



The path to
excellence

Phase 1a:

**Pre-Consultation
Business Case**



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1.0 Executive Summary

Healthcare organisations nationally have been challenged to work together to adapt local services to address the three care gaps outlined in the NHS Five Year Forward View; gaps in health and wellbeing, care and quality and finance and efficiency. The response in South Tyneside and Sunderland has been the development of a formal alliance between South Tyneside and City Hospitals Sunderland NHS Foundation Trusts (FTs), working in partnership with South Tyneside and Sunderland Clinical Commissioning Groups (CCGs) to jointly review and plan hospital services as part of a strategic transformation programme known as the Path to Excellence.

The importance and value of having local hospitals providing a range of services continues to be recognised however continued service duplication across South Tyneside District Hospital (STDH) and Sunderland Royal Hospital (SRH) is presenting challenges to the delivery of safe, high quality services. Stroke, obstetrics and gynaecology and paediatrics emergency services are among the South Tyneside and Sunderland hospital-based services facing an unprecedented sustainability challenge, driven predominantly by a limited medical workforce and resulting in service continuity, quality and financial pressures. They are therefore the first phase - Phase 1a - of a phased programme of service reviews designed to address the clinical quality and financial sustainability challenges across the Trusts.

Workforce challenges were brought to the fore in October 2016, when the presence of only one part-time substantive stroke consultant at South Tyneside District Hospital, together with the reduction in total stroke consultant numbers to staff out-of-hours stroke services, led to CCGs and FTs taking the difficult decision to temporarily relocate stroke inpatient services from South Tyneside District Hospital to Sunderland Royal Hospital, with any proposed permanency to these arrangements to be subject to future public consultation.

The broader national and regional strategic context for stroke services presents a case for long term stroke service change with an increasing national evidence base to support service consolidation and strong policy steers through the Five Year Forward View (FYFV) and more recent subsequent FYFV Delivery Plan to improve acute stroke care and clinical outcomes. The North of England Cardiovascular Network also recommends a reduction in the number of hospitals providing hyper-acute stroke services locally to ensure an appropriate critical mass of patients to deliver improved quality. Change is therefore necessary to invoke improvements in the quality of stroke services at South Tyneside and Sunderland, with both hospital sites failing to achieve high quality scores as set out in the Sentinel Stroke National Audit Programme (SSNAP).

Obstetrics and gynaecology and paediatric services are experiencing similar workforce constraints with senior medical service gaps inhibiting consistent delivery of national clinical standards and the provision of sustainable safeguarding arrangements.

National strategy is also driving change with both the Five Year Forward View for Maternity Care, Better Births, and the Urgent and Emergency Care Review, Transforming Urgent and Emergency care in England, expecting local compliance with national requirements. The recently published Five Year Forward View Delivery Plan echoes these priorities, advocating whole-pathway efforts to reduce stroke risk and strokes, improved maternity services and better clinical outcomes, with continuing plans to relieve pressure on Accident and Emergency , through locally accessible urgent treatment centres¹.

Better Births sets out recommendations to delivery safer, more personalised maternity care, with expectations that women will experience greater care continuity, better post-natal and perinatal mental health care and more multi-professional, cross-boundary working, delivered through Local Maternity Systems of providers and commissioners working together across populations of 500,000-1.5million.

Transforming Urgent and Emergency care sets out a vision where people with urgent care needs are treated quickly and as close to home as possible with care for people with more serious or life threatening emergency problems treated in centres with the very best expertise and facilities in order to maximise the chances of survival and a good recovery. The national urgent and emergency strategy expects local implementation of a range of planned actions including improved self-care, enhanced NHS 111 services, more integrated out of hospital urgent care and strengthened 999 services supported by seven day hospital service access and specialist services in emergency hospitals.

Phase 1a of the Path to Excellence programme therefore represents the delivery of the acute elements of national strategy by seeking to improve stroke clinical outcomes, to strengthen the safety and quality of maternity care and ensure the right balance of locally accessible and specialist paediatric care. In doing so, the proposals seek to come up with more sustainable workforce models to retain the services as locally as possible for the longer term.

Given the interdependent nature of Special Care Baby Unit (SCBU) services with both obstetrics and paediatrics services, SCBU services are also an integral part of the proposed review and option development process, with full support of the NHS England Specialised Commissioning northern regional team.

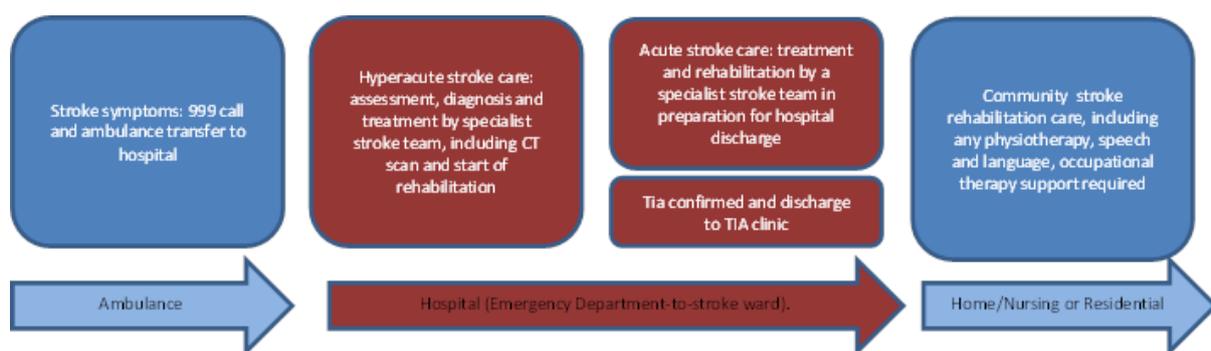
¹ Next Steps on the NHS Five Year Forward View, NHS England, 2017

The financial case for change for all three service areas is equally as compelling with both Trusts having significant funding gaps and reporting a combined spend of over £880,000 on locum medical staff in 2015/16. Up to approximately £2,000,000 of potential savings are to be made depending on the options adopted post-public consultation.

Clinically-led design teams have developed potential options for change as part of a service review programme overseen by both CCG and hospital clinical and non-clinical leaders and informed by extensive engagement with previous or anticipated future service users over the last seven months. A minimum of two potential options for each service have been developed and agreed to be subject to a formal public consultation over the next 3-4 months. Each set of options include one option to develop single-site services at Sunderland Royal Hospital and each includes one option to retain appropriate, safe service delivery at South Tyneside District Hospital, in order to maximise patient choice where possible. The stroke options include a third option, presenting a slightly different service arrangement relating to the repatriation of stroke patients at South Tyneside after having acute care at Sunderland. The development of a single-site SCBU at Sunderland is also proposed as a direct consequence of the maternity and paediatric options, given that SCBU must be aligned to birth rates and shares a paediatric medical workforce. Details of the potential changes across the Phase 1a services are summarised below.

The elements of the **stroke care pathway** within the scope of the proposed consultation are depicted in red in 1.1 below:

Figure 1.1: In-scope elements of the stroke care pathway



For **Stroke services** the reasons for service change are fourfold:

- To improve the overall sustainability of the service in terms of making the most efficient use of the senior medical staff.
- To improve the overall sustainability of the service in terms of the ability to cover nursing vacancies on both stroke units.

- To improve clinical outcomes and service quality through disinvestment in some areas in order to invest in others, namely extra inpatient therapy resource to improve the acute audit SSNAP scores beyond a 'D'.
- To improve the overall financial position of the South Tyneside and City Hospitals Sunderland Foundation Trusts by reducing the overall costs in providing a stroke service across the two localities.

Prior to the temporary stroke inpatient stroke pathway changes described above, both South Tyneside and Sunderland hospitals provided a full hyper acute and acute stroke service. All stroke inpatient care temporarily moved to Sunderland in December, 2016, with South Tyneside patients receiving post-discharge community stroke rehabilitation in their local communities.

The three proposed long term service configuration options are:

Option 1: Provide all inpatient stroke care from the Sunderland Royal Hospital stroke unit (ward E58) and close the stroke beds (Ward 8) at South Tyneside District General Hospital. Patients from South Tyneside and Sunderland will have their acute stroke care at SRH before being discharged to community stroke rehabilitation teams in their respective local communities.

Option 2: Provide all inpatient and the majority of acute care from the SRH stroke unit (ward E58) with repatriation of South Tyneside patients to STDH for rehabilitation after 7 days for those patients requiring longer stays and who are medically stable for transfer.

Option 3: Provide all hyperacute stroke care from the SRH stroke unit (ward E58) with repatriation of South Tyneside patients to STDH for further acute care and rehabilitation after 72 hours for those patients requiring longer stays and who are medically stable for transfer.

Option 1 stands to deliver the greatest quality improvements, estimating that inpatient stroke service would move from a 'D' to a 'A' or 'B' rating in SSNAP as well as having a positive impact on health and health inequalities. The service arrangements proposed will enable investment in a small number of extra Nurse Practitioners and also the redistribution of a proportion of the therapy resource. It will deliver workforce sustainability through the amalgamation of medical and nursing teams, supporting future recruitment and retention and enhancing consistency and quality of care. All three options are aligned to patient insight which demonstrates the importance of accessing care in specialist stroke units.

In relation to accessibility, negligible ambulance service impact to convey 1-2 patients daily from South Tyneside to Sunderland has been reported by the North East Ambulance Service.

All options will result in visitors of confirmed stroke patients experiencing longer average travel times for anywhere between 3-10 days, depending on the option chosen and length of hospital stay. 83% of South Tyneside patients aged over 60 will continue to be able to get to SRH by public transport within one hour, however, hospital access by public transport within 30 minutes will fall from 61% to 5%. Return hospital journeys from SRH by public transport may be more challenging and necessitate further analysis. It is possible that longer journey times are most applicable to patients from the north of South Tyneside. A small number of stroke patients from this area are expected to be taken to the Royal Victoria Infirmary (RVI). Some public transport journeys are quicker to the RVI than SRH. Additional public transport travel time is estimated at an average extra 18 mins to get to hospital and an average extra 21 minutes to get home from hospital.

Around 70% of South Tyneside residents are estimated to be able to get to and from SRH by car within 11-20 minutes with an average estimated additional seven minutes' travelling time. The travel impact will affect a minimum of 253 annual stroke patients². Potential access barriers to access exist for vulnerable groups and mitigating actions are being considered, however these are not deemed to outweigh the potential health and health inequalities gains.

Given the pre-existing temporary change to the stroke inpatient pathway, the proposals are immediately deliverable with little change. Capacity and performance impacts have been fully assessed with contingency funding in place to flex capacity to accommodate medial boarders. Further work continues to understanding what opportunities there are for improving the number of patients receiving Early Supported Discharge, with ongoing attempts to maximise capacity by bringing the two community teams together.

There is no financial impact to commissioners, however, option 1 will deliver a £180,000 improvement in the Healthcare Group position compared against budget, and a greater benefit of £510,000 when compared against 2015/16 actual spend. Options 2 and 3 are dependent on additional investment of £431,000 to make the necessary therapy staff available to deliver the required clinical quality improvements. Given that increased clinical quality and workforce sustainability can be delivered without additional investment, option 1 is therefore the preferred option of South Tyneside and Sunderland healthcare partners.

The elements of the **obstetrics, gynaecology** and **paediatric** care pathways within the proposed public consultation are depicted in red in figures 1-2, 1-3 and 1-4 below:

² SSNAP data, 2015/16 available at <https://www.strokeaudit.org/results/Clinical-audit/National-Results.aspx>

Figure 1-2: In-scope elements of the obstetrics care pathway

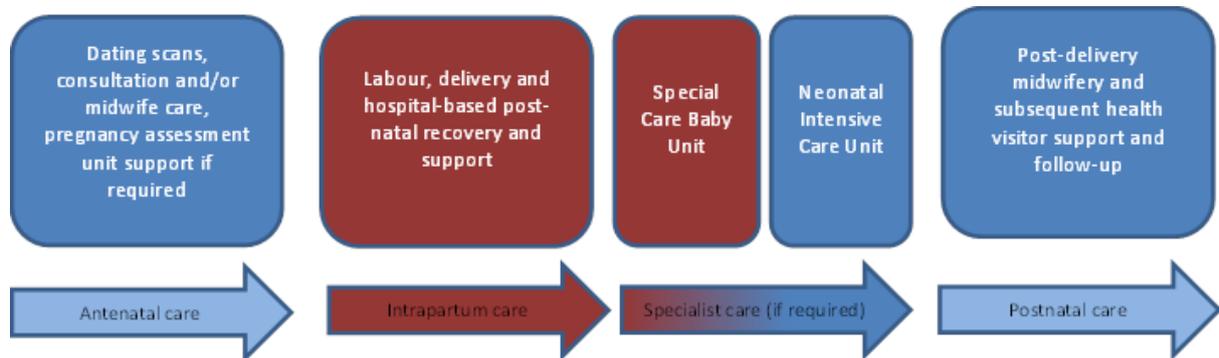


Figure 1-3: In-scope elements of the gynaecology care pathway

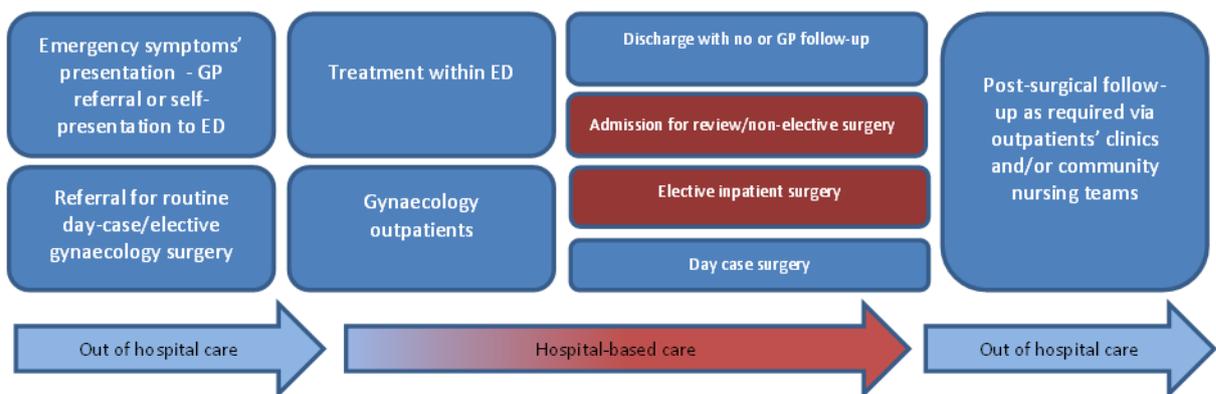
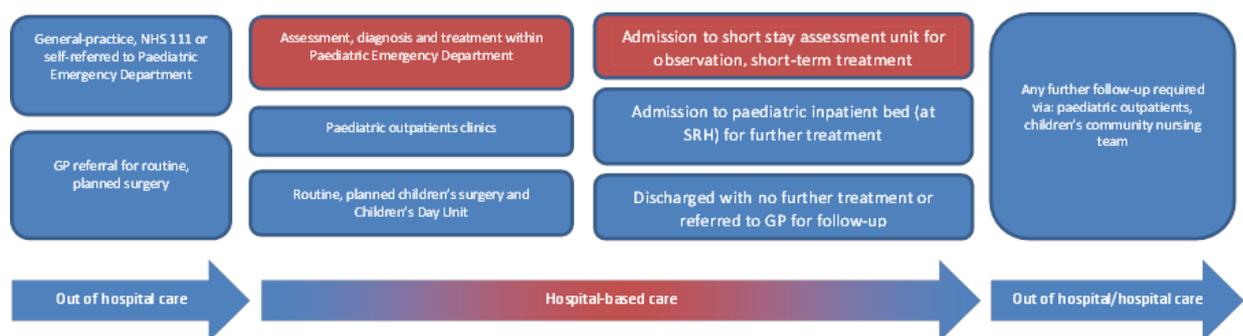


Figure 1-4: In-scope elements of the paediatric care pathway



For **Obstetrics and Gynaecology** and **Paediatrics**, the reasons for change are:

- To improve the overall sustainability of the service in terms of making the most efficient use of the senior medical staff.
- To deliver quality improvements through greater service integration, more senior substantive medical decision-making availability, and compliance with key clinical standards

- To improve the overall sustainability of the service in terms of the ability to increase nursing ratios within the Special Care Baby Unit
- To improve the overall financial position of the South Tyneside and Sunderland Healthcare Group by reducing the overall costs in providing a split-site obstetrics, gynaecology and paediatric service and delivering theatre efficiencies.
- To contribute to national policy delivery around Local Maternity Systems covering populations of at least 500,000³.

Obstetrics and Gynaecology options are:

Option 1

Developing a free-standing Midwifery Led Unit at STDH to deliver low risk care with all high-risk intrapartum care and an alongside MLU at SRH.

Option 2

Developing a single medically-led obstetric unit and alongside MLU at SRH

Both due to critical interdependency of Obstetrics and Gynaecology from a senior medical workforce point of view and in line with the strategic direction of the South Tyneside and Sunderland Healthcare Group, Gynaecology inpatient and emergency care would be provided from the SRH site, whilst day case work would be delivered on both sites. Each site would also retain outpatient and office based services to deliver care as close to home as possible. A single community midwifery team across both geographies would be created.

Clinical co-dependencies also mean that both options would involve the provision of a single SCBU at SRH, integrated with Neonatal Intensive Care (NICU).

With regards to wider potential reconfigurations of maternity services as part of the Sustainability and Transformation plans for Northumberland, Tyne & Wear and North Durham or for Durham, Darlington, Tees, Hambleton, Richmondshire and Whitby, at time of writing this report the details of these potential changes are to be confirmed. Clear links are in place across the strategic transformation programmes to ensure future alignment of capacity and resources. Preliminary modelling has demonstrated that any additional activity flow to the north, resulting from the BHP scenarios, is not likely to significantly impact on the PtE proposals and CHS capacity and this will be revisited once BHP options are clear and prior to any final decision on the PtE Phase 1a proposals being made.

³ Better Births: Improving Outcomes in England, A Five Year Forward View for Maternity Care, 2016

Both potential clinical options will improve clinical quality as bringing the two consultant teams together increases the amount of time of consultant delivered care in the higher risk obstetric unit at SRH, moving from 40 hours of Consultant Obstetrician and Gynaecologist cover per week at STDH and 68 at SRH to 84 hours of cover overall. The proposed service arrangements will enhance compliance with national medical staffing requirements. They also both improve sustainability from a workforce point of view by consolidating both the Consultant and middle grade/specialist trainee rotas, supporting less locum reliance which, in turn, contributes to greater care consistency and long term quality improvement. Both options contribute to improved health and health inequalities.

Only the delivery and immediate hospital-based post-natal elements of the maternity pathway would change within both options, with locally accessible antenatal and community post-natal care continuing. Under option 1, locally accessible birthing facilities would also continue to exist at STDH for women with low-risk pregnancies, together with the choice of home birth.

Historical activity analysis suggests that around 460 South Tyneside women deemed to be at risk of experiencing a more complex birth would travel to SRH to deliver each year, presenting a travel impact for families and visitors for the duration of their hospital stay. Travel by public transport within 60 mins for South Tyneside women is comparable between the STDH and SRH, however access to SRH within 30 minutes by public transport is considerably lower. Additional travel requirements are an average increase of six minutes' drive-time and 21-25 minutes on public transport, depending on the direction of travel. 60% of the inpatient gynaecology patients from South Tyneside would travel to SRH each year, with equal travel impact.

A further 520 women from South Tyneside are expected to travel to Gateshead or Newcastle to give birth each year, together with around 40% of inpatient gynaecology patients who choose to have operations at Gateshead's Queen Elizabeth (QE) Hospital or Newcastle's Royal Victoria Infirmary (RVI). Access to the QE by public transport is easier and faster for women who live in Jarrow than it is to SRH. Hebburn residents also have easier car and public transport access to QE than SRH. Bus journey times from Hebburn to the RVI are shorter.

Further accessibility analysis is required to fully understand modes of travel together with work to explore how return public transport journeys to South Tyneside can be improved.

External advice sought from maternity clinical leads from the North of England Maternity Clinical Network confirms no consistent evidence of impacts on perinatal mortality rates (as an independent variable) for mothers living up to 4 hours from their nearest maternity unit. NEAS is likely to encounter additional onward conveyances to SRH at no more than 10 per month which is expected to have a

minimal impact on NEAS services. Current NEAS performance from FMLUs to CLUs elsewhere is positive with an estimated blue-light transfer time of 11 minutes between STDH and SRH.

Both options retain a range of statutory delivery choices, with home births, midwifery-led and consultant-led obstetric settings available. Option 1 would offer the four birthing locations set out in *Better Births*; an obstetric unit, in a co-located midwifery led unit, in a free standing midwifery led unit and home birth. This demonstrates alignment with patient insight obtained through which women reported the importance of choice as well as important factors of having consultant and midwife care in the same location together with proximity of the service when deciding where to give birth.

Challenges for vulnerable groups exist equally in both options in change presenting a potential barrier to access together with risks around continuity of care, travel costs and care transfers.

The workforce capacity exists to support deliverability within a reasonable timeframe, although option 2 requires infrastructure changes to increase the number of maternity beds and is therefore likely to take longer to implement. Organisational and clinical commitment exists to support the effective implementation of both options.

Both options generate financial benefit to the healthcare group of £1.13m (option 1) and £1.16m (option 2) against actual spend. There is no financial impact for commissioners. The CCGs expect current block contracting arrangements to be sufficient to mitigate against any financial risk presented by patient flows outside of the South Tyneside and Sunderland FTs. Provider savings are net of any future block-contract renegotiation.

For **Paediatrics** it is acknowledged by the clinical and managerial teams across both Trusts that Paediatric services are becoming significantly challenged in being able to continue to provide a sustainable and safe service within existing resources. This is predominantly due to issues in recruiting and maintaining sufficient senior doctors to provide the Emergency Care Service at South Tyneside 24/7, at middle grade level. There are currently 3 middle-grade (senior doctor) vacancies and there is a weekly reliance on covering the medical rota with agency doctors out of hours. Whereas variability caused through the use of agency doctors has been minimised through attempting where possible, to use the same doctors familiar with the service, this cannot be guaranteed and does throw open the issue of safety as the middle-grade is the most senior doctor within the department at night.

When the rota cannot be covered by locum doctors, then consultants are expected to provide resident out of hours cover. If this happens then there is a likelihood that

planned work for the following day, such as outpatient clinics would need to be cancelled.

The National Clinical Advisory Team (NCAT), who were involved in supporting the previous review of Children's Health Services across the South of Tyne in 2012 amongst other things commented on the options of whether a 24 hour unit at South Tyneside or one operating shorter hours was the best approach, suggesting that a 24 hour unit might become unsustainable in the future based on the collective understanding of national medical staffing issues. This is now a real concern and the opportunities to recruit into paediatric middle-grade posts both now and for the future are very limited. Future service models must recognise the shortages. As stated above the current level of vacancy if not covered with locum agency staff or Consultants providing out of hours resident cover would necessitate the closure of the department on multiple occasions each week, therefore the overriding objective within the options offered overleaf is to address these shortages in a planned way. Coupled with this is the financial challenge for both organisations in relation to continuing to provide the current services, both of which are loss making within the present financial climate.

Paediatric and Maternity Services are often seen as the cornerstone of public health services and are often the entry point to health services for the family. Because of this it will be vital to propose safe and sustainable options to the public. Joint consideration of both services enables the consultation process to outline proposals in relation to the pregnancy, birth and the childhood continuum that will be required to maintain the safety of services, maximise a positive experience for service users and to ensure that the achievement of quality standards can be sustained. In particular this includes the challenges relating to medical workforce and finance. Due to the interdependencies between the services, both have been considered in the first wave of clinical service reviews.

Paediatric options are:

Option 1: provision of 12-hour day-time paediatric ED service at STDH with 24/7 paediatric ED at SRH. The service would operate at STDH from 8am to 10pm (doors closing at 8pm to allow children to be treated and discharged). The service would continue with full medical support.

Option 2: Development of nurse-led paediatric minor injury/illness service between 8am-10pm at STDH with 24/7 acute paediatric services at SRH.

Under both options a single special care baby unit would operate from SRH. Outpatient and community based paediatric services would continue to be provided within from both hospital sites. With both the proposed options the Adult ED service at both STDH and SRH would remain unchanged.

The clinical efficacy and sustainability of both options has been affirmed by nominated, non-conflicted representatives of the informal North of England Child Health Network. Both options offer the opportunity to ensure service continuity and quality improvement through the delivery of a stronger and more stable medical workforce, enhancing future recruitment, reducing the risk of cancelled operations and clinics, creating required safeguarding capacity and reducing reliance on locums to help deliver more consistent care. The impact on health and health inequalities of both options is positive.

Both options retain 7 day acute services on the South Tyneside site during day-time and peak activity times, whilst transferring all out of hours overnight activity to SRH, demonstrating alignment with patient insight obtained which reported parents' prioritisation of seeing the correct specialist over locally accessible care, together with high numbers of parents who had tried to access the GP or call NHS 111 prior to attending at hospital.

Furthermore, an expected re-balancing of service provision made possible through workforce and capacity release will enable sub-specialised paediatric clinics to be provided at STDH and SRH, delivering more routine care as locally as possible.

In terms of travel for families requiring the most acute paediatric care, this is likely to result in additional travel for around 6,000 South Tyneside families annually (based on worst case scenario analysis), however at least between 6-8 out of every 10 South Tyneside patients will continue to be treated locally at STDH. For those patients that will be required to travel further, 84% will be able to reach SRH within 60 minutes between, a 2% shortfall against the number of patients who can currently get to STDH within one hour. Far less patients from South Tyneside can access SRH within 30 minutes, however, the additional travel impact is expected to be offset by the heightened clinical care resulting from the creation of more specialist paediatric services. The average estimated public transport travelling time increase is between 18-23 minutes longer depending on the direction of travel.

Patients travelling by car are expected to be affected to a lesser extent with 67% of previous South Tyneside paediatric patients able reach SRH in between 11-20 minutes. The average additional car travel time is six minutes. A number of South Tyneside families are expected to choose to travel to Gateshead or Newcastle for paediatric ED care. These are estimated at around 400 patients annually for paediatric option 1 and 700 annually for option 2, with patients in Jarrow and Hebburn experiencing a mix of shorter, longer and equivalent car and public transport journeys to Gateshead's Queen Elizabeth Hospital than to SRH.

Ambulance service impact is understood to be negligible with onward conveyance activity not anticipated to be high as only three paediatric ED attendances are

ambulance-delivered. Inter-site transfer activity arising from self-presenting and/or deteriorating patients is still to be fully quantified as part of an ongoing aggregated ambulance service impact assessment.

Challenges for vulnerable groups exist equally with both options with work ongoing to fully explore any potentially mitigating actions to risks around care transfers, barriers to access, particularly for BME, disables and socio-economically disadvantaged groups, and personal, social and financial travel costs.

Workforce numbers are available to support prompt implementation of both proposed service models, assuming staff satisfaction to transfer sites. Organisational commitment is in place with all key organisations, including those likely to absorb any dispersed activity.

Paediatric option 1 will incur costs of £374,000 annually against actual spend while option 2 will deliver savings of £224,000. As per above, there is no financial impact to commissioners with block contracting arrangements mitigating current risk and savings net of activity dispersal helping to reduce any future contract renegotiation cost risk.

All options within phase 1a of the programme have been subject to a full impact assessment to evaluate their safety and anticipated impact on clinical quality and outcomes, together with assessing their affordability, deliverability and understanding any co-dependent services. Independent impact assessments to identify any travel, transport, equality, health and health inequalities impact have also been commissioned to strengthen the proposals. The accessibility analysis has highlighted an additional £44,000 investment requirement to cover NEAS costs occurred through additional ambulance job cycle times across the three clinical specialties. Further work is ongoing to assess the collective ambulance service and to ensure appropriate local capacity and response time performance.

A range of potential drawbacks to the proposals must also be considered, as highlighted by the Integrated Equality, Health and Inequalities Impact Assessment, including potential cost and wellbeing implications of additional travel, the barriers to understanding how to access services and understand and adapt to change and potential gaps in co-ordination of care, all of which may be particularly prevalent risks among vulnerable groups. The summary of these impact assessments can be found in chapter 7 of this Pre-Consultation Business Case with the full details available in the appendices that accompany this case.

The CCGs, in partnership with the FTs, are now keen to explore these potential options further as part of a planned public consultation to harness the views of local people prior to any final decision being made.

2.0 Introduction and background

The formation of the South Tyneside and Sunderland Healthcare group is a development by South Tyneside NHS Foundation Trust (STDH) and City Hospitals Sunderland NHS Foundation Trust (CHSFT), with full support by both the South Tyneside and Sunderland Clinical Commissioning Groups, in response to the NHS 5 Year Forward View (5YFV). This formal alliance aims to exploit the benefits of jointly reviewing and planning services collectively rather than as individual organisations. In common with other responses to the 5YFV the work between the four organisations is aimed at tackling the three 'gaps' of health and wellbeing, care and quality and finance and efficiency, and so make the health systems across South Tyneside and Sunderland both clinically and financially sustainable for the long-term. This programme of jointly reviewing and planning services together is known as the '**Path to Excellence**' programme. At the core of the programme is a series of Clinical Service Reviews (CSRs) and this paper brings together the findings for three CSRs involving services that are significantly challenged in terms of workforce sustainability across the Healthcare Group. These services are Stroke, Obstetrics & Gynaecology and Paediatrics. The Path to Excellence programme (PtEP) contains over 20 different CSRs that will be reviewed over the next two years but these three services have been looked at in the first phase of reviews given the workforce vulnerability and fragility issues.

2.1 Aims and objectives of Pre-Consultation Business Case

This Pre-Consultation Business Case (PCBC) is the culmination of the CSRs for the three services and it aims to:

- Make the case for urgently transforming the models of delivery for acute Stroke, Obstetrics & Gynaecology and Paediatrics.
- Describe the potential options for future service configuration; and
- Describe the communications and engagement processes that have been undertaken with the public, clinical teams and other stakeholders in developing the potential options for transforming how care could be delivered.

In addition, the PCBC seeks to demonstrate compliance with the NHS England assurance framework set out in Planning, Assuring and Delivering Service Change for Patients⁴ and including the following four tests of service reconfiguration:

- Strong public and patient engagement;
- Appropriate availability of choice;
- Clear clinical evidence based; and

⁴ NHS England. 2015. Planning, assuring and delivering service change for patients. [ONLINE] Available at: <https://www.england.nhs.uk/wp-content/uploads/2015/10/plan-ass-deliv-serv-chge.pdf>. [Accessed 30 August 2016].

- Support for proposals from commissioners.

This PCBC demonstrates that there is a case to transform these three services both to maintain or improve the safety and quality of these services and to come up with more sustainable workforce models. The clinical design teams that have carried out the CSRs are confident that the potential options within this business case will ensure that the Healthcare Group can deliver the highest quality of care within the available resources. The PCBC also sets out the potential options for acute hospital care for Stroke, Obstetrics and Gynaecology and Paediatrics services.

2.2 Introduction to the organisations

The following sub-section of the business case describes the constituent organisations involved in the Path to Excellence Programme.

2.2.1 Clinical Commissioning Groups

The South Tyneside Clinical Commissioning Group (CCG) represents 27 GP practices in South Tyneside and covers a population of over 152,000. The CCG Executive includes doctors and a practice manager nominated by member practices to run and develop the CCG. It became a statutory body in April 2013 and took over responsibility for commissioning a wide range of local health services across South Tyneside. The CCG has the following stated strategic priorities:

- Seamless planned care pathways of care, integrated within and across organisations
- Streamlined urgent care services with a single point of access
- Partnership delivery of personalised care and independent living for patients with long term conditions
- Personalised care plans in mental health based on a stepped care approach with timely access to services
- Improving the quality of prescribing and deliver agreed efficiencies

Sunderland CCG is the statutory health body responsible for the planning and buying of local NHS care and services to meet the needs of the local community. their vision is to improve the health, wellbeing and life expectancy of the residents of Sunderland, by providing joined up health and social care, underpinned by effective clinical decision-making, reducing the disparities in health across the city and achieving “better health for Sunderland”. It is made up from a partnership of 51 GP practices, split into five localities, Coalfield, Sunderland North, Sunderland East, Sunderland West and Washington, and together it is responsible for a local population of approximately 275,500. The vision of the CCG is supported by three high level strategic objectives which are to:

- Transform out of hospital care (through joining up health and social care and enabling seven day working);
- Transform in hospital care, specifically urgent and emergency care (and enable seven day working);
- Enable self-care and sustainability to ensure the NHS can survive and thrive in the future.

2.2.2 NHS Foundation Trusts

STFT was authorised as a Foundation Trust on the 1st January 2005. It provides a full range of community services across South Tyneside, Gateshead and Sunderland, and hospital services in South Tyneside and has an annual budget of approximately £190m.

The strategic aims of the Trust are:

- To deliver high quality and safe services for our patients;
- To continuously improve our services;
- To ensure our financial performance is strong;
- To deliver excellent partnerships for the benefits of our patients;
- To be an excellent employer;
- To always listen, learn and act, by adopting a “you said/we did” approach.

CHSFT was authorised as an NHS Foundation Trust in July 2004. The Trust provides a wide range of hospital services to a local community of around 350,000 residents along with a range of more specialised services provided to patients outside this area, in some cases to a population as great as 860,000. The Trust has around 811 acute beds, an annual income of around £340m and it employs around 5,140 people.

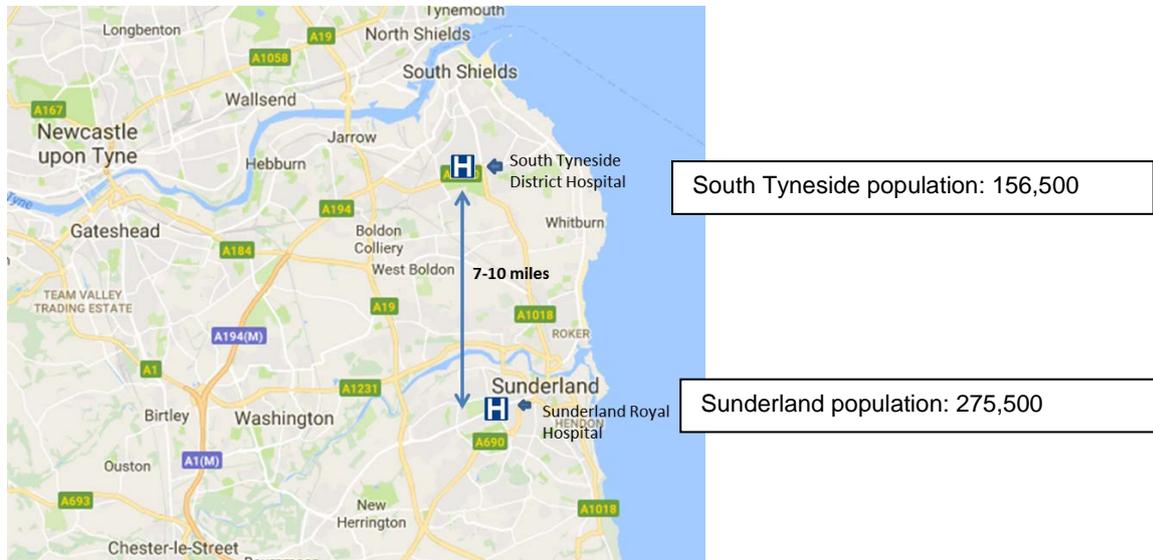
The Trust values are stated as:

- Driven by clinical quality;
- Creating the ideal patient experience;
- Listening to our patients, carers and families and learning from their experiences;
- Listening to our staff and encouraging them to improve services;
- Financial sustainability to invest in the future;
- Patient centred, business focused;
- Pride in who we are and what we do.

2.3 Geography and demographics

The following chapter of this PCBC summarises South Tyneside and Sunderland demographics, health needs and local healthcare provision. The populations covered, together with the main hospital sites, are depicted in figure 2-1 below.

Figure 2-1: Map of South Tyneside and Sunderland hospitals



2.3.1 The South Tyneside population and local health needs

South Tyneside CCG has a population of 152,000 spread across 64 square kilometres and comprising post-industrial and former mining communities configured around the main towns of Hebburn, Jarrow and South Shields. Population demographics broadly mirror the national average with the exception of South Shields having slightly more middle-to-older age residents and less working-age adults than the England average⁵. Census projections predict population growth of 4% in the next ten years with the population age-mix expected to change considerably, with an anticipated 1% fall in working age adults, a 20% rise in people aged over 65, and a 40% rise in people aged over 85 by 2021⁶.

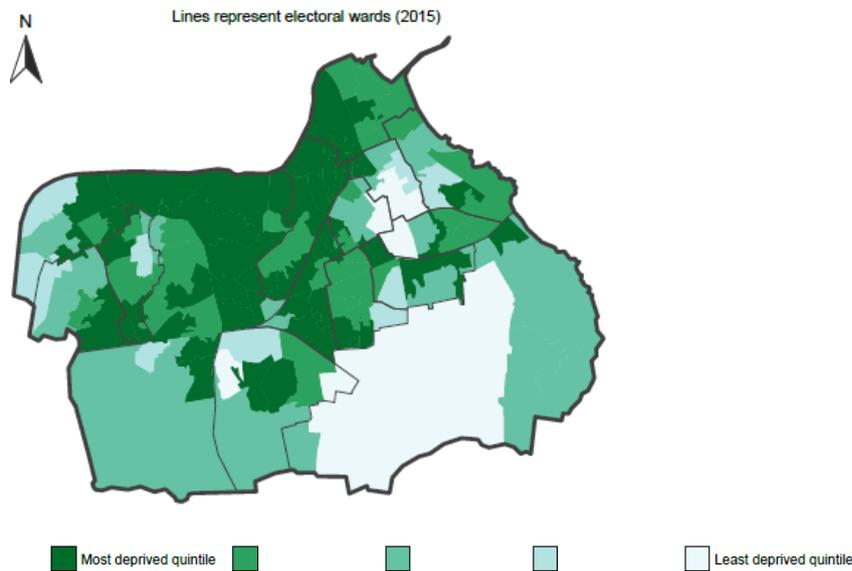
South Tyneside has overall levels of deprivation significantly higher than the England average (currently in the top 20% of Local Authorities with the highest levels of deprivation), see figure 2-3. Life expectancy is lower than the England average with life expectancy between the most and least deprived areas 8.3 years for women and 9.9 years for men. Over half of the life expectancy gap between South Tyneside and

⁵ South Tyneside Joint Strategic Needs and Asset Assessment, 2016

⁶ South Tyneside CCG Annual Report 2015/16

England is due to higher rates of mortality due to circulatory disease (heart disease and stroke) and all cancers⁷.

Figure 2-3: Deprivation levels by ward across South Tyneside, Index of Multiple Deprivation, 2015, Association of Public Health Observatories, 2016



Levels of health and underlying risk factors in South Tyneside are among some of the worst in the country. The 2016 Community Health Profiles prepared by Public Health England compare health in South Tyneside to England averages, highlighting in red those measures which are significantly worse and in green those which are significantly better (see figure 2-4). Levels of smoking, drinking and obesity leading to cancer and heart disease are among the highest causes of death with further challenges relate to an ageing population, prevalence of multiple long term conditions and an increasing over reliance on hospital services which in turn presents additional significant financial challenges⁸.

Figure 2-4: South Tyneside Community Health Profile 2016, Public Health England

⁷ South Tyneside Five Year Strategic Plan 2014/15-2020/21

⁸ South Tyneside Five Year Strategic Plan 2014/15-2020/21

Health summary for South Tyneside

The chart below shows how the health of people in this area compares with the rest of England. This area's result for each indicator is shown as a circle. The average rate for England is shown by the black line, which is always at the centre of the chart. The range of results for all local areas in England is shown as a grey bar. A red circle means that this area is significantly worse than England for that indicator; however, a green circle may still indicate an important public health problem.

- Significantly worse than England average
- Not significantly different from England average
- Significantly better than England average
- Not compared



Domain	Indicator	Period	Local No total count	Local value	Eng value	Eng worst	England Range	Eng best
Our communities	1 Deprivation score (IMD 2015) #	2015	n/a	30.6	21.8	42.0	○	5.0
	2 Children in low income families (under 16s)	2013	6,565	25.9	18.6	34.4	●	5.9
	3 Statutory homelessness†	2014/15	*1	*1	0.9	7.5	○	0.1
	4 GCSEs achieved†	2014/15	900	57.4	57.3	41.5	●	76.4
	5 Violent crime (violence offences)	2014/15	1,422	9.6	13.5	31.7	●	3.4
	6 Long term unemployment	2015	1,180	12.5	4.6	15.7	●	0.5
Children's and young people's health	7 Smoking status at time of delivery	2014/15	403	25.9	11.4	27.2	●	2.1
	8 Breastfeeding initiation	2014/15	821	53.0	74.3	47.2	●	92.9
	9 Obese children (Year 6)	2014/15	340	23.0	19.1	27.8	●	9.2
	10 Alcohol-specific hospital stays (under 18)	2012/13 - 14/15	75	85.0	36.6	104.4	●	10.2
Adults' health and lifestyle	11 Under 18 conceptions	2014	80	30.9	22.8	43.0	●	5.2
	12 Smoking prevalence in adults†	2015	n/a	17.4	16.9	32.3	●	7.5
	13 Percentage of physically active adults	2015	n/a	47.9	57.0	44.8	●	69.8
	14 Excess weight in adults	2012 - 14	n/a	71.9	64.6	74.8	●	46.0
Disease and poor health	15 Cancer diagnosed at early stage #	2014	385	51.3	50.7	36.3	○	67.2
	16 Hospital stays for self-harm	2014/15	292	197.3	191.4	629.9	●	58.9
	17 Hospital stays for alcohol-related harm	2014/15	1,278	859	641	1223	●	374
	18 Recorded diabetes	2014/15	8,954	7.1	6.4	9.2	●	3.3
	19 Incidence of TB	2012 - 14	20	4.5	13.5	100.0	●	0.0
	20 New sexually transmitted infections (STI)	2015	802	837	815	3263	●	191
	21 Hip fractures in people aged 65 and over	2014/15	203	621	571	745	●	361
Life expectancy and causes of death	22 Life expectancy at birth (Male)	2012 - 14	n/a	77.1	79.5	74.7	●	83.3
	23 Life expectancy at birth (Female)	2012 - 14	n/a	81.6	83.2	79.8	●	86.7
	24 Infant mortality†	2012 - 14	13	2.7	4.0	7.2	●	0.6
	25 Killed and seriously injured on roads	2012 - 14	93	20.9	39.3	119.4	●	9.9
	26 Suicide rate†	2012 - 14	39	9.9	10.0			
	27 Deaths from drug misuse #	2012 - 14	28	6.5	3.4			
	28 Smoking related deaths	2012 - 14	1,044	391.3	274.8	458.1	●	152.9
	29 Under 75 mortality rate: cardiovascular	2012 - 14	361	92.2	75.7	135.0	●	39.3
	30 Under 75 mortality rate: cancer	2012 - 14	728	185.9	141.5	195.6	●	102.9
	31 Excess winter deaths	Aug 2011 - Jul 2014	200	12.7	15.6	31.0	●	2.3

Some health needs in relation to the three clinical areas that will be subject to consultation are higher than the England average. The stroke prevalence in South Tyneside is above the national average but consistent with the regional average. Influencing factors are the high prevalence of stroke risk factors, including smoking, obesity, physical activity, and diabetes. The appropriate identification and treatment of atrial fibrillation (AF) also plays a key role in stroke reduction. South Tyneside has seen recent improvements in the percentage of those with AF receiving anti-coagulants and efforts are underway in primary care to screen more patients for signs of AF. The NHS Health Checks screening programme is also delivered in South Tyneside, to identify early signs of poor health related to stroke, heart disease, diabetes and kidney disease among those aged between 40 and 74⁹.

Rates of smoking among women at the point of delivery are twice the national average with 25.9% of women recorded as a smoker at birth¹⁰ which can lead to poor health outcomes for both mother and baby. A significant amount of work is ongoing to reduce smoking during pregnancy, with local stop-smoking services demonstrating better than average quit rates. Given the risk smoking brings to pregnancy and infant and adult health, this is a priority within South Tyneside's Health and Wellbeing Strategy.

The rate of under-18 conceptions in South Tyneside is higher than the English average, but has more than halved over the last 15 years¹¹. Teenage pregnancies are associated with 60% higher rates of infant mortality and are at increased risk of low birthweight which can impact on the child's long-term health. The number of low birth weight babies in South Tyneside is broadly in line with the England average¹² at 7.2%.

South Tyneside has a significantly higher proportion of children in low income families (26%) compared to the national average (19%). This can lead to premature mortality and poor health outcomes for adults however infant and child mortality in South Tyneside is consistent with national averages. There are a high number of children aged 0-14 admitted to hospital for injuries, more A&E attendances for 0-4s

⁹ Cardiovascular disease profile, Public Health England (PHE) accessible at <https://fingertips.phe.org.uk/profile/cardiovascular/data#page/0/gid/1938133110/pat/46/par/E39000027/ati/19/are/E38000163>

¹⁰ Child Health Profile (CHP), (PHE), accessible at <https://fingertips.phe.org.uk/profile-group/child-health/profile/child-health-pregnancy/data#page/1/gid/1938132997/pat/46/par/E39000027/ati/19/are/E38000163>

¹¹ CHP, PHE, accessible via above link

¹² CHP, PHE, accessible via above link

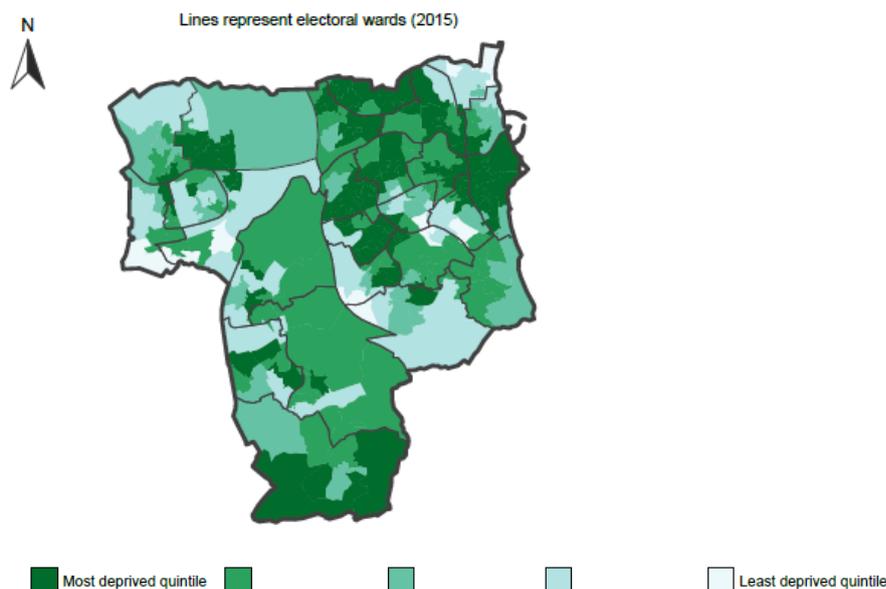
than the England average and significantly higher than average number of under 18 year olds admitted to hospital in South Tyneside for alcohol related conditions¹³.

2.3.2 The Sunderland population and local health needs

Sunderland has a population of around 275,506 spread across 137 square kilometres and five demographically diverse localities: Coalfields, Sunderland North, Sunderland East, Sunderland West and Washington. Population demographics are expected to change over the next 20 years with a population increase of 8,100 (3%) forecast, a significant growth in the number of older people¹⁴ and a population that is becoming more ethnically diverse¹⁵.

Deprivation is higher than the England with many electoral wards among the most deprived nationally as figure 2-5 demonstrates. Life expectancy is lower than the England average with life expectancy between the most and least deprived areas 7.6 years for women and 9.9 years for men. Over 60% of the gap is caused by cancer, respiratory diseases and cardiovascular disease¹⁶

Figure 2-5: Deprivation levels by ward across Sunderland, Index of Multiple Deprivation, 2015, Association of Public Health Observatories, 2016



¹³ Overview of CHP, PHE, accessible via <https://fingertips.phe.org.uk/profile-group/child-health/profile/child-health-overview/data#page/1/gid/1938132992/pat/46/par/E12000001/ati/19/are/E08000023>

¹⁴ Sunderland Health and Care System Strategic Plan 2014-2019

¹⁵ Sunderland Joint Strategic Needs Assessment Summary

¹⁶ Sunderland Health and Care System Strategic Plan 2014-2019.

The 2016 Community Health Profiles prepared by Public Health England compare health in Sunderland to England averages, highlighting in red those measures which are significantly worse and in green those which are significantly better (see figure 2-6). The prevalence of Coronary Heart Disease, Chronic Obstructive Pulmonary Disease, stroke and hypertension is higher than the England average with the four disease areas a major cause of premature death and emergency hospital admissions in the city¹⁷.

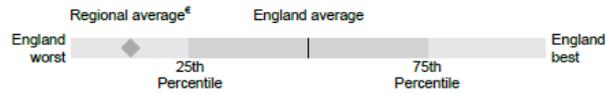
¹⁷ Sunderland Health and Care System Strategic Plan 2014-201

Figure 2-6: Sunderland Health Profile 2016, Public Health England

Health summary for Sunderland

The chart below shows how the health of people in this area compares with the rest of England. This area's result for each indicator is shown as a circle. The average rate for England is shown by the black line, which is always at the centre of the chart. The range of results for all local areas in England is shown as a grey bar. A red circle means that this area is significantly worse than England for that indicator; however, a green circle may still indicate an important public health problem.

- Significantly worse than England average
- Not significantly different from England average
- Significantly better than England average
- Not compared



Domain	Indicator	Period	Local No total count	Local value	Eng value	Eng worst	England Range	Eng best
Our communities	1 Deprivation score (IMD 2015) #	2015	n/a	29.7	21.8	42.0		5.0
	2 Children in low income families (under 16s)	2013	11,525	23.6	18.6	34.4		5.9
	3 Statutory homelessness†	2014/15	105	0.9	0.9	7.5		0.1
	4 GCSEs achieved†	2014/15	1,491	50.6	57.3	41.5		76.4
	5 Violent crime (violence offences)	2014/15	2,556	9.3	13.5	31.7		3.4
	6 Long term unemployment	2015	1,499	8.4	4.6	15.7		0.5
Children's and young people's health	7 Smoking status at time of delivery	2014/15	531	19.4	11.4	27.2		2.1
	8 Breastfeeding initiation	2014/15	1,557	57.5	74.3	47.2		92.9
	9 Obese children (Year 6)	2014/15	651	23.2	19.1	27.8		9.2
	10 Alcohol-specific hospital stays (under 18)	2012/13 - 14/15	152	92.9	36.6	104.4		10.2
Adults' health and lifestyle	11 Under 18 conceptions	2014	163	34.9	22.8	43.0		5.2
	12 Smoking prevalence in adults†	2015	n/a	21.5	16.9	32.3		7.5
	13 Percentage of physically active adults	2015	n/a	50.6	57.0	44.8		69.8
	14 Excess weight in adults	2012 - 14	n/a	70.8	64.6	74.8		46.0
Disease and poor health	15 Cancer diagnosed at early stage #	2014	684	53.4	50.7	36.3		67.2
	16 Hospital stays for self-harm	2014/15	465	168.7	191.4	629.9		58.9
	17 Hospital stays for alcohol-related harm	2014/15	2,401	882	641	1223		374
	18 Recorded diabetes	2014/15	15,324	6.6	6.4	9.2		3.3
	19 Incidence of TB	2012 - 14	64	7.7	13.5	100.0		0.0
	20 New sexually transmitted infections (STI)	2015	1,356	749	815	3263		191
Life expectancy and causes of death	21 Hip fractures in people aged 65 and over	2014/15	341	698	571	745		361
	22 Life expectancy at birth (Male)	2012 - 14	n/a	77.3	79.5	74.7		83.3
	23 Life expectancy at birth (Female)	2012 - 14	n/a	80.8	83.2	79.8		86.7
	24 Infant mortality†	2012 - 14	32	3.6	4.0	7.2		0.6
	25 Killed and seriously injured on roads	2012 - 14	241	29.1	39.3	119.4		9.9
	26 Suicide rate†	2012 - 14	81	11.0	10.0			
	27 Deaths from drug misuse #	2012 - 14	49	6.1	3.4			
	28 Smoking related deaths	2012 - 14	1,829	401.7	274.8	458.1		152.9
	29 Under 75 mortality rate: cardiovascular	2012 - 14	670	92.8	75.7	135.0		39.3
	30 Under 75 mortality rate: cancer	2012 - 14	1,275	175.5	141.5	195.6		102.9
	31 Excess winter deaths	Aug 2011 - Jul 2014	419	15.4	15.6	31.0		2.3

Health needs in relation to the three clinical service areas subject to consultation are greater in Sunderland than the national England average. The prevalence of stroke and TIAs is above average as are stroke risk factors such as atrial fibrillation, coronary heart disease and hypertension,¹⁸ with higher than average mortality from stroke¹⁹.

Birth rates are slightly lower in Sunderland than the national average²⁰ however breastfeeding rates, both 48-hours after birth and at 6-8 weeks are lower than the England average²¹. While infant mortality is lower than the England average²², stillbirths and deaths within 28 days are above average,²³ maternal mortality is slightly higher than the England average²⁴. Low weight births (8.8%) are above the national average of 7.4%, presenting increased health risks, as does the above average rates of smoking among women at the point of birth. There are also higher teenage pregnancy rates in Sunderland²⁵.

A&E attendances for children aged under 5 are over twice the national average in Sunderland with 1,320 attendances per 1,000 under 5s in 2013/14²⁶ with above-average levels of emergency admissions for under 5s²⁷.

2.4 Health services across South Tyneside and Sunderland

Hospital based services across South Tyneside and Sunderland are centred around South Tyneside District Hospital in South Shields, and Sunderland Royal Hospital in Sunderland. Both sites provide a range of acute planned and unplanned medical and surgical services with Sunderland also providing some more specialised services such as vascular surgery, ophthalmology, bariatric surgery, ENT and urology.

¹⁸ 2015/16 data from Commissioning for Value 2016 Long Term Conditions

¹⁹ CVD profile, PHE, accessible via

<https://fingertips.phe.org.uk/profile/cardiovascular/data#page/0/gid/1938133110/pat/46/par/E39000027/ati/19/are/E38000176>

²⁰ 2014 data from NHS Digital Indicator Portal

²¹ 2013/14 data from Commissioning for Value (CfV) 2016 Maternity and Early Years Focus data pack

²² 2011-2013 data from CfV 2016 Maternity and Early Years Focus data pack

²³ 2013 data from CfV 2016 Maternity and Early Years Focus data pack

²⁴ 2012-14 from CfV 2016 Maternity and Early Years Focus data pack

²⁵ CHP, PHE, accessible via

<https://fingertips.phe.org.uk/profile/cardiovascular/data#page/0/gid/1938133110/pat/46/par/E39000027/ati/19/are/E38000176>

²⁶ 2013/14 data from CfV 2016 Maternity and Early Years Focus data pack

²⁷ 2012/13 data from CfV 2016 Maternity and Early Years Focus data pack

Out of hospital health services are delivered through 27 GP practices across South Tyneside with a range of extended access and enhanced services delivered. The borough's 35 community pharmacies also deliver a broader range of services and care beyond traditional dispensing and the supply of medicines through the "Think Pharmacy First" scheme. An integrated urgent care hub is co-located with South Tyneside District Hospital's Emergency Department, providing primary care, urgent care and GP out of hours services. A range of community based services are available in South Tyneside, including recently developed one-stop-shop style diabetes clinics and integrated community health and social care teams which bring together district nurses, community matrons, social workers and occupational therapists, aligned to GP practices.

In Sunderland, out of hospital services are delivered through 51 GP practices, supported by a range of other providers. Urgent care is delivered through four urgent care centres. A range of community based services also exist across Sunderland with an integrated approach in place as part one of a small number of national 'Vanguard' schemes to test new models of care. Services include an enhanced rapid response city-wide Recovery at Home service, which helps to support peoples' recovery after discharge from hospital and prevent emergency admissions through community integrated teams and locality-based community teams that bring together community nurses, social workers, GPs, carer centre workers and Age UK.

Mental health services are delivered across both areas by Northumberland, Tyne and Wear Mental Health and Learning Disabilities NHS Foundation Trust. The Trust runs a range of hospital and community-based mental health and learning disability services with recent community services transformation and third sector mental health service support and provision also in place. Ambulance services across South Tyneside and Sunderland are delivered by the North East Ambulance Service which also provides the NHS 111 single point of access to urgent care service.

Ill-health prevention is also a significant strand of local healthcare with both South Tyneside and Sunderland City councils the local leaders in increasing individual responsibility for health and supporting self-care. In South Tyneside, the 'A Better U' programme is a cornerstone of the prevention strategy to promote health and wellbeing.

3.0 The strategic context for change

The following chapter of this PCBC summarises the general case for acute service change from a strategic, clinical, and financial perspective, with further detail available in the Path to Excellence Issues Document and Path to Excellence Case for Change, both of which encompass the full programme. The specific case for change for stroke, obstetrics and gynaecology and paediatrics are set out in section 6.0.

3.1 Strategic context for proposed changes

This sub-section of the chapter sets out the national, regional and local context for the changes that are being proposed.

3.1.1 National context

3.1.1.1 The Five Year Forward View and formation of the Healthcare Group

As referred to in the introduction of this business case one of the key elements of the 5YFV published in October 2014 was the recognition that to bridge the 'care and quality' and 'funding and efficiency' gaps, the way in which healthcare was traditionally delivered would need to change. The 5YFV talks about a consensus on the direction the NHS will take, moving away from an organisational approach to planning and managing care, to more collaboration across healthcare systems with new models of care and organisational forms emerging from this.

The new models of care 'Vanguards', announced in March and July 2015, are intended to support such change, with a cohort of 'Acute Care Collaboration (ACC) Vanguards' seeking to maintain the viability of local hospitals through new formal shared working arrangements between clinical specialists at different hospitals, and to improve efficiency by sharing back office administration and management between different sites. Whilst not a Vanguard, the South Tyneside and Sunderland Healthcare Group is the response from STFT, CHSFT and the South Tyneside and Sunderland Clinical Commissioning Groups in trying to realise the benefits of this type of collaboration.

The aim of the South Tyneside and Sunderland Healthcare Group is to create a more formal mechanism for both STFT and CHSFT to work with each other and their partner organisations to implement strategies to deliver quality care across their respective populations so that key quality standards can be achieved, which will ultimately allow workforce and financial stability for both Trusts. As part of the Healthcare Group, both Trusts recognise the importance and value of having a local hospital providing a range of services, but they equally recognise the urgent need to rebalance services across South Tyneside and Sunderland as it is no longer safe or sustainable for either organisation to duplicate the provision of services in each location. The vision and aims of the healthcare group is described in the supporting

Path to Excellence Case for Change and a high-level vision for achieving sustainable service provision across both acute sites is set out in figure 3-1 below.

Figure 3-1. High level Blueprint for the South Tyneside and Sunderland Healthcare Group.



3.1.1.2 National strategy and clinical standards

The NHS Five Year Forward View reflected or introduced a range of national policy intended to deliver improvements across the three gaps of health and wellbeing, care and quality and funding and efficiency gap. These national strategic expectations relating to stroke, urgent and emergency care and maternity services are also reinforced in the Next Steps on the NHS Five Year Forward View, published in March, 2017²⁸.

National expectations for Urgent and Emergency Care Reform were set out in NHS England's Urgent and Emergency Care Review which mandated the delivery of reform to ensure that those people with urgent care needs could receive this as close to home as possible and those with more serious or life threatening emergency

²⁸ Next Steps on the NHS Five Year Forward View, March, 2017, available at <https://www.england.nhs.uk/publication/next-steps-on-the-nhs-five-year-forward-view/>

care needs could be treated in centres with the very best expertise and facilities in order to maximise the chances of survival and a good recovery²⁹.

The 2016 national Maternity Review culminated in the publication of a Five Year Forward View for Maternity Services 'Better Births'. This outlined expectations of improved clinical outcomes through greater personalised and continuity of care and safer care through improved transitions across all elements of maternity care, including perinatal mental health, and greater collaboration through community hub service models and providers and commissioners working together in local maternity systems covering populations of between 500,000-1,500,000³⁰.

Stroke services are one of the clinical specialities used to underpin a national recommendation for greater care consolidation³¹ with an expectation that stroke services will be clinically more effective if admitting between 600-1500 patients each year³².

Improved seven-day service delivery is a core national requirement across a range of services, including general practice, urgent care and acute hospital care with the latter underpinned by evidence that timely access to consultant review reduced avoidable deaths and harm. There is an expectation that 100% of the population will have access to the same level of consultant assessment and review, diagnostic tests and consultant-led interventions every day of the week by 2020. At least 50% of the population is expected to have access to the four prioritised clinical standards³³ by April, 2018.

The 'Next Steps on the Five Year Forward View' document also advocates the use of the national Right Care programme to ensure optimal use of anticoagulation treatment for patients with Atrial Fibrillation to prevent strokes as well as beginning the roll out of new treatments, including mechanical thrombectomy treatment for stroke.

²⁹ Transforming Urgent and Emergency Care Services in England: Urgent and Emergency Care Review, End of Phase 1 Report, November 2013, available at <http://www.nhs.uk/NHSEngland/keogh-review/Pages/published-reports.aspx>

³⁰ Better Births: Improving Outcomes for Maternity Services in England, 2016, available at <https://www.england.nhs.uk/mat-transformation/mat-review/>

³¹ NHS Five Year Forward View, October, 2014, available at <https://www.england.nhs.uk/publication/nhs-five-year-forward-view/>

³² 7 Day Services Clinical Guidance, Stroke, NHS England, available at <https://www.england.nhs.uk/publication/nhs-five-year-forward-view/>

³³ Next Steps on the NHS Five Year Forward View, March, 2017, available at <https://www.england.nhs.uk/publication/next-steps-on-the-nhs-five-year-forward-view/>

3.1.1.3 National Planning Guidance

Planning guidance for 2016/17-2020/21³⁴, moved the NHS to a more place-based rather than organisational approach to planning. This included the requirement to develop a 5-year Sustainability and Transformation Plan (STP) across a wide regional footprint by July 2016. Attached to the planning process is the £1.8bn Sustainability and Transformation Fund (STF) which is contingent on NHS Trusts:

- Improving the overall organisational financial position,
- Improving performance against access targets,
- Making significant progress on transformation by helping develop and agreeing the wider sustainability and transformation plan.

For both STFT and CHSFT access to their allocations of the STF is a vital part of their respective financial plans for 2016/17, which in turn makes collaboration and transformation a significant priority in the short, medium and longer term. The following section describes how the PtEP integrates into the local STP.

3.1.1.4 Workforce sustainability

Pressures across the workforce are being experienced by NHS organisations nationwide whether that is in relation to the shortage of qualified nurses, attracting and retaining consultants in certain specialities, gaps in rotas for doctors in training or the introduction of the agency cap. The restriction on overseas recruitment provides further pressure as this has often been used in the past as a way of covering gaps.

Recruitment to small teams (such as those in STFT) can often be a problem, for example consultants will often want to work in a large team, which offers them a number of opportunities to experience the wide-ranging aspects of their chosen discipline as well as extend their opportunities to participate in research activity and educational roles. Small teams can often mean onerous and unsustainable on-call rotas that are unattractive to the employee, for example in a small unit a consultant may have to be on-call 1 week in every 4 or 5, whereas in a larger unit this is more likely to be 1 week in 6-8 or even less, impacting on a healthy work-life balance and impeding recruitment.

There are an ever-growing number of publications from Royal Colleges, the Department of Health and other bodies in relation to minimum population size that a clinical speciality is recommended to cover and provide for. This type of guidance is designed to maintain patient safety and to ensure that when a doctor is treating a patient he or she has enough experience to treat complex conditions. Research

34. Delivering the Forward View, NHS planning guidance 2016/17-2020/21, December 2015. Available at: <https://www.england.nhs.uk/wp-content/uploads/2015/12/planning-guid-16-17-20-21.pdf> [Accessed 17 March 2017].

shows that something is more likely to go wrong when a patient is treated in a unit where the doctors are not seeing sufficient volumes of certain types of conditions.

With all of this in mind the benefits of STFT and CHSFT working more closely together will support our ability to respond to these challenges to ensure quality care is provided to our patients through efficient and effective deployment of staff who are sufficient in number as well as appropriately skilled and trained. Through effective workforce planning there is an opportunity to have a combined focus and consistent and supportive approach to recruitment and retention of staff, skill mix and role review resulting in a reduced need for agency staff.

3.1.1.5 Financial sustainability

The financial position that the NHS faces today is arguably the most challenging it has ever encountered. NHS Trusts posted a combined financial deficit of £822 million for 2014/15, for the 2016/17 this is expected to be even greater with collectively the NHS in England being circa £2.8 billion in deficit at the end of the financial year. Simple year-on-year cost cutting will not achieve the required savings and may lead to patient safety issues if both Trusts continue to try and provide all the services they currently offer on their own. This is clearly unsustainable and proves a significant risk to the delivery of healthcare across South Tyneside and Sunderland if nothing is changed. It is envisaged that through the Path to Excellence programme and through the CSRs that opportunities will arise to improve the financial efficiency in delivering these services

3.1.2 Regional context

The STP for Northumberland, Tyne & Wear and North Durham (NTWND) builds on a long history of partnership working and through that collaboration the results have been positive and greater than any individual organisation could have achieved alone. As a footprint, NHS and Local Authority organisations in Northumberland Tyne and Wear and North Durham (NTWND) have come together to work in collaboration on closing the three 'gaps' described previously.

Figure 3-2. Understanding the 3 gaps across the NTWND STP footprint.



The NTWD STP is built upon established programmes of work within each of the Local Health Economies that make up the STP foot print as well as additional new proposals for transformation over the next 5 years with common priorities being delivered at an STP level.

Whilst the start of the PtEP predates the Sustainability and Transformation Plan (STP) for Northumberland, Tyne and Wear and North Durham (NTWD), it is contained in the plan with particular with reference to the 'Optimal Use of the Acute Sector' work stream. The paragraph below is taken from the NTWWD STP submission in October 2016:

“Our work to date has been to understand existing hospital work programmes in each of our LHEs and explore opportunities for STP-wide alignment across care pathways, services lines, back office sharing, pathology to improve the quality and experience of care and maintain sustainability within a future hospital system. The collaboration between City Hospitals Sunderland and South Tyneside FT exemplifies the opportunities for cooperation across other LHE.”³⁵

3.1.3 Local context - out of hospital care models

While the service change proposals outlined in this business case are focused on the acute elements of the respective patient pathways, there is a significant amount of work underway or planned by the CCGs in both preventing hospital admission and supporting patients in their recovery from acute episodes of care. These include the Sunderland All Together Better Vanguard project which has brought health and

35 NHS England. 2016. *Sustainability and Transformation Plans*. [ONLINE] Available at: <https://www.england.nhs.uk/ourwork/futurenhs/deliver-forward-view/stp/>. [Accessed 30 January 2017].

social care professionals together to provide a Recovery at Home service to provide short-term urgent care to people at home, the development of integrated community teams and enhanced primary care to support those with the poorest health. Elements of the service are now being replicated in South Tyneside where a Better Outcomes programme is already underway to deliver health improvements for local communities.

4.0 Patient, public, carer and wider stakeholder engagement

The following chapter of the business case sets out the approach, importance, governance and stakeholder management activities as part of the engagement work to date on the Path to Excellence programme. It also outlines some headline messages from the insight work to date.

4.1 Setting a communications and engagement strategy - why is it important?

Any reconfiguration of services requires a robust and comprehensive public engagement and consultation process in order ensure plans are well informed, that public and stakeholders are aware of the issues and how they may be solved, and the risks of challenge and risk to the reputation of the NHS organisations is minimised.

NHS organisations are required to ensure that local people, stakeholder and partners are informed, involved and have an opportunity to influence any changes. The process for involving people requires a clear strategy, action plan and audit trail, including evidence of how the public and key stakeholders have influenced decisions at every stage of the process and the engagement mechanisms used.

Following best practice in engagement and consultation will minimise risk of public and stakeholder opposition, minimise risk of referral to the Secretary of State, legal challenge and judicial review. In particular, the communications and engagement strategy takes account of NHS legal duties and requirements contained in:

- NHS Act 2006 (As Amended by Health and Social Care Act 2012)
- S.244 NHS Act 2006 (as amended)
- S.149 Equality Act 2010
- S.3a NHS Constitution
- S.82 NHS Act 2006 - Co-operation between NHS bodies and local authorities
- Human Rights Act 1998
- The Gunning Principle
- “The Four Tests” – NHS Mandate 2013-15 (carried forward through NHS Mandate 2015-16)
- Planning, Assuring and Delivering Service Change for Patients – NHS England Guidance
- Transforming Participation in Health and Care – NHS England Guidance
- Empowering communities – six principles for new models of care

All four NHS organisations in the NHS South Tyneside and Sunderland Partnership are fully supportive of ensuring best practice communications and engagement.

The public engagement and communications strategy is informed by the appropriate strategic advice and expertise in consultation, engagement and communications, underpinned by relevant operational plans and resources alongside robust programme and project management discipline. In order to ensure capability and capacity, the partnership has commissioned NHS North of England Commissioning Support³⁶ to provide the expertise to deliver programmes of communications and engagement around significant service change. The commissioning support unit has a proven track record of successful delivery of reconfiguration of NHS services, free from challenge.

The overarching communications and engagement strategy which sets the legal, policy and best practice context in which the programme will operate, is included as appendix 4.1.

4.2 Governance arrangements to deliver the communications and engagement strategy

The main activity of operational delivery of the communications and engagement strategy has been developed by a Communications and Engagement Task and Finish group and the membership includes communication, engagement and patient experience professionals from all health and care organisations across the two areas. Chaired by the senior communications and engagement manager, it has strategic input from the Healthcare Group programme manager and CCG commissioning managers as well as the two Healthwatch organisations, which retain their independent status.

The scope of the group is defined in the terms of reference for the group at appendix 4.2.

4.2.1 External quality assurance of the consultation process

To ensure the engagement and consultation processes are in line with best practice, the programme has asked the Consultation Institute³⁷ to conduct a quality assurance assessment on the process being followed. The NHS partners value the positive challenge of such a well-respected body and recognise that external assurance can make a difference to its response profile and credibility.

Each assessment takes account of the specific circumstances of the exercise, and includes a rigorous examination of pre-consultation activity to ensure that all the legal, policy and best practice work have been observed.

³⁶ <http://www.necsu.nhs.uk/services/communications/patient-and-public-involvement>

³⁷ <https://www.consultationinstitute.org/>

4.3 Establishing a case for change with all stakeholders

A key part of the pre-engagement phase is to set out a case for change, and this has been done via the publication of an issues document which has been shared widely across South Tyneside and Sunderland. The document was shared in draft with the Joint Health Overview and Scrutiny Committee (JHOSC) prior to publication and allowed elected members to feedback their comments. The purpose of the document is to set out the big challenges for the NHS in South Tyneside and Sunderland and it describes how the NHS is at the start of a new journey for the local NHS 'Path to Excellence', It explains some of the problems that must be solved very soon in order to secure safe and sustainable NHS services in the future. A copy of the Path to Excellence issues document can be found in supporting documentation.

Between November 2016 and January 2017, NHS leaders attended 21 meetings across Sunderland and South Tyneside to raise awareness of these issues and the PtE programme, together with obtaining feedback to inform the clinical services review programme. These ranged from council community area forums, voluntary and community sector networks, people's boards, councils of GP practices and ward committees. Over 500 people were directly engaged during this process, many of who were elected members, members of the community and voluntary sector and health professionals.

Proactive communications around the issues document also took place including media release, stakeholder communications, a new website and establishment of social media accounts.

- Website www.pathtoexcellence.org.uk
- Facebook <https://www.facebook.com/nhsexcellence/>
- Twitter <https://twitter.com/NHSexcellence>

The analytics available demonstrate that the social media and web site continues to grow and this will play an important role in the consultation phase.

The issues document also supported staff communications and engagement activity.

4.3.1 Establishment of Joint Health Overview and Scrutiny arrangements

In line with the regulations set out in section 30 of the 2013 legislation, the NHS organisations requested that a joint health overview and scrutiny was established for the two areas which was subsequently formed. This is to support the NHS bodies to meet their statutory duties under s244 of the consolidated NHS Act 2006, which requires NHS organisations to consult relevant Local Authority Health Overview and Scrutiny Committees (HOSC) on any proposals for a substantial development of the health service in the area of the Local Authority, or a substantial variation in the provision of services. The Joint OSC Terms of Reference are at Appendix 4.3.

The primary aim of health scrutiny is to strengthen the voice of local people, ensuring that their needs and experiences are considered as an integral part of the commissioning and delivery of health services and that those services are effective and safe. Effective health scrutiny requires clarity at a local level about respective roles between the health scrutiny function, the NHS, the local authority, health and wellbeing boards and local Healthwatch.

The NHS partners have taken a proactive and transparent approach to reporting the programme's work to the JHOSC and have attended dedicated sessions with elected members on:

- 18th September 2016
- 8th November 2016
- 30th January 2017
- 7th March 2017

Further meetings are being arranged to ensure the opportunity to present the options for change formally to the committee during the consultation period as well as the draft public feedback in the post consultation phase. The JHOSC has indicated that it will provide a formal response to the consultation before the end of the consultation period.

The NHS partners also arranged for elected members to have a specific dedicated workshop about the NHS duties to engage and consult from the Consultation Institute. The feedback from the scrutiny officers was that this was very well received and has resulted in elected members being focused on specific issues around the NHS meeting legal duties to engage and consult and asking pertinent questions around these key areas.

4.3.2 Engagement with Members of Parliament and the local media

The constituent NHS organisations engage with local Members of Parliament (MPs) on a regular basis as part of their on-going stakeholder relationships. MPs have been briefed and have received information about the Path to Excellence programme, and specific meetings have taken place at individual MP requests.

South Tyneside and Sunderland are well served by local newspapers and broadcast media. Briefings with editors and journalists have taken place over several months, and there are professional working relationships in place in order to ensure journalists have access to accurate and timely information on the issues.

4.3.3 Engagement with campaign groups

It is to be expected given the high level of public interest across the country regarding NHS policy at national level, that local campaign groups have emerged and been established. In the main locally a group called "Save South Tyneside Hospital" has been established and it is a coalition of different political and interest

groups co-ordinated via the Public Services Alliance which is the campaign branch of the trade union UNISON.

Efforts have been made by the NHS to open up dialogue with the campaign leaders, responding to requests for information, letters etc; and campaign leaders have met with the hospital Trust's chief executive on a number of occasions with further meetings anticipated.

4.3.4 Staff engagement

The importance of keeping staff informed across both South Tyneside and Sunderland NHS Foundation Trusts has not been underestimated and staff communication and engagement forms an important part of the Communications and Engagement Strategy. Existing mechanisms for engagement and communication have been used in both Trusts, including email updates, however these have been supplemented with the circulation of a regular staff bulletin designed specifically to keep staff informed regarding progress with the PtEP. Dedicated pages have been set up on both staff intranets, including a 'frequently asked questions' section which is populated using questions raised by staff. The leadership team in the Trusts have also utilised existing forums to keep managers updated, however, in January and February, a total of 16 face to face briefing sessions were held for all staff in order to reinforce some of the messages which had previously been published. These were well attended and staff were updated by a member of the Executive Team and given the opportunity to ask questions or seek clarification.

The clinical commissioning groups have held CCG staff and GP engagement events such as time in, time outs and council of practices and have specifically discussed the PtEP. Further sessions are anticipated, including dedicated sessions for clinical leaders from secondary and primary care to review options. NHS leaders also continue to meet with the Local Medical Committee as part of the on-going engagement with the medical trade unions.

It is planned that enhanced staff and clinical engagement will run in parallel with the public engagement programme during the formal consultation programme.

4.3.5 Service user and carer engagement

The Path to Excellence communication and engagement task and finish group has overseen the gathering of patient, service user and carer engagement across the phase 1a areas of care to inform the option development process.

Engagement techniques and interaction rates are detailed below. It is important to note the level of digital engagement through facebook, and this reflects the shift in society towards the use of on-line as a means to give views easily.

Feedback headlines and its impact on option development are outlined in section 4.4 below with a more detailed summary at appendix 4.5. The full insight report is available within supporting documentation.

Stroke engagement activity detailed analysis

Campaign	Survey returns	Facebook promotion results – Link clicks	Facebook promotion - Reach	Face to face interviews
NHS Path to Excellence Stroke Carer	18	857	60,564	11
NHS Path to Excellence Stroke Survivor Postal survey to 542 acute patients	227	544	34,486	33

Maternity engagement activity detailed analysis

Campaign	Survey returns	Post engagement results (Facebook)	Facebook – Reach	Face to Face interviews
NHS Path to Excellence Experiences of maternity	805	1400	33, 824	36
NHS Path to Excellence Planning to have a baby	202	282	9, 298	N/A

Gynaecology engagement activity detailed analysis

Campaign	Survey returns	Post engagements results (Facebook)	Facebook – reach	Face to face interviews
Path to Excellence Experiences of Gynaecology Care	137	1014	48764	18

Paediatrics engagement activity detailed analysis

Campaign	Survey returns	Post engagements results (Facebook)	Facebook – reach	Face to face interviews
Path to Excellence	53	1073	26823	N/A

Children's Health Care (paediatrics)				
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4.4 What our engagement has told us

A longer summary of the patient engagement and experience is included as appendix 4.4. A full report is available on the path to excellence website <https://pathtoexcellence.org.uk/wp-content/uploads/2017/05/A-review-of-patient-insight-South-Tyneside-and-Sunderland-Version-4.pdf>

Stroke

Admission to hospital

Three quarters of survey respondents perceived that they were admitted to hospital as soon as they through necessary – with a greater proportion of those who received treatment at Sunderland indicating that they were admitted at the right time compared to those in south Tyneside (81% & 66%).

Most inpatients who took part in the interviews perceived that it was very important that they received their care in a specialist unit. This was felt to ensure that they were treated by specialist staff who understood their needs.

The majority of inpatients and carers indicated that they, or the patient that they cared for, received diagnostic tests and/or initial interventions either straight away or within a few hours of admission to hospital. Of the inpatients that could recall this information, all were seen by a stroke consultant either on the same day (12 respondents) or the day after their stroke (10 respondents).

The majority of people stayed on a stoke ward for most of their say (83%)

Health professionals in hospital

Nearly two thirds of survey respondents stated that they were always able to get answers from doctors that they could understand (60%), whilst a similar proportion were able to get answers from the nursing staff (57%). Equivalent proportions stated that they had full confidence and trust in the doctors and nursing staff who cared for them (83% & 82% respectively).

Nearly a third of survey respondents indicated that the hospital doctors often or sometimes talked in front of them, as if they weren't there (10% & 20% respectively). Nursing staff were felt to do this less frequently (9% indicated that nurse often talked in front of them & 18% some of the time).

Survey respondents were given the opportunity to elaborate further on the treatment they received, many commented upon the excellent standard of care (12%), particularly the kindness and professionalism of the staff (20%). A further 7% specifically mentioned hospital staff (doctors, consultants and nurses) in response to what they believed was particularly good about their stroke care and also the services delivered by the physiotherapy team, occupational therapists and the community stroke team (4%, 3% and 2% respectively).

Care and treatment in hospital

Over half of survey respondents felt involved in decisions about their care and treatment (57%), with a further 33% perceiving that they were to some extent.

The majority of carers who took part in face-to-face interviews stated that they also felt listened to and involved in the patient's care, in addition to perceiving that the staff offered support and advice to them as well as the patient.

Most survey respondents indicated that they could understand all or most of the information they were given in hospital (61%), with a further 26% stating that they could understand some of it.

The vast majority of inpatients who took part in the interviews, indicated that they were provided with the right type and amount of care in hospital. The most important aspect of their care was perceived to be helping them get back to normal i.e. being able to walk, talk, drink and eat. The majority felt that with the help of the nursing staff they were able to achieve what they wanted.

Leaving hospital

Over half of survey respondents indicated that they received an explanation about their medication that they could understand (53%), whilst 69% perceived that they received enough information about how to take their medication while they were in hospital.

Following discharge from hospital

The majority of survey respondents rated the care they received as excellent or very good (47% & 29% respectively). Furthermore, the vast majority of those who participated in the interviews highly rated the care and treatment that they or the individual they cared for received.

Two thirds of survey respondents stated that they had mobility problems after leaving hospital (67%). Of these, 61% indicated that they got enough treatment to help them improve their mobility.

Satisfaction with service

When survey respondents were given the opportunity to elaborate further on the care and treatment they received, many commented upon the aftercare as being particularly good in relation to their overall care.

A high level of satisfaction was also observed among the outpatients sampled, with all stating that they were happy or very happy with the follow-up support and appointments they received. The majority felt that the support they had received had been tailored to their needs, and that this was important in aiding their recovery and rehabilitation. Only one individual felt they hadn't received enough support and felt let down by the service.

Suggestions made to improve the service included greater support for patients, improved communication to ensure patients receive better explanations of their conditions and course of treatment, improved aftercare and improve facilities (e.g. beds being made more often, quieter wards, better standard of food).

Structure of services

Individuals who took part in the interviews had the opportunity to comment on the structure of services. 16 respondents stated a preference for keeping services localised, whilst 14 respondents preferred a model of having all stroke services centralised in one location.

Despite these findings, the majority of inpatients and carers who took part in the interviews stated that they would not be happy or would face issues if they or the patient that they cared for were transferred to another hospital for their stroke care. This was mainly due to the perceived difficulty that carers and family members would have in travelling to the hospital and the patient being further from home. These concerns were also raised among some survey respondents.

Maternity services

For those who are planning to have a baby in the next two years, being able to have a choice about where they can give birth was perceived to be important (42% felt that it was extremely important and 33% very important). The most important factor in deciding where to give birth was having consultant and midwife care in the same location, closely followed by the proximity of the service to where they live.

The importance of having access to a local service was also evident during the facilitated interviews who indicated that the primary reason that they chose the hospital was the proximity of the service to where they live, and the convenience for them, their partners and family in accessing the service.

Labour and delivery

For those survey respondents who had given birth in the last two years, high numbers of respondents said:

- They were always spoken to in a way that they could understand during their labour and birth.
- They were always involved in decisions about their care.
- They were always treated with dignity and respect.
- Had complete confidence and trust in the staff who cared for them.
- Indicated that their birthing partner was involved in their care as much as they wanted to be.

Postnatal care

Approximately two thirds of survey respondents indicated that their partner was able to stay with them as much as they liked in hospital (63%). However, 23% stated that their partner was restricted to visiting hours, 8% that there was no accommodation for them to stay and 4% that they were not able to stay for another reason. A notably larger proportion of those who had given birth at Sunderland Royal Hospital indicated that their partner (or someone else close) had stayed with them in hospital, compared to those who had given birth at South Tyneside District Hospital (72% & 51%, respectively).

Satisfaction with service

All survey respondents who had given birth in the last two years or were expecting a baby, were asked if there was anything particularly good about the care they received, or are currently receiving. The most respondents highly commended the staff (18%), many describing them as 'amazing', 'brilliant' and 'fantastic'. Many respondents made references to specific individuals and the exemplary care they had received from them.

Suggestions to improve the service delivered included; improved attitude of health professionals / retraining of health professionals to be less rude, improved postnatal care, better facilities for partners to stay in the hospital (particularly raised by those who had given birth in South Tyneside where this was identified as an issue), consistency of midwife throughout the maternity pathway and improved staffing on wards and in antenatal clinics.

Structure of services

Those who had given birth in the last two years were asked if there would have been any issues if they had to deliver their baby in another hospital. The main concern raised by these respondents was the distance they would have had to travel, as well as the transport issues they would have faced (13% of respondents).

In the facilitated interviews, it was found that although most had a preference to receive all their maternity care at their local hospital, due to the proximity and the familiarity they have with the service, the majority weren't too concerned if they had to receive aspects of their care at another hospital. Those that did express concerns, were concerned how they would travel to the hospital with others stating that they would like an explanation as to why it was necessary for them to travel. Just one individual had experience of being transferred between different hospitals during her last pregnancy, this individual had found the experience very unsettling.

Paediatric services

Less than half (44%) respondents felt they waited about the right amount of time between arriving at hospital and their child being assessed, with a further 21% stating that they didn't have to wait too long and 25% indicating that their wait was too long.

Overall, parents whose children received their care at South Tyneside District Hospital were much more satisfied with the length of time they had to wait, compared to those whose children received their care at Sunderland Royal Hospital.

Care and treatment

79% felt that their child was always treated with kindness and compassion by the staff who cared for them and 83% that they were always given enough privacy when their child was being examined, treated, or their care discussed.

Furthermore, 75% stated that they were involved as much as they wanted to be in decisions relating to their child's care and treatment, while 83% had full trust and confidence in the staff who treated their child.

The majority felt that their child got the care they required when they needed it the most (81%), with a further 15% indicating that they did to some extent.

88% of parents had concerns about the care and treatment of their child during their stay and wanted to talk to a member of staff about this. Of these respondents, 80% felt that this was very easy/easy to do.

Facilities

All parents that needed to stay overnight with their child were able to. 76% of parents who did stay were also offered facilities to use

Aftercare and discharge

54% of respondents stated that their child was prescribed new medication during their stay in hospital, of which the majority (79%) stated that they were given enough information about what the medication was and how their child should take it.

87% of parents were provided with information about their child's further care and treatment upon discharge. Of these, 89% felt that the information they were supplied was sufficient, whilst 11% felt that it wasn't.

Satisfaction with service

When parents were given the opportunity to comment upon the care that their child received, they mostly described the attitude of health professionals using words such as 'reassuring', 'polite', 'friendly', 'happy' and 'wonderful'.

Parents perceived that receiving high quality, safe care from specialists and seeing the correct specialist who can deal with your child's illness was more important than having an emergency paediatric unit close to home (76%, 80% compared to 52% respectively).

Some of the suggestions made by survey respondents to enhance the service delivered included; more competent and knowledgeable triage staff / improved training for support staff, shorter waiting times, improved food options for vegetarians and those with food allergies / intolerances, refreshments for parents who are unable to leave their child and new, modern beds for parents to stay in hospital.

Gynaecology services

Admission to hospital

All those who participated in the facilitated interviews, indicated that they had automatically been referred to their local hospital for their care and treatment.

The length of time interview respondents had to wait to be referred to the service varied significantly, with some waiting a few days or perceiving their wait as 'very quick', while others had to wait three to four weeks, and another three months. Furthermore, a handful of interview respondents had experienced delays whilst waiting in clinic for their appointment.

Care and treatment in hospital

76% of survey respondents were required to have an operation, of these 43% indicated that they waited the right amount of time between the decision being made that an operation was required and being operated on, with a further 30% stating that they didn't have to wait very long. However, 15% perceived that their wait was too long. Furthermore, 34% stated that they would have been willing to attend another hospital if it meant having their procedure sooner, while 38% would have preferred to have waited and have their procedure carried out at their local hospital.

Similarly, there was a mixed consensus among interview respondents as to whether they would be happy to receive aspects of their care and treatment at another hospital. Concerns related to how respondents would travel to the other hospital.

Satisfaction with service

Suggestions made by survey respondents to enhance the service included reduced waiting times for referrals to the service, as well as on-the-day waiting times for appointments and procedures, improved postoperative care and improved patient-practitioner communication.

Survey respondents perceived that high quality, safe care from specialists and seeing the correct specialist who can deal with your illness were more important than having an emergency gynaecology unit close to home (85% & 77%, compared to 42%).

5.0 The process of developing change proposals

This chapter of the business case explains the programme management arrangements and how the potential reconfiguration solutions have been developed, evaluated and assured.

5.1 Programme management arrangements

5.1.1 Programme structure

The PtEP is jointly led by the two Provider Trusts and two Clinical Commissioning Groups in looking at the optimal use of acute hospital services across South Tyneside and Sunderland. The CSRs as part of the PtEP brings together clinical and managerial leaders from across South Tyneside and Sunderland to:

- Re-design acute care that the Healthcare Group provides;
- Ensure or improve quality;
- Make it sustainable for the long-term;
- Be informed by expert clinical advice; and,
- Review proactive and meaningful patient and public engagement.

The programme is responsible for developing, assuring and presenting these proposals on behalf of the CCGs and the Healthcare Group, working through an agreed governance structure prior to any proposal being endorsed for public consultation and entering the Phase 2 Assurance Checkpoint part of the NHS England Assurance process round service change.

The diagram below shows the current plan in terms of how the programme is structured in relation to the phases of CSRs.

Figure 5-1: The phases of CSRs as part of the PtEP.

Phase 1	Phase 2	Phase 3
Stroke	Anaesthetics & Theatres	Emergency Care
Obstetrics & Gynaecology	Cardiology	Critical Care
Paediatrics	Gastroenterology	Acute Medicine
Trauma & Orthopaedics	Respiratory	Therapy Services
General Surgery	Diabetes	Diagnostics
	Care of the Elderly	Pharmacy
	Specialist Rehabilitation	
Increasing delivery of elective work at STFT		

Given the significant workforce pressures in stroke, obstetrics & gynaecology and paediatrics it has been agreed that these services should go to public consultation at the earliest opportunity and hence this PCBC has been produced to describe the potential changes across these services as phase '1a'.

It should be noted that conversations between the CCGs, Foundation Trusts, NHS Improvement and NHS England continue about consulting on the rest of the services only once when all the CSRs are completed, as opposed to a number of consultations as was originally planned when the programme was initially designed.

5.2.2 Clinical design process

The clinical design process has been clinically led with service clinical directors leading inclusive, multi-professional teams. Teams have drawn upon a range of data to review current and benchmark performance, to assess national clinical guidance and research evidence as well as considering patient insight feedback and learning from other organisations.

Consistent hurdle and evaluation criteria has been applied throughout, with critical clinical and non-clinical challenge applied through the Clinical Services Review Group as well as FT and CCG leadership bodies. More detail can be found in the clinical design process at appendix 5.1

5.2.3 Five reconfiguration tests

Any plans for significant service change must satisfy what are now five reconfiguration tests. Four of these are detailed in the Government's annual mandate to NHS England and embodied in NHS England guidance 'Planning, assuring and delivering service change for patients'³⁸.

The four tests are:

- Strong public and patient engagement
- Consistency with current and prospective need for patient choice
- Clear, clinical evidence base
- Support for proposals from commissioners.

In March, 2017, NHS England's Chief Executive Simon Stevens announced a fifth test, to bring further assurance to the service change proposals where significant bed closures are involved. The test is reflected in the Next Steps on the NHS Five Year Forward View and will form part of NHS England's routine assurance checks from 1 April 2017. Any service change proposals that will result in 'significant hospital

³⁸ Planning, assuring and delivering service change for patients, NHS England, 2015

bed closures' will have to satisfy one of the following three conditions in order for NHS England support for the proposals to:

- demonstrate that sufficient alternative provision, such as increased GP or community services, is being put in place alongside or ahead of bed closures, and that the new workforce will be there to deliver it; and/or
- show that specific new treatments or therapies, such as new anti-coagulation drugs used to treat strokes, will reduce specific categories of admissions; or
- where a hospital has been using beds less efficiently than the national average, that it has a credible plan to improve performance without affecting patient care (for example in line with the Getting it Right First Time programme)³⁹.

The PtE programme has undertaken a self-assessment against these tests (see appendix 5.2) which demonstrates compliance.

5.2.4 Internal and external assurance

The programme has taken clear steps to ensure robust internal and external clinical and non-clinical assurance arrangements are in place to ensure optimum options-development, in line with national best practice and compatible with local service arrangements. Methodologies include multi-disciplinary internal clinical involvement at all levels, planned reviews from the Consultation Institute and obtaining independent, external clinical feedback. Assurance arrangements are described in more detail in appendix 5.3.

A pivotal part of assuring the clinical and financial sustainability of the proposals is a pre-consultation assurance check by NHS England which concluded in April, 2017. Working in partnership with NHS Improvement and Health Education England, NHS England confirmed a 'partially assured' position for the proposals, in keeping with most service change schemes at this stage. The assurance position came with recognition of the need for change and full support for the proposals to progress to public consultation, with the proviso that some further actions would be taken to further strengthen the change proposals prior to any final decisions being made. The outcome of NHS England's assurance review can be found within the supporting documentation.

³⁹ Next Steps on the NHS Five Year Forward View, NHS England, 2017

6.0 Summary of proposed changes

The following chapter of this business case outlines a summary of the potential reconfiguration of acute services across South Tyneside and Sunderland for the following services:

- Stroke,
- Obstetrics and Gynaecology,
- Paediatrics.

6.1 Proposed future service options – Stroke

6.1.1 Current stroke service arrangements

The following sub-section sets out the service arrangements in relation to stroke for both CHSFT and STFT. Please note this section describes what was available at STFT prior to the temporary move of the acute stroke service to SRH.

6.1.1.1 City Hospitals Sunderland NHS Foundation Trust

The clinical team at the Sunderland Royal Hospital (SRH) provides the acute inpatient stroke care within City Hospitals Sunderland (CHSFT), this includes:

- Inpatient care is based on a 39 bedded Acute Stroke Unit (Ward E58), with a daytime (0800-1800) thrombolysis service provided by the stroke consultant team.
- Access to dedicated stroke rehabilitation beds on Hume Ward (F61) at SRH.
- Stroke Nurse Practitioners also work across 7 days in reaching to A&E but currently don't work after 20.00.
- Daily High Risk TIA Clinics are undertaken on the ward by CHSFT Consultants during the working week.
- The High-Risk TIA Clinic is delivered on E58 at weekends and Bank Holidays by the on-call Consultant.
- A weekly MDT is undertaken with the vascular surgeons ensuring all suitable patients for carotid surgery are discussed.
- A weekend on-call service that also covers all CHSFT, South Tyneside FT and Gateshead FT with ward rounds in each stroke Unit.
- An out of hours thrombolysis service is available with telemedicine used to treat appropriate patients.

Inpatient therapy provision supports the rehabilitation of stroke patients 5 days a week at SRH. Within the current staffing resource members of the therapy team aim to make sure that:

- Patients are treated by the therapy teams Monday to Friday with weekend cover provided by a non-stroke physiotherapist.
- New patients are seen within 72 hours of admission by Occupational Therapy (OT), Physiotherapy (PT) and Speech and Language Therapy (SALT).
- All urgent, new patients are seen within 12 hours of referral to the individual service (City Hospitals Sunderland internal target).
- Patients are prioritised to facilitate discharge to help ensure that stroke patients should spend 90% of their admission on a stroke unit.
- PT, OT and SALT aim to offer initially at least 45 minutes of each relevant stroke rehabilitation therapy for a minimum of 5 days per week to people who can participate, and where functional goals can be achieved. If more rehabilitation is needed at a later stage, the intensity is tailored to the person's needs at that time.

6.1.1.2 South Tyneside NHS Foundation Trust

Acute inpatient stroke care provided by STFT is located at South Tyneside District Hospital (STDH) and this consists of:

- Inpatient care based on a 20 bedded Acute stroke Unit with a daytime thrombolysis service provided by the stroke consultant team.
- A substantive full time consultant geriatrician working part time in stroke, and part time in elderly care.
- A Stroke Nurse Practitioner supports the medical and nursing team and carrying out the TIA clinics with supervision from the stroke consultants (5 days a week with weekend provided by SRH).
- STFT consultants participating in the weekend on-call stroke service in common with consultants from CHSFT and Gateshead as part of the South of Tyne and Wear rota.
- An out of hours thrombolysis service available through an on-call South of Tyne and Wear rota, with telemedicine used to treat appropriate patients.

Inpatient physiotherapy provision supports the rehabilitation of stroke patients 7 days a week (OT and SALT work across 5 days). The details of the current workforce supporting the ward are contained in the next section. In addition to the inpatient therapy team there is a Community Stroke Team that supports patients discharged from the ward at STDH. Again, whilst this is not an Early Supported Discharge Team (ESDT) the team does support earlier discharges from the ward as well as longer term rehabilitation activities. The Community Stroke Team currently works 5 days a week.

6.1.1.3 Workforce models for the acute stroke services across CHSFT and STFT

The table overleaf shows the budgeted establishment for the acute stroke units across both organisations.

Table 6-1: Budgeted establishment for the inpatient stroke services across both Trusts.

Inpatient teams		CHSFT	STFT	
Staff Type	Grade	WTE	WTE	Comments
Medical Staff	Consultant	3.5	1.19	WTE equivalent based on current job plans. STFT includes locum consultant.
	SpR/Middle Grades	1.0		
	F2	2.0	1.0	
	F1	2.0	1.0	
Specialist Nurses	Band 7	5.0	1.0	CHSFT - Work from 08:00-20:00 7 days a week
Ward Nurses	Band 7	1.0	1.0	
	Band 6	2.0	2.0	
	Band 5	36.35	14.55	
	Band 2	24.6	10.08	
Physiotherapy	Band 7		1.0	
	Band 6	2.0		
	Band 5	1.9	2.0	
	Band 4		2.0	
	Band 2	1.1		
Occupational Therapy	Band 6	0.6	1.0	
	Band 5	2.0		
	Band 4		1.0	
	Band 3		0.33	
	Band 2	0.8		
Speech and Language Therapist	Band 7	0.4		
	Band 6	0.5	1.0	
	Band 5	0.9		
Dietetics	Band 6	0.3	0.4	

The ratio of staff to beds for both nursing staff and therapy staff is below the national recommendations contained in the Acute and Organisational SSNAP audit standards. The deficit of therapy staff in the majority of areas has accounted for lower scores in the SSNAP acute audit for the therapy domains.

The table overleaf shows the current establishment for both Acute Stroke Units against these standards. As can be seen the actual staff group to bed ratio is lower than the recommended levels across virtually every discipline at both organisations.

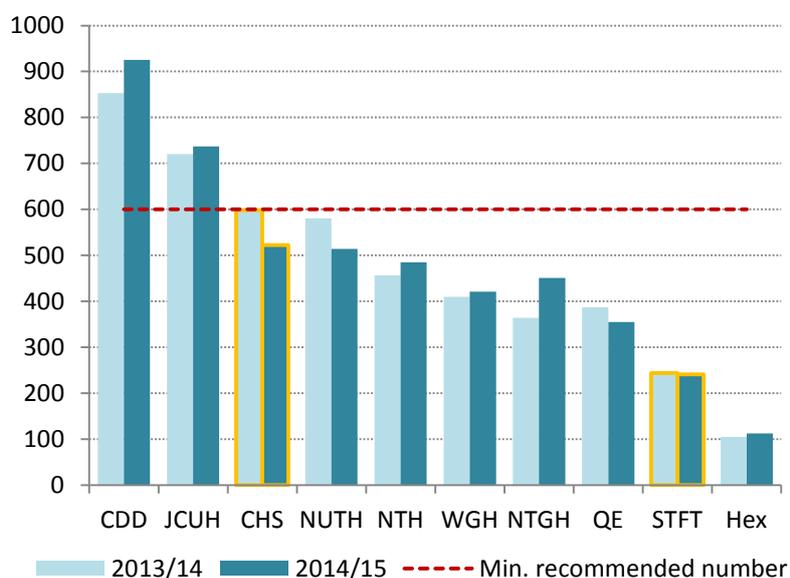
Table 6-2: Staff to bed ratio for the inpatient stroke services across both Trusts.

Trust	Nursing ratios (1:1.35 for ASUs)	Physiotherapy ratios (0.84 WTE per 5 beds)	Occupational Therapy ratios (0.81 WTE per 5 beds)	Speech and Language Therapy ratios (0.81 WTE per 10 beds)	Dietician ratios (0.5 WTE per 20 beds)
CHSFT	1.01	0.53	0.33	0.46	0.15
STFT	0.88	1.00	0.50	0.50	0.40

6.1.1.4 Activity Levels

The graph below shows the relative activity levels in stroke units across the region. Over 2013/14 – 2015/16 neither CHSFT nor STFT achieved the 600 stroke admissions recommended as the critical mass for a routinely admitting stroke unit. CHSFT has achieved this for 2015/16 (615).

Figure 6-1: Annual stroke patient numbers from SSNAP annual report 2015.



The graphs overleaf show the length of stay for the two Trusts for stroke patients discharged from hospital during 2015/16. The median length of stay for patients at CHSFT was 5.9 days and the mean length of stay was 16.2 days. For STFT the median length of stay was 10.0 days with a mean of 25.4 days. Potential reasons for the differences in length of stay between the two organisations include; the greater availability of senior decision makers in terms of more stroke consultants being employed at CHSFT and the availability of the Community Stroke team 7 days a week for patients being discharged from SRH (only 5 days for STFT).

Figure 6-2: Mean Length of Stay for stroke patients at CHSFT.

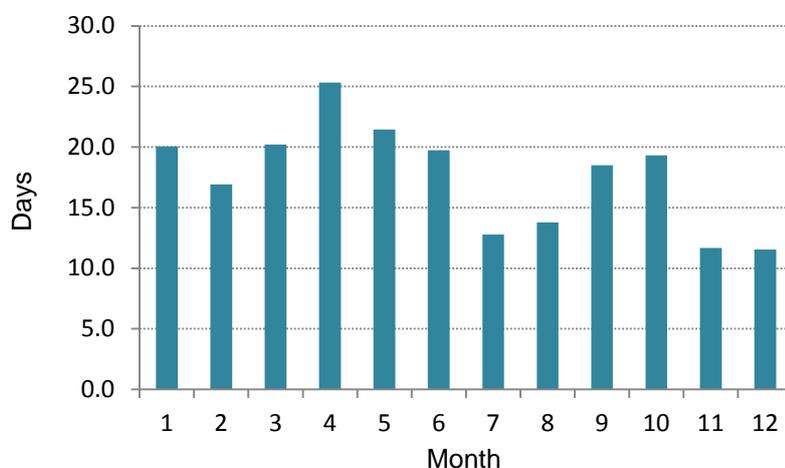
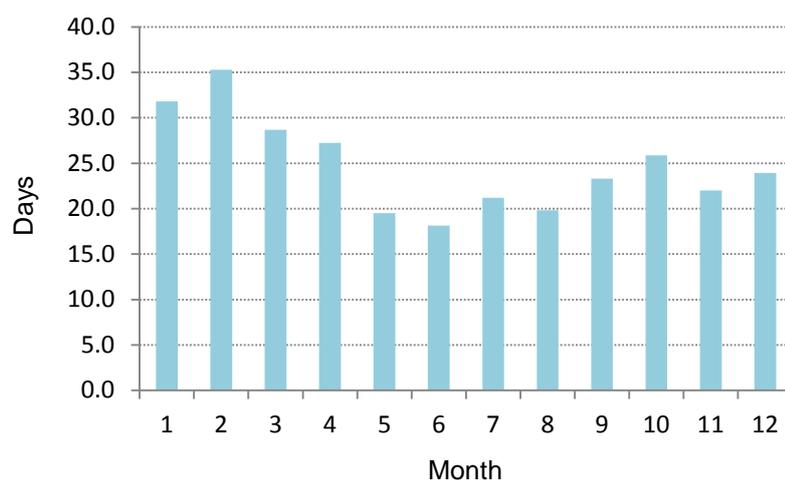


Figure 6-3: Mean Length of Stay for stroke patients at STFT.



6.2 The stroke case for change

Both regionally and nationally there is a chronic shortage of Consultants specialising in stroke care and this has been arguably the key driver for the major consolidation of acute stroke services elsewhere in the country, for example in London, Manchester and Birmingham. There is currently a substantive vacancy for a Stroke Consultant at STFT and this has been vacant since 2014. Given that this leaves a single part-time stroke consultant as the only substantive Consultant for STFT with little prospect of attracting an additional consultant, both Clinical Commissioning Groups across South Tyneside and Sunderland have taken the step to consolidate acute stroke admissions to the acute stroke unit at SRH on a temporary basis given the vulnerability of the current service provision at STFT.

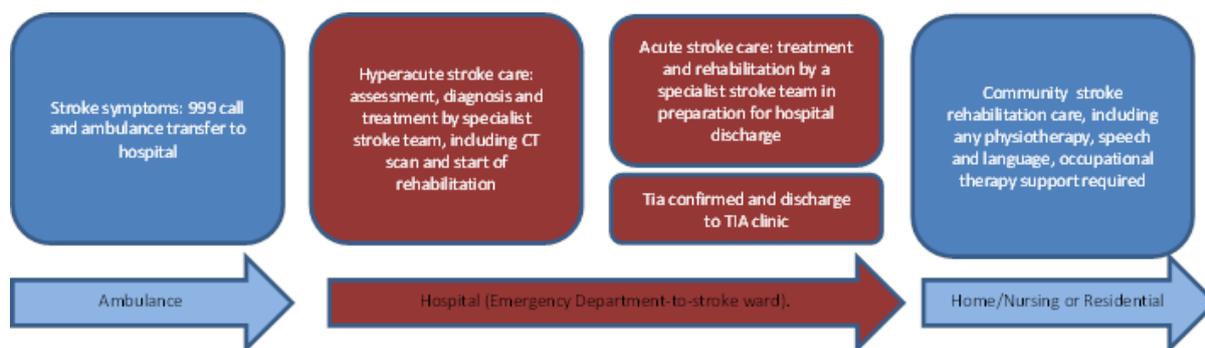
In addition to the clear workforce issues driving both the temporary and permanent need to reconfigure the stroke services there is also both local and national guidance

on the critical mass of patients needed for a stroke unit to ensure the best outcomes for patients. This is described in detail in section 6.2.3.

6.2.1 Scope of proposed stroke changes

Not all of the stroke services outlined above are within the scope of the PtE proposed service changes. The pathway diagram below highlights in red those sections that will be subject to public consultation.

Figure 6-4: In-scope areas of stroke pathway



6.2.2 Future proposed stroke service arrangements

In practice any reconfiguration of service will mean the rationalisation of all acute stroke admissions to Sunderland from South Tyneside but with different configurations relating to how patients will receive their care following the acute phase of their stroke. Please note that under each of the options the vast majority of stroke mimics (the exceptions being some specialised neurology conditions) will go direct to E58 and will be looked after by the stroke team. This is designed to minimise the impact on Acute Medicine at CHSFT. The solutions are outlined below:

Table 6-3: Outline reconfiguration models for stroke across CHSFT and STFT.

<p>Option 1: All acute strokes being redirected to CHSFT with the consolidation of all inpatient stroke care at Sunderland Royal Hospital.</p>	<p>Option 2: All acute strokes being redirected to CHSFT with the repatriation of South Tyneside patients back to STDGH after 7 days.</p>	<p>Option 3: All acute strokes being redirected to CHSFT with the repatriation of South Tyneside patients back to STDGH after 72 hours.</p>
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<ul style="list-style-type: none"> - All suspected strokes within the South Tyneside area will automatically be re-routed to CHSFT via a NEAS bypass. - Acute stroke patients self-presenting to STDGH to be redirected to SRH via ambulance once the appropriate treatment is given. - For inpatients at STDGH who suffer a suspected stroke a telephone call will be made to the on call stroke physician at SRH to discuss transfer and review within 24 hours. - Stroke mimics with a predicted long length of stay (greater than 7 days) will be repatriated to STFT. - <i>Patients from both Sunderland and South Tyneside will have their acute and rehabilitation phases at CHSFT before being discharged to their respective Community stroke teams.</i> - Daily high risk TIA clinics will be delivered at CHSFT with low risk clinics being delivered at STFT 	<ul style="list-style-type: none"> - All suspected strokes within the South Tyneside area will automatically be re-routed to CHSFT via a NEAS bypass. - Acute stroke patients self-presenting to STDGH to be redirected to SRH via ambulance once the appropriate treatment is given. - For inpatients at STDGH who suffer a suspected stroke a telephone call will be mad to the on call stroke physician at SRH to discuss transfer and review within 24 hours. - Stroke mimics with a predicted long length of staff will be repatriated to STFT. - <i>Repatriation of South Tyneside patients to STDGH for rehabilitation would happen following 7 days for those patients requiring longer stays in hospital</i> - Daily high risk TIA clinics will be delivered at CHSFT with low risk clinics being delivered at STFT 	<ul style="list-style-type: none"> - All suspected strokes within the South Tyneside area will automatically be re-routed to CHSFT via a NEAS bypass. - Acute stroke patients self-presenting to STDGH to be redirected to SRH via ambulance once the appropriate treatment is given. - For inpatients at STDGH who suffer a suspected stroke a telephone call will be mad to the on call stroke physician at SRH to discuss transfer and review within 24 hours. - Stroke mimics with a predicted long length of staff will be repatriated to STFT. - <i>Repatriation of South Tyneside patients to STDGH for rehabilitation would happen following 72 hours for those patients requiring longer stays in hospital.</i> - Daily high risk TIA clinics will be delivered at CHSFT with low risk clinics being delivered at STFT
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The preferred potential option expressed by the clinical design team for stroke is option 1, all acute strokes being redirected to CHSFT with the consolidation of all inpatient stroke care at Sunderland Royal Hospital as it delivers the biggest quality benefit for patients across South Tyneside and Sunderland.

This option would involve the closure of the 20 bedded stroke ward at STDH with all inpatient stroke care now being delivered at SRH in the preferred potential solution. This poses the question if all inpatient stroke activity currently being delivered across the two current stroke units can be accommodated on the 39 bedded ward at SRH. The bed modelling analysis to test this option is outlined in sub-section 6.2.6.3 of this business case. As will be described in later sections options 2 and 3 are viable options but to demonstrate the same quality improvements as shown in option 1 would take a considerable financial investment.

There is the possibility of running TIA clinics from both sites in option 1, however under options 2&3 there would be reduced consultant availability at STDH (due to ward commitments) and therefore the daily high risk clinics would need to be provided at CHSFT.

Pathways of how stroke presentations will be dealt with in the different organisations and areas are outlined below. These are broadly the same for all 3 options; however, for potential options 2&3 an additional repatriation step would be required after the initial acute phase at SRH.

Figure 6-5: CHSFT Pathway: Ambulance arrivals with NEAS diverting all strokes to CHSFT.

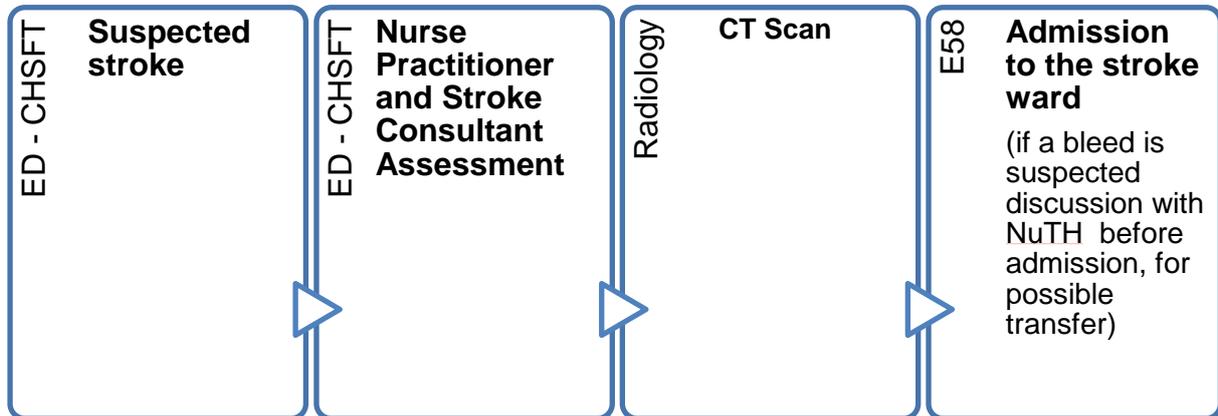


Figure 6-6: STFT Pathway: Self presenting patients to Emergency Department at STFT.

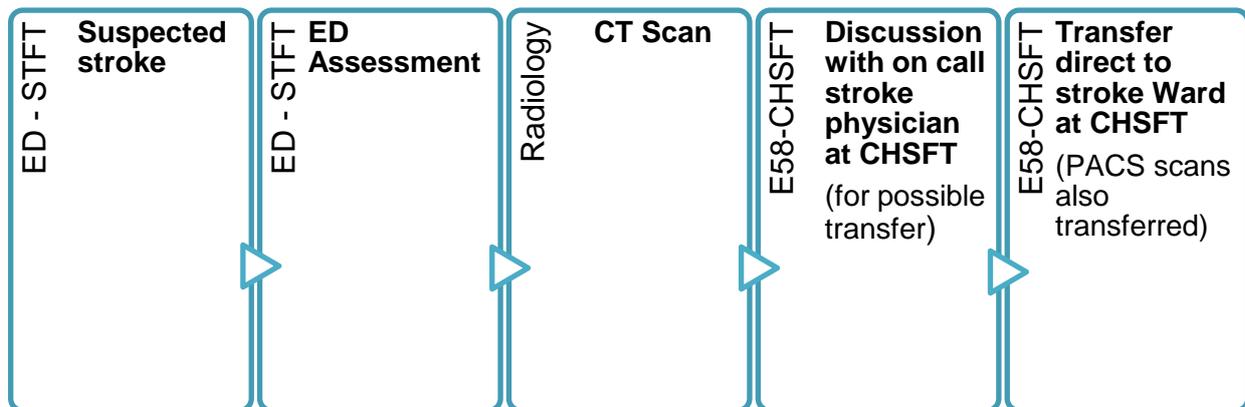
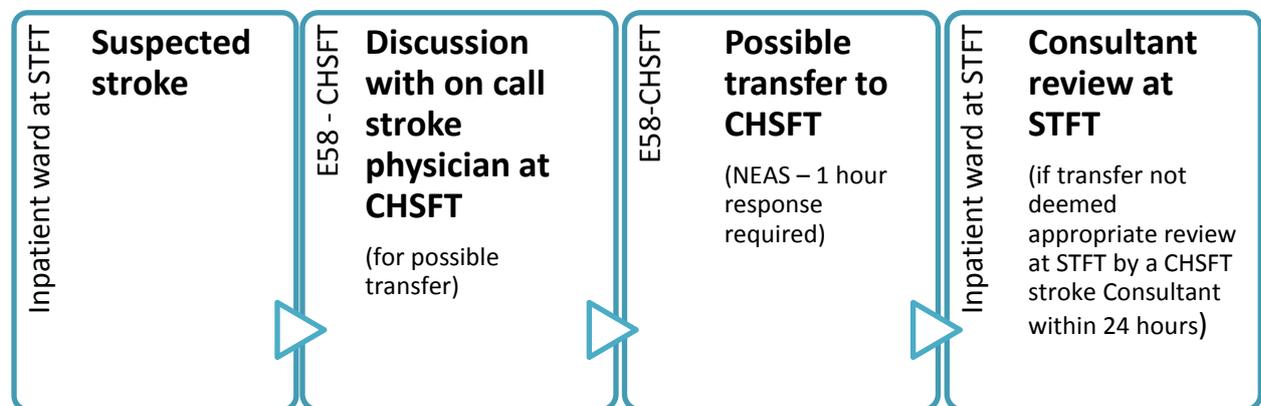


Figure 6-7: STFT Pathway: Inpatient strokes at STFT.



6.2.2 Patient and public engagement feedback and how this has informed the proposals

A summary of all the patient engagement insight work is contained in section 4.4.1. A number of factors from this work influenced the potential reconfiguration solutions but those factors relating to getting care in the right place had the greatest influence. These included that a lower proportion of South Tyneside patients indicated they were admitted at the correct time and that only two thirds of respondents from South Tyneside reported that they were admitted to a specialist stroke unit. In addition, most inpatients surveyed (across both units) said that it was very important that they received their care in a specialist unit. The clinical design team felt that their preferred solution of consolidating inpatient care at SRH would allow them to meet patient expectations and also improve patient care.

6.2.3 Strategic alignment of proposed changes

There has been a large amount of national guidance written in recent years describing what constitutes a safe and effective stroke service. The National Stroke Strategy published by the Department of Health in 2007 provided a national quality framework to secure improvements across the stroke pathway over a period of 10 years. This document's main recommendations were to provide hyper-acute stroke units (HASUs) for rapid patient access and then transfer to dedicated stroke units for rehabilitation once patients are stabilised. This model has already been adopted in some parts of the country and been shown to be both clinically and cost-effective.

Since this publication, further key national documents have been developed around stroke care. These include:

- Implementing the National Stroke Strategy – An imaging guide (DH, 2008)
- NICE guideline - diagnosis and initial management of acute stroke and transient ischaemic attack (2008) and the NICE stroke quality standard (2010)
- National clinical guideline for stroke 4th edition (Royal College of Physicians, 2012)
- Stroke Service Standards (British Association of stroke Physicians, 2010)
- Supporting life after stroke (Care Quality Commission, 2011)
- NICE guideline 162, stroke rehabilitation: Long-term rehabilitation after stroke (2013)
- Cardiovascular Disease Outcomes Strategy – Improving outcomes for people with, or at risk of cardiovascular disease (Department of Health, 2013)

In the 5YFV stroke services were recognised as falling under the new care model of specialised care. Within this new model there is the recognition that for some services, such as stroke, there is a compelling case for greater concentration of care. More specifically it highlights the strong relationship between the number of patients and the quality of care, derived from the greater experience these more practised clinicians have, access to costly specialised facilities and equipment, and the greater

standardisation of care that tends to occur. The document references the London service change of consolidating 32 stroke units into 8 hyper- acute units and a further 24 units providing care after the first 72 hours, and highlights that this has achieved a 17% reduction in 30-day mortality and a 7% reduction in patient length of stay.

The Northern England Cardiovascular Disease (CVD) Clinical Network published a report of TIA and Stroke Services across the Northern Region entitled, 'Resilience and Future proofing Stroke Services for the North East and Cumbria' in October 2015. The report highlighted varied performance across the network with many units struggling even to attain a level 'C' across the SSNAP Domains (the SSNAP data collection is explained later in this section). It explains that the national recommendations propose the minimum (600) and maximum (1500) numbers of stroke patients that any one stroke unit should see in a year in order to deliver maximum quality, with a recommended reduction the number of hyper-acute stroke units across Cumbria and the North East. The Northern England CVD Network report can be found at appendix 6.1.

6.2.4. Impact assessment of proposed changes

This sub-section describes the impact assessment of the proposed changes from a clinical, workforce, capacity, accessibility, inequality, affordability and deliverability point of view.

6.2.4.1 Clinical efficacy

The first priority for any CSR is to improve or maintain safety and quality of the service through any potential reconfiguration. For acute stroke services across South Tyneside and Sunderland whilst safe when looking at hard safety metrics in terms of mortality rates it is clear there are aspects of service quality that need to be improved particularly when looking at the Sentinel Stroke National Audit Programme (SSNAP).

SSNAP aims to improve the quality of stroke care by auditing stroke services against evidence-based standards through near real-time data collection, analysis and reporting on the quality and outcomes of stroke care. Data is collected at team level within Trusts using a standardised method and clinical involvement, and supervision at team level is provided by a lead clinical contact in each hospital that has overall responsibility for data quality.

SSNAP results are made public on a quarterly basis by a named team. This model provides clinicians, commissioners, patients and carers, and the general public with up-to-date information on the processes of stroke care across the entire pathway and is in line with the Department of Health data transparency policy.

The SSNAP clinical audit collects a minimum dataset for every stroke patient, including acute care, rehabilitation, six-month follow-up, and outcome measures, in England, Wales and Northern Ireland. The Intercollegiate Stroke Working Party (ICSWP) has chosen 44 key indicators as representative of high quality stroke care. These include data items included in the CCG Outcomes Indicator Set and NICE Quality Standards (covering England only). The key indicators are grouped into 10 domains covering key aspects of the process of stroke care. Both patient-centred (PC) domain scores (scores attributed to every team that treated the patient at any point in their care) and team-centred (TC) domain scores (scores attributed to the team considered to be most appropriate to assign the responsibility for the measure to) are calculated.

Each domain is given a performance level A to E, and a total key indicator score is calculated based on the average of the 10 domain levels for both patient-centred and team-centred domains. A combined total key indicator score is calculated by averaging the patient-centred and team-centred total key indicator scores. This combined total key indicator score is adjusted for case ascertainment and audit compliance to result in an overall SSNAP level.

<u>Colour</u>	<u>Level</u>
	A
	B
	C
	D
	E

Presenting results in this way gives patients, clinicians, commissioners and the public a simple way of understanding complex data and draws conclusions on the level of service provision at national and provider level. The themes covered by the SSNAP domains are:

Domain 1: Scanning

Domain 6: Physiotherapy

Domain 2: Stroke unit

Domain 7: Speech and language therapy

Domain 3: Thrombolysis domain

Domain 8: Multidisciplinary team working

Domain 4: Specialist assessments

Domain 9: Standards by discharge

Domain 5: Occupational therapy

Domain 10: Discharge processes

Both organisations have failed to achieve the SSNAP levels that demonstrate a high quality service. Whilst performance against some domains is encouraging, overall

SSNAP scores are disappointing. The figure below shows the respective performance over time for the two stroke units compared to the routinely admitting stroke units in England.

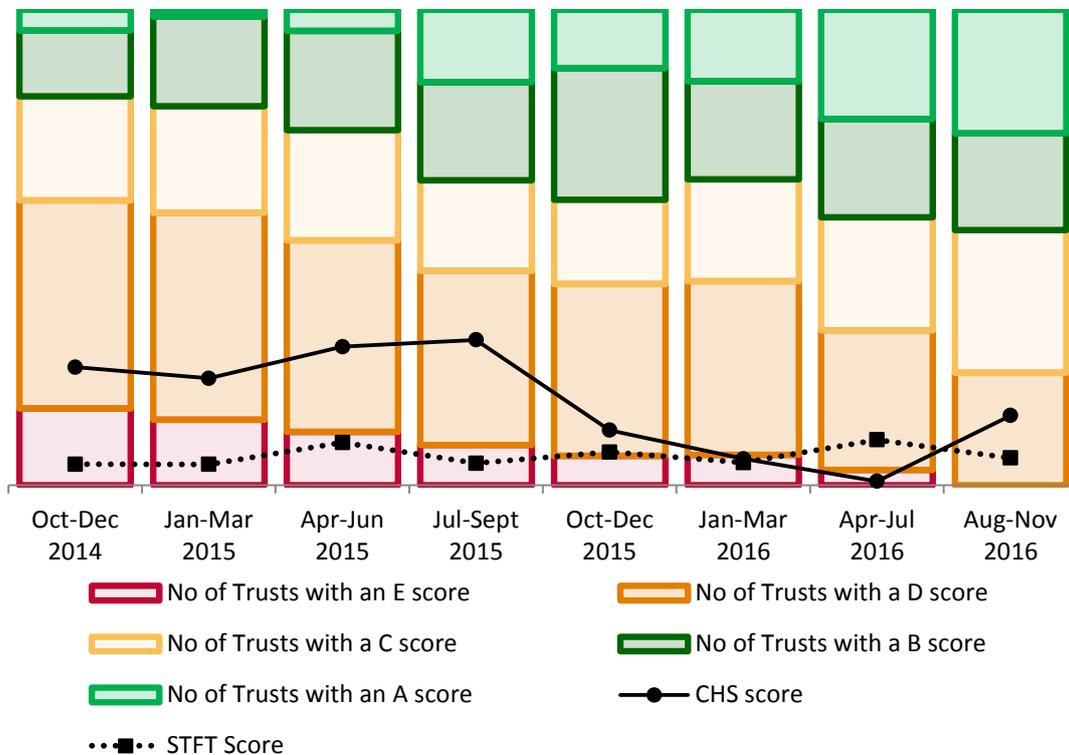


Figure 6-8: Trust Acute Audit Scores from October 2014-November 2016.

During 2015 SSNAP scores generally improved across England over time with a greater proportion of Trusts gaining an 'A' or B score. However this was not the case for CHSFT, whilst they generally maintained a 'D' score, their relative position in that cohort of Trusts deteriorated. The score in STDH marginally improved over the same time period and the service scored a 'D' level in the latest published results.

Below are the domain scores for both City Hospitals Sunderland and South Tyneside for the published SSNAP scores, July to September 2015. Please note this was the latest available data used when the potential options were being formulated by the clinical team.

Trust/score	D1: Scanning	D2: stroke Unit	D3: Thrombolysis	D4: Specialist Assessments	D5: Occupational Therapy	D6: Physiotherapy	D7: SALT	D8: MDT	D9: Discharge standards	D10: Discharge Process

CHSFT	C	B	D	B	B	B	E	D	D	A
STDH	E	E	E	E	E	B	D	E	D	A

Table 6-4: SSNAP domain scores for both Trusts.

The investment in extra specialist nurses and net increase in therapy time at CHSFT as outlined in option 1 would have a significant improvement in the overall SSNAP score and particularly in the following domains:

Domain 4: indicators 4.3, 4.4 and 4.5

Domain 5: indicators 5.1, 5.2, 5.3 and 5.4

Domain 6: Indicators 6.1, 6.2, 6.3 and 6.4

Domain 7: Indicators 7.1, 7.2, 7.3 and 7.4

Domain 8: indicators 8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7 and 8.8

Domain 9: indicator 9.1

In total 24 out of the 44 separate indicators would be directly improved by the extra specialist nurse and therapist resource. The impact of these improvements has been estimated below. The overall SSNAP score would be over 80 (if other domain scores remained the same) which would achieve an overall 'A'.

Table 6-5: Projected SSNAP scores if the preferred possible solution (solution1) is adopted.

Trust/score	D1: Scanning	D2: stroke Unit	D3: Thrombolysis	D4: Specialist Assessments	D5: Occupational Therapy	D6: Physiotherapy	D7: SALT	D8: MDT	D9: Discharge standards	D10: Discharge Process
CHSFT	C	B	B	A	A	A	A	A	B	A

The previous table showed the projected SSNAP scores if the preferred possible solution (option 1) is adopted. The following table shows what the projected SSNAP scores for options 2 & 3 would be if the extra therapy investment was added to staff the rehabilitation (or non-routinely admitting) Stroke Unit at STDH as per the table in next section.

Table 6-6: Projected SSNAP scores if potential options 2 or 3 are adopted.

Trust/score	D1: Scanning	D2: stroke Unit	D3: Thrombolysis	D4: Specialist Assessments	D5: Occupational Therapy	D6: Physiotherapy	D7: SALT	D8: MDT	D9: Discharge standards	D10: Discharge Process
CHSFT	C	B	B	A	A	A	A	A	B	A
STDH	n/a	B	n/a	n/a	A	A	A	n/a	B	A

6.2.4.2 Workforce sustainability

This sub-section sets out the workforce sustainability benefits of the reconfiguration of the acute stroke services in relation to medical, nursing and therapy staff.

6.2.4.2.1 Medical staff

There are currently 6 Consultants (some only part time and therefore only 3.5 WTE) who contribute to the stroke rota at City Hospitals Sunderland. At South Tyneside there is one substantive Consultant working part time into stroke, in addition to this there is a locum Consultant. In addition to the limited number of consultants driving a consolidation of stroke units across the northern region (and nationally), the commitment from Gateshead Health Foundation Trust and the Newcastle upon Tyne Hospitals Foundation Trust to work more collaboratively together also has a fundamental bearing on the current configuration of stroke services. From November 2016 the two Trusts have implemented a hub and spoke arrangement with all acute strokes in the Newcastle and Gateshead localities being seen and if needed, being admitted to the Royal Victoria Infirmary in Newcastle upon Tyne. For patients from the Gateshead locality they are transferred back to the Queen Elizabeth hospital in Gateshead following the acute phase (post 72 hours) of their stroke episode of care. These changes have meant that regardless of which potential options is chosen to be adopted across South Tyneside and Sunderland, the South of Tyne and Wear rota arrangements that were in place have now stopped. In the preferred possible solution, there is no planned expansion in Consultants over and above current numbers. The additional on call frequency as a result of this change is expected to be offset by the requirement to cover one site for new stroke admissions as opposed to the three sites that are currently covered. Once the changes are embedded a job planning diary exercise will be carried to ascertain that this is the case. In options 2 & 3 recruitment in to the long-standing Consultant vacancy at STDH would be required.

As for the junior medical staff under option 1, the complement of junior medical staff allocated to the stroke unit at Sunderland Royal Hospital remains the same but they are joined by one of the Foundation level doctors (FY2) from the stroke unit at South Tyneside General Hospital. This increase in junior medical staff will help support the acute part and rehabilitation parts of the pathway at CHSFT. Under options 2&3 the junior doctor complement would remain the same as described in section 6.2.1.

6.2.4.2.2 Nurse Practitioners

As part of the redirection of acute strokes to Sunderland Royal Hospital (under all the potential solutions) there is recognition from both the clinical and managerial teams that the number of stroke nurse practitioners would be increased to support both the Emergency Care department and also E58. There are currently 5.0 WTE nurse practitioners covering 08:00 – 20:00 supported by the utilisation of telemedicine (out of hours). Their duties during the day also involve supporting the TIA clinic and ward in addition to assessing patients in the Emergency Department. This current establishment has ensured that the recommendations of the Stroke Strategy have been partially implemented for a safe service for patients. However, whilst the recommendations are being met during working hours, there is a delay in assessment and management of stroke patients out of hours. On-going audit and monitoring of stroke patient management has highlighted that there is a delay in stroke care including the door to needle time out of hours thus the team recommend uplifting the stroke nurse practitioner team to provide enhanced cover for the 24/7 period. After transferring specialist nursing budget from STFT, this would only need a minimal additional investment (£28,506) as the E58 nursing numbers on night duty would be reduced by one to fund most of this. It is expected the nurse practitioner would be based on the ward unless assessing patients in the Emergency Department.

Further details on the in hours versus out of hours (OOH) disparity can be seen overleaf.

Table 6-7: Out of hours clinical audit to look at the effect of Nurse practitioners at CHSFT.

Audit metric	Difference between in hours vs out of hours
Thrombolysis rates	70% in hours 30% out of hours
Proportion of thrombolysis within 60 minutes	More than a half of the eligible patients (55%) were thrombolysed within 60 minutes during in-hours compared to only 10% during out-of-hours.
	Initial assessment of suspected stroke patients is done by stroke nurse specialists/stroke nurse practitioners during in-hours and was carried out

	<p>by A&E doctors or the medical on call team after 20:00 hours until 8:00 am next day.</p> <p>The median initial assessment time was found to be more than double during the out-of-hours period, compared to that during in-hours (10 mins vs. 24.5mins).</p>
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6.2.4.2.3 Nursing staff

The nursing staff establishment at CHSFT is already set for 39 beds and therefore it is not planned to increase the nursing staffing as part of any of the possible solutions. The nursing establishment has been reviewed by the Matron responsible for the ward both in preparation for the redirection of South Tyneside stroke patients to CHSFT and also as part of the CHSFT Nursing Assurance process and the numbers of nurses has been deemed adequate in terms of nurse to patient ratio. Whilst no additional staff nurses have been included in the models, it is expected that the stroke nurse practitioner will support the ward OOH when not assessing patients in the Emergency Department. Despite there being no additional nursing costs for the stroke ward, the costs for staffing additional beds for the displaced stroke patients have been included behind the financial modelling contained in financial impact section of this business case.

6.2.4.2.4 In-patient therapy staff

As described in Section 6.2.4.1 of this report, the areas in which the two organisations perform most poorly in the Sentinel Stroke National Audit Programme (SSNAP) are those connected to therapy domains. Section 6.2.1.3 of this report outlines the numbers of therapists contained in each of the respective unit establishments. The table overleaf contains the details of the uplift of staff numbers needed to attain the desired SSNAP level.

Table 6-8: Additional staff needed to achieve an SSNAP 'A' score for the therapy domains.

Option 1 All beds at SRH	PT	OT	SALT	Dietetics
Recommended staffing levels WTE	0.84 per 5 beds	0.81 per 5 beds	0.81 per 10 beds	0.5 per 20 beds
Proposed WTE agreed by the clinical team	6.55	6.0	3.15	1.0
Totals Skill mix for proposed	2.5 x B6 2.5 x B5 1.55 x B2	1.6 x B6 3.5 x B5 0.9 x B2	0.65 x B7 1.0 x B6 1.0 x B5 0.5 x B2	1.0 x B6
Option 2 or 3 Additional therapy staffing for Stroke Unit at STFT	PT	OT	SALT	Dietetics

Recommended staffing levels WTE	0.84 per 5 beds	0.81 per 5 beds	0.81 per 10 beds	0.5 per 20 beds
Proposed WTE agreed by the clinical team	3.36	3.24	1.62	0.5
Total skill mix for proposed	1.0 x B6 1.5 x B5 0.86 x B2	1.0 x B6 1.5 x B5 0.74 x B2	1.0 x B6 0.62 x B2	0.5 x B6

Under solutions 2 & 3 the Stroke Unit (20 beds) would need to be retained at STFT to repatriate patients following the acute phase at SRH, hence the additional number of staff required for these solutions. The recommended staffing levels are taken from the *Stroke acute commissioning and tariff guidance* produced by Healthcare for London at the time of the London Stroke reconfiguration. The proposed levels take into consideration the modelled bed utilisation for stroke patients and where resource is needed to be concentrated for the greatest clinical impact. The financial impact of the extra staff needed is included in the Finance impact section of this chapter.

6.2.4.3 Service capacity and delivery of constitutional standards

As part of the CSR for acute stroke services, work has been done to look at the bed capacity required across the different potential solutions as well as an assessment about what the additional flow of patients to SRH would mean.

In relation to bed capacity the preferred possible solution of centralising all inpatient strokes to SRH (option 1) would mean a change in both the number of stroke patients and medical boarders that would normally occupy beds on the stroke ward. The table below show the number of admissions, bed days and average length of stay for both these cohorts of patients. The data used here is from 2015/16.

Table 6-9: Bed modelling data for Stroke.

Ward	E58 (39 beds)		
	Patients	Occupied bed days	LoS
CHSFT stroke	615	5,665	16.2
CHSFT Mimics	213	1,065	5.0
CHSFT TIA	48	72	1.5
STFT stroke	232	3,758	16.2
STFT Mimics	70	350	5.0

STFT TIA	20	30	1.5
Stroke rehab beds (on F61)		4,296	
Total/Average	1,198	15,236	12.7
90% utilisation – beds needed		46	
Boarders displaced	638	4,731	7.4
90% utilisation beds – beds needed		14	

The total E58 occupancy for stroke patients from CHSFT and STFT (including TIAs and mimics) was 10,940 bed days. The total capacity available on E58 is 14,235 (39 x 365 days) giving a theoretical occupancy of 76.85%. There would therefore be a small amount of capacity for non-stroke boarders and if these were used there would be a reduction in the number of beds needed to accommodate the non-stroke patients (14 beds would be needed if all the non-strokes were accommodated elsewhere working on 90% utilisation). For STFT 5-6 beds would be required to accommodate all the non-stroke patients currently on the stroke unit.

Separate analysis for options 2 & 3, where the current stroke unit would be retained at STFT for those patients repatriated to STFT after their acute phase, has also been carried out. This showed that using 2015/16 data and based on 90% occupancy that for option 2 (repatriation after 7 days), 15.2 beds would be required. For option 3 (repatriation after 72 hours), again based on 90% occupancy, showed that 18.5 beds would be required. Please note these are based on the previous length of stay at STDH. The current number of beds on the stroke unit at STFT is 20 and therefore there is enough capacity to repatriate the patients in either of these solutions.

In relation to the constitutional standards for any service reconfiguration the potential impact on the core performance standards for each Trust needs to be considered. The table below lists the performance targets as outlined in the NHS Standard Contract for 2016/17 (for those considered to be impacted) and indicates to what degree there would be a potential performance impact following the preferred stroke reconfiguration.

Table 6-10: Potential impact on the constitutional standards for the proposed stroke changes.

Indicator	Standard	Potential direct impact	Potential indirect impact
18 weeks	Percentage of service users on incomplete RTT pathways (yet to start treatment) waiting no more than 18 weeks from		Potential risk if elective operations cancelled due to boarding patients.

	referral (92%)		
A&E 4 hours	Percentage of A & E attendances where the service user was admitted, transferred or discharged within 4 hours of their arrival at an A&E department (95%)	If 100% of the strokes, mimics and TIA patients currently attending A&E at STDGH attended the A&E department at CHSFT this would mean an extra 1-2 patients per day attending. The investment in the extra Stroke Nurse Practitioners would help mitigate this, especially OOH, both for initial assessment and to ensure flow through the system. Current nurse practitioner median response time is 10 minutes. OOH when carried out by the A&E team is 24.5 minutes.	Bed availability within Medicine at both Trusts due to the loss of medical boarding capacity on to the stroke Unit.
Cancelled Operations	All service users who have operations cancelled, on or after the day of admission (including the day of surgery), for non-clinical reasons to be offered another binding date within 28 days, or the service user's treatment to be funded at the time and hospital of the service user's choice (Number of service users who are not offered another binding date within 28 days >0)		Potential risk if elective operations cancelled due to boarding patients.

Key

Major	Minor	None or insignificant
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6.2.4.4 Clinical interdependencies

When considering the direction of travel contained in the 5YFV there are potentially difficult decisions needed to be made about the future role of some of our acute hospitals both locally and nationally. It is clear they need to be more integrated with local community and primary care services, whilst also being able to deliver high quality, safe, and accessible inpatient care to the populations they serve. The case for centralisation has been made for certain specific conditions and pathways but for the majority of acute inpatient services, there is uncertainty as to the evidence and need for centralisation and the impact on hospitals that might lose services. Work done by the South East Coast Clinical Senate on behalf of their CCGs in 2014 reviewed the evidence base for the critical co-dependencies of acute inpatient

Appendix 7.1 this business case contains a summary of the independently commissioned travel and transport impact assessment. This is derived from a baseline travel and transport impact assessment of general accessibility to both SDGH and SRH sites, together with service specific analyses for all proposed services changes contained within this phase of the PtEP, both of which can be found in the supporting documentation.

The stroke travel and transport impact assessment has been informed by analysis of:

- Accessibility analysis of the total current population, including for specific demographics such as over 60s and those without access to a car
- Postcode data of acute stroke patients admitted to STDH during the 2015/16 financial year and the 2016/17 financial year up to the end of October 2016
- Feedback from a stroke visitor travel survey undertaken between 10th February 2017 and 28th February 2017 at SRH
- Parking capacity
- Travel and parking costs

Headline findings for the stroke travel and transport impact assessment are as follows:

- Under the different potential options, visitors from South Tyneside will be required to travel to SRH, rather than STDH, to visit family / a friend who have suffered a stroke. The number of days that visitors will be required to travel to SRH, instead of STDH, will depend on the final service option taken forward for implementation and length of hospital stay, ranging from 3-10 days
- Visitors of Sunderland stroke patients should experience no additional travel impact
- 61% of South Tyneside residents aged 60+ (and those arguably more at –risk of suffering a stroke) can currently get to STDH within 30 mins by public transport between 14:00 and 16:00 (this drops to 5% if services are at SRH); 83% can access it within 60 minutes by public transport (this remains at 83% if services are at SRH)
- Return journeys for residents aged over 60 are similar between 19:00 – 21:00 with 54% of South Tyneside residents getting home from STDH within 30 mins (reducing to 5% if services are at SRH) and 80% within 60 minutes (reducing to 72% if services are at SRH).

- Residents who already experience between a 41-50 minute journey time to or from SRH are unlikely to experience any additional travel, however those residents who can currently reach STDH within 30 minutes will face more travel, with some residents likely to experience public transport travel in excess of one hour for return journeys
- The average public transport journey time increases by 18 mins (from 24 to 42 mins) on inward-bound journeys from South Tyneside to SRH and by 21 minutes (from 26-47 minutes on return journeys) for residents aged over 60
- Further analysis of the travel impact for visitors of patients experiencing a stroke between April, 2015-October, 2016, validates the above travel time estimations, although previous stroke patients experienced better accessibility to both sites
- Around 70% of South Tyneside residents are estimated to be able to get to and from SRH by car within 11-20 minutes
- The average travel time by car from South Tyneside to SRH is estimated to be seven minutes longer for South Tyneside residents aged over the age of 60 (from five to 12 minutes). Modelling of the travel impact for previous stroke patients demonstrates an equivalent journey increase of seven minutes.
- The travel impact will affect visitors of a minimum of 282 annual stroke patients. The impact could be greater when patients with TIAs and stroke mimics are considered, however, the length of stay for this group of patients will be significantly less.
- The Visitor Travel Survey results suggest that following the temporary location of acute Stroke services to SRH, around 97% of South Tyneside residents travelled by car however further work is required to validate this, given the limited sample size
- The relocation of services to SRH is estimated to have a very small impact on parking demands, with just 1-2 additional vehicles during afternoon visiting hours, and 2-6 vehicles during evening visiting time. Further work is planned to validate these estimations however with some sensitivity analysis to be applied, given that the mode of transport is drawn from a relatively small visitors' survey sample size.
- The average daily public transport cost for visitors of South Tyneside stroke could be £1.26, depending on the starting location with total worst case scenario costs up to around £13, with actual cost depending on total length of

stay of the patient (median at between 8-10 days), the final option implemented and frequency of visits.

- Parking costs would be broadly the same for visitors staying up to one hour at SRH in comparison to STDH, and costs would be less for visitors staying between 2-4 hours

It must be noted that accessibility analysis has been undertaken on an assumption that 100% of stroke patients will travel from South Tyneside to Sunderland, however, a small number of patients may be taken to Newcastle's Royal Victoria Infirmary (RVI), depending on the location of presenting symptom. Those residents likely to experience longer journeys to visit patients may therefore be residents who would travel to the RVI. Analysis of travel impact for residents within Hebburn and Jarrow has reviewed accessibility to the RVI. For patients in Jarrow, car journey times are longer than to the SRH, however both metro travel is quicker and bus travel is equivalent. Bus journey times for Hebburn residents are shorter than they are to SRH.

Further accessibility analysis is being undertaken to establish if return journeys from SRH to South Tyneside by public transport are more challenging for older people and/or previous stroke patients. While the clinical benefits of the stroke proposals outweigh any additional travel time, work is also planned to explore if and how the public transport travel experience for South Tyneside patients could be improved, particularly for return journeys and journeys in excess of one hour. This work will be proportionate to further work to better understand current modes of travel for visitors of stroke patients.

Ambulance service capacity and performance

From the North East Ambulance Service (NEAS) point of view, the assessment has looked at what the impact on the emergency care vehicle resource and the impact on the ambulance quality indicator (AQI) for Stroke performance (patients suitable for thrombolysis must arrive within the stroke unit within 60 minutes). This was done by analysing activity numbers to model key areas as follows:

- The impact of emergency care crews responding to stroke patients who ring 999 conveying the patient to the new stroke unit, to determine any impact on job cycle time.
- The impact of any changes in job cycle time on NEAS's ability to achieve the AQI Stroke indicator.

For the impact on emergency care crews the activity data used in the analysis was for the period April 2015 to March 2016 and was identified by establishing the number of vehicles that responded to incident in which either 'stroke' or 'TIA' was noted in the electronic patient record form (EPRF). The data therefore contains both

strokes/TIAs and stroke ‘mimics’. Using this data NEAS have determined the average time from receipt of the 999 call to a crew arriving on scene, the average time a crew spends on scene and the average time from leaving scene and conveyance to the stroke unit at SRH. Table 7-1 below outlines the result of the analysis.

Table 7-1: NEAS data on the increased cycle time in conveying South Tyneside patients to SRH.

	<i>Incident volume in 2015-16</i>	<i>Current job cycle time (hh:mm:ss)</i>	<i>Proposed job cycle time (hh:mm:ss)</i>	<i>Total additional time</i>
<i>South Tyneside to Sunderland Pathway</i>	543	1:04:09	1:16:20	110:19:24

The analysis suggests an increase in job cycle time, approximately 12 minutes per incident, associated with South Tyneside patients being conveyed to Sunderland. The total additional time associated with the patients being conveyed to SRH equates to 110 hours for the financial year, which would equate to an additional annual requirement of 9 x 12 hour EC shifts. Despite a proposed increase in job cycle time, due to the low volume of activity associated with stroke patients, which equates to 1.5 incidents on average per day, NEAS believe that any impact on performance would be negligible.

The impact as to whether the new pathways will impact on the AQI indicator (that patients who are eligible for thrombolysis must get to stroke unit within 60 minutes of the call to 999) has also been modelled using activity data for 2015-16. The summary can be seen in table 7-2 below.

Table 7-2: NEAS data on AQI impact for South Tyneside patients transferring to SRH.

	<i>Incident volume in 2015-16</i>	<i>Within 60 mins (existing pathway)</i>	<i>Within 60 mins (new pathway)</i>
<i>South Tyneside to Sunderland Pathway</i>	543	87%	80%

NEAS have advised that caution should be noted here as the methodology used for calculating impact against the AQI stroke indicator is a simpler approach to how it is calculated for the Trust as they have had to calculate based on all stroke activity as opposed to just those patients who received thrombolysis. In reality the availability of a stroke specialist is a bigger determinant of thrombolysis rates with performance at STDH prior to the temporary change being 0% of patients who were thrombolysed within 1 hour of clock start according to the annual SSNAP data for 2015/16.

Furthermore, contemporary clinical advice is that thrombolysis should be given within 4.5 hours of the onset of stroke symptoms,⁴⁰ hence any additional ambulance travel time should not adversely affect treatment and recovery.

6.2.4.6 Health and health inequalities

The full Integrated Impact Assessment (IIA) for the potential stroke services is included within supporting documentation and summarised within appendix 6.1. The IIA is designed to systematically review the proposed changes to stroke services with the aim of identifying potentially positive, negative or nil impacts on equality, health and health inequalities. The IIA is intended to:

- assure commissioners' of option viability prior to the consultation;
- ensure consultees from the most impacted and/or vulnerable communities are able to make informed contributions to the consultation process and
- be updated during and after the consultation process if and as further relevant feedback on the impact of the proposals and relevancy of the IIAs is received.

The results of the stroke IIA suggested that the changes could have a greater effect on communities in South Tyneside and on certain vulnerable groups, most notably:

- BME communities
- Disability groups
- Socioeconomically deprived communities
- Older people

These groups might be at higher risk of stroke and therefore more likely to benefit from improvements to service quality. However, they may also be vulnerable to some of the drawbacks associated with the changes such as continuity of care; travel costs (personal, economic and social); barriers to access; and traffic commuting between South Tyneside and Sunderland.

The IIA impact scores give an indication of the relative scale and direction of possible impacts. The total (net) Health and Health Inequalities IIA impact scores were overwhelmingly positive for Option 1 but negative for Options 2 and 3. The total score for acute stroke services for the different options are 185 for Option 1, -13 for Option 2 and -11 for Option 3.

In the health and health inequality elements of the stroke IIA, options 2 and 3 scored negatively because they could not deliver the levels of specialist staff required for

⁴⁰ NICE Pathways, Acute Stroke, March, 2016, accessible via <https://pathways.nice.org.uk/pathways/stroke#path=view%3A/pathways/stroke/acute-stroke.xml&content=view-node%3Anodes-thrombolysis-and-mechanical-clot-retrieval-for-acute-ischaemic-stroke>

effective, high quality stroke services. Option 1 was assessed as having some minor drawbacks relating to the impact of more traffic commuting between South Tyneside and Sunderland. While comparable scores for option 2 and 3 could be achieved if significant financial investment was made in recruiting specialist staff (both AHP and medical staff) this would be wholly dependent on there being available staff to recruit.

The IIA report includes some suggestions regarding actions that could mitigate against the identified drawbacks associated with option 1. The suggestions relate to patient transport, organisational development, quality improvement, education and training, and monitoring and evaluation. Overall, the IIA provided quantitative and qualitative evidence that the proposed changes relating to option 1 could have major benefits for the resident populations including vulnerable groups. The key benefits relate to the ability of the changes to achieve:

- Improved and sustainable levels of specialist medical staff.
- Improved and sustainable levels of specialist stroke allied health professionals.
- Improved and sustainable quality of stroke care 24/7.

These improvements can deliver multiple benefits for stroke sufferers and their carers, family and friends including:

- Reduced mortality.
- Reduced morbidity.
- Less disability and / or sensory impairment.
- Improved quality of life and emotional wellbeing.
- Less social dependency.
- Improved stroke prevention.

These improved outcomes could have an enduring and sustainable benefit to population health and health inequalities across South Tyneside and Sunderland. The information contained in the stroke IIA contributes to the consultation process with due regard to the public sector duties around equality and health inequalities and during consultation stakeholders will be invited to identify any further impacts or mitigating actions which have not been highlighted in the report.

6.2.4.7 Affordability and financial sustainability

As described in this section the preferred solution (option 1) is to centralise acute stroke services at CHSFT. In addition to the clinical benefits, this option delivers the greatest financial benefit, comprising a theoretical £180k improvement in the Group position compared against budget, and an even greater £510k benefit compared against 2015/16 actual spend. The savings against actual spend has been used in consultation material as it is easier to the public to relate to, however in the financial analysis carried out through the CSR this has been done against budget in terms of quantifying recurring savings.

The financial changes compared against budget under this proposed set of arrangements are as follows:

- An increase in best practice tariff income resulting from patients achieving the best practice criteria for being cared for on a dedicated stroke unit, having timely scans, and receiving alteplase where clinically appropriate (£147k improvement) is shown in table 6-12. Please note that this is for internal Trust purposes given the current block funding arrangements with commissioners and therefore net benefit for the Healthcare Group would be £180k against budget and £510k against actual spend for Option 1 once inter-trust recharges are taken into consideration.
- Cessation of recharging of consultant on-call sessions from CHSFT to STDH (£57k reduction in CHSFT income and matching £57k reduction in STDH spend – overall nil impact)
- Savings on medical staff through giving up the budget for the consultant post at STDH that cannot be filled and pooling all medical staff resource at CHSFT. There would also be the cessation of the current overspend on locums (£172k improvement)
- A transfer of approximately 2/3 of the STDH stroke unit ward nursing resource to CHSFT (net nil impact).
- Consolidation of the specialist nursing team at CHSFT, with a small net increase in costs. While the number of nurse practitioners would increase by 3, the bulk of this would be funded by reducing stroke ward nursing numbers overnight at CHSFT, with the practitioners being based on the ward when not assessing patients in ED (£29k cost increase)
- Consolidation of the stroke therapies teams at CHSFT, with a new skill mix in the disciplines of physiotherapy, OT, SALT and dietetics (£164k net improvement)
- An increase in non-pay spends, mainly relating to increased use of alteplase (£127k cost increase).

The other options considered both involved centralising stroke admissions at CHSFT but then repatriating patients back to STDH after either 7 days (Option 2) or 72 hours (option 3). These Options would effectively mean continuing with two stroke units. Overall both options would result in a £409k increase in costs, which when offset by the (notional) increase in best practice tariff income, gives a net £262k worsening of the financial position compared to 2016/17 budget. The only difference between the two options in financial terms is the split of the impact between the two Trusts.

The financial changes under these options are as follows:

- An theoretical increase in best practice tariff income as per Option 1 (£147k improvement)

- No change to existing recharging of consultant on-call sessions from CHSFT to STDH
- No change in medical staffing costs, because of the requirement to continue running two units, i.e. the existing expensive locum cover arrangements at STDH would need to continue (£216k overspend compared to budget)
- No change to ward staffing – the STDH stroke unit would remain fully open to manage patients repatriated after their initial acute admission at CHSFT
- Specialist nursing as per option 1 (£29k cost increase)
- Therapies – with two separate units the therapy resource would need to be increased to meet SSNAP national requirements (net £97k cost increase)
- An increase in non-pay spend, all relating to increased use of alteplase (£67k cost increase).

The following table summarises the financial impact of each option:

Table 6-12: Financial summary of the potential options for the reconfiguration of Stroke services.

Stroke - all options Compared to 16/17 plan / budget	Group - £ Change		
	Option 1	Option 2	Option 3
PBR Exclusions including alteplase	£147,402	£147,402	£147,402
Inter-Trust recharges	£-57,409	£0	£0
Total Activity & Income	£89,993	£147,402	£147,402
Consultants - Substantive	£-114,339	£-115,625	£-115,625
Consultants - Agency Locum	£-57,409	£225,808	£225,808
Junior Doctors	£0	£105,855	£105,855
Ward Staff	£0	£0	£0
Specialist nurses	£28,506	£28,506	£28,506
Physiotherapy	£-155,144	£-57,977	£-57,977
Occupational Therapy	£-3,113	£95,345	£95,345
SALT	£-16,152	£29,704	£29,704
Dietetics	£9,938	£30,153	£30,153
Total Pay	£-307,713	£341,768	£341,768
Non-pay including Alteplase	£127,256	£67,459	£67,459
Total Direct Costs	£-180,458	£409,227	£409,227
Indirect Costs	£0	£0	£0
Overheads	£0	£0	£0
Total Costs	£-180,458	£409,227	£409,227
Group Net Profit / (loss)	£270,450	£-261,826	£-261,826

6.2.4.8 Deliverability and implementation

As explained earlier in this section, following the completion of the CSR for stroke a decision was made by both CCGs to move the acute stroke services to SRH as described in solution 1. This was done due to the potential safety and quality impact

in connection with the vulnerability of the service at STFT from a senior medical point of view. This change was implemented on the 5th December 2016. During the planning for this change several issues were considered and worked through including:

- **Workforce - Admin / AHP / Nursing** (including arranging transferring of staff from STFT to CHSFT (where possible), arranging recruitment of nurse practitioners, and advertise AHP posts).
- **Workforce - Medical** (including confirming junior doctor changes and informing the Deanery, amending the junior doctor rotas where needed, developing an absence management protocol and reporting mechanism for additional hours for STFT staff).
- **Operational Model / Policy Development** (including pathway development for self-presenters at STFT Emergency Department – SOP, inpatient strokes at STFT – SOP, STFT thrombolysis protocol, transfer protocol from STFT ED to CHSFT, stroke mimics pathway, stroke repatriation pathway, CHSFT referral pathway to CST, CHSFT referral pathway to Social Care, out of hours review of strokes at STFT and Community Stroke Team SOP).
- **TIA & Planned Follow Ups** (including development of a TIA in hours protocol, TIA weekend protocol, TIA at STFT cover arrangements, STFT stroke planned follow ups – consultant, STFT stroke planned follow ups – nurse and existing stroke clinics at STFT).
- **Finance** (including discussing income implications with STCCG and ensure 17/18 contract consistency, review OP stroke / TIA / Medical specialty allocation, adjust budgets (STFT / CHSFT), cease stroke on-call recharges).
- **IT** (including liaising with SSNAP regarding site change, organise E-referral access for ST Community Stroke Team, develop a process for PACS transfers and update discharge letter for other location follow up).

The implantation and change in service occurred as planned and to date no significant operational issues have arisen.

6.3 Proposed future service options – obstetrics (maternity) and gynaecology and paediatrics (children’s services)

6.3.1 Current obstetrics (maternity) and gynaecology service arrangements

CHSFT and STDH currently operate two Obstetric Consultant-led Maternity Services. Both Sunderland Royal Hospital and South Tyneside District General Hospital have consultant-led and midwifery-led delivery facilities. At present there are approximately 4,500 births across both sites (3,200 at SRH and 1,300 at STDH).

Maternity services at STDH are delivered from a traditional maternity facility with a full range of antenatal and postnatal care provided by consultants, hospital-based midwives and community midwives. The Delivery Suite was refurbished in 2003 and comprises 9 rooms with a further 21 antenatal and postnatal beds

Maternity services at SRH are delivered from a purpose built maternity unit opened in 2000. The unit hosts a community midwifery team providing antenatal and postnatal care, with a dedicated team of hospital based midwives and consultants for patients with medium or high-risk pregnancies. The Delivery Suite has 20 single ensuite labour, delivery, recovery and postnatal rooms in which the majority of women stay until discharge, supported by 13 antenatal and postnatal beds on the maternity ward.

Both hospital maternity units have water birth facilities for uncomplicated deliveries and a dedicated obstetric theatre. A second theatre is available within the unit at SRH for emergency use. Both units provide consultant-led antenatal clinics for women with medium and high risk pregnancies, together with antenatal day units providing surveillance and support on an outpatient basis. Both hospitals have an early pregnancy assessment unit to provide care to women with threatened miscarriage in early pregnancy, with a five day service available at SDGH and a six-day service at SRH. Dating and anomaly scans are provided at both hospitals.

6.3.1.1 Community based maternity services

Antenatal care is currently provided by community midwifery teams operating separately across South Tyneside and Sunderland. They provide antenatal care, breastfeeding support, smoking cessation and parent craft services from GP Practices, Children’s Centres and/or during home visits. In Sunderland, there are five community teams located in community bases across the city. While the community midwifery teams are separate to the hospital midwifery teams, they work closely together and consultants, midwives, GPs and patients can refer into the Antenatal Day Units should they have any concerns about the wellbeing of the mother or baby.

6.3.2 Current gynaecology service arrangements

Gynaecology services are provided from three locations within South Tyneside District Hospital. The General Outpatients department provides clinic space for most gynaecology outpatient clinics including fertility. Colposcopy Services are provided within a dedicated suite of rooms, operating five days per week. While there are no dedicated gynaecology beds at STFT, up to 6 beds of the general female surgical ward (ward 3) can be used for gynaecological patients. Day case gynaecology surgery is performed in the surgical centre, a mixed ward day-care facility with dedicated male and female patient bays and single room accommodation.

Gynaecology services are provided from three locations across Sunderland; Sunderland Royal Hospital site, Monkwearmouth Hospital and the Galleries Health Centre, in Washington. Gynaecological outpatients and colposcopy services are provided from a dedicated suite of rooms within SRH's Chester Wing outpatients department, operating five days per week. Selected clinics also run from the Galleries and Monkwearmouth. The gynaecology ward at SRH (D47) has 9 inpatient beds, an ambulatory care area and a further day patient dedicated bay.

SRH also has the Sunderland Fertility Centre offering a variety of fertility services up to Intra Uterine Insemination. In Vitro Fertilisation (IVF) is not offered at either SDGH or SRH but is available to South Tyneside and Sunderland patients on referral to a range of local hospitals.

CHSFT also offers a Termination of Pregnancy Service (TOPS) as part of its Gynaecology and Family Planning service. There is no TOP service provided at South Tyneside.

6.3.3 The obstetrics (maternity) and gynaecology case for change

Obstetrics and gynaecology (O&G) services have been prioritised for change for primarily clinical reasons. The services across South Tyneside and Sunderland are facing increasing medical workforce pressures as the NHS Foundation Trusts continue to strive to provide separate services to local populations. The provision of two obstetric consultant and middle-grade rotas spreads a limited workforce and makes the delivery of workforce staffing standards increasingly hard to achieve or improve. The provision of fully-staffed middle grade doctors is a particular challenge, echoing a regional and national trend with gaps in training posts and difficulties in recruiting Trust grade doctors (RCOG, 2016). For Sunderland this means not having enough specialist trainees available to adequately staff the rota and for STDH this means the inability to attract Trust grade doctors. Locums are regularly used to fill middle grade staffing gaps to achieve the locally agreed standard of 10 whole time equivalent (WTE) medical posts per each O&G rota at all levels. Furthermore, neither STDH nor SRH consultant and trainee rotas for O&G are currently compliant with this standard. Gynaecology medical rotas at STDG are also less than the

locally-agreed acceptability standard of eight staff members per medical rota. Full staffing compliments are essential to the provision of robust safeguarding processes and South Tyneside NHS FT's most recent Care Quality Commission report, which rated the organisation as 'Requires Improvement', recommended that the Trust develop a formal process for safeguarding supervision specifically in maternity services (CQC, 2015).

Consultant retirement pressures pose a further threat to the mid to long term clinical sustainability of current services.

Safe staffing levels are clearly paramount in the commissioning and provision of high quality, safe services, as recommended by the Royal College of Obstetricians and Gynaecologists (2016, 2007). While overall, the RCOG recommendation of 40-hours of consultant cover per O&G unit is being met at both STDG and SRH; local organisations are keen to improve the availability of senior decision-makers that are so central to optimal clinical outcomes. However, improvements within the current service landscape cannot be achieved without increasing consultant numbers which is a high-cost option that is undeliverable, given both the local recruitment challenges and lack of new investment.

The clinical sustainability challenges posed by the medical workforce challenges across South Tyneside and Sunderland are set against a backdrop of national service improvement, as outlined in the 2016 National Maternity Review, Better Births: Improving outcomes of maternity services in England, A Five Year Forward View for maternity care. The Review recommends that providers and commissioners work together across populations of 500,000 to 1.5million to develop and implement a local vision to improve maternity services and outcomes. It describes how Local Maternity Systems should be established to develop plans for how providers can work together to better meet the needs of women and their families. South Tyneside NHS FT's 2015 Care Quality Commission report also recommended that a formal strategy for maternity and gynaecology services be developed which sets out how the service is to achieve its priorities, together with ensuring that staff understand their role in achieving service objectives (CQC, 2015).

The financial case for change for obstetrics and gynaecology is equally as strong with services at both STDH and SRH continuing to have expenditure levels that significantly exceed their income. While a local cost improvement plan is already in place to deliver £300,000 of savings within 2016/17, the Foundation Trust regulator NHS Improvement expects further efficiencies to ensure the Trusts are able to demonstrate financial sustainability and contribute to the achievement of the system-wide financial control total. The financial analysis for the potential options is outlined in section 6.3.10.12.

Retaining the current service configuration across South Tyneside and Sunderland is therefore unsustainable from a financial and clinical perspective. Change is necessary to maintain fully staffed medical rotas and deliver optimal clinical outcomes for local women and families, while yielding efficiencies to support the viability of the NHS Trusts that provide the services in order to keep services as local as possible.

6.3.4 Current paediatric (children's hospital services) service arrangements

6.3.4.1 Paediatric Emergency Department / Short Stay Assessment Unit services

Both STDH and SRH have paediatric emergency departments (ED) which operate 24-hours a day, 7 days a week. Child-trained medical and nursing staff work in both paediatric EDs, treating children and young people with a range of life threatening and minor illnesses or injuries. At STDH, this service operates from a dedicated purpose-built children's environment adjacent to the adult Emergency Department in the Ingham Wing of the hospital with four treatment rooms and one resuscitation bay. At SRH, the paediatric ED is in the process of being reconfigured as part of the new ED build.

Young adults can be offered to be seen in either paediatric or adult EDs, whichever is appropriate. Referrals into the Paediatric EDs may be via GPs, Urgent Care Centres, 111, 999 or self-referral. Protocols are in place at both hospitals to triage patients into primary care, including the on-site Urgent Care Centre at STDH or adjacent Pallion Urgent Care Centre, in Sunderland, when appropriate. A navigator role exists in Sunderland ED whereby a senior experienced person makes an initial decision on the required care of any child attending, and acts as a 'pre-triage' to fast track urgent cases and re-route non-urgent cases and minor injuries to other care pathways.

CHSFT 2015 CQC report highlighted the paediatric emergency medicine service as an area of outstanding practice, commenting on the "Close collaborative working between the directorate of paediatrics and emergency medicine, which had developed a shared medical consultant staffing approach that included consultant staff qualified in paediatric emergency medicine".

Both paediatric EDs have Children's Short Stay Assessment Units (CSSAU), enabling children requiring a period of observation to be monitored for up to 24 hours. Three beds exist at STDH as part of a 24/7 CSSAU with eight beds at SRH in a CSSAU which operates from 08:00 – 22:00, seven days a week.

6.3.4.2 Children's Inpatient Wards and Day Unit

There are currently no inpatient paediatric beds at STDH, with children requiring admission to hospital transferred to SRH, the Freeman Hospital, Newcastle or Newcastle's Royal Victoria Infirmary, depending on their clinical needs.

A six-bedded Children's Day Unit exists, adjacent to the Paediatric ED, which is currently open three days each week. The CDU cares for children undergoing day case surgery or diagnostic investigations as well as those undergoing dental or orthopaedic surgical procedures (this activity is counted under those specialties rather than paediatrics). The unit is staffed entirely by paediatric trained nurses and nursery nurses who can assist in supporting children of all ages throughout their stay in the unit.

SRH has a full inpatient paediatric unit which looks after children from across South Tyneside and Gateshead requiring admission for a period longer than 24 hours. There are three inpatient wards with a total of 52 beds spread over a surgical ward (20 beds plus 6 escalation/day case beds), a ward for 2-16-year-olds (20 beds plus 2 escalation/ day case beds) and a ward for 0-2-year-olds (12 cubicles and a two-bed High Dependency Unit). Day case patients are accommodated within the three wards – there is no separate Children's Day Unit.

Neither hospital has paediatric intensive care facilities with the most severely ill local patients being transferred to the Great North Children's Hospital, part of Newcastle's Royal Victoria Infirmary.

6.3.4.3 Outpatient services

Paediatric outpatient services at STDH relate to rapid follow-up/review clinics for children who have been discharged from emergency or short-stay care and who have ongoing secondary care health needs. All other STDH paediatric outpatient clinics take place in community locations, including Palmer Community Hospital in Jarrow and a small number that are community based. Clinics are led by a consultant paediatrician, some with specialist nurse or middle grade doctor support, and include:

- Development Clinics
- Feeding Clinics /Neurofibromatosis
- Neuro-development clinics
- Paediatric Neurology outreach clinics (provided by a visiting Newcastle consultant)
- Adoption Clinics
- Communication Clinics
- General/Communication/Dyspraxia/Autism clinics
- Looked After Children (LAC) clinics
- School Clinics
- Multidisciplinary Clinics

SRH operates a dedicated paediatric outpatient department, the Niall Quinn Centre, covering a variety of sub-specialty areas including asthma, cardiology, diabetes,

endocrinology, epilepsy, gastroenterology, respiratory medicine, tuberculosis, chronic fatigue syndrome and a range of neuro-disability clinics such as neurofibromatosis, neuroendocrinology, Downs Syndrome and sensory impairment. Hearing clinics are also delivered at Washington Galleries and the Durham Road Children’s Centre offers hearing clinics, services for Looked After Children and neuro-disability clinics.

6.2.4.4 Community Services

A range of other children’s services are provided at, or by both SDGH and SRH, as per table 6-13 below.

Table 6-13: Community provision for Paediatrics.

Service type	South Tyneside service provision	Sunderland service provision
Children’s Community Nursing	<p>The Children’s Community Nursing team provides care at home therefore avoiding or facilitating a reduced length of hospital stay. The service is available from 8am – 6pm, 7 days a week, 365 days per year, within the South Tyneside locality only. The team care for children following acute illness or injury and for those with chronic life limiting or threatening illness including palliative care. The team provides direct nursing care including clinical assessment, administration of medication, oxygen saturation monitoring, insertion of nasogastric tubes or gastrostomy buttons, tracheostomy care and management of asthma, allergy, eczema and epilepsy. The team also provides Synagis clinics 1-2 times per month for premature babies at risk of respiratory syncytial virus.</p>	<p>The Community / Specialist Nursing Team consists of community and specialist nurses are based within the Niall Quinn Children’s Outpatient Department. Children are referred to the service if they have a nursing need that requires some intervention within the home following admission to hospital, or if they have a long-term nursing need due to a chronic or long term health condition. The community services are available during office hours.</p>
Children & Young People’s Diabetes Services	<p>This multi-disciplinary team consists of two Paediatric Diabetes Specialist Nurses (PDSNs) and dedicated sessional commitments from a consultant paediatrician with a special interest in diabetes, specialty doctor, clinical psychologist and dietetics. The paediatric diabetes service provides outpatient clinics at South Tyneside District Hospital, including a joint</p>	<p>A multi-disciplinary service exists providing a holistic service to children and young people with diabetes.</p>

	transition clinic for patients transferring to the care of the adult diabetes service.	
Health Visiting and School Nursing	South Tyneside Foundation Trust provides both Health Visiting and School Nursing Services across South Tyneside, Sunderland and Gateshead.	
Sunderland: Neuro-disability / Development -	N/A	This specialist service offers expert, consultant-led and largely consultant-delivered assessment and healthcare for children and young people aged 0-19 years with possible and established disabilities of all kinds. It offers expert assessments, arranging appropriate investigations, onward referrals, care and management as required. The service links strongly with the regional paediatric neuro-disability clinical network, the regional paediatric epilepsy clinical network (PENNEC) and the North of England Collaborative Cerebral Palsy Survey (NECCPS).
Paediatric palliative care	N/A	The team includes paediatric consultant and specialist nursing expertise to offer paediatric palliative care 0-19 years, including end of life care at home, in and out of hours as required. This includes compassionate extubation after rapid discharge from PICU where this is considered in the best interests of the child or young person and complex symptom management. This service links strongly with the regional paediatric palliative care network.

6.2.4.5 Safeguarding services

Both hospital Trusts have statutory safeguarding responsibilities to protect people's health, wellbeing, and human rights and enable them to live free from harm, abuse and neglect. Both hospital sites have arrangements for Designated and Named professionals for child protection to be in place, who act as a source of guidance, support and advice to staff on child protection matters. However, the named doctor post at STDH is currently vacant with support being provided by named doctors from SRH. There is also no dedicated Paediatric Liaison Nurse at STDH although an

algorithm and guideline have been developed to ensure that there is a process for dealing with situations where concerns have been raised about children who are being referred between agencies.

Safeguarding Children in Acute Care at South Tyneside NHS Foundation Trust has had critical inspections from Care Quality Commission (CQC) and Joint Targeted Area Inspection (JTAI) and is currently subject to an Improvement Notice from the CQC.

Children's services in community at STDH were rated as good by CQC. An action plan has been developed and is being implemented to address these shortcomings. Service change proposals must however be able to deliver sustainable safeguarding arrangements for the safety of local children.

6.3.5 The paediatrics (children's hospital services) case for change

Medical workforce pressures are one of the main issues, presenting service sustainability and quality challenges to paediatric services across South Tyneside and Sunderland. Recruitment and retention challenges have resulted in a high vacancy rate at middle grade level across the sites and a reliance on locum medical staff, leading to inconsistent service quality. There are currently 3 middle-grade (senior doctor) vacancies and there is a weekly reliance on covering the medical rota with agency doctors out of hours. Whereas variability caused through the use of agency doctors has been minimised through attempting where possible to use the same doctors familiar with the service, this cannot be guaranteed and does throw open the issue of safety as the middle-grade is the most senior doctor within the department at night.

When the rota cannot not be covered by locum doctors, then consultants are expected to provide resident out of hours cover. If this happens then there is a likelihood that planned work for the following day, such as outpatient clinics would need to be cancelled.

Paediatric workforce gaps were highlighted in South Tyneside NHSFT's most recent CQC report which noted the use of advanced paediatric nurse practitioners to bolster limited junior doctor capacity (CQC, 2015). Three coroners' reports in recent years have also expressed concerns about a lack of consultant supervision of paediatric trainees and the lack of assessment for paediatric admissions. The sustainability of a 24-hour paediatric Emergency Department was questioned as far back as 2010 when the now obsolete National Clinical Advisory Team reviewed a range of services as part of the Accelerated Bigger Picture transformation programme.

As paediatric medical staff work across paediatrics and SCBU, special care baby unit services are also impacted by the workforce pressures with locum middle grade doctors regularly used to staff the units and the use of Advanced Neonatal Nurse

Practitioners (ANNPs) to support the junior doctors' rota at Sunderland when difficulties occur. SCBU staffing pressures at South Tyneside's SCBU can also restrict or prevent admissions. SCBU staffing issues were identified during the 2015 CQC inspection at South Tyneside with staff to baby ratios higher than 1:6 on a number of occasions and rotas that consistently did not meet the recommendations of the BAPM guidance. (CQC, 2015).

The challenges in sustaining clinical services cannot be uncoupled from the financial challenge however, with workforce gaps leading to increasing expenditure on locum and agency staff. In 2015/16, STDH spent over £250,000 on locum doctors just for paediatrics and continued spend at such levels is unsustainable.

Continuing to provide the paediatric services in the current configuration is therefore not an option if services are to be sustained locally and quality improvements and organisational financial balance are to be achieved.

6.3.6 Current special care baby unit arrangements

Specialised care for babies born prematurely and/or with specialised health needs is commissioned by NHS England.

STDH provides Level 2 special care baby services, delivering low-dependency care to any baby born greater than 32 weeks gestation and providing non-invasive respiratory support (CPAP) for babies with respiratory distress. Babies of less than 32 weeks gestation are transferred to Neonatal Intensive Care Units (NICUs) at other providers, although the SCBU is capable of resuscitating and stabilising any term or pre-term baby with unexpected problems, whilst awaiting the neonatal retrieval team. To this end the SCBU at SDGH is equipped with 2 ventilators and 2 CPAP drivers. It has six cots plus an additional stabilisation cot which allows delivery of short term high dependency and intensive care as required and is located on the ground floor of the maternity block opposite the Delivery Suite. The unit is staffed by a range of paediatric medical staff, paediatric nurse practitioners, neonatal nurse practitioners, staff nurses and Healthcare Assistants.

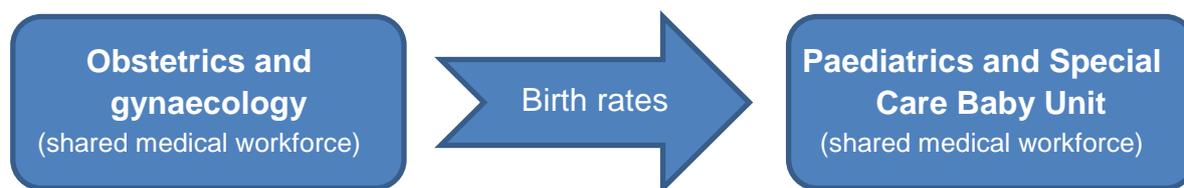
SRH has a Level 3 neonatal unit incorporating both intensive care (NICU) and special care (SCBU) facilities and offers high quality care for some of the most vulnerable babies in the Northern Region. NICU has 8 HDU/ITU cots and SCBU 16, although four of these are currently not in use. Private rooms are available for recently bereaved families, and those with very sick babies who are unlikely to respond to intensive interventions. Family accommodation is available in the Woodford Williams Lodge. A recent (August 2015) Royal College of Paediatrics & Child Health service review recommended that CHSFT should care for babies with a gestational age of 26 weeks or above.

6.3.7 Clinical interdependencies between O&G, paediatric and special care baby unit

The clinical specialities of obstetrics, gynaecology, paediatrics and special care baby services are inextricably linked due to their draw upon the obstetrics and paediatric medical workforce. Senior medical staff work across both obstetrics and gynaecology, as do middle grades and trainee doctors. Middle grade doctors provide out of hours cover for obstetric rotas which means the services must be reviewed simultaneously. The presence of an obstetric service is therefore a precursor to the availability of the necessary medical workforce for the provision of elective and non-elective gynaecology care.

Further co-dependencies lie in the provision of senior medical cover to the SDGH SCBU by paediatric consultants and an associate specialist, with on-site cover provided through a mix of paediatric middle grade doctors, SHOs, F2 doctors and paediatric nurse practitioners working on the medical rota. Four of the 18.7 WTE paediatric consultants/associate specialists at Sunderland work into NICU/SCBU while the 6 WTE at South Tyneside work across all clinical areas, making service separation impossible without significant medical workforce increase. SCBU services are also situated in areas where there is the greatest service need and demand, as determined by patient flows and a necessary critical mass of obstetric patient activity. Any service change which impacts on the volume of births in an area, and high-risk births which are more likely to translate into SCBU and/or NICU activity, will therefore directly impact on the need for, or sustainability of a SCBU. Routine, non-special care paediatric medical input at the point of birth is rarely required as new born baby checks are provided by the midwifery workforce. The clinical interdependencies are depicted in figure 6-9:

Figure 6-9: clinical interdependencies.



The shared senior medical workforce and activity-driven nature of SCBU therefore make the service an integral component of the Path to Excellence Phase 1a service change proposals. NHS England's Specialised Commissioning team, which commissions specialised services across Cumbria and the North East, accepts the co-dependent nature of the services and, as such, has formally agreed that SCBU services be considered as part of the proposed changes that are taken out to public consultation. Given that the SCBU changes are driven by a CCG-initiated change, NHS England has delegated consultation responsibilities for SCBU to the CCGs.

NHS England will consider the consultation feedback and provide final views to the CCGs on future SCBU arrangements to inform their final decision. NHS England will then fulfil any transactional commissioning responsibilities arising from the CCGs' final decisions.

6.3.7.1 Scope of proposed service change

Options have been developed around those areas of clinical service provision where the medium-to-long term sustainability poses a significant challenge, as outlined in section 6.3.3. The scope of the proposed changes is therefore limited to the following services:

- Elective and non-elective intrapartum (delivery) obstetrics (maternity) services
- Elective and non-elective inpatient and day case gynaecology services
- Paediatric emergency department services
- Special care baby services

The pathway diagrams at figures 6-10, 6-11 and 6-12 below highlight in red those areas of the obstetrics, gynaecology and paediatric pathways that will be subject to public consultation.

Figure 6-10: In-scope elements of obstetrics care pathway

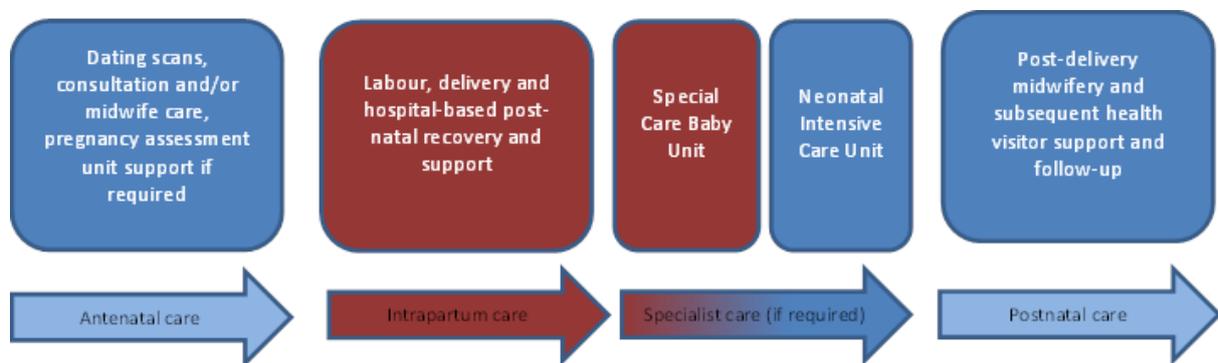


Figure 6-11: In-scope elements of gynaecology care pathway

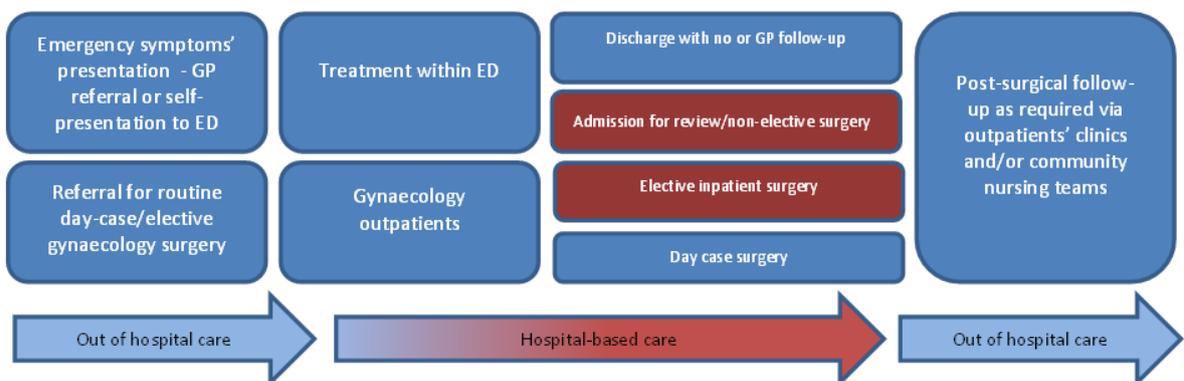
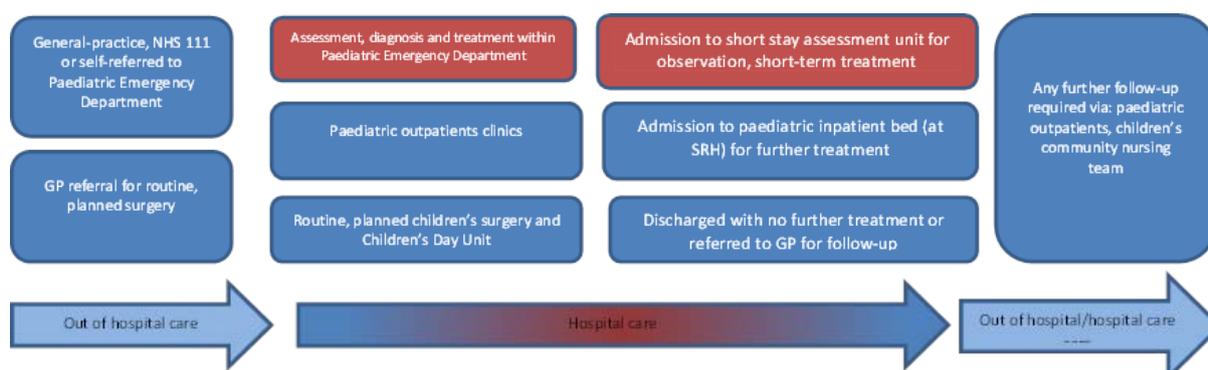


Figure 6-12: In-scope elements of paediatric care pathway



The in-scope services work interdependently with a number of other clinical services in order to fulfil their functions and deliver as seamless and holistic patient care as possible. While these are out with the service change proposals, the impact on such services has been carefully evaluated as part of the obstetrics, gynaecology and paediatric option-development process and is discussed in 6.3.8.2 below. Impact on services may be positive, negative or neutral. Services that are impacted by the obstetric, gynaecology and paediatric service change proposals include:

- Theatres
- Anaesthetics (and paediatric anaesthetics)
- Emergency surgery (paediatric and gynaecology)
- Neonatology, including neonatal transport
- Ambulance services
- Critical Care
- Child and Adult Mental Health Services
- General Practice
- Safeguarding
- Perinatal mental health services

A large number of obstetrics, gynaecology and paediatric services currently provided at STDH and SRH are out with the scope of the service change proposals and therefore will continue to be provided in the same way.

These include:

- Day case dental paediatric surgery
- Maternity, gynaecology and paediatrics outpatients clinics
- Fertility services
- Children's diabetes services
- Paediatric palliative care
- Neurodisability

- Health visiting and school nursing
- Children’s community nursing.

6.3.7.2 Proposed changes

Options for both obstetrics and gynaecology services and paediatric services have been developed by clinical review teams from within the respective specialities, with critical clinical and non-clinical challenge from the Clinical Services Review Group, as per the methodology outlined in section 5.2. Hurdle criteria was applied to a longlist of obstetrics and gynaecology options resulting in two options being further developed into more detailed options. Hurdle criteria were applied to a long list of paediatric options, resulting in two options being developed into more detailed options. Long-lists were also considered against one another, as a result of cross-working between the clinical service review teams, and ongoing critical clinical and non-clinical challenge through the Clinical Service Review Group. For example, the option of retaining overnight paediatric Emergency Department cover without an obstetric and special care baby unit service could not be deemed affordable, given the high cost of providing the necessary resident paediatric middle-grade capacity to an average nightly volume of five children who may not require review or input from a senior doctor.

The options were appraised against evaluation criteria to ascertain their clinical and financial viability, their deliverability, and to understand their impact on service user accessibility and choice. This has served a number of purposes; to assure both commissioners and providers of the efficacy of the obstetrics, gynaecology and paediatric proposals together with ensuring a truly transparent public consultation process which will invite feedback on only those proposals that can genuinely be delivered.

The two obstetrics and gynaecology options, summary impact and benefits are outlined in tables 6-14 and 6-15 overleaf.

Table 6-14: Obstetrics and gynaecology option 1: Developing a free-standing midwifery-led unit (FMLU) at STDH and medically-led obstetric unit at SRH	
STDH	SRH
<ul style="list-style-type: none"> • A free-standing Midwifery Led Birth Centre to deliver low risk care. • Hospital based antenatal care • Community midwifery care through single South Tyneside and Sunderland Community Midwifery Team with additional community midwifery resource into the Midwifery-led Birth Centre • Day-case and ambulatory care gynaecology services • Gynaecology outpatients 	<ul style="list-style-type: none"> • Medically-led Obstetric Unit to deliver high risk intrapartum care • Midwifery-led intrapartum care through co-located MLU. • Hospital based antenatal care • Community midwifery care through single South Tyneside and Sunderland Community Midwifery Team • All elective and non-elective inpatient gynaecology surgery • Day-case and ambulatory care gynaecology services

	<ul style="list-style-type: none"> • Gynaecology outpatients • Special care baby unit • Neonatal Intensive Care
Impact and benefits summary	
<ul style="list-style-type: none"> • Obstetrics and gynaecology service would be operated as a single service provided from two main locations • An estimated 3,660 births would take place at SRH and 320 at STDG with a further 520 deliveries being accommodated in non-South Tyneside and Sunderland sites (depending on choice) • Maximised patient choice in providing four different options for giving birth (obstetric unit, co-located midwifery led unit, free standing midwifery led unit and home birth) • Lower cost service than current configuration, although provider income loss incurred through activity displacement • Increased compliance with clinical standards • Safeguarding improvements anticipated • Continuation of locally-delivered antenatal and outpatient care • Single medical staffing model would improve the overall medical cover arrangements for the service and in part address the expected medical workforce issues resulting from a reduction in the numbers of medical trainees in O&G. • Potential reduction in neonatal or intrauterine transfers currently experienced from South Tyneside through consolidation of high risk deliveries and increased SCBU capacity • Intrapartum transfers may still be necessary and accessibility impact assessment in relation to ambulance times, performance and capacity required • Potential improvements in staffing ratios with SCBU as a result of combined workforce • Option may be unpopular with local population 	

Under option 1, the service would offer obstetric care provision for high risk births or for those women who choose to give birth in the Obstetric unit. Women classed as low risk during their first pregnancy and women who book for pregnancy care with their second or subsequent pregnancy (whether at South Tyneside or Sunderland) who are assessed as low risk will be encouraged to book for Midwifery-led care in the Birth Centre at STDH or at CHSFT. Women would be directed to the type of care that would maximise the chances of them having appropriate and safe care in an environment that supports their needs and reduces the possibility of unnecessary intervention, with no impact on the outcomes for mother or baby (NPEU, 2012).

Table 6-15. Obstetrics and gynaecology option 2: Development of a single medically-led obstetrics unit and alongside MLU at SRH	
STDH	SRH
<ul style="list-style-type: none"> • No medical or midwifery-led intrapartum care • Hospital based antenatal care • Community midwifery care through single South Tyneside and Sunderland Community Midwifery Team • Day-case and ambulatory care gynaecology services 	<ul style="list-style-type: none"> • All high and low risk intrapartum care delivered in co-located medical and midwifery led units • Hospital based antenatal care • Community midwifery care through single South Tyneside and Sunderland Community Midwifery Team • All elective and non-elective inpatient

<ul style="list-style-type: none"> Gynaecology outpatients 	<ul style="list-style-type: none"> gynaecology surgery Day-case and ambulatory care gynaecology services Gynaecology outpatients Special care baby unit
<p>Impact and benefits summary</p>	
<ul style="list-style-type: none"> Obstetrics and gynaecology service would be operated as a single service An estimated 3980 births would take place at SRH and 520 at non-South Tyneside and Sunderland sites Reduced patient choice although choice of home birth, CLU, MLU and non-South Tyneside/Sunderland sites remain Lower cost service than current configuration, although provider income loss incurred through activity displacement and estimated capital investment required to create additional space Increased compliance with clinical standards Safeguarding improvements anticipated Continuation of locally-delivered antenatal and outpatient care Single medical staffing model would improve the overall medical cover arrangements for the service and in part address the expected medical workforce issues resulting from a reduction in the numbers of medical trainees in O&G. Potential reduction in neonatal or intrauterine transfers currently experienced from South Tyneside through consolidation of high risk deliveries and increased SCBU capacity Intrapartum transfers may still be necessary and accessibility impact assessment in relation to ambulance times, performance and capacity required Potential improvements in staffing ratios with SCBU as a result of combined workforce Option likely to be unpopular with local population 	

The two paediatric options are described in tables 6-16 and 6-17 overleaf:

Table 6-16: Paediatric option 1: Day-time paediatric ED at SDGH and 24/7 paediatric ED at SRH

STDH	SRH
<ul style="list-style-type: none"> - Medically-supported Paediatric Emergency Department available from 8am to 10pm - Medically-supported Children’s Short Stay Assessment Unit available from 8am to 10pm - Doors closing for both services at 8pm to allow children to be treated and discharged - Children’s Day Unit - Paediatric outpatients’ clinics with potential scope to provide more sub-specialist clinics, e.g. paediatric epilepsy or asthma. - 	<ul style="list-style-type: none"> - Medically-supported Paediatric Emergency Department available 24/7 - Medically-supported Children’s Short Stay Assessment Unit available - Children’s Day Unit - Special Care Baby Unit - Paediatric outpatients clinics with potential scope to provide more sub-specialist clinics, e.g. paediatric epilepsy or asthma.
Impact and benefits summary	
<ul style="list-style-type: none"> - Maintains 7 day acute services on the South Tyneside Site during day-time and peak activity times, whilst transferring all out of hours overnight activity to SRH - Closure of the Paediatric ED and Children’s Short Stay Assessment unit overnight will improve the medical staffing arrangements by reducing the reliance on the use of agency locums and improving quality variability - Single medical and nursing team will be considerably more sustainable and attractive to potential recruits across the two organisations. - Will deliver financial efficiencies however some potential income loss through displaced activity to neighbouring hospital sites - SCBU transfer will increase sustainability through an integrated NICU/SCBU/Paediatric team - Reduction expected in the number of intrauterine transfers where neonatal care is required (STFT transfers currently represent approximately 15% of all of the in-utero transfers to SRH within the region (2010-14), together with expected reduction in postnatal transfers due to unavailability of cots (STFT transfers represent approximately 20% of all postnatal transfers to SRH (2010-14) - Potential to require additional ‘blue light’ ambulance transfers for self-presenting sick children out of hours, placing an additional demand on current inter-hospital transfers. - Positive impact on SRH 4-hour A&E delivery performance and potential shortfall in target delivery of between 0.4-0.8% at STDH - Improved - Will deliver safeguarding benefits through consistency of policies and improved workforce training 	

Table 6-17: Paediatric Option 2: Development of nurse-led paediatric minor injury/illness facility at STDH and 24/7 acute paediatric ED at SRH

STDH	SRH
<ul style="list-style-type: none"> - Nurse delivered paediatric minor injuries/illness care available between 8am and 10pm with pathway integration to existing Urgent Care Hub - Children’s Day Unit - Paediatric outpatients’ clinics with potential scope to provide more sub-specialist clinics, e.g. paediatric epilepsy or asthma. 	<ul style="list-style-type: none"> - Medically-supported Paediatric Emergency Department available 24/7 - Medically-supported Children’s Short Stay Assessment Unit available - Children’s Day Unit - Special Care Baby Unit - Paediatric outpatients clinics with potential scope to provide more sub-specialist clinics, e.g. paediatric epilepsy or asthma.
Impact and benefits summary	
<ul style="list-style-type: none"> - Single medical and nursing team will be considerably more sustainable and attractive to potential recruits across the two organisations. - Less medically-dependent service models (particularly in terms of middle grades) more sustainable in terms of anticipated future workforce supply challenges - Increased potential financial saving however some potential income loss through displaced activity - SCBU transfer will increase sustainability through an integrated NICU/SCBU/Paediatric team - Reduction expected in the number of intrauterine transfers where neonatal care is required (STFT transfers currently represent approximately 15% of all of the in-utero transfers to SRH within the region (2010-14), together with expected reduction in postnatal transfers due to unavailability of cots (STFT transfers represent approximately 20% of all postnatal transfers to SRH (2010-14) - Potential to require additional ‘blue light’ ambulance transfers for self-presenting sick children out of hours, placing an additional demand on current inter-hospital transfers. - Improved integration of the nurse led urgent care centre with primary care services within South Tyneside. - Positive impact on SRH 4-hour A&E delivery performance and potential shortfall in target delivery of up to 0.4-0.8% at STDH - Will deliver safeguarding benefits through consistency of policies, improved workforce training and additional capacity to better support specialist roles within the service such as the ‘Named Doctor’ and sub-speciality roles. 	

The obstetrics and gynaecology and paediatric options have been appraised, both separately and collectively due to the clinical interdependencies previously described. They have also been shared with NHS England’s Specialised Commissioning Team to fully evaluate the impact of the options on the SCBU provision that the team commissions. Given that both obstetric options propose the consolidation of high-risk births at Sunderland, CCGs and NHS England commissioners have agreed that SCBU must be considered an integral, directly

impacted element of the service change proposals so that local communities are clear on the scope and potential 'end state' of each of the reconfiguration proposals.

The Clinical Services Review Group felt that evaluation of the options as collective service combinations was important to ensure viability at an aggregated service level. Table 6-18 sets out the assessment of the combined options.

Table 6-18: Analysis of aggregated option combinations for O&G and Paediatrics.

Aggregated option combinations					
Aggregated option combination	Obstetrics	Gynaecology	SCBU	Paediatrics	Analysis
1: O&G 1 and P1	Development of free-standing Midwifery Led Unit at STDH with high risk intrapartum care at SRH	All elective and non-elective gynaecology surgery provided at SRH with day case and ambulatory care gynaecology at both sites	Development of single SCBU at SRH	12-hour day-time paediatric ED service at STDH with 24/7 paediatric ED at SRH	Both options deliverable, however sustainability of in-hours acute paediatric service long term may be a challenge.
2: O&G1 and P2	Development of free-standing Midwifery Led Unit at STDH with high risk intrapartum care at SRH			Development of nurse-led paediatric minor injury/illness service at STDH with 24/7 acute paediatric services at SRH	Both options deliverable. Sustainability of MLU if birth rates reduce may be a long term challenge.
3: O&G2 and P1	Development of a single medically-led obstetric unit and alongside MLU at SRH, serving both geographical areas			12-hour day-time paediatric ED service at STDH with 24/7 paediatric ED at SRH	Both options deliverable and likely to produce greatest workforce benefits.
4: O&G2 and P2	Development of a single medically-led obstetric unit and alongside MLU at SRH, serving both geographical areas			Development of nurse-led paediatric minor injury/illness service at STDH with 24/7 acute paediatric services at SRH	Both options deliverable, however sustainability of in-hours acute paediatric service long term may be a challenge.

6.3.8 Patient and public engagement feedback and how this has informed the proposals

A summary of all the patient engagement insight work is contained in section 4.4.1.

A number of factors from this work influenced the potential obstetrics and gynaecology reconfiguration options, including the importance of choice and also the reported important factors of having consultant and midwife care in the same location together with proximity of the service when deciding where to give birth. The clinical design team felt that the two options proposed would offer differing choices that reflected important factors for women within the workforce and affordability challenges while still delivering required quality improvements, one option of co-located consultant and midwifery care and a second option which retained a local delivery choice in South Tyneside.

The ability of birthing partners to stay with women in hospital was also considered, given the mixed feedback from women on their postnatal care, with less South Tyneside than Sunderland women able to benefit from this. Suggested improvements to services shared by the women surveyed and interviewed were also considered by the clinical review team. The suggestion for greater midwifery consistency throughout the maternity pathway was considered with an exploration of an integrated, case-loading-type service model which would enable midwives to support the same women through and beyond birth. This option was discounted due to its unaffordability as increased midwifery staffing levels would be required. Feedback around the quality of postnatal care and a reported perception of overstretched ward staff which impacted on care satisfaction levels at both sites was also considered as part of workforce analysis.

Given that proximity to maternity services, distance required travelling to potentially different delivery sites and transport issues were a common concern, Maternity services were included in the Travel and Transport Impact Assessment (TTIA), featured at appendix 7.2. This was echoed by feedback from previous gynaecology patients who voiced concerns as to how they would travel to a different hospital for treatment. Specific travel and transport analysis for gynaecology patients has therefore also been undertaken as part of the TTIA.

Important factors from the pre-engagement feedback considered by the obstetrics and gynaecology clinical design team included the perceived long wait for gynaecology care for 15% of those surveyed, the 35% of women who said they would have travelled to a different hospital to receive treatment sooner and the 38% of women who would have preferred to have waited and have their procedure carried out at their local hospital. Survey respondents perceived that high quality, safe care from specialists and seeing the correct specialist who can deal with your illness were more important than having an emergency gynaecology unit close to home (85% & 77%, compared to 42%).

The development of the paediatric options was also informed by the insight gleaned from pre-engagement activities. An important factor informing option development was parental feedback that seeing the correct specialist who can deal with your child's illness was more important than having an emergency paediatric unit close to home (76%, 80% compared to 52% respectively). Another significant influencing factor was that over half of parents presenting with a poorly child at ED (52%) had tried to access the GP or call NHS 111 prior to attending at hospital. This feedback, combined with further analysis of the nature of ED attendances, resulted in the incorporating of a nurse-led paediatric minor illness/injury facility at South Tyneside within the full consolidation option.

6.3.9 Strategic alignment of proposed changes

The following sections assess the strategic alignment of the obstetrics and gynaecology and paediatric proposed changes with applicable national, regional and local health strategy and policy.

6.3.9.1 Strategic alignment of proposed changes – obstetrics and gynaecology

There has been a large amount of national guidance written in recent years describing what constitutes safe and effective obstetrics and gynaecology services. Pertinent national strategy and guidance include:

- *Better Births: National Maternity Services Review* (NHS England, 2016)
- *Providing Quality Care for Women: Obstetrics and Gynaecology Workforce* (RCOG, 2016)
- *Safer Childbirth* (Royal College of Obstetrics and Gynaecology, 2008)
- *Maternity Matters* strategy (Department of Health, 2007)

The 2014 NHS Five Year Forward View committed to the development of new maternity service models, including reviewing how best to sustain and develop maternity units across the NHS, resulting in the Better Births' national maternity strategy. The review made a series of recommendations for the sustainability of safe, high quality and personalised care, with improved post-natal and perinatal mental health care and strengthened multi-professional working. It advised that commissioners and providers are asked to work together across areas as local maternity systems (LMS) covering a population of between 0.5- 1.5 million, with the aim of ensuring women, their babies and their families have equitable access to the services they choose and need, as close to home as possible. In particular, the role of the LMS is to:

- Bring together all providers involved in the delivery of maternity and neonatal care, including, for example, the ambulance service and midwifery practices providing NHS care locally;
- Develop a local vision for improved maternity services based on the principles of Better Births;
- Co-design services with service users and local communities;
- Put in place the infrastructure needed to support services working together.

Each obstetrics and gynaecology option has been assessed for its ability to deliver improvements against the Better Births recommendations. While the scope of the proposed changes means that they only partially contribute to the delivery of national strategic expectations, the options do support LMS delivery at a local level and option 1 satisfies the four choice requirements.

Maternity is one of NHS England's six clinical priority areas, as identified in the NHS Operational Planning and Contracting Guidance 2017-19 with CCG performance monitored against a series of maternity indicators as part of the CCG Improvement and Assessment Framework introduced from 2016/17. Performance is judged on the number of neonatal mortality and stillbirths, women's experience of maternity services and choices in maternity services, hence the impact of the proposed service changes has been assessed against all three areas.

NICE guidelines also determine standards of clinical service delivery within maternity services, including making MLU delivery available for women with low-risk pregnancies, hence MLUs (freestanding or co-located) feature in both future potential service configurations.

At a regional level, the development of a Local Maternity System(s) is a core feature of the Northumberland, Tyne and Wear and North Durham Sustainability and Transformation Plan (STP). The plan aspires to give children the best possible start in life by delivering the best maternity outcomes in the country and removing current variation in women's experiences of maternity services. Optimal use of the acute sector is a core workstream within the STP and the LMS will take a lead on any further review of maternity services that may be required. Consultant-led obstetrics is among a suite of acute specialities priorities for further review and development. The PtEP is continuing to work with the STP and LMS clinical leads to ensure that its obstetrics and gynaecology proposed changes are in keeping with any broader strategic plans.

Improving maternity services is a feature of both South Tyneside and Sunderland CCGs' Strategic Commissioning Plans for 2012-17 and 2015-17 respectively. South Tyneside CCG is committed to improving maternity service choice with a continued focus working with providers to deliver pathway reform to maximise outcomes across all local services. Sunderland CCG's plan aims to ensure services meet national quality standards, to consider whether to aspire towards increased obstetrics and gynaecology consultant cover, to put processes in place for the identification & management of high risk women and to reduce rates of still birth, perinatal and infant mortality.

The proposals are strategically aligned with the North East neonatal service review recommendations around future capacity and the network has confirmed the clinical

quality benefits of the proposals. Capacity testing and demand modelling will continue to take place in partnership with the neonatal network and NHS England's specialised commissioning team to ensure an optimal SCBU workforce and improved staffing-to-cot ratios going forward.

Proposed maternity service changes are part of the Darlington, Tees, Hambleton, Richmondshire and Whitby STP as part of the Better Health Programme (BHP). High-level discussions have taken place across both strategic change programmes to quantify any likely future impact of the BHP proposals; however, at time of writing this report, the details of these potential changes are unknown. It is recognised that once that information is available, further consideration may need to be given to establish any impact that proposed changes to the south of the patch may have on the capacity and patient flow in Sunderland.

6.3.9.2 Strategic alignment of proposed changes – paediatrics and special care baby unit

A number of national policy, clinical standards and strategy documentation have been reviewed to assess the strategic alignment of the proposed paediatric changes. These include:

- Standards for Short Stay Paediatric Assessment Units, RCPH, 2017
- Facing the Future: standards for Acute General Paediatric Services, RCPCH, 2015
- Facing the Future: Together for Child Health, RCPH, 2015
- Defining Staffing Levels for Children and Young People's Services – RCN standards for clinical professionals and service managers, RCN, 2013
- Standards for the Care of Critically Ill Children, Paediatric Intensive Care Society, 2012

Both paediatric options have been assessed against their ability to deliver core strategic aims and clinical standards with the medical workforce consolidation benefits making the greatest contributions.

The proposals are also supportive of local delivery of the National Urgent and Emergency Care Review which aims to ensure right places, response, high quality care for all, including the most critically ill and injured children.

Children's Services have been earmarked for review as part of the Northumberland, Tyne and Wear, North Durham STP to address variable quality and ensure appropriately balanced hospital based and out of hospital services that will lead to a reduction in secondary care service reliance. Paediatric services are identified within the optimal acute sector workstream priorities of the STP, together with neonatal and special care baby unit services. A view on the strategic alignment of the PtEP paediatric proposals has been obtained from the STP clinical lead for paediatrics who has reaffirmed regional challenges around recruiting middle grade doctors and

consultant paediatricians. He confirmed the PtE plans to be in line with NTWND STP plans to focus on, among others area of paediatric care, acute paediatric service provision, particularly around the location of inpatient beds and sustainability of rotas across the region, together with the efficiency of paediatric support for vulnerable neonatal babies. The PtE paediatric proposals will be reviewed against any proposals emerging from the STP prior to any final decision on South Tyneside and Sunderland services being made.

Both CCGs have prioritised improvements in the care of sick and injured children with their respective strategic commissioning plans for 2012-17 and 2015-17 committing to implementing an agreed paediatric emergency pathway; including children’s assessment and short stay services.

The paediatric options, particularly the proposed benefits aligned to SCBU service consolidation, are aligned with both South Tyneside Council’s Health and Wellbeing Strategy and Sunderland Council’s Health and Wellbeing Strategy priority to give every child the best start in life, in line with the Marmot review that identified social determinants which increase inequalities in life expectancy across the life course.

6.3.10 Impact assessment of proposed changes

6.3.10.1 Clinical efficacy – obstetrics and gynaecology

Options have been appraised against a range of quality markers in order for commissioners and providers to be assured of their clinical efficacy, including their potential impact on clinical outcomes, service quality and safety, patient experience and safeguarding. Elements of the workforce, health and health inequalities, choice and accessibility impact assessments highlighted in the sections above and below also contribute to an overall picture of clinical efficacy.

Quality and safety

The shortlisted obstetrics and gynaecology options – and current service configurations - have been assessed against a range of nationally determined, policy driven or locally agreed clinical standards. The clinical review team has undertaken quality and safety impact assessments against the guidance in table 6-19.

Table 6-19: Guidance used to inform obstetrics and gynaecology clinical quality and safety impact assessment.

Obstetrics and gynaecology standards
Maternity Matters, RCOG, 2008
National Screening Committee Standards, RCOG, 2008
NICE CG62
NICE CG154
Better Births, NHS England, 2015
Safer Childbirth, RCOG, 2007
Better Health Standards

The consolidation of the medical workforce in both of the obstetrics and gynaecology options is expected to deliver the greatest clinical benefits with the removal of duplicate middle grade rotas enabling enhanced senior medical cover across rotas, resulting in less locum reliance and subsequent delivery of consistent, high quality care. Workforce analysis has demonstrated that both obstetrics and gynaecology options stand to increase resident consultant cover from 40 hours per week at STDH and 68 at SRH to 84 hours per week overall, increasing senior decision-making and contributing to seven day service delivery. The workforce gains collectively support greater service quality through single-team and/or single-site working, enhancing longer term clinical sustainability through both recruitment and retention benefits and a more stable, consistent workforce.

This assessment demonstrates that current clinical standard compliance for obstetrics and gynaecology is largely constrained by workforce challenges with both hospitals failing to ensure a minimum of 10 WTE medical staff per rota and one-to-one midwifery care during the second stage of labour, while SRH is also unable to ensure a separate formal elective caesarean list. The workforce consolidation that would result from the options outlined stands to deliver improvements against these standards, resulting in compliance across the Healthcare Group.

While there are few current shortfalls in the current gynaecological service configuration against the neighbouring Better Health Programme standards that were accepted as relevant and applicable by South Tyneside and Sunderland clinicians, both O&G options stand to deliver some improvements in ensuring that all inpatients are reviewed by a consultant on a daily basis and also in ensuring that there is an expected eight person per rota arrangement in place across both sites. Currently both hospital sites are unable to ensure seven-day consultant presence and STDH currently has some rotas with less than eight staff.

Both obstetrics and gynaecology options continue to support delivery of NICE guidelines [CG190] which recommend that 'low-risk' multiparous women should be advised to give birth in a midwife-led unit (MLU) (stand-alone or alongside), or at home because the rate of intervention is lower and the outcome for the baby is no different compared with birth in an obstetric unit (Birthplace in England Collaborative Group 2011). NICE also recommends that 'low-risk' nulliparous women should be advised to give birth in a midwife-led unit. National studies have demonstrated that there has been no significant differences in perinatal morbidity observed between groups giving birth in MLU versus CLUs. Adverse outcomes were rare and occurred in both groups. MLU women were significantly less likely to experience an abnormal fetal heart rate, fetal-pelvic complications, shoulder dystocia, occipital-posterior presentation and postpartum haemorrhage compared with women in Obstetric units.

Significant reductions were found for the MLU group's use of caesarean section, instrumental delivery and oxytocin augmentation.

Given the free-standing nature of the midwife-led birthing centre proposed for South Tyneside in option 1, the research evidence base for free-standing MLUs has been reviewed and an independent, external clinical view sought from the maternity clinical leads of the North of England Maternity Clinical Network. The clinical leads reported that both co-located and free-standing MLUs were supported by a significant body of evidence, with particular attention drawn to the findings of the 'Birthplace' cohort study (NEPU, 2011) which state that 'such units are not only a safe place in which women with uncomplicated pregnancies can give birth, but they also confer significant advantages over so called Consultant led units'. The long term sustainability of an MLU may pose a particular challenge, should deliveries drop significantly below the estimated annual birth rates of 320, potentially compromising affordability for the provider if costs exceed income. The provision of joint medical and community midwifery teams across South Tyneside and Sunderland, together with integrated community and MLU working, will offset some of this risk as will concerted efforts further upstream in the patient pathway to build confidence in and increase use of the MLU among appropriate women expecting low-risk deliveries. Should options 1a or 1b be selected for implementation, contingency plans will still need to be in place to ensure sufficient capacity at SRH, should MLU activity at STDH be less than modelling has anticipated.

The separation of low and high risk care in both options will necessitate some interuterine transfers among women who encounter complications during childbirth. The research evidence base has therefore been fully reviewed and external clinical opinion sought from both the North East Ambulance Service and maternity clinical leads from the North of England Maternity Clinical Network, in their capacity as offering expert advice to the local healthcare system. Women who have previously given birth and who are assessed as low risk would be booked into the MLU unless they choose to give birth in the obstetric unit. The place of birth study (NPEU, 2011) concluded that for this group of women the transfer rate is 9% as compared to home births 12% and alongside MLU's 12.5%. If these national figures are representative then the expected number of transfers based on every 500 birth within the Birth Centre would be 45. It must be noted that one study on maternal and baby outcomes identified a transfer rate to an obstetric unit of approximately 36% among first-time mothers, clinical outcomes for those transferred were no worse than those with a planned delivery in an obstetric unit (NPEU, 2011). The Maternity Clinical Network leads have also reported no consistent evidence of impacts on perinatal mortality rates (as an independent variable) for mothers living up to four hours from their nearest maternity unit. Good risk stratification in terms of patient selection and optimal ambulance transfer times will further offset any real or perceived transfer risks. Further detailed analysis can be found in the accessibility impact assessment section in chapter 7.

The consolidation of high-risk deliveries proposed in both options is also expected to result in a reduction in inutero transfers.

Patient experience

The experience of patients within current in-scope services has been reviewed to understand current performance and, more importantly, to understand issues that may help to develop and enhance options for consultation. Analysis of Friends and Family Test data – a nationally mandated question for patients who experience a range of acute and mental health hospital care – has formed part of this analysis with illustrative samples demonstrating positive experiences of obstetrics and gynaecology services across both hospital sites.

Patient experience considerations are also highlighted in a suite of national surveys, guidance and policy documents, particularly in relation to maternity services, which have been considered and used to inform the options development and evaluation process. For example, the National Audit Office report of *Maternity Service in England* (2013) showed that despite all the evidence of good outcome and satisfaction associated with midwife-led care, the proportion of women birthing in Freestanding Midwifery Led Units (FMUs) had not increased significantly. One of the barriers to the development of more FMUs appears to be the prevalence of out-dated assumptions about the safety, popularity and efficiency of birth centres which would need to be addressed if either options 1A or 1B were progressed to implementation.

Issues also exist with Consultant led units in that people express dissatisfaction with the ability to accommodate women (and birth partner) in non - established labour (and birth partner) in an appropriate room or environment, to provide women with the choice of delivering at home or in a Midwifery Led Unit (MLU) and to provide facilities for partners staying post-natally.

National surveys have also identified continuity of care to be a high priority for women. Women like to be familiar with a named midwife, want to tell their story only once and develop a relationship which builds the woman's confidence in the midwife and subsequently they report more positive experiences. The *Maternity Matters* strategy (Department of Health, 2007) states that continuity of care across the maternity pathway is important for a positive experience. Further, NICE guidelines stipulate that "pregnant women should be cared for by a named midwife throughout their pregnancy".

The Path to Excellence Programme recognises that the way patients access a service forms a significant part of their overall experience. A full accessibility analysis has therefore been externally commissioned to ensure that accessibility to in-scope

services under the proposed service changes is fully understood and any potential barriers highlighted. This is discussed in more detail in section 7.1.3.

Choice

Patients' right to choice is embedded in both NHS statute and policy, through both the NHS Constitution (2015) and The NHS Choice Framework (2016). The NHS Choice Framework pays specific attention to choice of maternity services. Choice is also central to the *Maternity Matters* strategy and features in nearly all NICE guidelines concerning the place and method of giving birth. According to these guidelines, women should receive information about the place of birth for their baby during their booking appointment. The 2013 National Audit Office report also stated that women want more choice about where to give birth. That report quotes data from the National Federation of Women's Institutes, noting that only 25% of women wanted to give birth in a hospital obstetric unit with care led by consultants.

The results of the 2015 National maternity survey show that for place of birth, although the same percentage of women were offered a choice of hospitals as in 2013 (60%), more women in 2015 were offered a choice of a midwife-led unit or birth centre (41% in 2015 compared with 35% in 2013). More women were also offered a choice in consultant-led units (18% in 2015 compared with 16% in 2013).

Both obstetrics and gynaecology options satisfy the NHS Choice Framework requirements of offering three choices of place of birth, which are also core features of the National Maternity Strategy Better Births:

- at home, with the support of a midwife
- in a midwife-led facility (co-located with a consultant-led obstetric unit or free-standing), with the support of a midwife
- in hospital with the support of a maternity team. This type of care will be the safest option for some women and their babies

Option 1 of the obstetric and gynaecology options retains the greatest level of geographical and MLU-type choice due to the proposed availability of two Midwifery Led Units, a free-standing MLU at SDGH and co-located MLU at SRH. All other elements of the choice within the maternity pathway, i.e. choice of ante and post-natal care will remain the same.

Patients' legal right to choose first outpatient appointments will continue to apply for all obstetric, gynaecology and paediatric activity.

6.3.10.2 Clinical efficacy – paediatrics (including SCBU)

Options have been appraised against a range of quality markers in order for commissioners and providers to be assured of their clinical efficacy, including their potential impact on clinical outcomes, service quality and safety, patient experience and safeguarding. Elements of the workforce, health and health inequalities, choice

and accessibility impact assessments highlighted in the sections above and below also contribute to an overall picture of clinical efficacy.

Quality and safety

The shortlisted paediatric options – and current service configurations - have been assessed against a range of nationally determined, policy driven or locally agreed clinical standards. The paediatric clinical review teams have undertaken quality and safety impact assessments against the guidance in table 6-20. This includes relevant clinical quality standards for special care baby and neonatal services.

Table 6-20: Guidance used to inform clinical paediatric quality and safety impact assessment.

Paediatrics (including SCBU) standards
Facing the Future: standards for Acute General Paediatric Services, RCPCH, 2015
Facing the Future: Together for Child Health, RCPH, 2015
Defining Staffing Levels for Children and Young People’s Services – RCN standards for clinical professionals and service managers, RCN, 2013
Standards for the Care of Critically Ill Children, Paediatric Intensive Care Society, 2012

The consolidation of the medical workforce in the paediatric options is expected to deliver the greatest clinical benefits with the removal of duplicate middle grade rotas enabling enhanced senior medical cover across rotas, resulting in less locum reliance and subsequent delivery of consistent, high quality care. Both options, but option 2 particularly, stand to deliver benefits in the consolidation of the middle grade workforce with option 2 delivering further workforce gains through the consolidation of all acute paediatric consultant rotas, releasing important senior medical expertise and capacity that is understood to be a key factor in avoidable child death. Some improvements are also expected to be delivered in the consolidation of the SCBU workforce, delivering an improvement in staff-per-cot ratios. The workforce gains collectively support greater service quality through single-team and/or single-site working, enhancing longer term clinical sustainability through both recruitment and retention benefits and a more stable, consistent workforce.

Compliance with key paediatric quality and safety standards will increase with both paediatric options, with option 2 delivering increased compliance through the increased availability of consultants at weekends and also the provision of single medical teams enabling at least 10 WTE medical posts on paediatric rotas. The proposed co-dependent SCBU service amalgamation will also improve, although not deliver, full compliance with national staffing standards.

Both paediatric options are expected to deliver clinical quality benefits through the creation of single clinical teams that will enrich nursing and medical competencies, address workforce pressures and deliver improved clinical outcomes. Both options

will retain locally accessible paediatric care for minor illnesses and injury with option A retaining enhanced medical-led care through a day-time ED and CSSAU. The risks of sustaining a paediatric ED were previously highlighted by the former National Clinical Advisory Team as part of a 2010-12 review of paediatric services across South of Tyne and Wear. It is recognised that transitional arrangements and/or permanent clinical pathways would need to be in place to ensure the safe management of self-presenting patients overnight, underpinned by an appropriately qualified workforce, should this be the option selected for implementation. The same need exists for option 2, should high risk patients present at either the nurse-led paediatric urgent care facility or the adult ED/urgent care centre. Analysis of the potential impact on emergency ambulance transfers of such patients has been evaluated as part of section 7.3.3.

Patient experience

The experiences of patients within current in-scope services has been reviewed to understand current performance and, more importantly, to understand issues that may help to develop and enhance options for consultation. Analysis of Friends and Family Test data – a nationally mandated question for patients who experience a range of acute and mental health hospital care – has formed part of this analysis with illustrative samples demonstrating positive experiences of paediatric services across both hospital sites.

The paediatric patient experience is likely to be impacted by both paediatric options in terms of additional travel required for South Tyneside families requiring treatment outside of normal working hours. In option 1, patients and their families will travel, or be taken by ambulance, directly to Sunderland, Gateshead or Newcastle hospitals for paediatric ED treatment. Those children who present at STDH after 8pm would be transferred to Sunderland by ambulance or re-routed to urgent care or general practice according to the severity of symptoms. While option 2 will mean all seriously ill or injured children would receive care at SRH, the proposed provision of a nurse-led paediatric walk in facility at STDH will enable lower acuity cases to continue to be treated locally. As GP and self-referral are the main referral routes, any potential negative patient experience impact can be mitigated through publicity around transport times and routes, together with the continued assertion that some additional travel may be necessary in order to access the best possible care.

As detailed previously, the PtEP recognises that the way patients access a service forms a significant part of their overall experience. A full accessibility analysis has therefore been externally commissioned to ensure that accessibility to in-scope services under the proposed service changes is fully understood and any potential barriers highlighted. This is discussed in more detail in section 7.1.2.

Choice

National choice guidance is less applicable to the paediatric service change proposals. The NHS Constitutional right to be involved in decisions about treatment and to be given information to help choose the right treatment will continue to apply. This will be available to patients under proposed new service configurations through the delivery of public-facing communications and marketing materials to support patients and families to in accessing prompt paediatric urgent or emergency care, aligned to whichever option is approved for implementation.

Safeguarding

The impact of all proposed options on safeguarding have been considered, however the impact is most relevant for the paediatric service change proposals given it is the paediatric services that fulfil the statutory safeguarding functions. This is particularly important given the current CQC improvement notice in relation to safeguarding in acute care at STDH. The creation of the single medical and nursing teams featured in both paediatric options will deliver the safeguarding benefits required to ensure a sustainable named doctor role at STDH. While paediatric option 2 is likely to result in increased safeguarding referrals at SRH as the site sees greater acute paediatric activity, the workforce consolidation invoked by the option will enable the creation of additional capacity to ensure all safeguarding concerns are safely and effectively managed.

6.3.10.3 Workforce sustainability

The case for change is largely workforce driven, as has been previously outlined, with workforce gaps and recruitment challenges presenting a significant threat to obstetrics and paediatrics service sustainability in their current configuration. All options have therefore been fully assessed from a workforce perspective to ensure that maximum workforce benefits can potentially be delivered. While modelling assumes that medical training post numbers will remain unchanged, input and guidance has will continue to be sought from Health Education North East (HENE) to ensure that capacity can continue to service trainee doctor competency requirements and to fully understand the impact of the proposals on trainee rotations. Specific plans are in place to review doctor training impact of proposals including through ST NHSFT Medical & Education Training Group and supply of job descriptions to HENE.

Medical staff

Benefits of the both obstetrics and gynaecology will deliver medical workforce benefits through the consolidation of consultant and middle-grade/specialist trainee rotas, with the removal of a second obstetric rota at STDH. Some rotas will still be 50% non-career grades. Working as one team across both sites, consultants will continue to work across the two acute and community sites across South Tyneside, Sunderland, Washington and Monkwearmouth. Consultant cover will be expected to increase from 68 (Sunderland) and 40 (South Tyneside) hours per week to 84 hours.

No reduction in consultant numbers is proposed in either option, with savings resulting from a reduction in the delivery of duplicate PAs.

There would be savings in programmed activity sessions as a result of removing the second obstetric rota at STDH and reducing Programmed Activities for roles which are duplicated on both sites (Clinical Director, Delivery Suite lead, Cancer lead) combining these roles into one across both sites. There are also planned efficiencies in filling Gynaecology theatre lists over both sites.

Both O&G options will deliver the recommended registrar staffing level of 10 registrars per rota. This is based on the requirements to cover the various requirements of the role (covering the ward, delivery suite, clinics, theatres and other sessions). This would assume a number are funded as trainees (up to 7) with the rest funded as Trust grade doctors. It is challenging to be more exact with these figures as there is currently a regional shortage of O&G trainees at Registrar level and therefore rota “gaps” at Sunderland currently need to be filled by locum posts, while those staff who tend to take Trust grade doctor posts (such as those at South Tyneside), will often move to a suitable training post if this is possible. While junior doctors’ rota cover is less problematic, the recommended staffing level of 10 foundation doctors/GP VTS per rota will be delivered. Both options continue to provide an F1 training post at Sunderland.

Midwifery and nursing staff

The shift of intrapartum activity from STDH to SRH under both options, will require some reinvestment of midwifery resource to look after these extra patients. This has been modelled using a modified version of the Birthrate + workforce planning tool and informed by the professional judgements of the Heads of Midwifery. The proposed midwifery staffing changes can be viewed at tables 6-21 and 6-22. It is anticipated that natural wastage and staff movement will deliver the remodelled midwifery numbers over a 12-month implementation period, without redundancies being required.

Table 6-21: Acute midwifery workforce model for O&G option 1.

Option 1: Partial consolidation, MLU at STDH, Co-located unit at CHSFT	STDH Change	CHSFT Change	Total Change
Band 7	-10.84	0.00	-10.84
Band 6	-20.31	10.96	-9.35
Band 2	-4.44	6.25	1.81
Other Nursing	0.75	-2.80	-2.05
Admin & Clerical	-0.43	0.00	-0.43

Total	-35.27	14.41	-20.86
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Table 6-22: Acute midwifery workforce model for O&G option 2.

Option 2: MLU at STDH, Co-located unit at CHSFT	STDH Change	CHSFT Change	Total Change
Band 7	-10.84	0.00	-10.84
Band 6	-20.31	10.96	-9.35
Band 2	-4.44	6.25	1.81
Other Nursing	0.75	-2.80	-2.05
Admin & Clerical	-0.43	0.00	-0.43
Total	-35.27	14.41	-20.86

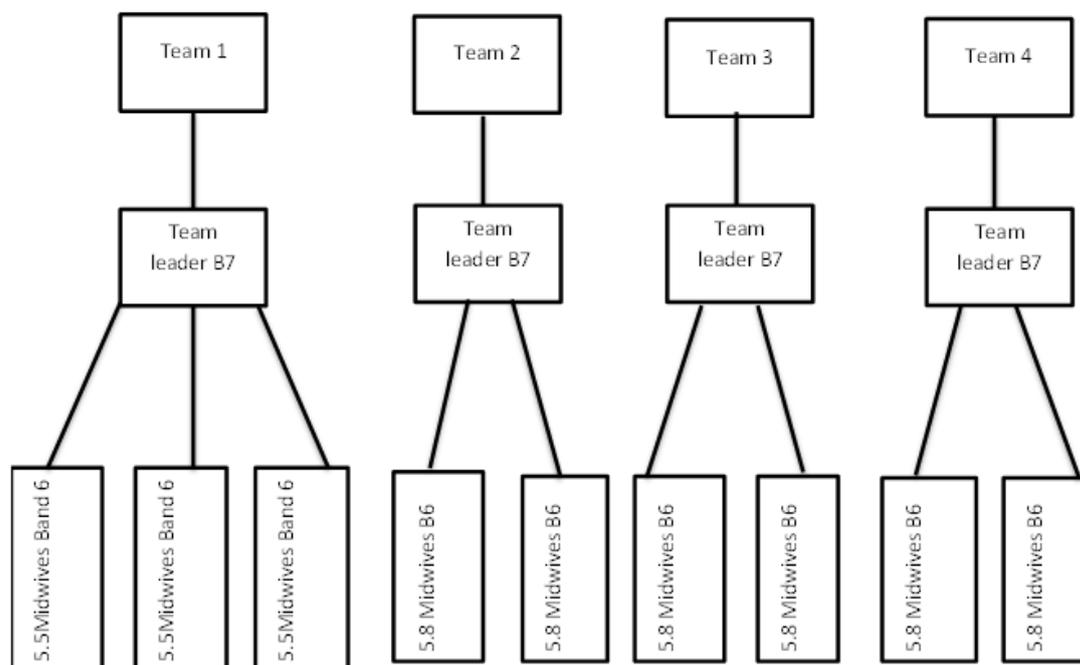
Both obstetrics and gynaecology bed requirements have been fully modelled and the gynaecology nursing complement at SRH is deemed to be enough to absorb gynaecology patients.

Both O&G options will result in the creation of a single community midwifery team. Careful planning will be required to ensure the smooth consolidation of the two community midwifery teams to ensure a single operating model and standard operating procedures are safely implemented with minimal disruption to staff and patients. A competency and training assessment will also be undertaken to ensure that all community midwives are appropriately skilled to fulfil roles within a Midwife-Led Birthing Centre, should this be the part of the final option selected for implementation.

While an integrated team midwifery was considered as a midwifery model to improve continuity of care into the intrapartum period, this was discounted following a cost appraisal which identified an increased cost of £1.4 million.

The community teams will be arranged into four sectors. A team leader in each sector will manage care in smaller teams to meet the requirements of the national maternity review and promote continuity of care. One team will be based in South Tyneside (team 1) to cover community activity and staff the Midwifery led unit using an on call/ availability system, should option one be progressed to implementation. There will be three teams based in Sunderland (teams 2,3 & 4). Figure 6-10 illustrates the proposed community midwifery model. Numbers will differ slightly per option due to the need for community midwives to staff the MLU under option 1.

Figure 6-10: Indicative proposed single community midwifery team arrangements.



6.3.10.4 Workforce sustainability – paediatrics and special care baby unit

The workforce implications of both paediatric options, and interdependent SCBU service provision, are detailed in tables 6-23 and 6-24 below.

Table 6-23: Workforce implications of Paediatric Option 1 – 12-hour day-time paediatric ED service at STGH with 24/7 paediatric ED at SRH

Staff group	STDH WTE change	CHSFT WTE change	Net WTE change
Medical			
Consultants – no change to WTEs but cessation of overnight and weekend on-call, with associated release of costs.	0.00	0.00	0.00
Middle Grade Doctors – removal of middle grade cover from midnight to 8am at STDH, no additional required at CHSFT	-1.91	0.00	-1.91
Junior Doctors – no change assumed	0.00	0.00	0.00
Total Medical	-1.91	0.00	-1.91
Paediatric ED Nursing: Take out night shift at STDH, but increase CHSFT staff nurse cover overnight.	-5.74	2.87	-2.87
SCBU nursing – assume straight transfer of staffing budget from STDH to CHSFT.	-8.53	8.53	0.00

Staff group	STDH WTE change	CHSFT WTE change	Net WTE change
Paediatric nurse practitioners – no change assumed.	0.00	0.00	0.00
Ward nursing – no change assumed	0.00	0.00	0.00
Children’s Outpatients – no change assumed	0.00	0.00	0.00
Specialist Nurses & Children’s Community Nursing – no change assumed	0.00	0.00	0.00
Total Nursing	-14.27	11.40	-2.87
Grand Total Change	-16.19	11.40	-4.79

Table 6-24: Workforce implications of Paediatric Option 2 – Development of nurse-led paediatric minor injury/illness service at STDH with 24/7 acute paediatric services at SRH

Staff group	STDH WTE change	CHSFT WTE change	Net WTE change
Medical			
Consultants – remove all STDH acute PAs plus pro-rata proportion of supporting PAs.	-3.52	0.00	-3.52
Middle Grade Doctors – removal all STDH acute PAs plus pro-rata share of supporting PAs.	-4.94	0.00	-4.94
Junior Doctors – assume STDH staff transfer to CHSFT	-3.00	3.00	0.00
Total Medical	-11.46	3.00	-8.46
Paediatric ED Nursing: STDH existing paed ED staff replaced by new nurse-led model (B7/B6 supported by B2s) operating for 98 hours per week (8am-10pm, 7 days per week). Increase CHSFT nursing cover overnight	-1.69	2.87	1.18
SCBU nursing – assume straight transfer of staffing budget from STDH to CHSFT. tbc	-8.53	8.53	0.00
Paediatric nurse practitioners – transfer 2.50 WTE ANPs to CHSFT to support SCBU and maternity, remove PNPs	-7.02	2.50	-4.52
Ward nursing – STDH day unit staff transfer to CHSFT	-4.68	4.68	0.00
Children’s Outpatients – no change assumed	0.00	0.00	0.00
Specialist Nurses & Children’s Community Nursing – no change assumed	0.00	0.00	0.00
Total Nursing	-21.92	18.58	-3.34
Grand Total Change	-33.37	21.58	-11.79

The new STDH nurse-led paediatric model will comprise 1 x Band 7, 2 x Band 6 nurses and 1 x Band 2 Healthcare Assistant on duty at all times during the 98 hours per week, enhanced by additional Band 6 nurses in the afternoon and evenings when the department is busiest. The WTEs above include full prospective cover for holidays etc and 7.5 hours per week of Band 7 management time.

Both paediatric options will enhance staff/cot ratios within the NICU/SCBU at Sunderland, through greater nursing availability and senior medical support. 7/8 NICU cots and 8/16 SCBU cots at SRH are currently staffed to BAPM standards 9% of the time and while advanced neonatal nurse practitioner training plans are in place these roles will not commence until later in 2017.

6.3.10.5 Service capacity and delivery of constitutional standards – obstetrics and gynaecology

There are an average of 4,500 babies delivered by South Tyneside NHS FT and City Hospitals Sunderland each year, with broadly a 70/30% split across SRH and STDH respectively. A more detailed breakdown of historical birth rates and types can be found in the supporting clinical service review report. Modelling of future activity has been undertaken based on historical postcode analysis. Figures 6-11 and 6-12 below provide an estimate of the number and place of birth in both O&G reconfiguration options.

Figure 6-11: O&G Option 1 modelled activity flow.

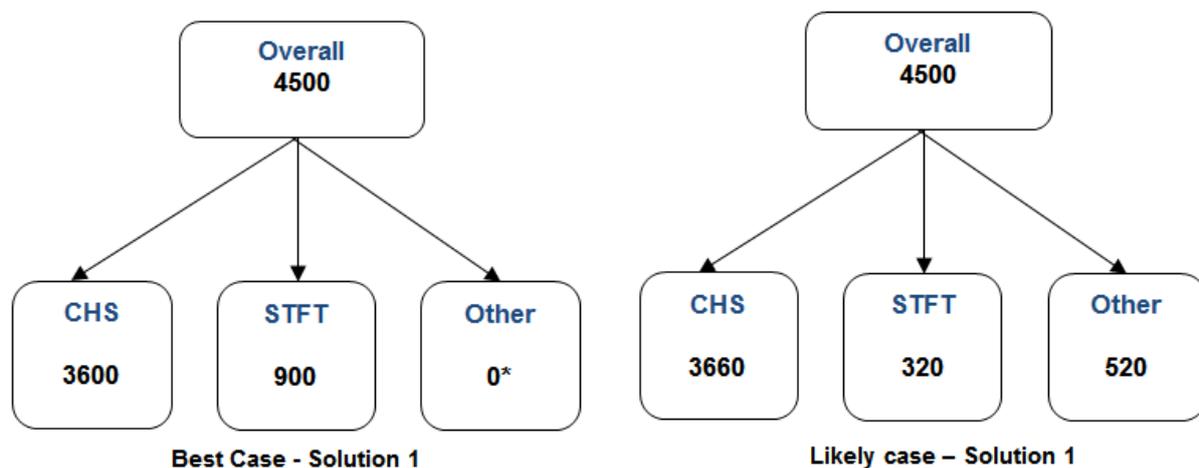
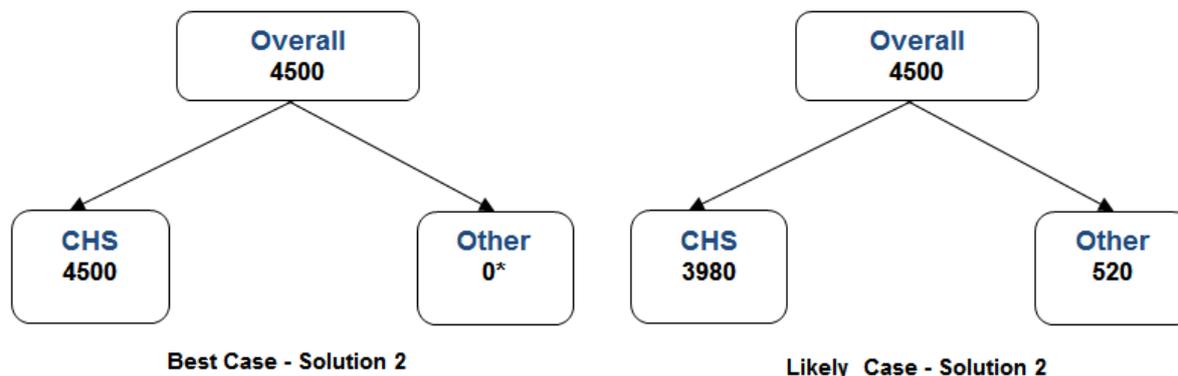


Figure 6-12: O&G Option 2 modelled activity flow.



Additional activity can be absorbed within SRH with the provision of two extra beds at Sunderland under option 1. Anticipated pathway changes such as enhanced recovery for c-sections will be employed to ensure timely and effective discharge and to ensure optimal capacity.

While best case options suggest that all current births are retained between the South Tyneside and Sunderland units, market share data demonstrates that women generally choose to give birth close to where they live and currently both localities retain about 85% of local birth based on choice. It is acknowledged that a significant shift in market share away from South Tyneside and Sunderland – 40% of existing STDH activity - is likely due to natural patient flows from Jarrow and Hebburn towards Gateshead and Newcastle. While this presents a risk around provider income and service sustainability, this will be mitigated with maximised opportunities to attract residents to choose to use the new service.

Neighbouring commissioners and providers clearly need to be satisfied that this displaced South Tyneside activity does not compromise capacity and care quality at either Gateshead' Queen Elizabeth Hospital or Newcastle's Royal Victoria Infirmary. Gateshead Healthcare NHS Foundation Trust and Newcastle University Hospitals NHS Foundation Trust have verbally confirmed that there should be enough capacity across that local health economy to absorb the expected increase in births. Further discussions with Northumberland, Tyne and Wear North Durham Sustainability and Transformation Leads have confirmed wider system capacity to absorb the displaced activity, should any further changes in the obstetrics and gynaecology service landscape emerge from the strategic plan.

The majority of South Tyneside Gynaecology elective activity (265 in 2015/16) and non-elective activity (339 in 2016/16) will transfer to SRH under both options, however 40% of this activity could flow to Newcastle and Gateshead acute sites, following evidence that suggests gynaecology treatment choices often follow place of

birth. A small proportion of further acute gynaecology activity that cannot be dealt with in A&E would also flow to SRH or Newcastle and Gateshead sites.

The proposed shift of high-risk births and gynaecology inpatient care to SRH will free up capacity at STDH. The six gynaecology beds are not currently ring-fenced for gynaecological patients and therefore will be maintained for non-gynaecological female surgery.

A high level assessment of interdependent capacity and resource implications such as those in A&E, diagnostics, theatres ITU/HDU has been undertaken with no capacity concerns anticipated. Specific analysis of the O&G proposals on the continued delivery of key NHS constitutional targets and performance indicators, as embedded in the NHS Standards Contract, has also been undertaken. The results can be seen in table 6-25. No minor or major direct impact on standard delivery is associated with the options.

Table 6-25: Impact analysis of O&G options on NHS constitutional targets.

Indicator	Standard	Potential direct impact	Potential indirect impact
18 weeks	Percentage of Service Users on incomplete RTT pathways (yet to start treatment) waiting no more than 18 weeks from referral (92%)	Both sites delivering 18 weeks, this will remain the case. Current performance is 96.9% at CHSFT and 93.7% at STDH)	
6 weeks diagnostics	Percentage of Service Users waiting 6 weeks or more from Referral for a diagnostic test (no more than 1%)	No expected change as a result of the proposed options, however use of Urodynamics facility at SFTTF would be beneficial for CHSFT.	
A&E 4 hours	Percentage of A & E attendances where the Service User was admitted, transferred or discharged within 4 hours of their arrival at an A&E department (95%)	Potential positive impact as all current referrals would be managed through SRH and would be routed through gynaecology or maternity pathway rather than A&E	
Cancer waiting time standards	Percentage of patients seen within 14 days who have been referred urgently by a GP with suspected cancer by a GP (93%); percentage of patients	Both sites delivering good positions, this position is not expected to change. For the 14 days	

	waiting no more than one month (31 days) from diagnosis to first definitive treatment for all cancers (96%) or for surgery (94%); and the percentage of patients waiting no more than two months (62 days) from urgent GP referral to first definitive treatment for cancer (85%) or from screening (90%)	standard the current performance is 95% at STDH and CHSFT, for 31 days it is 100% at STDH and CHSFT and for the 62 day target it is 90% at STDH and 100% at CHSFT.	
MSA	Mixed sex accommodation breach	No impact	No impact
Cancelled Operations	All Service Users who have operations cancelled, on or after the day of admission (including the day of surgery), for non-clinical reasons to be offered another binding date within 28 days, or the Service User's treatment to be funded at the time and hospital of the Service User's choice (Number of Service Users who are not offered another binding date within 28 days >0)	Separate work ongoing to address this in both Trusts with an aim to improve. Possible improvement with revised pathways for elective and day-care surgery. For 2015/16 there were 57 cancelled operations at CHSFT and 21 at STDH.	

Further analysis of the proposed changes on the North East Ambulance Service capacity and performance is required. This is reflected in the accessibility impact assessment and aggregated impact assessment in subsequent sections.

6.3.10.6 Service capacity and delivery of constitutional standards – paediatrics and special care baby unit

There are currently a total of 18,500 paediatric urgent and emergency care attendances on the STDH each year and 20,000 attendances at SRH. Of the total STDH attendances, around 3,099 are urgent care hub presentations, with 15,401 accommodated within the existing paediatric ED. Data demonstrates that 9% of South Tyneside ED attendees are admitted to the CSSAU and 12% of Sunderland ED attendees are admitted to the CSSAU.

Activity analysis demonstrates that around 3,500 additional ED attendances and 300 admissions would transfer to Sunderland (option 1) and up to 6,000 additional paediatric ED attendances (depending on the capacity of the nurse practitioner led service at STDH) would transfer to Sunderland and 1,500 admissions (option 2). Some activity displacement predominantly to Gateshead is expected with around between 400-700 ED attendances flowing out of South Tyneside.

Specific modelling has been undertaken on ensuring appropriate CSSAU capacity at SRH under both options. Analysis of STDH CSSAU activity between 20:00hrs and 23:59hrs indicates an average of 2 children on the unit per night who may need to be transferred to SRH under option 2 proposed arrangements, but ranging from a minimum of zero to a maximum of 8. The bespoke Admitted Patient Care bed modelling tool has been used to provide further assurances around option 2, given this brings the greatest CSSAU increase. The model considers:

- Occupancy – given the number of beds available, what is the average occupancy level across all hours during the period under analysis. A value of 100% is likely to mean unmet demand and that this number of beds is not enough for the service.
- Assurance – given the number of beds available, during what proportion of the available hours was the available beds sufficient to cope with the demands placed upon them, during the period under analysis. A value of 100% is likely to mean that there is spare capacity and this number of beds may be too high.

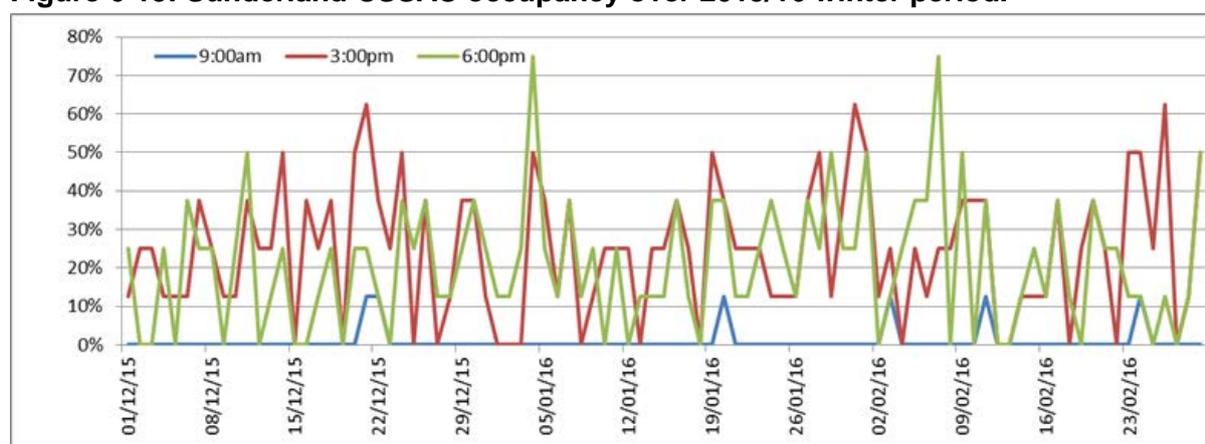
The model incorporates combined CHSFT and STDH activity through CSSAU, and therefore reflects the potential impact of all CSSAU activity being concentrated at CHSFT under option 2 which represents the worst case capacity option. Capacity assurances are demonstrated in Table 6-26.

Table 6-26: CSSAU occupancy vs assurance.

Number of beds	Occupancy	Assurance
8 (current CHSFT CSSAU)	47%	100%
4	64%	94%
3	73%	86%

The model suggests that the optimal number of beds required would be 3-4 based upon current combined activity levels, and demonstrates sufficient bed capacity to absorb STDH CSSAU activity into the CHSFT CSSAU. Occupancy over the winter months (Dec15-Feb16) was also reviewed to assess the impact of winter pressures (see Figure 6-13) and this also indicates that the CSSAU was not fully occupied though it is acknowledged that at times the department can be at capacity. The new build ED at SRH retains the current 8 bed CSSAU capacity, with staff moving between the ED and CSSAU depending on demand.

Figure 6-13: Sunderland CSSAU occupancy over 2015/16 winter period.



It is assumed that capacity at CHSFT for other non-CSSAU non-elective work matches demand as demonstrated in previous years. All non-elective work is carried out by the consultant of the week. The SRH inpatient unit has circa 1,900 non-elective admissions per year (excluding CSSAU admissions), plus a further 300 paediatric day cases and 150 elective admissions.

SCBU capacity has also been reviewed with combined anticipated workloads of the two units, based on 2015/16 activity, used to calculate required nursing input and nursing/cot ratios, given that full SCBU consolidation is a feature of both paediatric options. There are currently 6 SCBU cots at STDH and 16 at CHSFT. Table 6-27. This suggests that, on average, of 7.08 nurses are required per shift, although taking no account of day to day variation.

Table 6-27: SCBU / NICU demand for nursing.

Month	SRH Intensive Care Days	SRH High Dependency Days	SRH SCBU Days	STDH SCBU Days	Total SCBU Bed days	Total nurse days per month	Average nurses needed per shift
Nurse / patient ratio	1 to 1	1 to 2			1 to 4		
Apr-15	56	73	294	64	358	182	5.87
May-15	94	75	263	84	347	218	7.04
Jun-15	83	53	295	27	322	190	6.13
Jul-15	166	157	262	84	346	331	10.68
Aug-15	57	190	268	87	355	241	7.77
Sep-15	60	117	221	87	308	196	6.31
Oct-15	102	63	250	121	371	226	7.30
Nov-15	89	41	342	55	397	209	6.73
Dec-15	80	117	246	67	313	217	6.99
Jan-16	99	112	258	50	308	232	7.48
Feb-16	73	47	274	83	357	186	5.99
Mar-16	119	47	198	58	256	207	6.66
	1078	1092	3171	867	4038	2634	7.08

Given the anticipated dispersal of 40% of births to the north of the patch, SCBU activity is expected to reduce in line with this, reducing nursing requirement to circa 6.85 WTE per shift.

Current SCBU nursing establishments are 8.53 WTE at STDH and 43.21 WTE at CHSFT. However, within the CHSFT figures are 5 WTE Band 8 Advanced Neonatal Nurse Practitioners (ANNPs) who are effectively part of the middle grade medical rota (see Section 1.3) and therefore cannot be counted against the nursing ratios. Also one nurse per shift is the shift co-ordinator and therefore cannot be counted against the ratio. After adjusting for these staff the average staffing per shift is 8.3 WTE across the whole organisation (Table 6-28).

Table 6-28: Calculation of budgeted NICU / SCBU staffing per shift.

	STDH	CHSFT	Total
B8 ANNPs		5.00	5.00
B7 shift co-ordinator		1.00	1.00
B6	3.62	10.00	13.62
B5	3.43	22.52	25.95
B4		2.69	2.69
B3			0.00
B2	1.48	2.00	3.48
Total	8.53	43.21	51.74

Staff per shift (B6 & below)	1.6	6.8	8.3
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This suggests the current budgeted staffing is adequate to meet average combined demand and to provide limited flexibility to cope with peaks and troughs.

Further detailed activity analysis has been taken to underpin the proposed nurse-led paediatric minor illness/injury facility proposals that form part of option 2. Table 6-29 provides a breakdown of the nature and outcomes of paediatric ED attendances at STDH.

Table 6-29: Paediatric ED presentations and outcomes, STDH.

Top 5 presentations and key outcomes All age groups (0-16)	Number	Discharge to GP	Admit to PSSAU	Admitted to another hospital	Seen and treat by a GP	Referred to a F/U Clinic / other professional
'Unwell child'	5,161	2,977	695	26	1,141	209
Limb problems	3,717	2,629	55	3	58	449
Head injury	1,188	1,038	98	10	9	30
Rash	1,101	550	55	2	435	32
Shortness of Breath	992	577	215	4	104	11
Total	12,159	7,771	1,118	45	1,747	731
As a % of totals for		64%	9%	0.3%	14%	6%

disposal / outcome top 5 presentations						
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The most common presentations and outcomes among children under three is depicted in table 6-30.

Table 6-30: Top 5 presentations and outcomes (under 3 years old).

Top 5 presentations and key outcomes under 3's	Number	Discharge to GP	Admit to PSSAU	Admitted to another hospital	Seen and treat by a GP	Referred to a F/U Clinic / other professional
'Unwell child'	3139	1822	509	13	632	124
Rashes	649	332	46	0	241	18
Shortness of breath	539	50	124	1	50	8
Falls	222	117	22	2	2	15
Vomiting	210	111	24	2	42	11
Total	4759	2432	725	18	967	176
As a % of totals for disposal / outcome top 5 presentations		51%	15%	0.3%	20%	3.5%

The analysis shows that 16% of paediatric ED presentations at STDH are already managed in urgent care hub and 64% discharged to GP. Respiratory symptoms represent the largest admission group.

Outpatients activity is expected to remain unchanged with annual attendance rates remaining at 4,500 at STDH and 18,000 at SRH.

Analysis of the paediatric and SCBU proposals on the continued delivery of key NHS constitutional targets and performance indicators, as embedded in the NHS Standards Contract, has also been undertaken. The results are at table 6-31. A potential impact of option 2 on both Trusts' 4-hour A&E delivery performance is highlighted with predicted slight performance improvement at SRH (0.1%) and between 0.4-0.8% shortfall against performance at STDH, depending on whether or not activity within the proposed paediatric minor illness/injury facility could contribute towards target delivery.

Table 6-31: Impact assessment of paediatric options against NHS constitutional target delivery.

Indicator	Standard	Potential impact	Mitigation plan
18 weeks	Percentage of Service Users on incomplete RTT pathways (yet to start treatment) waiting no more than 18 weeks from Referral (92%)	None identified	None identified
6 weeks	Percentage of Service	None identified	None identified

Indicator	Standard	Potential impact	Mitigation plan
diagnostics	Users waiting 6 weeks or more from Referral for a diagnostic test (no more than 1%)		
A&E 4 hours	Percentage of A & E attendances where the Service User was admitted, transferred or discharged within 4 hours of their arrival at an A&E department (95%)	Circa 5,000 extra Paediatric ED attendances at SRH increases the risks of CHSFT achieving this target for option 2.	Reduce the number of referrals to SRH through 'choose well campaign' by maximising use of urgent care and GP services. It is expected that a small number of urgent care referrals will continue to be managed in and out of hours through the Adult ED.
Cancer waiting time standards	Percentage of patients seen within 14 days who have been referred urgently by a GP with suspected cancer (93%); Percentage of patients waiting no more than one month (31 days) from diagnosis to first definitive treatment for all cancers (96%) or for surgery (94%); Percentage of patients waiting no more than two months (62 days) from urgent GP referral to first definitive treatment for cancer (85%) or from screening (90%)	None identified	None identified
MSA	Mixed sex accommodation breach	None identified	None identified
Cancelled Operations	All Service Users who have operations cancelled, on or after the day of admission (including the day of surgery), for non-clinical reasons to be offered another binding date within 28 days, or the Service User's treatment to be funded at the time and hospital of the Service User's choice (Number of Service Users who are not offered another binding date within 28 days >0)	None identified	None identified

Further analysis of the proposed changes on the North East Ambulance Service capacity and performance is required. This is reflected in the accessibility impact assessment and aggregated impact assessment in subsequent sections.

A reduction in the number of postnatal ambulance transfers that occur due to limited SCBU cot availability at STDH is expected through the SCBU consolidation proposals. STDH transfers currently represent approximately 20% of all postnatal transfers in to SRH (2010-14). A reduction in the number of intrauterine transfers where neonatal care is required is also expected to be incurred through both options due to the proposed consolidation of high risk deliveries at SRH. STDH transfers represent approximately 15% of all of the in-utero transfers to SRH within the region (2010-14).

6.3.10.7 Clinical interdependencies

When considering the change options for O&G and paediatrics, the CCGs have and will continue to review the implications of the proposals for interdependent services. The interdependencies across O&G and the co-dependent nature of SCBU with both O&G and paediatric services has already been outlined in earlier sections resulting in SCBU becoming an integral part of the proposed service change due to the direct impact the proposed changes will have.

Work done by the South East Coast Clinical Senate on behalf of their CCGs in 2014 has informed the CCGs' assessment of clinically interdependent services. The South East Coast Clinical Senate reviewed the evidence base for the critical co-dependencies of acute inpatient services to provide a clinical consensus on service inter-dependencies and the most comprehensive clinical review to date of the inter-dependencies between a wide range of acute hospital-based services. As part of the work the Senate developed a number of key co-dependency 'grids' which outline which clinical services within an acute hospital are co-dependent and to what degree. Tables 32 and 33 set out the dependency levels between acute O&G and paediatric services and other hospital-based services. All proposed potential service configurations maintain the relevant levels of service interdependency.

Table 6-32: Suggested service dependencies for obstetrics services.

	A&E/Emergency Medicine	Acute and General Medicine	Respiratory Medicine	Gastroenterology	Urgent GI Endoscopy	General Surgery	Gynaecology	Diabetes	Urology	Vascular surgery hub	Vascular surgery spoke	Plastic Surgery	Critical care (adults)	Critical care (paeds)	General Anaesthetics	Acute Cardiology	Nephrology	Inpatient Dialysis	Palliative Care	Neurology	X-ray and Diagnostic Ultrasound	Acute Paediatrics (non specialised)	Neonatology	CT Scan	MRI Scan	Cardiac MRI	Interventional Radiology	Clinical Microbiology	Laboratory Microbiology	Urgent diagnostic Haematology	Acute inpatient Rehabilitation	Occupational Therapy	Physiotherapy	SALT	Dietetics	Acute Mental Health Services		
Standard	4	4	4	4	2	2	4	2	2	2	24	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Post change	4	4	4	4	2	2	4	2	2	2	24	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Co-Dependencies Definitions/Key:

The colour describes the dependency of the service in the row, on the support service in the column. The number denotes the number of hours within which the patient needs review

Purple: the service should be co-located in the same hospital.

Red: Service should come to the patient (patients transfer not appropriate – telemedicine/in reach form another site could provide this cover.

Amber: Ideally on the same site but could alternatively be networked via robust emergency referral and transfer protocols.

Green: Does not need to be on the same site. Appropriate arrangements are in place to gain specialist opinion or care.

Table 6-33: Services that should be based on the same site as Acute Paediatrics.

	STDH current	CHSFT current	Option 1	Option 2
A&E	Y	Y	Y	Y
General Surgery (Upper GI & Lower GI)	Y	Y	Y	Y
Trauma & Orthopaedics	Y	Y	Y	Y
General Anaesthetics	Y	Y	Y	Y
Neonatology	Y	Y	Y	Y
Radiology (x-ray, CT, ultrasound)	Y	Y	Y	Y
Pathology (urgent diagnostic haematology and biochemistry)	Y	Y	Y	Y
Acute mental health	N	N	N	N

More detailed assessments of clinical co-dependencies can be found in tables 6-34 and 6-35.

Table 6-34: Assessment of clinical co-dependencies of obstetrics and gynaecology services with other services.

Clinical co-dependency assessment: Obstetrics and Gynaecology		
Service	Expected impact	Comments
Emergency Care	Whist no changes to the emergency gynae services are being proposed as part of this review there will be transfers of patients from STDH to CHSFT who self present with significant gynae problems at STDH.	The number of A&E attendances to STDGH in relation to patients presenting with an Obstetric or Gynaecology complaint for 2015/16 was 1764 for Obstetrics and 368 for Gynaecology. Pathways would need to be agreed to which patients could still be seen at STDGH and which patients would need to transferred to SRH if the potential solution was implemented.

<p>Diagnostics</p>	<p>The majority of diagnostics associated with the maternity pathway occur in the ante natal phase. Gynae diagnostics – colposcopy, urodynamic, ultrasound.</p>	<p>There are no plans to change ante natal provision as part of the proposals within this service review. The impact on diagnostics for the increased births at CHSFT has been mitigated by the transfer of costs within the financial modelling. Specific analysis has been carried to look at the number of echocardiograms requested. This shows that for CHSFT there was 52 requests in 2015. Only 9 of these were requested as inpatients. Pro-rata for STDH this would be an extra 20 requests with 4 inpatients requests if all births came across to CHSFT.</p>
<p>ITU/HDU</p>	<p>As can be seen by the co-dependency grid on the previous page ITU/HDU is required to be co-located on site where high risk obstetric care is delivered.</p>	<p>Whilst maternal admissions to ITU/HDU are rare they may be a small increase in ITU/HDU admissions at CHSFT and a corresponding reduction at STDH. For 2015/16 there were two mothers who required HDU level care post partum.</p>
<p>Neonatal Services</p>	<p>As can be seen by the co-dependency grid on the previous page, Neonatology is required to be co-located on site where high risk obstetric care is delivered</p>	<p>The removal of high risk obstetric care at STDH will mean there is no longer need to staff SCBU on site, this will mean however an increased workload for SCBU at CHSFT. In 2015/16 there were 110 admissions to SCBU with an average length of stay of 9.2 days. This gives an estimate of 1,012 cot day or 2-3 cots needed per day.</p>
<p>Anaesthetics/ Theatres</p>	<p>The loss of high risk obstetric care removes the need for an Obstetric theatre and associated anaesthetic time/capacity at STDGH. There will also be a small number of extra gynae cases that will need to be done as emergencies at SRH.</p>	<p>Theatre capacity at CHSFT will need to be fully assured to accommodate additional elective O&G activity with any clinical risks associated with this fully explored. There were 12 cases carried out on the emergency list at STDH last year. It is the team's view that these extra cases could be absorbed onto the emergency lists already in place at CHSFT.</p>

Table 6-35: Assessment of clinical co-dependencies of paediatrics services with other clinical services.

Service	Potential Option 1 – Closure of STDH Paediatric ED and CSSAU overnight + transfer of SCBU to SRH	Potential Option 2 – Nurse Led Urgent care Centre 8am-10pm no PSSAU or SCBU
Emergency Care	<p>An anticipated 3,454 Paediatric ED attenders and 345 CSSAU admissions overnight at STDH will divert to SRH Paediatric ED / CSSAU.</p> <p>No direct impact on main A&E at SRH as separate department.</p> <p>Slight reduction in input required overnight from Adult ED medical and nursing at STDH.</p> <p>The CHSFT new ED build was built with some additional capacity which would accommodate the additional numbers.</p>	<p>An anticipated 13,372 Paediatric ED attenders and 1,495 CSSAU admissions at STFT would divert to SRH Paediatric ED / CSSAU without any kind of remaining paediatric urgent care facility in place. The paediatric minor injury/injury service is expected to absorb 60% of cases, leaving 5,349 additional SRH Paed ED attendances. The main A&E is a separate department.</p> <p>The CHSFT new ED build was built with some additional capacity which would accommodate the additional numbers.</p>
Obstetrics & Gynaecology	<p>Circa 100-150 babies (1,000 bed days) per annum will require O&G medical input at SRH. Cessation of requirement for STDH O&G medical input.</p> <p>These implications have already been considered as part of the O&G service review</p>	<p>Circa 100-150 babies (1,000 bed days) per annum will require O&G medical input at SRH. Cessation of requirement for STFT O&G medical input.</p> <p>These implications have already been considered as part of the O&G service review</p>
Medicine	No impact identified	No impact identified
Surgery	Small number of Surgical cases will transfer to CHSFT. Existing Dental lists will continue to be managed at STDH	Small number of Surgical cases will transfer to CHSFT. Existing Dental lists will continue to be managed at STDH
Critical Care	No impact identified	No impact identified
Theatres and Anaesthetics	Reduces the infrequent requirement for Anaesthetic department to support ventilation of children prior to transfer 24/7. Removes the issue of Anaesthetists not meeting existing RCA standards for routine anaesthetising of children	Reduces the infrequent requirement for Anaesthetic department to support ventilation of children prior to transfer 24/7. Removes the issue of Anaesthetists not meeting existing RCA standards for routine anaesthetising of children
Radiology	A small reduction in the number of X rays and scans undertaken on Paediatric ED and CSSAU patients at STDH at night would be expected, and would be matched by a corresponding increase at CHSFT (less any patients going elsewhere).	A reduction in the number of x-rays and scans at SDGH would be expected but with a corresponding increase at CHSFT (less any patients going elsewhere).
Pathology	A small reduction in the number of pathology tests undertaken on Paediatric ED and CSSAU patients at STDH at night would be expected, and	A reduction in the number of pathology tests undertaken at STFT would be expected but matched by a corresponding increase at CHSFT

Service	Potential Option 1 – Closure of STDH Paediatric ED and CSSAU overnight + transfer of SCBU to SRH	Potential Option 2 – Nurse Led Urgent care Centre 8am-10pm no PSSAU or SCBU
	would be matched by a corresponding increase at CHSFT (less any patients going elsewhere).	(less any patients going elsewhere).
Therapies	No impact identified	No impact identified
Outpatient department	No impact – although in medium term will look at optimising distribution of sub-specialist clinics across both trusts.	No impact – although in medium term will look at optimising distribution of sub-specialist clinics across both trusts.
Estates	Closure of the SCBU at STDH will free up this area for potential use by other services.	Closure of the SCBU at STDH will free up this area for potential use by other services.
Transport	<p>Closure of the STDH Paediatric ED and CSSAU overnight will result in a change in ambulance pathways, with NEAS taking a small number of patients at night to SRH rather than STDH. There will also be a very small increase in the number of transfers to Sunderland of patients self-presenting at STDH.</p> <p>Closure of the SCBU at STDH will result in more South Tyneside mothers and their families having to travel to Sunderland (as already identified in the Obstetrics & Gynaecology review).</p>	<p>Closure of the Nurse-led facility overnight will result in a change in ambulance pathways, with NEAS taking a small number of patients at night to SRH rather than STDH. There will also be a very small increase in the number of transfers to Sunderland of patients self-presenting at STDH.</p> <p>Closure of the SCBU at STDH will result in more South Tyneside mothers and their families having to travel to Sunderland (as already identified in the Obstetrics & Gynaecology review).</p>
Primary care	This solution will require working with the whole system to ensure only necessary patients travel to CHSFT for treatment from STDH when services are closed. This will include local in hours and out-of-hours GP providers.	This solution will require working with the whole system to ensure only necessary patients travel to CHSFT for treatment from STDH when services are closed. This will include local in hours and out-of-hours GP providers.

A number of non-clinical services underpin the effective delivery of clinical services and therefore will be central to any future service configuration. An assessment of the impact of the proposals on non-clinical services, both within and outwith the hospital setting.

Table 6-36: Assessment of non-clinical co-dependencies for Obstetrics and Gynaecology Services.

Non-Clinical Services Assessment: Obstetrics and Gynaecology		
Service	Expected impact	Comments
IT	The reconfiguration of services will mean a great number of women transferring between providers.	Whist maternal hand held notes act as the primary care record for pregnant women there will be a need to look at ways of transferring any electronic patients records from STDH to CHSFT, GHFT and NuTH. As with other CSRs the IT teams are aware of the potential for service changes in O&G and will look and ways of managing the IT implications once the new configuration has been agreed.
Estates	In either option there will be a reduction in the space needed on the STDH site and there will be some estates work needed on the SRH site in terms of reconfiguring some rooms on the antenatal/post natal ward.	The amount of space vacated on the STDGH site will depend on the possible solution that is chosen to consult on. In option two, there will be a requirement for additional space to be created at the SRH site by converting D46. There will also be a requirement for four rooms on the AN/PN ward to LRDP convert rooms, This is estimated to be a further £378,682.
Transport	The reorganisation of gynaecology services in particular will result in both South Tyneside residents travelling to Sunderland for their care, and Sunderland residents travelling to South Tyneside.	The issue of transport and the potential impact that will have on residents of each locality has been recognised as a key area that requires a detailed impact assessment. Therefore a separate and independent travel impact assessment for the Clinical Service Review Programme (including Obstetrics and Gynaecology) is being commissioned.

6.3.10.8 Accessibility, travel and transport

The impact of the proposed obstetrics and gynaecology options on service accessibility, travel and transport have been assessed from a number of perspectives:

- Assessing the general accessibility of services for women-as-patients, visitors and staff and any associated travel time, cost and experience impact
- Assessing emergency intrapartum transfer issues and any associated clinical risks
- Assessing the impact of the proposals on both emergency and routine ambulance services from a clinical, capacity, cost and performance perspective

- The commissioning of an Integrated Impact Assessment for Equality, Health and Health Inequalities which assessed service access and travel impact, particularly for vulnerable groups

This assessment has been informed by various data sources and methodologies, including:

- The commissioning of an independent travel and transport impact assessment (TTIA) (summarised at appendix 7.1)
- A travel and transport workshop
- Review of the clinical evidence base around intrapartum transfers
- External review of the proposals by clinical leads from the North of England Clinical Maternity Network, which included a specific focus on any intrapartum transfer risks
- Analysis of the options by the North East Ambulance Service
- Insight feedback from service users as part of pre-engagement activity

Obstetrics - general accessibility

The independent Travel and Transport Impact Assessment (TTIA) highlights that South Tyneside mothers will be the population category affected by the proposals from a travel and transport perspective. Depending on the option that is taken forward, it could be that around 780 South Tyneside mothers will be affected (in the case of Option 2) or only those that are deemed to be having a high risk birth (460 patients in the case of Option 1), who will be required to travel to SRH for the birth. Under both options, 520 patients from the north of South Tyneside are expected to choose to give birth at Gateshead's Queen Elizabeth (QE) Hospital or Newcastle's Royal Victoria Infirmary (RVI).

The maternity TTIA reviewed:

- Accessibility analysis of the total current population, including for specific demographics such as those without access to a car
- Postcode data of maternity patients treated STDH during the 2015/16 financial year and the 2016/17 financial year up to the end of October 2016
- Feedback from a patient and visitor travel survey undertaken between 10th February 2017 and 28th February 2017 at SRH; although the results should be treated with some caution due to the limited sample size
- Parking capacity
- Travel and parking costs

Key findings were:

- The travel impact for maternity patients and visitors mirrors general accessibility of the wider general population.

- 85% of previous maternity patients from South Tyneside could get to SRH by public transport between 14:00-16:00 within 60 mins, compared to 87% of patients who could get to STDH), however only 2% of South Tyneside patients could get to SRH within 30 mins, compared to 70% who could get to STDH.
- Accessibility rates for maternity patients returning from SRH to South Tyneside by public transport appears more challenging with 73% of previous South Tyneside maternity patients able to return home within 60 mins, compared to 86% of patients who could get back from STDH within an hour; 2% of South Tyneside patients could get back from SRH within 30 mins by public transport, compared to 64% who could get back from STDH.
- The greatest travel impact is in more South Tyneside people travelling between 41-50mins to get to or from SRH
- There is an average public transport travel time increase of between 21 minutes (for inward journeys) and 25 minutes (for return journeys)
- Car travel to either STDH and SRH within 30 or 60 minutes is broadly equivalent for South Tyneside patients, with 70% of South Tyneside patients estimated to be able to reach SRH by car in between 11-20 mins and an average total car journey increase of six minutes (from 6-12 minutes)
- 81% of maternity patients and visitors reported attending STDH by car or taxi and 17% by bus
- 69% of visitors reported car to be their indicative mode of travel to SRH, however further work is required to fully understand modes of travel.
- The parking impact at SRH is estimated at between 29 and 51 maternity patient and visitor vehicles daily. Sufficient capacity is available to absorb this, however, further work is required to fully test and validate parking analysis
- Parking costs over two days are similar for visits between one and four hours although there is a parking cost for visitors staying between 4-24 hours. Equivalent parking costs can be achieved for visitors of babies being cared for in SCBU through the purchase of a monthly parking pass
- Hebburn patients have much easier car and public transport access to the QE than SRH, which is more akin to current STDH, and reinforces assumption that some of these patients may choose to give birth in Gateshead.

- Jarrow patients appear to have easier and faster public transport links to the QE than SRH which suggests that those relying on public transport may go there, however Jarrow patients can get to SRH quicker by car. Bus journey times are comparable from Jarrow to SRH and RVI and metro journeys to the RVI are shorter, however car travel to RVI is longer than to SRH.

Further accessibility analysis is required to fully understand modes of travel together with work to explore how return public transport journeys to South Tyneside can be improved.

Insight obtained through an extensive pre-engagement programme identified the importance of having a high-quality local service, close to home as an important factor of maternity care. Travel distance was raised as the main concern for women who had given birth in recent years when asked about any issues they would have had if they had been required to give birth at a different hospital. Women who took part in facilitated interviews voiced a preference to receive all their maternity care at their local hospital, due to the proximity and the familiarity they have with the service, however the majority weren't too concerned if they had to receive aspects of their care at another hospital. Those that did express concerns were concerned how they would travel to the hospital with others stating that they would like an explanation as to why it was necessary for them to travel.

The integrated equality, health and health inequalities impact assessment also highlighted the financial and emotional impact of additional travel time and distance as a potential drawback, however, this was not deemed to be significant enough to outweigh the benefits of the proposed changes, as highlighted below.

Obstetrics – ambulance transfers

Transfer rates for women having their first baby are known to be 36% in freestanding units and 45% in alongside units, while rates for multiparous women are much lower (9% and 13% respectively). Nationally the median total transfer duration (from the decision to transfer through to first assessment in the OU) was 60 minutes for FMU transfers and 49 minutes for home birth transfers (NPEU, 2015). The study also identified that in the case of women having their first baby that intervention rates were higher the further the Unit was away from the obstetric unit. (Birthplace 2011). The study concluded that of those women who required transfer from a freestanding Midwife-led Unit the outcomes were no better or worse than for those women delivering in an obstetric unit and that there was no association between the transfer itself and outcome. Nevertheless, given the proposed freestanding MLU as part of option 1, the programme has analysed this issue further to understand any real or perceived risks for women who may need to be transferred from STDH to SRH during delivery.

External advice sought from maternity clinical leads from the North of England Maternity Clinical Network confirms no consistent evidence of impacts on perinatal mortality rates (as an independent variable) for mothers living up to 4 hours from their nearest maternity unit. The network reinforced the findings of the Birthplace study that freestanding (or co-located) midwife-led units (MLUs) are safe places in which women with uncomplicated pregnancies can give birth, but places which also confer significant advantages over so called Consultant led units. The network highlighted that the distance from South Tyneside to Sunderland is typical of that between many of the units contributing to the Birthplace study, which means that the findings of this work are immediately transferrable to the proposed developments at South Tyneside.

The network's conclusion assumes the provision of ambulance transfer times in keeping with those accepted as reasonable and in line with those for the units contributing to the Birthplace and other studies.

The North East Ambulance Service will also encounter more emergency hospital journeys to SRH as a result in pathway changes that will mean all high risk women are taken to Sunderland (where this risk is fully known and communicated). The potential pressure on ambulance services, together with the potential drawbacks of additional inter-site transfers has been highlighted in the integrated equality, health and health inequalities impact assessment discussed in subsequent sections. While neither issue was felt to outweigh the positive impacts on equality, health and health inequalities likely to result from the proposed change, there needs to be clear actions in place as part of any future implementation to mitigate this risk.

CSRG and subsequently both CCG Governing bodies have sought assurances from the North East Ambulance service on any clinical incidents relating to transfer of patients out of FMLUs. NEAS have confirmed there were no clinical incidents referring to delay in responding to call from FMLUs in Northumberland (Hexham, Alnwick and Berwick) as a comparison in terms of an area with FMLUs. Worst case scenario modelling suggests that no more than one patient per day would require transfer from a FMLU at STDH to SRH (based in the Birthplace study, 2011); however, in reality transfers are likely to be far less frequent due to the combined case mix of nulliparous and multiparous women. Work is ongoing with NEAS to look at response times for patients requiring transfers from FMLUs across the region but NEAS estimate the transfer time between STDH and SRH to be 11 minutes.

NEAS has confirmed that maternity conveyance to South Tyneside number under 10 per month on average. Any change at an individual service level that would result in conveyance to SRH instead of STDH is expected to have a minimal impact on NEAS services. Therefore should either of the maternity options be chosen, the low volumes of current demand for NEAS services would not be expected to have an adverse impact on the service. That said, the impact when considered at an

aggregated level across all three clinical service areas, does present some capacity challenges for NEAS which would require an investment of between £23-44,000, as is set out in section 7.1.6.

Further analysis of the aggregated impact of site-to-site transfers is also required which will form part of the full, aggregated risk assessment discussed in section 7.1.6.

Just one individual in the facilitated interviews conducted as part of the pre-engagement programme, had experience of being transferred between different hospitals during her last pregnancy and this individual had found the experience very unsettling.

Gynaecology – general accessibility

The TTIA highlights that South Tyneside patients requiring inpatient treatment will be affected by the service change proposals as they will be required to travel to SRH for treatment. Key findings include:

- 86% of South Tyneside patients could access SRH by public transport within 60 minutes (compared to 87% who could get to STDH by public transport within one hour).
- Accessibility within 30 minutes by public transport presents more of an impact with 2% of historical gynaecology patients from South Tyneside being able to reach SRH by public transport within 30 minutes (compared to 69% who could reach STDH by public transport within 30 mins).
- There is an average increased public transport journey time of 20 minutes from South Tyneside to SRH (from an average journey time of 23 to 43 minutes during the 14:00 to 16:00 time period)
- The greatest impact for people travelling from South Tyneside by public transport is in the number of South Tyneside patients travelling between 41-50mins
- 70% of previous South Tyneside gynaecology patients are estimated to be able to access SRH within 11-20mins by car, with an average increased car journey travel time of six minutes to SRH (from an average of six to reach South Tyneside to an average of 12 minutes to reach SRH)
- Potential parking demand arising from gynaecological inpatient presentations needing to travel to SRH is estimated at one additional patient vehicle parked on site per day.

Gynaecology – ambulance transfers

While many women who present at STDH with gynaecological problems could be safely treated within A&E and/or urgent care; it is possible that a number will require acute gynaecology care and therefore will need to be transferred to SRH. NEAS is currently working with the PtEP to quantify the likely hospital-to-hospital transfer rate in order to ensure appropriate ambulance capacity is in place. Early analysis suggests this to be no more than one patient daily, however further work is required take into account the anticipated impact of changes to healthcare referral and signposting routes such as NHS 111 and general practice.

NEAS is also seeking to establish the current level of gynaecological ambulance conveyances to STDH to understand the implications of taking those patients to SRH.

6.3.10.9 Accessibility, travel and transport – paediatrics

The impact of the proposed paediatric options on service accessibility, travel and transport have been assessed from a number of perspectives:

- Assessing the general accessibility of services for families and children, staff and any associated travel time, cost and experience impact
- Assessing any inter-site transfer issues and any associated clinical risks
- Assessing the impact of the proposals on both emergency and routine ambulance services from a clinical, capacity, cost and performance perspective

This assessment has been informed by various data sources and methodologies, including:

- The commissioning of an independent travel and transport impact assessment (TTIA) (summarised at appendix 7.1)
- A travel and transport workshop
- Analysis of the options by the North East Ambulance Service
- The commissioning of an Integrated Impact Assessment for Equality, Health and Health Inequalities which assessed service access and travel impact, particularly for vulnerable groups
- Insight feedback from service users and their families as part of pre-engagement activity

General accessibility

The TTIA analysed:

- Accessibility analysis of the total current population, including for specific demographics such as those without access to a car
- Postcode data of paediatric patients treated STDH during the 2015/16 financial year and the 2016/17 financial year up to the end of October 2016

- Feedback from a parental travel survey undertaken between 10th February 2017 and 28th February 2017 at SRH; although the out of hours' travel survey results should be treated with some caution due to the limited sample size
- Parking capacity
- Travel and parking costs

Key findings from the paediatric impact assessment are:

- 84% of South Tyneside patients could get to SRH by public transport within 60 minutes between 14:00 – 16:00 (compared to 86% who can access STDH by public transport within 60 minutes).
- Accessibility by public transport within 30 minutes is a greater challenge with 4% of South Tyneside historical paediatric patients being able to get to SRH by public transport within 30 minutes between 14:00 – 16:00, compared to 65% who can access STDH within this timeframe.
- Return journeys by public transport from SRH appear to be longer for South Tyneside patients, echoing the general accessibility analysis
- There is an average, estimated 18 minute longer inward public transport journey time between 14:00 – 16:00 (increasing from 24 min average to 42min average) and 23min longer return public transport journey time between 19:00 – 21:00(increasing from 25-48 mins)
- 93% of previous paediatric patients could get to STDH by car within 10 mins, reinforcing the correlation between proximity to service and urgent care service use
- 67% of previous South Tyneside paediatric patients could continue to access urgent care services at SRH by car in between 11-20 minutes
- There is an average, estimated additional increase in car journey times of six minutes (increasing from 6-12 mins)
- 95% of surveyed patients attending STDH out of hours arrived at hospital by car
- 87% of surveyed patients attending STDH in-hours arrived at hospital by car
- There would be a small increase in parking demand at SRH, but capacity exists, with an estimated three additional cars arriving at SRH during the daytime and a further 7 OOH.

The IIA highlighted increased travel costs of both paediatric options as a potential drawback, together with noting the impact of increased traffic commuting between South Tyneside and Sunderland and associated environmental impact.

Insight feedback from parents/guardians surveyed as part of the paediatric pre-engagement work showed that high quality care from specialists was perceived to be more important than having an emergency paediatric unit close to home (52% rated this factor as most important).

Ambulance transfers

Both paediatric options will result in some impact for local ambulance services. A small increase in the number of transfers from STDH to SRH is expected as a result of patients self-presenting at STDH who require paediatric ED services. Ambulance services will also take South Tyneside patients requiring paediatric ED services directly to SRH (between 22:00-08:00 under option 1 and anytime under option 2), presenting a potential impact on overall ambulance journey times and overall capacity and performance.

These risks are echoed by the IIA which also highlights the risks of extra steps in the patient pathway presenting implications for timeliness and cost-efficiency of care. The IIA advocates an emphasis to avoid delay is built into the clinical model to ensure the timely assessment of children in need of inter-hospital transfer together with the availability of emergency ambulances to provide the transfer, and the efficiency of the clinical response in Sunderland when receiving and treating the transferred children. The IIA highlights how such risks might disproportionately affect key groups with language or communication difficulties in South Tyneside i.e. BME communities, disabled groups, older patients and those with socioeconomic deprivation.

Current numbers of ambulance-conveyed patients to STDH average 3 per day. Under Option 1, and based solely on those incidents currently responded to by NEAS, should out of hours' paediatric ED services be relocated to Sunderland Royal Hospital, the impact on existing NEAS services is expected to be minimal due to the low volume of daily paediatric incidents that are presently conveyed to South Tyneside Hospital overnight. Under Option 2, it is proposed to move all acute paediatric services to Sunderland whilst providing a nurse practitioner led MIU/UCC service between the hours of 8am and 10pm. It is expected, that 60% of the paediatric activity currently experienced during these hours would be suitable to this nurse practitioner led service. According to NEAS data, there are on average 2 conveyances per day during these hours.

Further analysis of the anticipated transfers of self-presenting or deteriorating patients from, STDH to SRH is required, as is discussed further in section 7.1.6. This

will form part of a full, aggregated risk assessment of the collective capacity and performance impact for NEAS with all healthcare partners working together to suitably mitigate any risk.

6.3.10.10 Health and health inequalities – obstetrics and gynaecology

An integrated impact assessment (IIA) has been commissioned from an independent organisation to fully understand both positive, negative or nil effects of both of the obstetrics and gynaecology options on equality groups, health outcomes and health inequalities, in line with legal and policy requirements of clinical commissioning groups. The IIA is intended to:

- assure commissioners' of option viability prior to the consultation;
- ensure consultees from the most impacted and/or vulnerable communities are able to make informed contributions to the consultation process and
- be updated during and after the consultation process if and as further relevant feedback on the impact of the proposals and relevancy of the IIAs is received.

A summary of the IIA for the obstetrics and gynaecology proposals, which also considers the impact of the associated proposed changes to SCBU, is at appendix 6.1 with the full IIA within supporting documentation.

The assessment highlights that the changes could have a greater effect on communities in South Tyneside and on certain vulnerable groups, most notably:

- Socioeconomic deprivation
- Disability (physical, mental, learning)
- Race (BME communities)
- Age (older women, older and teenage mothers)
- Women who misuse alcohol or drugs
- Sensory impairment
- Women with co-morbid conditions

These groups may be more likely to need women's services and will therefore benefit from improvements in service quality. They might also be more vulnerable to some of the changes in the way services are provided.

The total Health and Health Inequalities IIA scores for both options were positive with the report suggesting that there is strong evidence that the significant benefits associated with the proposed changes outweigh the drawbacks. Key benefits outlined in the IIA include the ability of the changes to achieve:

- More sustainable and consistent high quality care, regardless of the day of the week or the time of day – for women, mothers and babies
- Safer care due to sustained and improved levels of specialist staffing - especially in obstetric care and neonatal care - able to provide timely intervention and avoid clinical deterioration

- More cost-efficient and cost-effective obstetrics and gynaecology services

Other key findings of the Obstetrics, Gynaecology and SCBU IIA include:

- The total IIA score (combining both negative and positive scores) for Option 1 (152) was higher than Option 2 (111) because the latter option entails more far reaching changes which will affect more women
- Option 2 scored lower due to reduced choice offer to women which is likely to be less acceptable, together with the suggested increased risk of medical interventions
- Despite their advantages, the options present some potential challenges for women such as understanding and adapting to the changes which could inhibit access, travelling further for care or to visit women and newborns which could generate additional expense, time, inconvenience and emotional stress and also in receiving continuous care with smooth handovers
- Overall, both options scored positively as they will bring about continuing improvements in service quality able to ensure all children achieve a better start in life.

The IIA makes suggestions to mitigate any drawbacks for all stakeholders to realistically consider how positive impacts can be maximised and negative impacts reduced within the context of economic challenge. Further details about the following high-level recommendations can be found in the summary IIA at appendix 6.1 or in the full O&G IIA within the supporting documentation:

- Promoting continuity of care especially for vulnerable groups
- Reducing travel and transport costs especially for vulnerable groups
- Helping everyone to understand and adapt to the new changes, especially vulnerable groups
- Minimising any implications arising from traffic commuting between South Tyneside and Sunderland
- Minimising any negative impact on the local economy
- Promoting sustainability
- Maximising cost-efficiency savings
- Maximising outcomes of transfers of care during labour or immediately after the birth (specific to option 1)
- Ensuring a positive patient experience to ensure acceptable health care (specific to option 2)
- Action to mitigate against unnecessary obstetric interventions

6.3.10.11 Health and health inequalities – paediatrics

An integrated impact assessment (IIA) has been commissioned from an independent organisation to fully understand both positive, negative or nil effects of both of the

paediatrics options on equality groups, health outcomes and health inequalities, in line with legal and policy requirements of clinical commissioning groups. The IIA is intended to:

- assure commissioners' of option viability prior to the consultation;
- ensure consultees from the most impacted and/or vulnerable communities are able to make informed contributions to the consultation process and
- be updated during and after the consultation process if and as further relevant feedback on the impact of the proposals and relevancy of the IIAs is received.

A summary of the paediatric IIA is at appendix 6.1 with the full IIA available within the supporting documentation. It demonstrates that South Tyneside communities and vulnerable groups could be more likely to be affected by the changes. These groups are:

- Children and families affected by socio-economic deprivation,
- Children and families affected by substance or alcohol misuse
- Infants and Young people
- BME communities
- Children in need of safeguarding
- Children and families affected by physical or mental illness, disability or sensory impairment
- Pregnant and recently delivered mothers and their babies

The IIA scores indicate that both options can achieve significant gains for population health and inequalities in South Tyneside and Sunderland. The combined health and health inequality impact assessment scores (combining positive and negative impacts) are broadly equivalent across both options (option 1: 79 and option 2: 45), with slightly lower scores for the impact within protected characteristics' categories of race and pregnancy/maternity.

While drawbacks were identified, the IIA reported that these were rarely significant enough to offset the strongly positive benefits identified. Key findings of the IIA include:

- equality groups living in South Tyneside were most likely to be affected because of the more significant changes relating to availability of services there.
- health and health inequalities impact assessment combined scores were higher for option 1.
- drawbacks associated with Option 2 are on a larger scale than those associated with Option 1 because the changes are more far reaching and affect a larger number of people, however, this must be balanced against the benefits Option 2 have in terms of greater cost efficiency savings compared to Option 1.

- because of their benefits for all service users as well as vulnerable and equality groups, the service improvements could lead to significant benefits to child health and inequalities across South Tyneside and Sunderland, giving

Potential drawbacks of the paediatric change proposals include:

- the challenges of understanding and adapting to the proposed changes
- vulnerable groups experiencing possible barriers to access
- continuity of care during handovers between hospitals and when crossing local authority and CCG boundaries
- increased travel costs (personal, social and economic)
- acutely ill children being transferred from South Tyneside to Sunderland
- increases in demand for acute ambulance services and acute paediatric services in Sunderland
- increases in traffic commuting between South Tyneside and Sunderland

The IIA reports anticipated and profound benefits for children, especially in relation to

- More effective and timely treatment of acute illnesses
- Less risk of deterioration
- Less pain and distress due to delays in assessment and treatment
- Shorter hospital stays and less readmissions or readmissions
- Improved capacity to identify and safeguard children in need

6.3.10.12 Affordability and financial sustainability – obstetrics and gynaecology

Currently there are separate O&G services at STDH and CHSFT. Both Trusts provide an obstetrician-led maternity service and a full gynaecology service including emergency and elective surgery.

As with the financial analysis for the Stroke CSR, the savings against actual spend have been used in consultation material as it is easier to the public to relate to, however in the financial analysis carried out through the CSR this has been done against budget in terms of quantifying recurring savings. These details are contained in the table below.

The option which gives the (marginally) greatest financial saving to the Group is Option 2 - to centralise all births and inpatient Gynaecology at CHSFT, retaining only day case gynaecology at STDH. This results in a net £1.214m improvement in the position compared against budget. Against the actual spend for 2015/16 this is £1.158m.

The financial changes under this solution are as follows:

- A significant reduction in income, on the basis that if deliveries are concentrated at CHSFT then a large proportion of mothers from Jarrow and Hebburn could chose to give birth at Gateshead Trust rather than at CHSFT (£1.414m income reduction)
- A reduction in consultant medical staff costs, resulting from the cessation of STDH site on-call and consultant of the week sessions, together with the rationalisation of non-clinical PAs with the creation of a single combined team (£366k improvement)
- A reduction in middle grade medical staff costs on the assumption that there will no longer be a requirement for 24 hour cover at STDH, or cover in STDH theatres (£467k improvement)
- A substantial reduction in midwifery staffing, driven largely by the anticipated loss of activity and income but also through reconfiguration of the teams across the whole patch (£1.230m improvement)
- A small non-pay saving (£9k)
- A net saving on anaesthetics and theatres staffing across the two units resulting from the concentration of all births and inpatient gynaecology at CHSFT (£200k saving)
- An assumed reduction in CNST contributions pro-rata to the anticipated loss of activity and income (£374k improvement), although this is outwith the direct control of the trusts as the contributions are calculated centrally.

The other proposed set of service arrangements considered (Option 1) involves the establishment of a Midwife-Led Unit at STDH and concentrating all obstetrician-led care at CHSFT. This would give a net £1.186m improvement in the position compared against budget. Against the actual spend for 2015/16 this would be £1.130m. The financial consequences are the same as for Option 2 except for a slight difference in midwifery staffing. Under this set of proposals there would be a combined MLU / STDH community team whereas under Option 2 there would just be a STDH community midwifery team.

The table below summarises the financial impact of each option:

O&G - all options Compared to 1617 Budget / income plan:	Group - £ Change	
	Option 1	Option 2
Obstetrics income	-£1,414,242	-£1,414,242
Total Activity & Income	-£1,414,242	-£1,414,242
Consultant Medical Staff	-£366,307	-£366,307
Middle Grade Medical Staff	-£467,213	-£467,213
Midwifery Staff	-£1,202,181	-£1,230,172
Total Pay	-£2,035,701	-£2,063,691
O&G non-pay	£8,791	£8,791

Total Direct Costs	-£2,026,910	-£2,054,901
Indirect costs - theatres	-£199,793	-£199,793
Overheads - CNST	-£373,921	-£373,921
Total indirect costs and overheads	-£573,714	-£573,714
Total Costs	-£2,600,624	-£2,628,615
Net Surplus / Deficit	£1,186,382	£1,214,372

6.3.10.13 Affordability and financial sustainability – paediatrics and special care baby unit

Current service provision at STDH comprises a Paediatric ED and Short Stay Assessment Unit, together with a SCBU. These are overseen by a consultant team supported by middle grade and junior medical staff, paediatric nurse practitioners and ED nurses. All paediatric inpatient services are already centralised at CHSFT, which also has a SCBU and NICU.

As with the financial analysis for the Stroke CSR, the savings against actual spend have been used in consultation material as it is easier to the public to relate to, however in the financial analysis carried out through the CSR this has been done against budget in terms of quantifying recurring savings. These details are contained in the table below.

The option which gives the greatest financial saving is to replace the current 24-hour medically-led model at STDH with a nurse-led service operating from 8am-10pm (Option 2). SCBU would transfer to CHSFT. This would deliver a net improvement of £768k compared to budget and £224k against the actual spend in 2015/16. The financial changes under this set of proposals are as follows:

- A reduction in income for SCBU linked to the loss of Jarrow / Hebburn births described under the O&G review above, together with a further reduction in income for overnight Paediatric ED attenders from those areas (£267k income reduction)
- A reduction in consultant expenditure as there would no longer be the need for any acute sessions on the STDH site (£467k improvement)
- A reduction in middle grade medical expenditure as there would no longer be the need for any acute sessions on the STDH site (£481k improvement)
- A reconfiguration of the Nurse Practitioners and Paediatric ED nursing teams at STDH to create a new staffing model, together with an increase in Paediatric ED nursing at CHSFT to cope with overnight activity transferring from STDH (£86k improvement)
- A small reduction in non-pay associated with the loss of activity from the group (£29k)

The other option which was considered was to retain a medically-led model but with no overnight service. This delivers a lower net improvement of £201k compared to budget but require an extra £374k in terms of the actual spend for 2015/16, due mainly to the need to retain a greater proportion of medical staffing resource at STDH. The table below summarises the financial impact of each option:

Paediatrics - all options Compared to 16/17 plan / budget	Group - £ Change	
	Option 1	Option 2
SCBU / NICU Activity & Income	-£205,825	-£205,825
Acute Paediatric Pathway Activity & Income	-£60,697	-£60,697
Total Activity & Income	-£266,522	-£266,522
Direct costs:		
Consultant Medical Staff	-£149,253	-£437,913
Middle Grade Medical Staff	-£178,543	-£481,479
Paed ED nurses / nurse practitioners	-£109,596	-£85,748
Total Pay	-£437,392	-£1,005,139
Non-pay	-£29,871	-£29,871
Total Direct Costs	-£467,263	-£1,035,010
Indirect Costs	£0	£0
Overheads	£0	£0
Total Costs	-£467,263	-£1,035,010
Group Net Profit / (loss)	£200,741	£768,488

7.0 Aggregated impact and risk assessment of proposed changes

This chapter sets out the combined impact and risk assessment of the three sets of proposed service arrangements when considered as a collective change programme. A robust risk assessment process is in place with all relevant risks logged and reported as part of the programme management arrangements outlined in section 5.0.

7.1 Capacity and delivery – combined impact and risks

7.1.2 Accident & emergency impact

The total impact on accident and emergency has been assessed to ensure both sufficient capacity and to evaluate the potential impact on four hour target delivery as one indicator of service quality. Total additional worst-case scenario annual ED footfall across all three specialities, based on the options with the greatest acute service delivery at SRH equates to around 800, given that paediatric ED attendances are accommodated in a separate department and obstetric patients would flow through a maternity pathway. This includes a number of ambulance-delivered patients with suspected stroke symptoms but who are unlikely to have a stroke confirmed. This equates to an average of an additional 2.2 patients per day, with stroke nurse practitioner in-reach support intended to partially mitigate this risk. Current capacity analysis, enhanced by the current premises extension at SRH is sufficient accommodate the additional patients.

In terms of potential impact on the four-hour A&E target delivery, the combined potential impact of extra ED activity at SRH and reduced ED activity at STDH has been assessed. Current performance of the FTs is 92.1% for STFT and 92.8% for CHSFT based on attendances between March, 2016 and February 2017. Analysis shows that this performance would improve by 0.1% for CHS as a result of increased overall activity at SRH and reduce by between 0.3-0.8% at STFT, depending on whether or not activity presenting at the proposed nurse-led paediatric minor injury/ailment facility can be counted towards the target. A range of out of hospital initiatives exist in both CCG areas, delivered both by the CCGs and through the North East Urgent and Emergency Care Network, which aim to drive down A&E demand.

7.1.3 Beds and workforce

The impact of the combined proposals on bed availability, both from a short stay assessment, day case and inpatient perspective has been assessed and no significant risks have been identified as is outlined in section 5.4.2. This has included any potential implications for general medical beds, however, medical boarding capacity will continue to exist on the stroke ward at SRH, reducing risks in instances

of medical bed pressures. Four beds will exist to accommodate medical boarders, working on a 90% occupancy assumption, supported by funding for a further 14 beds as a contingency.

The aggregated proposals represent a consolidation of specialist skill and staff and additional workforce is not required to facilitate their implementation. The reduction in the number of medical and nursing rotas across all options will enhance the senior medical cover presence across all specialities as well as enabling investment in increased therapies staff and improving staff to bed ratios in areas such as SCBU and NICU. Overall a reduction in workforce numbers from between 25 and 36 whole time equivalents is expected, depending on the options progressed through to implementation, with the greatest staffing changes expected in obstetrics and gynaecology. These are not expected to translate to redundancies however, with current vacancies, anticipated retirements and natural attrition expected to deliver required numbers over a 12-month period.

7.1.4 Clinical support services and theatres

High-level analysis has been undertaken to both assess the capacity and cost implications of the proposed changes diagnostic, theatres and other support services and this will continue to ensure all potential impacts are fully considered. A total of 94 emergency theatre sessions will be required at SRH, 252 elective inpatient theatre sessions and 335 elective day case sessions. Around 1,500 additional radiology procedures will be performed at SRH as a result of the maximum activity transfers of the proposals, however, budgets will transfer to support this to be effectively absorbed. The ongoing anaesthetics, theatres and clinical support services and pharmacy service reviews are also considering the proposals to assess the service-specific impact and any wider implications for the future clinical support services model going forward.

7.1.5 Enablers and infrastructure

Some minor capital works are expected across the service change proposals with some but not all options. The development of a single-site for all intrapartum care at SRH will require additional space and beds to accommodate the additional obstetrics activity. Capital funding sources are being explored and an assessment of implementation timescales is also being undertaken to inform the future decision.

Current accessibility analysis does not suggest that individual service parking impacts will present a capacity challenge, however, further modelling is planned to deliver further assurances around this. The proposals that will bring the greatest number of additional patients/visitors to SRH are estimated to generate 67 extra car parking requirements at SRH daily.

7.1.6 Ambulance service impact – performance and capacity impact

A vital consideration in any service reconfiguration is the impact that any potential options have on the North East Ambulance Service (NEAS). Through phase 1a of the PtEP the programme management has worked with NEAS to quantify what the impact on the ambulance service could be in the different configuration options. This work will continue to ensure that all parties have a common understanding of any risk and are in agreement about necessary mitigating actions. Key areas of focus for this work include understanding:

- The additional cycle times of South Tyneside patients being taken directly to SRH and not STDH
- The time, capacity and performance impact of the return of vehicles to the South Tyneside area
- The onward blue-light transfer of any inappropriate self-presenting and/or deteriorating patients at STDH to SRH, including realistic onward transfer rates from similar service changes elsewhere
- The level of risk around additional 999 calls from patients unclear about the new care models in place
- The safe repatriation of stroke patients for options 2 and 3
- Overall impact on red, green and urgent ambulance performance
- Modelling the likely impact of patient behaviour influencers such as NHS 111, GP referral pathways, ambulance service triage and despatch and public communications
- Appropriate risk-mitigating actions to safeguard positive local ambulance service performance,

Previous sections have outlined the ambulance service capacity and performance implications of the service-specific proposals. NEAS has suggested that this does not present a significant capacity and performance risk at individual service level. In 2016/17 NEAS delivered 72% of red 1 ambulance calls and 66% of red 2 calls in the eight-minute timeframe in South Tyneside and 70% of red 1 calls and 62% of red 2 calls in Sunderland. Red 1 call performance is better locally than the overall NEAS performance of 67.5%. Red 2 call responses in South Tyneside are better than the NEAS total performance of 62%. South Tyneside and Sunderland red 1 ambulance responses were above the England average last year while the overall NEAS performance was slightly lower than the England average (68.7% of red 1 calls and 62.5% of red 2 calls).

Current ambulance service activity to STDH for the three clinical areas under review is less than one stroke patient daily, less than 10 pregnant women per month and an average of 3 paediatric patients each day. The average job cycle time is expected to increase by 12 minutes, as a result of ambulances travelling further to take South Tyneside patients to SRH. It must be noted that the job cycle travel time is not travel

time; it represents additional travel, handover and clearance of the crew to receive further despatches from SRH.

More patients travelling to SRH by ambulance result in combined additional emergency ambulance crew hours of between 233 and 441 hours each year. This equates to between 21-40 operational 12-hour shifts which would come with a recurrent cost of between £23-£44,000 per annum based on the known impact to existing ambulance incidents in the South Tyneside area. Further work is ongoing with NEAS to fully model any capacity, time and performance impact of ambulance crews returning to the South Tyneside area.

The risk relating to the onward ambulance transfer of patients who either self-present at STDH's ED with acute symptoms or who are already in STDH and deteriorate, is yet to be fully quantified. Early, worst case scenario analysis suggests an aggregated daily transfer number of between 2-6 per day, depending on the options pursued, however, modelling has yet to fully consider the impact of external health system influencers on patient behaviour, such as GP referrals, NHS 111 advice and patient education. Further analysis is particularly required to understand the likely pathways and service entry routes for paediatric patients and to assess and agree any risk of increased urgent/non-urgent 999 calls.

Once the capacity and performance risk is fully agreed across all healthcare partners, a range of appropriate mitigating actions will be explored, considered and addressed as part of the decision-making and implementation process.

7.2 Travel and transport – combined impact and risks

The travel and transport analysis described in previous sections highlight the additional travel impact of the clinical options proposed. Car ownership levels across both South Tyneside and Sunderland are lower than the national average with 38% and 35% of households without cars, respectively. General accessibility by public transport to both hospital sites is good and in line with neighbouring communities' access to other local hospitals across the North East, while in some cases access to Sunderland Royal Hospital is better. South Tyneside District Hospital is served by a total of 12 bus services, 10 of which have frequencies of between 10 minutes and one hour and Sunderland Royal Hospital is served by a total of 18 bus services, 12 of which operate at frequencies between 10 mins and 30 mins. Both hospital sites are also within 800 metres of a metro station.

Around 80% of South Tyneside residents have access to SRH within one hour. Individual modelling based on historical use of the specialities under review have affirmed the general accessibility analysis. All options collectively present an average of either between 20-25 minutes additional public transport travel or 6-7 minutes

additional car travel for South Tyneside residents who will receive care at SRH instead of STDH under some of the options proposed. Fieldwork testing has validated public transport journey times but has also raised some risks in relation to number of bus/metro journeys from some parts of South Tyneside to SRH as well as some potential accessibility challenges. Further work is planned to build on this as well as to fully understand modes and direction of travel, particularly for residents in northern South Tyneside communities. Further work will also be undertaken to test car journey travel times, to review any connection between deprivation and accessibility, to explore how accessibility challenges such as return public transport journeys from SRH to South Tyneside can be improved and to validate parking analysis.

The percentage of the local population anticipated to experience additional travel time is around 4% for South Tyneside residents with zero impact for Sunderland residents. This equates to between 6-8,000 people incurring additional travel annually. The nature of the services under review however means that the increased annual attendances at SRH are likely to be discreet attendances around infrequent healthcare episodes and therefore the travel impact is neither regular nor sustained.

Public transport travel within 60 minutes is relatively unchanged by the service proposals with only a slight shortfall on the percentage of South Tyneside people able to reach SRH by public transport in an hour when compared to their current access to STDH. Travel by public transport to SRH from South Tyneside within 30 minutes is significantly more challenging, however, with only a small percentage of the population likely to be able to do so.

The equality, health and inequalities impact assessment has highlighted positive health impacts of all but options 2 and 3 of the stroke proposals as a result of the workforce consolidation benefits and associated improved clinical outcomes. The improvement in quality and increased clinical sustainability is therefore a sufficient and necessary gain to justify the increased travel to services that can be retained as locally and safely as possible.

That said, the personal impact on families, patients and carers of additional travel, is not underestimated. The deprivation levels across both geographical areas, represents a financial as well as emotional impact. Public transport costs are estimated at an average of £1.26 daily. Parking costs are only likely to increase for drivers staying at SRH for four hours or more. The number of households without cars are below the England average of 26% at 38.5% for South Tyneside and 35.1% for Sunderland. The risk of patients avoiding seeking prompt treatment as a result of increased travel requirements is clearly a risk that needs to be addressed.

The independent Travel and Transport Impact Assessment recommends a number of measures that could be employed to assist in reducing the travel impact of the

proposed service changes, particularly on South Tyneside residents who may be required to travel to Sunderland Royal Hospital for their healthcare needs and / or their visitors. These will be reviewed by the South Tyneside and Sunderland Healthcare Partnership prior to any decision being made. Considerations include:

- Ensuring patients and visitors have accurate, up to date information about their travel choices, including public transport information, and are aware of online journey planners.
- Ensuring patients and visitors have accurate information about parking choices and costs.
- Providing users with information about schemes that offer assistance with travel costs.
- Providing travel information with appointment letters.
- Promoting the existing policy of allowing patients to discuss and schedule appointment times that ease their travel arrangements.
- Working with local authorities and local transport providers to explore the viability of introducing improved and new bus routes

7.3 Equality, health and health inequalities – combined impact and risks

This section outlines the common themes across the three Equality, Health and Health Inequalities Integrated Impact Assessments (IIAs). A summary of the IIAs can be found at appendix 6.2, with each full IIA available in the supporting documentation. A brief summary of each individual IIA has also been included in section 6.2.6.6 for Stroke, section 6.3.10.10 for Obstetrics & Gynaecology and section 6.3.10.11 for Paediatrics.

As discussed in section 6.0, an IIA has been externally commissioned to incorporate a:

- Health Impact Assessment (HIA) and
- Equality Impact Assessment (EIA)

Each of these assessments evaluated what the potential options may do – positively or negatively - in terms of these two areas for the populations of South Tyneside and Sunderland. More specifically, the health and health inequalities elements of the IIAs were designed to assess the overall health impact and the impact on health inequalities in relation to:

- Service outcomes;
- Service activities;
- Safety of the services;
- Quality of the service;

- Sustainability and resilience of the service (including its ability to respond to projected demographic changes);
- Access to the service;
- Choice for patients, their families and carers;
- The mental, social and emotional wellbeing of patients, their families and carers.

For the equality elements of the IIAs, the assessment was designed to identify what the impact of the potential would have in relation to patients who fall in one of the protected characteristic groups, i.e.

- Disability
- Gender reassignment
- Marriage and Civil Partnership
- Pregnancy and maternity
- Race
- Religion or belief
- Sex
- Sexual orientation
- Deprivation or social economic status.

For each of the assessments where findings identify negative impacts on health, recommendations have been made about how these could be mitigated. The relevancy of the findings will be tested as part of the consultation process. A final IIA for each clinical speciality will then be produced, incorporating any further potential equality, health and health inequalities implications and considerations raised as part of a continuing process to understand the full impact of the proposals and address any risks, prior to any final decisions being made.

Common positive impacts of the proposals across all in-scope clinical specialities include:

- More sustainable and consistent high quality care, regardless of the day of the week or the time of day
- Safer care due to improved levels of specialist staffing able to assess and treat patients promptly
- Improved levels of specialist staff and resources able to deal with rising population needs in terms of scale and complexity*
- Cost savings/more efficient or cost-effective service provision in the face of economic austerity
- More efficient and timely treatment of acute illness*
- Less risk of clinical deterioration*
- More specialist skills and services in Sunderland

*Applies to all O&G and all Paeds options but only Option 1 of stroke proposals

The IIAs highlighted a number of potential drawbacks in relation to the service areas. While the IIA did not demonstrate these to be sufficient enough to outweigh the positive health and health inequalities impacts, they are still potential risks that the partner organisations need to consider as they develops the service change plans, particularly prior to making any final decision and informing any future implementation arrangements. The potential drawbacks highlighted by the IIA have been included in the programme risk log and clinical design teams are reviewing them to establish the extent of the impact and also to identify appropriate mitigating actions. A series of recommended actions were included in the IIA for consideration to reduce any potential negative implications.

Drawbacks and suggested mitigating actions relating to all three service specialities, including commonalities across the services are included in table 7-1 below..

Table 7-1: Aggregated IIA drawbacks and suggested mitigating actions

	Drawbacks and suggested mitigating actions from IIA	Stroke	O&G	Paeds	All
Access, experience and education	Patient and public information campaigns could be developed and targeted to promote understanding and enable service users to adapt to the changes	✓	✓	✓	✓
	A cross-area user group could be supported to champion the views of service users, their families/carers.	✓	✓	✓	✓
	The new service specification could specify responsibilities for monitoring and evaluation of service outcomes including equity of access	✓	✓	✓	✓
	Introducing oversight arrangements could ensure scrutiny of equity and user experience data and ensure that this information is translated into timely and appropriate service developments whenever necessary	✓	✓	✓	✓
	Community engagement and development schemes could be implemented to build the capability and confidence of children and their parents and carers to self-care and use health services appropriately, for example, the provision of education interventions in schools and the community.			✓	
	Stroke prevention programmes targeting at risk groups (could reduce their stroke risk and further reduce health inequalities)	✓			
	The promotion of home births and use of clinical guidelines and protocols to mitigate risk of unnecessary obstetric intervention		✓***		
Continuity of care	New oversight arrangements could monitor user satisfaction and critical incidents relating to service continuity and coordination for all users, especially vulnerable groups and ensure that this information is translated into service developments as appropriate and necessary	✓	✓	✓	✓

	Protected learning events for relevant professional groups, could help to build relationships and improve skills and knowledge especially with reference to adoption and development of key care pathways			✓	
	NHS patient safety initiatives could focus on quality assuring handovers between different teams	✓**	✓	✓	
	Whole system learning collaboratives could help to build strategic connections across the system and to drive through system-wide improvements	✓	✓	✓	✓
	System-wide collaboratives could champion the development of integrated records and information systems to promote information sharing and communication across service and sector boundaries	✓**	✓	✓	
	The service specification could include provision to identify and minimise delays in A&E assessment and inter-hospital transfer for all stroke patients	✓	✓	✓	✓
Capacity and performance	Oversight arrangements could monitor ambulance performance data and ensure that this information is translated into service developments as appropriate and necessary	✓	✓	✓	✓
	The impact on other aspects of the Sunderland hospital services can be monitored and addressed	✓	✓	✓	✓
	Commissioners will inevitably monitor and evaluate the ongoing performance of these providers and ensure service improvements as necessary	✓	✓	✓	✓
	Oversight arrangements could monitor demand and supply linked with population projections and modelling to identify and plan for any future capacity issues (NB: this is a national priority for stroke and other age related illnesses.) to ensure future sustainability	✓	✓***		
	The current plans for early supported discharge will reduce lengths of stay and free up capacity - this service development should therefore be developed as a priority	✓			
Economic	Other Path to Excellence proposals could be developed in ways that offset the apparent economic losses in South Tyneside. For example, this might entail some Sunderland hospital functions being transferred to South Tyneside e.g. quality improvement.	✓	✓	✓	✓
Pollution	Wherever possible, any new transport initiatives could seek to minimise air and noise pollution, avoid congestion and promote road safety. Possible solutions include park and ride facilities with free hospital shuttle buses and less costly options such as advocating car share schemes	✓	✓	✓	✓
Travel and transport	A range of opportunities to minimise the additional travel costs could be explored. Possibilities include provision of shuttle buses between hospital sites or less costly alternatives such as volunteer drivers or subsidised parking at hospital sites	✓	✓	✓	✓
	Additional disabled (and maternity) parking bays could be provided at both hospital sites	✓	✓	✓	✓
	Patient and public information campaigns could maximise the benefits of any new transport services	✓	✓	✓	✓

	Future service user experience surveys could monitor and evaluate travel needs and experiences with reference to differences between equality groups in South Tyneside and Sunderland.	✓	✓	✓	✓
	Oversight arrangements could be introduced to scrutinise user experience data and ensure that this information is translated into timely and appropriate service developments whenever necessary.	✓	✓	✓	✓

** stroke options 2 and 3 only

*** O&G option 2 only

8.0 Implementation considerations

This section outlined service-specific assessments of the deliverability of the proposed changes together with a summary of core considerations to be made as the proposals move through from the consultation and decision-making to implementation phase.

8.1 Implementation and deliverability assessment

As part of the CSR process the Clinical Design teams self-assess their capability to implement the potential reconfiguration options, i.e. that there is strong clinical agreement on the proposed change, that there is managerial commitment to make the changes and that there are not any insurmountable gaps in service that will stop successful implementation. This is assessed against the following capability criteria:

- Quality benefits: Are the quality benefits for patients easily identified for the proposed service change?
- Efficient use of resources: Does the proposed service change improve the financial position for the Group?
- Clinical buy-in: Has there been strong clinical involvement in the development of the model and is there a consensus amongst the clinical teams?
- Managerial Commitment: Is there commitment from both managerial teams to make the proposed changes?
- Workforce capacity: Are there enough staff across all disciplines to implement the new service model?
- Fit with high level blueprint: Does the proposed service change fit with the high level Blueprint for the Group?
- Infrastructure: There is the required environment and equipment already in place required by the service change.

The self-assessment of the services in phase 1a are summarised below:

Table 8-1: Stroke self-assessment on the capability for implementation.

Area	Criteria	Assessment	Score (max = 4)
Process	Quality benefits	It is predicted with the addition of the 24/7 stroke NP cover in the new model will help improve the SSNAP metrics as part of the hyper acute bundle of care. The extra therapist numbers will also improve score of 5 of the 10 domains. It is predicted that the overall score will become a A-B.	4
	Efficient use of resources	The preferred possible solution releases the most money back to the two organisations through the efficient use of resources through	4

		closing inpatient capacity.	
Staff	Clinical buy-in	Over the last few months there have been a number of different options proposed for stroke. The preferred possible solution has the greatest clinical buy-in across the clinical teams in both organisations.	4
	Managerial Commitment	There are some concerns about the number of general medical patients who currently occupy beds who would need to be accommodated if the preferred possible solution was agreed as the model to take forward. This would be less of an issue for options 2 or 3.	3
	Workforce capacity	The preferred model makes the most of the senior medical staffing (Consultant) resource whereas the other models don't do this. However even by consolidating the consultant team the WTE equivalent is less than the 6.0-6.5 WTE (1.3 WTE per 100,00 population) recommended by BASP (British Association of Stroke Physicians) for the population of Sunderland and South Tyneside.	2
Organisation	Fit with high level blueprint	The preferred model is concordant with the high level Blueprint with CHSFT concentrating on the acute part of the pathway. This is fully supported by both local Clinical Commissioning Groups.	3
	Infrastructure	Whilst there is capacity to accommodate the stroke admissions onto the stroke ward at CHSFT this does create a risk in displacing medical boarders. There is also a need to update the telemedicine equipment to review stroke patients that self present to STDH or for inpatients that have a stroke at STDGH, the costs to renew this equipment is incorporated in the financial model.	3

Table 8-2: Obstetrics and Gynaecology self-assessment on the capability for implementation.

Area	Criteria	Assessment	Score (max = 4)
Process	Quality benefits	The potential options will increase the number of hours resident on the obstetric unit to 84 hours per week, i.e. 12 hours a day, 7 days a week. This gives parity of senior presence at weekends where currently this is not the case on either site.	4
	Efficient use of resources	Both of the options for O&G the direct costs involved with providing intrapartum care across the healthcare group and thus	3

Area	Criteria	Assessment	Score (max = 4)
		improve the use of resources.	
Staff	Clinical buy-in	The Clinical Director/Lead Obstetrician and the Lead Midwives have led the development of the two clinical models as outlined in this report. The majority of the clinical leads support the preferred potential solution although there was also support for the 2nd solution outlined in the report.	3
	Managerial Commitment	There is strong commitment by both managerial teams to reconfigure the service in order to make the most efficient use of resources.	4
	Workforce capacity	The two potential options make the most the senior medical staffing resources. No new posts would be required for implementation of either solution although there would be need for staff to work as one team across both sites.	4
Organisation	Fit with high level blueprint	The preferred potential solution is concordant with the high level Blueprint with CHSFT concentrating on the more complex obstetric cases with STDH providing a midwifery led unit to give the women of South Tyneside and Sunderland choice across healthcare group.	3
	Infrastructure	Whilst there is capacity to accommodate the extra deliveries on the Delivery Suite at CHSFT this will increase pressure on the unit at times of peak activity. Use of the MLU in preferred potential solution will help ease this although there has been a history of MLUs being under utilised with in the region.	3

Table 8-3: Paediatric self-assessment on the capability for implementation.

Area	Criteria	Assessment	Score (max = 4)
Process	Quality benefits	Both options increase compliance with relevant quality standards (see Section 3). They also reduce reliance on middle grade medical staff where recruitment has been a major problem for both trusts.	4
	Efficient use of resources	Both potential options generate direct cost savings across the healthcare group and therefore improve the use of resources. The service does however still make a significant overall loss.	2
Staff	Clinical buy-in	The CHSFT clinical director has been directly involved in the development of the potential options.	2
	Managerial	There is a strong commitment by both	4

Area	Criteria	Assessment	Score (max = 4)
	Commitment	managerial teams to reconfigure the service in order to make the most efficient use of resources.	
	Workforce capacity	Both options offer improvements to the medical and nurse staffing arrangements. Option 2 goes further towards addressing gaps in the medical workforce. Both options make the most of the available medical and nursing resource through staff working as one team across both sites. Option 2 particularly addresses capacity / availability issues in middle grade medical staffing	4
Organisation	Fit with high level blueprint	Option 2 is in accordance with the high level blueprint, with Acute Paediatrics and SCBU being concentrated at CHSFT while maintaining outpatient and community provision at STDH. There is also consistency with the earlier Obstetrics & Gynaecology preferred solution of concentrating obstetrician-led care at CHSFT.	3
	Infrastructure	The proposed closure of the Paediatric ED, CSSAU and SCBU at STDH under Option 2 will increase pressure on the Sunderland departments	2

In relation to the more tangible implementation consideration these are described in the sections 6.2.6.6, 6.3.10.14 and 6.3.10.15. With the main outstanding risks that could alter the options as they are currently described in chapter 6 are:

- Securing the capital funding for building works required to accommodate the expansion of the number of LDRP rooms at SRH (required for option 2 within the Obstetrics & Gynaecology potential options).
- Confirmation of assumptions for junior doctors with HEENE

8.2 Deliverability and implementation considerations

As explained earlier in this section, following the completion of the CSR for stroke a decision was made by both CCGs to move the acute stroke services to SRH as described in option 1. This was done due to the potential safety and quality impact in connection with the vulnerability of the service at STDH from a senior medical point of view. This change was implemented on the 5th December 2016. During the planning for this change several issues were considered and worked through including:

- **Workforce - Admin / AHP / Nursing** (including arranging transferring of Staff from STDH to CHSFT (where able), arranging recruitment of Nurse Practitioners, Advertise AHP posts).
- **Workforce - Medical** (including confirming junior doctor changes and informing the Deanery, amending the junior doctor rotas where needed, develop absence management protocol and reporting mechanism for additional hours for STDH staff).
- **Operational Model / Policy Development** (including pathway development for Self-Presenters at STDH Emergency Dept – SOP, Inpatient Strokes at STDH – SOP, STDH thrombolysis protocol, Transfer protocol from STDH ED to CHSFT, Stroke Mimics pathway, Stroke repatriation pathway, CHSFT referral pathway to CST, CHSFT referral pathway to Social Care, Out of Hours review of strokes at STDH and CRST SOP).
- **TIA & Planned Follow Ups** (including development of a TIA in hours protocol, TIA weekend protocol, TIA at STDH cover arrangements, STDH Stroke Planned Follow Ups – Consultant, STDH Stroke Planned Follow Ups – Nurse and Existing Stroke Clinics at STDH).
- **Finance** (including discussing income implications with STCCG and ensure 17/18 contract consistency, review OP stroke / TIA / Medical specialty allocation, adjust budgets (STDH / CHSFT), cease stroke on-call recharges).
- **IT** (including liaising with SSNAP regarding site change, organise E-referral access for ST CRST, develop a process for PACS transfers and update discharge letter for other location follow up).

The implementation and change in service occurred as planned and to date no significant operational issues have arisen.

Detailed implementation planning around the permanency of the stroke arrangements, and the obstetrics, gynaecology and paediatrics proposals is clearly unable to be carried out until the CCGs' decision on the configuration of services is known, post-public consultation. However, there are issues that the operational teams across the two Trusts have considered that would need to be planned for and implemented. Some of these would need to be addressed regardless of which potential option was implemented with others dependent on which set of service arrangements was agreed. Table 8-1 sets out some of the indicative changes required, however, the list is not exhaustive.

Emergency preparedness, resilience and response considerations will form a key part of implementation considerations. Activity and capacity modelling undertaken across South Tyneside and Sunderland, together with provider and commissioner conversations further afield, has demonstrated a system that can comfortably accommodate all current activity. However, the healthcare partnership acknowledges that any potential change in the number of sites providing acute stroke, obstetric and

paediatric services could present challenges in the case of a major incident or emergency which affected service continuity or compromised capacity at those sites. As a category one responder, a full impact assessment of any preferred options will therefore be undertaken prior to any final decision being made and this work will continue to feature as part of implementation planning, with changes reflected in all appropriate contracts. Specific focus will be given to ensuring that clear arrangements are in place for the management (across all four incident levels) of:

- Business Continuity Incidents
- Critical Incidents
- Major Incidents

Table 8-4: Implementation considerations for obstetrics, gynaecology, paediatrics and SCBU

Nature of work	Obstetrics and gynaecology	Paediatrics/SCBU
Workforce	Midwifery: arranging transferring of Staff from STDH to CHSFT and associated HR processes; reorganisation of the Community teams; and developing a staff rotation across units (for option 1).	Nursing: arranging transferring of nursing staff from STDH PED to CHSFT PED and associated HR processes; ensure relevant training (such as APLS) is still carried on an going basis for staff with the ED; and start the recruitment and training of extra Paediatric Nurse Practitioners (option 2).
	Medical: confirming junior doctor changes and informing HENE; amending the junior doctor rotas where needed; and carrying out a job planning exercise for the Consultants across both Trusts.	Medical: confirming junior doctor changes and informing HENE; amending the junior doctor rotas where needed; and carrying out a job planning exercise for the Consultants across both Trusts.
Operational Model / Policy Development	Working back from the intended implementation date, agree when the last booking will be taken for high risk deliveries (for option 1), or all deliveries (for option 2) at STDH, and clearly communicate this to the community teams; consolidate clinical guidelines across each service (please note this is already underway as not dependent on any reconfiguration); and work with NEAS to implement the necessary bypass protocols.	Consolidate clinical guidelines across each service; develop a communications plan to inform the public of South Tyneside about the proposed changes; and work with NEAS to implement the necessary bypass protocols.
Finance	Discussing income implications with STCCG and ensure contract consistency; secure capital money for expansion of the delivery unit at SRH (for option 2); and set up a process to track changes to ensure that all the financial benefits identified are being realised.	Discussing income implications with STCCG and ensure contract consistency; and set up a process to track changes to ensure that all the financial benefits identified are being realised.
IT	In lieu of a single IT system design a way for SRH staff to see STDH clinical notes electronically and vice versa;	As with Obstetrics and Gynaecology design a way for SRH staff to see STDH clinical notes

	ensure all relevant staff have access to the clinical IT systems across each trust; and Gynaecology elective patients 'moved' across sites in terms of confirm TCI dates and tracking 18 week waits.	electronically and vice versa; and ensure all relevant staff have access to the clinical IT systems across each trust.
Evaluation and monitoring	Agreeing KPIs, monitoring, reporting and oversight arrangements for changes	
EPRR	EPRR business continuity, major and critical incident assessments and necessary amends	

9.0 Consultation and decision-making

9.1 Consultation process

South Tyneside and Sunderland CCGs are committed to ensuring that the potentials options outlined in the pre-consultation case are subject to an open and transparent public consultation process in order to harness local people's views on the most appropriate way to address the clinical and financial challenges outlined. A 14.5 week long public consultation process will therefore be held to test the change proposals, understand if and how they can be improved and to identify if people have better ideas that the Path to Excellence programme may have missed. During this period, commissioners will listen carefully to the views of all communities and local stakeholders who have an interest in health and social care. The consultation will also invite views on the criteria and considerations used to inform the CCG's final decision to establish the importance of proposed evaluation domains to local people.

The consultation will be anchored in best practice, drawing upon the guidance below and informed by external critical advice from the Consultation Institute, as outlined in section 4.2.1.

- Cabinet Office - Consultation Principles (revised January 2016)
- The Consultation Institute - Consultation Charter
- NHS England – Planning, assuring and delivering service change for patients
- NHS England - Planning for Participation

A summary of consultation approach, key methodologies, role of patient reference group, and links to consultation plan are contained in appendix 4.1.

9.2 Decision-making process

The CCGs plan to make final decisions in relation to the proposed changes early in 2018. Decisions will be taken separately by each CCG Governing Body, but on the same date, in line with CCG constitutional arrangements. The Sunderland and South Tyneside CCG chairs, on behalf of their respective governing bodies, considered several options in relation to the decision making for the path to excellence programme and sought expert governance and legal advice on all of the options. This will ensure the governance process is transparent and in line with CCG functions and statutory responsibilities and ensure the individual constitutional requirements for both CCGs are met. The options considered included utilising the normal business meeting cycle for each CCG, the possibility of forming a joint committee and holding a governing body meeting in common.

The risks associated with each option were considered and the chairs agreed the most appropriate way forward would be for both CCG governing bodies to hold a meeting in public in their respective areas on the same day and at the same time. The governing bodies will receive the same set of papers prior to their

meetings for consideration to ensure any decisions made will be done so on the same basis.

The CCGs' decisions will take account of the output from the consultation together and any variation on the proposed options arising from the consultation process, any further clinical assurance that may take place and the final accessibility and integrated health and health inequalities impact assessments. The CCGs propose to use the evaluation criteria that helped to assess the service change options to inform their decisions, taking into account local views received as part of the consultation on the importance of these criteria and underpinning data sources. The CCGs will take decisions in relation to stroke, paediatric and obstetrics and gynaecology services and make a recommendation to NHS England in relation to SCBU services. As statutory commissioners of NICU and SCBU services, NHS England's specialised commissioning team will then formally consider these recommendations. The CCGs will notify local stakeholders of the date and process to be followed for making their final decision post-consultation.

Prior to the CCGs making their final decisions on the future of stroke, paediatric, obstetrics and gynaecology services, several key activities must take place. These include:

- **Analysis of the consultation:** during this phase responses to consultation will be independently analysed and a report produced containing the findings from this analysis. This report will be provided to the Joint Health Overview and Scrutiny Committee and made available to the public.
- **Updating the Integrated Impact Assessment:** the CCGs will continue to review and update the Integrated Impact Assessment in parallel to the consultation process, in line with CCGs' statutory responsibilities to ensure equality across protected characteristic groups, to promote health and reduce health inequalities. The views of local individuals, groups and organisations will form a valuable part in ensuring that all potential impacts of the proposed service change s- positive, negative or neutral – are fully identified to inform the final decision.
- **Ongoing development of the business case:** elements of the pre-consultation business case will be further developed to ensure that the clinical and financial case for the options are fully explored, confirming workforce availability and affordability and assessing any relevant risks. This will involve further clinical and non-clinical review of the proposed options, drawing upon external advice and opinion as may be deemed necessary. Further clinical review will be particularly important where any alternative service models are suggested and need to be considered against the criteria previously applied to

the options proposed. All additional information will be included in a final Decision Making Report.

- High-level implementation and evaluation planning:** while no changes can or will occur until after CCGs make their respective decisions, some high-level implementation planning will take place (as outlined in chapters 6 and 8), given that the 'do nothing' option within each service specialty have been discounted. Early implementation planning will enable the programme to mobilise the new service at the earliest opportunity and to realise the promised health and efficiency gains as soon as possible. Given that the outcome of the consultation, and consequently the CCGs' final decisions are unknown at this stage, planning will accommodate all potential options with a focus on those features that are common to all options i.e. the establishment of a single community midwifery team within the obstetrics and gynaecology options, together with focusing on the measurable outcomes and key performance indicators that will be necessary to measure the success of the changes. Implementation and evaluation planning cannot and will not be completed in detail until the outcome of the consultation is known and a decision is taken to go ahead with a particular solution.

9.3 Timeline

Below is the strategic timeline for public consultation which has been developed through the Consultation and Engagement Governance Group.

Table 9.1: Strategic timeline for public consultation for phase 1a of the PtEP.

Date	Key activity
Pre- engagement and planning phase	
Dates	Timeline
23 March, 2017	South Tyneside CCG Governing Body review of draft PCBC
28 March, 2017	Sunderland CCG Governing Body review of draft PCBC
29 March, 2017	NHS England service change assurance begins
21 April, 2017	NHS England service change assurance process concludes
May, 2017	South Tyneside CCG Governing Body sign-off of final PCBC
May, 2017	Sunderland CCG Governing Body sign-off of final PCBC
W/c 26 June, 2017	Joint OSC chairs' meeting to verbally outline consultation proposals
Consultation phase	
19 June, 2017	Consultation publicity begins
5 July, 2017	Consultation start date
W/c 17 July	Attendance at to formally present consultation proposals.
W/c 21 August	Mid-term review of consultation activity with the Consultation Institute.
15 October, 2017	Consultation ends (14.5 week period). Analysis of feedback begins.
Analysis and decision-making phase	
November, 2017	Independent analysis of consultation feedback

December, 2017 date to be confirmed	Publication of consultation feedback (internally and externally)
December, 2017 – date to be confirmed	CSRG workshop to receive consultation results, consider findings and assess if any required changes in clinical model and/or impact assessments are required
December, 2017 – date to be confirmed	Joint CCG Governing Bodies' workshop to receive and consider consultation results, review any further recommended changes to clinical model and agree decision-making process
January, 2018 - dates to be confirmed	Formal decision made in public at respective Governing Body Meetings: Sunderland CCG South Tyneside CCG

10.0 Glossary

5YFV	Five Year Forward View
A&E	Accident & Emergency
ANNP	Advanced Neonatal Nurse Practitioner
ANP	Advanced Nurse Practitioner
APLS / EPLS	Advanced Paediatric Life Support / European Paediatric Life Support
AQI	Ambulance Quality Indicator
BAPM	British Association of Perinatal Medicine
CCG	Clinical Commissioning Group
CCN	Children's Community Nursing
CHSFT	City Hospitals Sunderland NHS Foundation Trust
CIP	Cost Improvement Programme
CPAP	Continuous Positive Airway Pressure
CQC	Care Quality Commission
CSRG	Clinical Service Review Group
CSSAU	Children's Short Stay Assessment Unit
ED	Emergency Department
EIA	Equality Impact Assessment
EPRF	Electronic Patient Record Form
F&F	Friends & Family
F1 / F2	Foundation Year 1 / Year 2 doctor
FMLU	Freestanding Midwifery Led Unit
FTF	Facing the Future (RCPCH Standards)
GP	General Practitioner
GPVTS	General Practice Vocational Training Scheme
HEENE	Health Education England North East
HIA	Health Impact Assessment
IIA	Integrated Impact Assessment
ISLA	Internal Service Level Agreement
LAC	Looked After Children
LDRP	Labour, Delivery, Recover and Postnatal (rooms)
LMS	Local Maternity System
MSA	Mixed Sex Accommodation
NCAT	National Clinical Advisory Team
NEAS	North East Ambulance Service
NECCPS	North of England Collaborative Cerebral Palsy Survey
NECS	North of England Commissioning Support
NICU	Neonatal Intensive Care Unit
NLS	New-born Life Support
PCBC	Pre- Consultation Business Case
PBR	Payment by Results
PDSN	Paediatric Diabetes Specialist Nurse
PED	Paediatric Emergency Department
PENNEC	Paediatric Epilepsy Network for the North East and Cumbria
PLICS	Patient Level Information & Costing System
PLN	Paediatric Liaison Nurse
PNP	Paediatric Nurse Practitioner
RCN	Royal College of Nursing

RCPCH	Royal College of Paediatrics & Child Health
RSCN	Registered Sick Children's Nurse
RTT	Referral To Treatment
PtEP	Path to Excellence Programme
SCBU	Special Care Baby Unit
SRH	Sunderland Royal Hospital
SSCB	Sunderland Safeguarding Children's Board
STCYPD MDT	South Tyneside Children's & Young People's Diabetes Multi-Disciplinary Team
STDH	South Tyneside NHS Foundation Trust
TCI	To come in (date)
WTD	Working Time Directive
WTE	Whole Time Equivalent

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