still working within the structure created by the Health and Care Act 2012 in which each Trust operated individually and was legally accountable only for its own performance to its commissioners and regulators.

However, while the legal accountabilities remain in place, the NHS is beginning to move towards a more system-based way of working, with the aim of incentivising trusts to work together in the interest of patients rather than separately.

In this structure, commissioners and providers across the ICS footprint are expected to hold each other mutually accountable, and performance is beginning to be assessed at a cross-system level, as well as for individual organisations. Thus poor performance on quality, or a financial shortfall, in one Trust will appear on the scorecard for the system as a whole, the system as a whole will be held responsible for working together to address the issues, and ultimately all partners will be penalised for poor performance by some members.

As the largest ICS in England, and one of the most advanced, SYB is at the forefront of developing this.

One element of this mutual accountability is the development of a shared approach to monitoring, and a greater degree of transparency around the performance of individual Trusts.

15.3 Current monitoring

15.3.1 Monitoring at individual organisational level

At present data on quality and performance is largely reviewed by Trusts Boards and CCG Governing Bodies, scrutinising the performance of their own organisation or CCG footprint. Papers are taken at public meetings and are available online.

15.3.2 Monitoring at system level

While most monitoring in the system is at organisational level, the system is beginning to see some cross-system working:
• **The Quality Surveillance Group.** This multi-agency group (which consists of commissioners, local authorities, voluntary and patient representative organisations, but excludes providers) meets monthly and reviews any concerns about the quality of care in each Place in SYB. Each meeting receives:
  - a report on quality outcomes, compiled at regional level;
  - a narrative update on any quality issues that are known to be emerging at any individual Place.

The quality metrics that are considered by this group are exclusively performance based, such as performance against national targets. If an issue is identified for escalation it goes to a quality review meeting at which a report is taken which looks at wider issues such as workforce constraints, leadership issues, or financial concerns.

• **Quality Group.** The system is in the process of setting up a Quality Group which will review performance and other key indicators at a system level, and will include providers. The design of this group is at an early stage.

• **Local Workforce Advisory Group.** The LWAB has a remit to oversee workforce issues across SYB, and receives updates on specific pieces of work, but does not currently monitor performance on workforce on a regular basis.

• **Integrated Assurance Framework.** Work is underway to develop a framework for assurance across the system, including developing a forward look to develop upcoming risks.

### 15.4 Developing the current approach into monitoring

The request from the CEOs, AOs and acute provider Chairs is to identify whether specific initiatives in the transformation programme are having an effect; and to identify risks in these services before they arise.

The monitoring identified above has some limitations in this regard:

- Much of the data that is currently collected at a system level is based on the system performance indicators; is general rather than service-specific; and / or is retrospective;
- The more nuanced, service-specific data that Trusts collect is largely not shared at a system level.
- In particular, there is currently no systematic collection of data relating to workforce at a system level.

We suggest the following approach:

- We should identify no more than five key metrics for each specialty which would be collected and shared on a bimonthly basis. Initially these would be collected and shared within the Hosted Networks; as the Quality Group develops, they might be monitored within that group.
- Ideally these metrics should be metrics which both enable us to identify whether the transformation work in the HSR specialties is achieving its objective, and whether the service is facing risks which could deteriorate into safety concerns.
- The Hosted Networks, with support from the ICS, should be asked to take the lead on developing these metrics.

Examples of the types of metrics that the system might be asked to collect and share include:

- The number of shifts in the specialty which the Trust has needed to fill other than by substantive staff working their core hours, over the last 2 months
Hospital Services Review: Report for Governing Bodies

- The number of trainees in a Trust who choose to take up a permanent post in it.
- Number of times that patients have been transferred to another Trust outside of the processes or hours agreed in transfer protocols between Trusts.
Conclusions and Next Steps

In this section we will consider the following:

- Conclusions drawn by AOs and CEOs in terms of the way forward as presented in this report

- Next steps for Governing Bodies and the process of public consultation once decisions have been made
16 Conclusions

AOs and CEOs discussed the evidence contained in this report on the 21st of March and 1st of April. AOs and CEOs, upon evaluating all of the evidence provided by the HSR, concluded that where there is not an immediate safety concern, their preference would be that Transformation should be the first area of focus to change and develop services. This approach should include options such as co-locating A&E and SSPAU, and developing out of hospital services, which can help to reduce workforce pressures.

In future, if there are safety concerns or if clinical models change, for example if A&E and SSPAU co-location and increased community services reduces the need for an in-patient unit, reconfiguration may become a viable option that can be revisited.

To this end, the system should develop an approach to monitoring the impact of transformation at a system level, with ‘early warning’ metrics to identify concerns around sustainability. This will form part of the wider ICS approach to monitoring performance.

In summary:

- **Inpatient paediatrics**: the AOs and CEOs preferred that a transformation approach to change be taken, focusing on system-wide Transformation across services to develop the workforce and as a result improve the quality of services and ensure that services remain future-proof in the face of declining workforce numbers and growing demand.

  The exception to this was Bassetlaw, where the AOs and CEOs believed that system-wide Transformation will not be able to go far enough to address support the reinstatement of Paediatric services overnight, without destabilising other Trusts in the system that are currently performing well.

- **Maternity**: When considering key interdependencies, the Governing Body should look into the options for higher risk women to give birth at Doncaster Royal Infirmary and explore whether neonatology and anaesthetics rota can be maintained sustainably 24/7 at Bassetlaw.

- **Gastroenterology**: across Gastroenterology and Endoscopy, we recommend that the Hosted Networks should focus on key priorities such as understanding demand and capacity and workforce solutions.

  For Out of Hours GI Bleeds, it is proposed that the Hosted Network should take forward any work on the development of out of hours protocols, developing a formalisation of what is currently common practice through shared working with the HNs.

16.1 Decision for Governing Bodies

Governing Bodies are asked to consider whether they agree with the conclusions reached by the AOs and CEOs above. In particular, they are asked whether they agree that an approach of focusing on transformation, and considering reconfiguration only if there is an immediate risk of safety issues, is appropriate in addressing the long term sustainability of acute services in SYB. If transformation fails to address the workforce issues in the medium to long term reconfiguration may have to be reconsidered.

They are also asked to agree the approach to monitoring the progress of transformation, and metrics for early warning on sustainability issues, that is laid out in chapter 15.

Governing Bodies have agreed during their July meetings to delegate responsibility for agreeing the direction of travel laid out in this report to the Joint Committee of Clinical Commissioning Groups (JCCCG).
17 Next steps

17.1 Overview
The next steps are as follows:

**Agreement of this paper**
- Public engagement
- Discussion within public meetings of the Governing Bodies
- Discussion and agreement of the proposed way forward by the JCCCG

**Taking forward transformation**
- Taking forward development of the level 1 Hosted Networks.
- Taking forward development of the level 3 Hosted Network for paediatrics.
- Development of monitoring
- Taking forward other elements of transformation.

**Taking forward reconfiguration**
If any CCG decides to take forward reconfiguration, this will require:
- Full equalities impact assessment (EIA) led by the CCG.
- Engagement with the relevant Overview and Scrutiny Committee, and engagement for information with the Joint Health Overview and Scrutiny Committee;
- Engagement with the North of England Clinical Senate (and/or the Yorkshire and the Humber Clinical Senate) around any suggested reconfiguration changes.
- Public consultation in line with legal requirements.
17.2 Agreement of this paper

17.2.1 Public engagement

A significant amount of public engagement has already taken place on the underlying models and options for the HSR, SOC and in the most recent phases between October 2018 and April 2019. The reports into this public engagement are available on the ICS website. There has also been patient and public input specifically into the travel and transport work. Bassetlaw commissioners and providers have engaged with their local community and with patients, particularly regular users of paediatric services at Bassetlaw.

We have not so far undertaken public engagement on the analysis, which is only now complete and in a state to be shared.

We will undertake engagement with members of the public in parallel with the paper going to Governing Bodies and decision making by the GBs over whether to proceed with consultation around reconfiguration on any sites.

The ICS will make the report public and will engage on it ahead of the JCCCG discussion so that this engagement can inform the JCCCG discussions, and individual CCGs will take forward further individual engagement if required.

17.2.2 Discussion within public meetings of the Governing Bodies

The Acute Trusts will be given an opportunity to comment on the paper in private, in advance of discussions in CCG Governing Bodies.

Each of the CCGs in SYB and North Derbyshire will then discuss the paper at a public meeting in August / September.

CCG Governing Bodies agreed in July to delegate decision making on all issues relating to the Hospital Services Programme to the Joint Committee of Clinical Commissioning Groups, so the report will be discussed and the overall approach agreed at the JCCCG meeting in September.

<table>
<thead>
<tr>
<th>CCG Governing Bodies (public)</th>
<th>Acute provider Trust Boards (private)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30th July Doncaster and Bassetlaw Rotherham Sheffield Children’s Sheffield Teaching</td>
<td>31 July Chesterfield</td>
</tr>
<tr>
<td>20th Aug Bassetlaw CCG</td>
<td>5th September Barnsley</td>
</tr>
<tr>
<td>4th Sept Rotherham CCG</td>
<td>5th Sept Sheffield CCG</td>
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<td>5th Sept Sheffield CCG 5th Sept Doncaster CCG 5th Sept Derby and Derbyshire CCG</td>
<td>5th Sept Barnsley CCG</td>
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<td>12th Sept Barnsley CCG</td>
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<tr>
<td><strong>24th Sept Joint Committee of Clinical Commissioning Groups</strong></td>
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Figure 19: Dates of upcoming CCG Governing Bodies and Acute provide Trust Boards
17.2.3 Discussion in the JCCCG

SYB Clinical Commissioning Groups have agreed that the paper will be discussed in public Governing Bodies, but that because it involves a cross-system analysis, a final decision on whether to agree the analysis will be made at JCCCG.

17.3 Taking forward transformation

17.3.1 Taking forward development of the level 1 Hosted Networks

Recruitment to the Hosted Networks has already begun with the aim of clinical leads and network managers being in post in the Autumn.

Work programmes will be defined over the summer and agreed with the Strategic Health Executive Group in October / November.

If there is any need for public or patient engagement in any element of the work programme, this will be overseen by the Integrated Care System (ICS) communications team. Trusts will also lead engagement with staff as required.

17.3.2 Taking forward development of the level 3 Hosted Networks

Work is ongoing between Sheffield Children’s Hospital and Doncaster and Bassetlaw to develop a level 3 Hosted Network. SCH and DBTH Boards agreed the way forward in June, and a work programme is being developed.

17.3.3 Developing approach to monitoring

As part of developing the work programme for Hosted Networks, clinicians and managers will be asked to help to develop the metrics and processes to monitor progress on transformation.

17.3.4 Taking forward other elements of transformation

Each Trust is taking forward its own internal transformation programme.

17.4 Taking forward reconfiguration

17.4.1 Full equalities impact assessment led by the CCG

The ICS has considered equalities issues throughout but CCGs have a statutory responsibility to undertake a full EIA for any consultation that they will be leading;

17.4.2 Engagement with the relevant Overview and Scrutiny Committee

Each Local Authority in South Yorkshire and Bassetlaw has a Health Overview and Scrutiny Committee which considers issues related to health. In addition, a Joint Health Overview and Scrutiny Committee (JHOSC) has been formed, to consider issues which are cross system for South Yorkshire and Bassetlaw, Mid Yorkshire and North Derbyshire. The JHOSC has engaged regularly with the ICS around the Hospital Services Review and the Hospital Services Programme.

Any proposed permanent change to services will need to go through public engagement, and (following discussion with the relevant Overview and Scrutiny Committee, and the Joint Health...
Overview and Scrutiny Committee as required) the CCG may consider formal consultation with patients and the public.

More generally, the JHOSC and relevant OSCs will be kept informed about and engaged on changes that emerge from this work.

17.4.3 Engagement with the Clinical Senate

Up to now the ICS has engaged with the North of England Clinical Senate (NECS) rather than the Yorkshire and Humber Clinical Senate because the Independent Chair of the Hospital Services Review is also the Chair of the YHCS. The arrangements for individual engagement with the Senate, if any is necessary, will be reviewed going forward.

17.5 Public engagement and consultation on reconfiguration

There are legal requirements defining the public consultation that must be undertaken if any permanent reconfiguration is being considered for a site.

Consultation would be led by the CCG for the site(s) in question, in accordance with the legal requirements, or the ICS for any system wide reconfiguration.
18 Acknowledgements

We would like to thank everyone across SYB(ND) who has taken the time to provide us with quantitative and qualitative information to aid with the development of this report.