Start Well Pre-Consultation Business Case - Maternity and Neonatal services

Foreword

North Central London Health and Care Partnership has committed to improving population health outcomes and reducing inequalities. Our Population Health and Integrated Care Strategy which has at its heart an ambition to work with residents of all ages in North Central London so they can have the best start in life, live more years in good physical and mental health and in a sustainable environment.

The Start Well programme is a key aspect of delivering this strategy as we know that pregnancy and birth are the foundations of a good start in life. Starting well in life has a big influence on life chances and supports reducing inequalities. We want to ensure our maternity and neonatal services are in the best position to support families through pregnancy and birth. It is important that pregnant women and people have a positive birth experience and ensure that everyone has access to the same services no matter where they live or choose to deliver.

Through the Start Well programme we have worked together as a health and care system to identify the challenges we face in our maternity and neonatal services. Our population is changing – the number of births in our five boroughs is declining and yet the proportion of babies being born with increasingly complex needs is rising. As they are currently set up, our services fall short of meeting the long-term needs of pregnant women and people, and their babies.

The development of these proposals has been clinically led and informed by the current experience of pregnant women, people and their families. The proposed changes seek to fundamentally improve access, experience and quality of care. We believe that we can achieve this through the changes we have proposed, which will include an overall reduction in the number of maternity and neonatal units in North Central London so that we can create services that deliver high quality care, with a resilient workforce supported by the right environment and infrastructure.

The Start Well programme has been richly informed by the experiences of both service users and staff in North Central London. Consultation will provide us with an opportunity to gain feedback to inform our next steps towards improved maternity and neonatal care across North Central London.

Frances O'Callaghan
CEO, North Central London Integrated Care Board

Specialised commissioning

We are pleased to be jointly presenting the proposals outlined in this pre-consultation business case. The work that has gone into considering the best possible solutions to address the case for change in NCL has been robust and the proposals recognise the complex interconnectivity between services across the capital. NHS England's London Region team, as the commissioner of neonatal services, fully supports the proposals put forward, and will continue to work with NCL through the next steps of this important programme of work.

Hannah Witty
Regional Director of Finance, NHSE London Region

Trust Chief Executives

The Start Well Programme has been driven by a commitment to reduce inequality and improve the outcomes, quality, and experience for pregnant women and people, babies and their families.

Although there is always more to do, we know that our staff work incredibly hard, providing high quality care. Yet, the current infrastructure isn't set up to best support them to do so.

We believe that the case for change in maternity and neonatal services is compelling and represents a call to collective action, to meet the needs of our population now and into the future. The proposals presented within this document have had extensive clinical engagement and input, guided by best practice and they represent an opportunity to improve care and outcomes.

The consideration of such potentially significant changes to our services is something we have thought about long and hard. It has taken several years to come to these recommendations, and the options have been developed following a thorough options appraisal process, carefully listening to staff and service user views as part of the process.

The NCL People Plan sets out how the ICS will together work to respond to national workforce challenges. Start Well is a way in which we can support our maternity and neonatal staff to work in an environment where they can provide the best possible care, where they are supported to develop and learn and have the resources they need to do their jobs. We believe that the proposals set out in this business case would, if implemented, set up our maternity and neonatal services to do this, as well as meeting the needs of our population into the future.

Now, we want to hear from you, and encourage everyone to feedback on these proposals during the consultation. This feedback will allow us to work together to carefully consider next steps.

Matthew Shaw
Chief Executive
Great Ormond Street Hospital for Children NHS Foundation Trust

Nnenna Osuji
Chief Executive
North Middlesex University Hospital NHS Trust

Peter Landstrom
Group Chief Executive
Royal Free London NHS Foundation Trust

David Probert
Chief Executive
University College London Hospitals NHS Foundation Trust

Helen Brown
Chief Executive
Whittington Health NHS Trust

1. Executive summary

1.1 Introduction

North Central London (NCL) Integrated Care System (ICS) has developed a pre-consultation business case (PCBC) for the Start Well programme for maternity and neonatal services, in partnership with NHSE Specialised Commissioning (the commissioner of specialised maternity and neonatal services). This sits alongside a separate PCBC on our proposed changes to paediatric surgery, which have also been developed as part of the Start Well programme.

We have brought together a range of stakeholders and system partners to help understand the opportunities for improvement in maternity and neonatal care in NCL and to develop an approach to addressing these. These proposals seek to address a number of opportunities for improvement which were identified through a case for change that was published in summer 2022. The Start Well programme is a collaborative programme of work that has meaningfully engaged partner organisations and clinical leaders from across NCL and neighbouring ICSs and providers, demonstrating system working across our ICS and the wider landscape. Throughout, the programme has maintained a population health approach, in line with the principles set out in our Population Health and Integrated Care Strategy.

Maternity care refers to care provided by health and care professionals during pregnancy, labour, birth and up to six weeks after birth. It also encompasses the monitoring of the health and wellbeing of the pregnant women or person and baby, health education and any additional support required.

The NHS offers a choice to pregnant women and people on where they would like to give birth:

- **Home birth:** for a home birth, women and people, who typically have a low risk of developing complications during delivery, have the support of two midwives at home.
- **Midwife-led unit:** this is a unit run by midwives and may be in either a standalone unit or in a unit alongside an obstetric-led unit at a hospital. Women and people, who typically have a low risk of developing complications during delivery, would have the support of a midwife whilst giving birth. In a standalone midwife-led unit, transfer for complications or pain relief requires an ambulance or car.
- **Obstetric-led unit:** pregnant women and people with a moderate to high level of complexity are advised to give birth at an obstetric-led unit that provides sufficient care for all their needs. All obstetric-led units are co-located with a neonatal unit.

Neonatal care is provided to babies born prematurely (before 37 weeks' gestation), and babies that are born unwell or with additional needs. The care is delivered in a neonatal unit, or by specialist neonatal doctors outside of a neonatal unit.

The NHS has defined three categories of neonatal unit in its Neonatal Critical Care Service Specification (E08/S/a)[1]:

- **Special Care Unit (SCU) (level 1):** provides local care for babies born at 32 weeks or more and more than 1,000g birthweight who require only special care of short-term high dependency.
- **Local Neonatal Unit (LNU) (level 2):** provides care for all babies born at 27 weeks of gestation or more, more than 800g birthweight, or multiple pregnancies more than 28 weeks. The units may also receive babies born at 27 – 31 weeks who require high dependency care.
- **Neonatal Intensive Care Unit (NICU) (level 3):** provides the full range of neonatal care. All babies born at less than 27 weeks of gestation of birthweight less than 800g. Multiple pregnancies at less than 28 weeks of gestation should receive perinatal and early neonatal care in a maternity service with a NICU (level 3) facility.
- **Neonatal Surgical Intensive Care (level 3):** provides specialised services such as neonatal surgery and cardiology.

In NCL, maternity care and neonatal care is currently provided on five secondary care hospital sites (Barnet Hospital, North Middlesex University Hospital (North Mid), Royal Free Hospital, UCLH and Whittington Hospital. Great Ormond Street Hospital (GOSH) provides neonatal care as a specialist provider and is outside the scope of this pre consultation business case. There is also a standalone midwife-led birth centre (Edgware Birth Centre) located at the Edgware Community Hospital.

1.2 Case for change

Our case for change was developed in the context of both national policy and local challenges, with a clear vision nationally for maternity services to become safer, more personalised, kinder, more professional and more family friendly.

Although hospital staff across the units in NCL deliver the best possible care within the current care models, our local clinicians have looked at our services and concluded that there are real opportunities to improve outcomes and experience for our local population. These include:

- **Ensuring that maternity and neonatal services are, and continue to be, high-quality**:
  - **Ensuring equality in maternity service provision and experience:** currently there is variation in maternal outcomes across NCL and there is also some variation in the quality of maternity services provided. This means that not all pregnant women and people have the same outcomes and experience of services.
  - **Minimising avoidable admissions to neonatal units:** access to neonatal outreach programmes depends on where you live in NCL. The existing provision is inconsistent between our boroughs and does not represent equitable access. For example, in Islington, phototherapy (used for the treatment of jaundice) is available in the community, whereas for babies living elsewhere in NCL, they would likely have to stay in hospital for treatment.

[1] NHS England. Neonatal Critical Care Service Specification. Available online: https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/01/e08-serv-spec-neonatal-critical.pdf [accessed March 2022]

- **Ensuring that services are sustainable for the future, meeting population needs and providing an environment for staff to maintain their skills:**
    - **Addressing low and declining use of the Royal Free Hospital SCU (level 1) unit:** Royal Free Hospital neonatal unit looks after fewer babies than the other units in NCL and does not accept babies born under 34 weeks' gestation. The number of admissions into this unit has been declining by 12% every year since 2018/19 and the occupancy of the unit in 2021/22 was 37%, meaning over half of its cots were not occupied on any given day. The current activity volumes at the SCU (level 1) unit at the Royal Free Hospital do not meet the recommended standards set out by the British Association of Perinatal Medicine (BAPM). With a declining birth rate across NCL, there is a long-term sustainability challenge at the SCU (level 1) to ensure there is sufficient activity delivered at the unit and that staff working at the unit are able to maintain their skills and competencies
    - **Reducing the under-utilisation of midwife-led units in NCL:** units in NCL are not utilised in an equal way, with many pregnant women and people either choosing to deliver, or being recommended to deliver, in an obstetric-led setting. Data shows that for some sites in NCL, the utilisation of their alongside midwifery-led units was around 30% or under, whilst obstetric-led units were dealing with significant pressures.
- **Ensuring that we have sufficient well-trained staff to deliver services:**
    - **Reducing challenges in recruiting midwives and neonatal nurses:** across our maternity sites in NCL there are challenges in recruiting and retaining maternity staff. For our units to comply with the new staffing standards, we would need to recruit an additional 86 midwives across the system. There are also currently high levels of staff vacancies in neonatal nursing. The number of vacancies at units means that units cannot always open all their cot spaces and some babies are having to be moved to neonatal cots outside of NCL.
    - **Addressing workforce vacancies and variation in access to allied health professionals (AHPs) across neonatal units:** across NCL there is a need to increase AHP provision across all NCL units. AHP staffing (dietetics, physiotherapists, occupational therapists and speech and language therapists), has been compared with the recommended professional body levels set out by British Association of Perinatal Medicine (BAPM) and NCL is consistently under these recommended levels for all disciplines.
- **Having the right maternity and neonatal estate to provide a positive patient experience:** hospital facilities should provide privacy, preferably labour rooms with ensuite bathrooms and space for the birth partner to join delivery where possible. Currently, the maternity and neonatal estate at Whittington Hospital does not meet modern best practice building standards and there is a lack of ensuite facilities, space around the neonatal cots and lack of space for parents and carers. Any improvement to the current estate would require additional investment.

1.3 Vision and care models

Our vision is to deliver best practice care that meets national quality guidance and to deliver an improved experience for those who use and work in our services. The design of the proposed

maternity and neonatal care model has been clinically led, drawing on national best practice and the latest clinical guidance[2,3,4.] The care model addresses the opportunities for improvement outlined in the case for change and aims to improve the clinical outcomes, quality of care, access to services, and experience for service users as well as our staff.

Our vision is to offer personalised care in the right setting, in modern, high-quality facilities. Evidence shows that key to delivering good outcomes and maintaining staff skills and competencies are neonatal units that see enough babies. To achieve this, all our neonatal units in NCL would be an LNU (level 2) or NICU (level 3). These units would have 24/7 access to specialists who regularly treat and care for unwell babies. All units would be staffed with allied health professionals (AHPs) and neonatal nursing and medical staff, in line with recommended guidance, ensuring we are using our scarce workforce skills as efficiently and equitably as possible, and reducing the need to transfer babies between units or outside NCL. To facilitate babies being treated closer to home, community neonatal services would be available across all the boroughs in NCL.

The neonatal units would be co-located with an alongside midwife-led unit and obstetric-led unit, and home birth would continue to be offered in all boroughs. Pregnant women and people would continue to have the choice to deliver in a midwifery-led setting, a consultant-led setting or a home setting. For midwifery-led units, the environment would promote a non-medicalised birthing experience, including providing privacy and promoting a positive birthing experience within a relaxed environment that feels more like home.

1.4 Options appraisal

We have followed a detailed process to identify options for the location of services for public consultation. Through the Start Well programme on maternity and neonatal services we are proposing two changes: 1) implementation of a new model of care relating to the organisation of hospital-based maternity and neonatal services, and 2) the closure of the birthing suites at Edgware Birth Centre. This document focuses on the options appraisal process for the proposed changes to hospital-based maternity and neonatal services. The proposals for Edgware Birth Centre can be found in the Edgware Birth Centre Addendum.

1.4.1 Organisation of hospital based maternity and neonatal services

We identified options for the location of services by first considering minimum activity volumes and workforce requirements. We agreed there is sufficient activity volumes and workforce for four neonatal units in NCL, all of which would be designated either an LNU (level 2) or NICU (level 3). This would allow staff to maintain their skills and competencies and would provide 24/7 access to specialist staff. Each neonatal unit would be co-located with an obstetric-led birthing unit and alongside midwife-led unit. This means there would be four obstetric-led birthing units co-located with four midwife-led units, and four neonatal units, with home birth continuing to be offered across

[2] https://www.bapm.org/resources/service-and-quality-standards-for-provision-of-neonatal-care-in-the-uk

[3] https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf

[4] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1064302/Final-Ockenden-Report-web-accessible.pdf

NCL. Three of these neonatal units would be an LNU (level 2) and one of these would also be a NICU (level 3) to meet the needs of the local population.

There are currently five maternity and neonatal units in NCL, and not all currently provide the agreed model of care. These are at Barnet Hospital (Barnet), North Middlesex University Hospital (North Mid), Royal Free Hospital, University College London Hospital (UCLH) and Whittington Hospital. UCLH currently has a NICU (level 3), which is a regionally designated service. Moving this unit would be very difficult because of co-located services and current networks, as agreed by NHS specialised commissioning and all partners[5]. Therefore, it is proposed that the NICU (level 3) remains at UCLH and becomes a fixed point in each option. We therefore considered four options as the remaining possible combinations for the location of the three LNU (Level 2) units:

- **Option 1**: North Mid, Royal Free Hospital, Whittington Hospital, UCLH (no unit at Barnet)
- **Option 2**: Barnet, Royal Free Hospital, Whittington Hospital, UCLH (no unit at North Mid)
- **Option 3**: Barnet, North Mid, Whittington Hospital, UCLH (no unit at Royal Free Hospital)
- **Option 4**: Barnet, North Mid, Royal Free Hospital, UCLH (no unit at Whittington Hospital)

We undertook a robust evaluation process that evaluated each of the options for impact on quality of care, workforce, access to care and affordability, and value for money.

As a result of this process, we concluded that:

- Options 1 and 2 are not implementable given the significant projected outflows of people to non-NCL units, which are unable to accommodate this additional activity. This position was confirmed by neighbouring providers and Integrated Care Boards (ICBs). It was also confirmed by the Maternity and Neonatal Clinical Reference Group (CRG) who stated that the significant outflows from NCL may undermine the viability of NCL providers and would make it harder to provide integrated care before, during and after giving birth. Options 1 and 2 would also result in longer travel times for patients to access services than options 3 and 4. Therefore, these options are not being recommended to be taken forward for consultation.
- Option 3 and 4 are both implementable and both options are being recommended to go forward for consultation, with option 3 being recommended as the preferred option at this stage.
- Option 3 (unit at Royal Free Hospital closes) was recommended by senior clinicians from across NCL as the preferred option as it would be easier to implement and cause less disruption to a smaller number of staff and the potential outflow of some patients to units outside NCL would be easier to manage and provide more benefits for those patients:
    - It would be significantly easier to implement option 3 than option 4 from a workforce perspective because the Royal Free Hospital currently has a SCU (level 1) neonatal unit whilst the Whittington Hospital (option 4) already has a LNU (level 2); therefore option 3 would not require movement of any neonatal consultant medical staff and fewer midwifery and nursing staff would need to move between units.

[5] NHSE Specialised Commissioning, 2023

- Option 3 would result in projected patient flows of 850 deliveries per year to hospitals in North West London (NWL), which NWL ICB has confirmed could be delivered within existing capacity and would support the future sustainability of these units where the local birth rate has been declining. It would also provide benefits to women and people in NWL who currently deliver outside of NWL units in terms of continuity of care and integration of acute and community pathways. Option 4 would result in projected patient flows of 373 deliveries per year to hospitals in North East London (NEL), of which 322 would be to Homerton University Hospital. This would be much more difficult to deliver as there are existing capacity constraints within units in NEL, particularly at the Homerton Hospital, where activity would be expected to flow. This is also against a backdrop of increasing birth rate across some boroughs in NEL, which is expected to add to the current pressure on maternity and neonatal services in NEL.

- Senior clinicians from across NCL confirmed that option 4 (unit at Whittington hospital closes) is a viable option for consultation but would be more difficult to implement than option 3 and as such is not the preferred option. Although the options are very similar in terms of care model, access and affordability, it would require more movement of specialist staff between units and the existing SCU (level 1) unit at Royal Free Hospital would need to be upgraded to an LNU (level 2), which would be more difficult to deliver (in terms of workforce and implementation) than expanding the existing LNU (level 2) at Whittington Hospital. The projected patient flow to NEL would be more difficult to manage than patient flow to NWL under option 3.

The option to maintain the status quo for hospital based maternity and neonatal services has not been recommended by the programme as an option for consultation. Maintaining the status quo would mean that the care model delivered would not meet best practice guidance, would not address the opportunities for improvement set out in the case for change and would not deliver services that best meet our population demographics.

It is therefore recommended that options 3 and 4 are taken forward to consultation and that option 3 be consulted on as the preferred option. To avoid confusion, **moving forward option 3 will be referred to as option A and option 4 as option B.**

1.5 Impact of our options for consultation for hospital based maternity and neonatal services

For hospital-based maternity and neonatal services, we have shortlisted two options for consultation. It is recommended that option A and B are formally consulted on, with option A being the preferred option. An interim Integrated Impact Assessment (IIA) (found here), was undertaken to assess the impact of each of the options. It found that for both options, we would:

- Provide antenatal and postnatal services as close to home as possible. This would be in line with the ambitions set out in our Population Health and Integrated Care Strategy for NCL, ensuring all populations have access to the same services and information. Continuing to deliver these services would provide better population health management and reduce the risk of adverse outcomes for pregnant women, people and babies.
- Continue to offer the choice of home births for pregnant women and people who would prefer to deliver in a setting outside of a hospital

- Provide women and pregnant people, and their babies, with access to high-quality maternity and neonatal care and access to specialists, including AHPs, as well as equitable provision of neonatal community services through the roll-out of the virtual ward programme across all broughs in NCL
- Provide a hospital environment that would ensure privacy and dignity for women and people giving birth
- Continue to deliver a high-quality NICU (level 3) with co-located obstetric-led birthing unit and alongside midwife-led unit at UCLH.
- Deliver a high-quality LNU (level 2) with co-located obstetric-led birthing unit and alongside midwife-led unit at Barnet and North Mid

In option A (our preferred option), we would also have a high-quality LNU (level 2) with co-located obstetric-led birthing unit and alongside midwife-led unit at Whittington Hospital. The current SCU (level 1) unit and the co-located obstetric-led and alongside midwife-led birthing unit at the Royal Free Hospital would close. All four maternity and neonatal units would be staffed in line with workforce quality standards, which are not currently delivered across NCL. This would mean:

- Midwifery, neonatal nurses and medical staff working at the Royal Free Hospital would move to other sites within NCL, retaining jobs within NCL and ensuring that all four remaining maternity and neonatal units would be staffed in line with quality standards.
- Maintaining training placements in NCL where units remain open for neonatal QIS, student nurses and midwives
- The potentially impacted local catchment population may experience increased travel times for car, taxi and public transport by 4-6 minutes and increased taxi costs by £4.90 per average journey. We have developed mitigations to address this impact, which include a conversation about travel costs during maternity appointments booking, as well as ensuring there is consistently available information about how to claim for reimbursement of travel expenses.
- There would be a similar impact on travel times for people with protected characteristics and people who have vulnerabilities. Specific consideration would also be given to other access needs for people with protected characteristics and people who may have other vulnerabilities, including digital access, access to cars, physical on-site access and cultural and language barriers.
- There could be a potential flow of patients to units outside of NCL, particularly a flow of 385 patients to St Mary's Hospital and 465 patients to Northwick Park Hospital in NWL, which could be delivered within current capacity in NWL. The outflow of patients from NCL to NWL would support the sustainability of units in NWL, where the birth rate has been declining. It would also provide benefits in terms of continuity of care for patients and integration of acute pathways with local services.
- Total capital investment of £42.4m to deliver the additional estate requirements. This would be delivered over a 4-year period. This total capital investment includes the incremental estate, equipment and IT costs over the next 30-years.

In option B, we would have a high-quality LNU (level 2) with co-located obstetric-led birthing unit and alongside midwife-led unit at the Royal Free Hospital. This unit would need to be upgraded from the current SCU (level 1) and would require workforce to move units to meet the staffing

requirements for an LNU (level 2). The current LNU (level 2) unit and the co-located obstetric and alongside midwife-led birthing unit at Whittington Hospital would close. This would mean:

- Midwifery, neonatal nurses and medical staff working at the Whittington Hospital would move to other units within NCL, retaining jobs within NCL and ensuring that all four remaining maternity and neonatal units would be staffed in line with quality standards. However, senior clinicians in NCL agreed that this would be more difficult to implement than the changes in option A.
- Maintaining training placements in NCL where units remain open for neonatal nurses QIS, student nurses and midwives, although slightly lower numbers than for option A
- Increased travel times for car, taxi and public transport by 5-7 minutes and increased average taxi costs by £4.43 per average journey. We have developed mitigations to address this impact, which include a conversation about travel costs during appointment booking, as well as ensuring there is consistently available information about how to claim for reimbursement of travel expenses.
- There would be a similar impact on travel times for people with protected characteristics and people who have vulnerabilities. Specific consideration would also need to be given to other access needs for people with protected characteristics and people who may have other vulnerabilities including digital access, access to cars, physical on-site access and cultural and language barriers.
- A modelled potential flow of patients to hospitals outside of NCL, particularly a flow of 322 additional deliveries per year to Homerton University Hospital in NEL every year. Homerton Hospital site is physically constrained and there is a backdrop of increasing births in NEL in line with increasing population. It would therefore be a challenge in accommodating additional births from other areas, although across the system as a whole it is likely to be manageable.
- Total capital investment of £39.4m to deliver the additional estate requirements. This would be delivered over a 4-year period. This total capital investment includes the incremental estate, equipment and IT lifecycle costs over the next 30-years.

1.6 Implementing the proposals

We have developed a timeline to implementation and reviewed the enablers we would need to invest in for the proposals:

- **Workforce:** support to staff through the transition, investment in training neonatal nurses to be qualified in specialty and recruiting additional AHPs. We are working with the London Neonatal Operational Delivery Network to achieve this.
- **Finance:** delivering the required capacity and estate requirements is critical for both options. The capital investment would be funded within the ICB capital departmental expenditure limit (CDEL) envelope. For option A, where capital requirements exceed £25m for Whittington Hospital, an outline business case (OBC) and a full business case (FBC) would be required in line with HMT Green Book requirements. These would require approval from NHS England (NHSE) and DHSC[6].
- **Communication and engagement:** working with impacted trust communication teams, as well as partners in the community, we would need to extensively communicate the changes.

[6] https://www.england.nhs.uk/wp-content/uploads/2023/02/B1376i-capital-investment-and-property-business-case-approval-guidance.pdf

This would need to be inclusive and co-ordinated, ensuring that those populations that are harder to reach receive the same information and that the information is accessible to all groups, including those with protected characteristics.

1.6.1 Closure of the birthing suites at Edgware Birth Centre

We have also reviewed the use of Edgware Birthing Centre (EBC) and propose that we close the birthing suites at EBC. This proposal is part of the proposed changes to hospital-based maternity and neonatal services and further detail on the proposals and preferred way forward can be found in Edgware Birth Centre Addendum.

1.7 Benefits

The proposed maternity and neonatal model of care is expected to deliver a range of benefits that ensure equity of provision and experience for patients, training and development opportunities for staff, services which are clinically sustainable, and up-to-date estate and buildings which meet modern standards. The benefits of the outline proposal in this document would improve the quality of care and clinical outcomes and would consolidate our workforce to help units reach the workforce quality standards. These benefits will be felt and experienced by everyone, including patients, families, carers, staff and local communities. The benefits outlined demonstrate how our proposals will address a number of the opportunities for improvement that were identified in our case for change.

1.8 Stakeholder engagement

We have undertaken detailed and robust engagement to develop the proposals for maternity and neonatal services. Inclusiveness has underpinned our approach to engagement, and we have ensured that a wide range of perspectives have been captured in line with our commitments to local populations and our statutory responsibilities.

Our thinking on the proposals and work undertaken, has been tested with patient and community groups, providers and local authorities through a series of events, meetings and online surveys. In addition, all NCL MPs have been offered briefings on the programme and its progress to date. In promoting an inclusive approach to engagement, we have utilised a range of engagement techniques, including traditional engagement methods, virtual sessions, online platforms and communicating via social media. Feedback from engagement has been captured and this has helped to shape the proposals.

Through engagement, residents and service users have influenced the development of our care model. Residents have told us how important it is that they feel listened to and involved in their maternity care. We have heard the importance of communication, both between and with clinical teams, as well as the value placed on continuity of care by those who have experienced it. For neonatal care, it is clear how important it is for patients to have the best specialists available. Engagement has influenced our interim IIA and the mitigations that we have developed to support service users who may have additional needs or vulnerabilities should changes be implemented.

1.9 Quality assurance

We have implemented a robust quality assurance process, which underpins the programme and gives assurance to this PCBC and Edgware Birth Centre Addendum. The process undertaken by the programme has been assured by NHSE and going to public consultation was dependent on this assurance being received. Our proposals have been independently reviewed by the London Clinical Senate, who provided feedback on the proposed changes. This has been acted upon and built into this business case.

NHSE has stated that the programme has met the five tests for reconfiguration set out by the Secretary of State:

- **TEST #1**: The proposed change can demonstrate strong public and patient engagement.
  - We have had early involvement with patients and the public via our communications and engagement workstream and Patient and Public Engagement Group (PPEG). Our materials have been tailored to meet the needs of the audience and ensure participation.
- **TEST #2**: The proposed change is consistent with current and prospective need for patient choice.
  - We have ensured that our proposals maintain choice as per the NHS Choice Framework for maternity services.
- **TEST #3**: The proposed change is underpinned by a clear, clinical evidence base.
  - We developed a set of clinical design principles through the Maternity and Neonates Clinical Reference Group to reflect best practice clinical care. The care model development has been clinically led and underpinned by best practice and professional body guidance.
- **TEST #4**: The proposed change to service is owned and led by the commissioners.
  - We have led the development of the PCBC and the Start Well programme has been progressed through the NCL ICB Board and NHSE London Region Specialised Commissioning governance arrangements, in accordance with the organisations' constitutions and supporting documents
- **TEST #5**: Proposals including significantly reducing hospital bed numbers will have to meet one of the following three conditions:
  - 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
  - How 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).

The proposed service change will not reduce hospital bed or cot numbers and therefore the conditions set out by this test do not apply.

In addition, assurance has been received from engagement with potentially impacted populations through the case for change engagement period.

In line with the programme governance set, the approvals process for the PCBC was:

- Maternity Clinical Reference Group (CRG), Finance and Analytics Group, PPEG and Integrated Impact Assessment (IIA) Steering Group ratified the information that has formed part of this document before being submitted to the Start Well Programme Board
- The Start Well Programme Board reviewed this document and submitted to NHSE for assurance
- Documentation has been shared with the Joint Health Overview and Scrutiny Committee (JHOSC)
- London Joint Committee for specialised services reviewed and supported the proposals set out in this PCBC and to initiate public consultation. The decision has been ratified by the London Regional Executive.
- After assurance, a decision to proceed to consultation was made by a meeting in public of the NCL ICB Board on 5 December 2023

1.10 Plans for consultation

We have developed a comprehensive approach to public consultation. This plan sets out the approach that we will use for consultation and the activities and channels that we will use to ensure we inform and actively engage with a diverse range of audiences and stakeholders.

The overall management and delivery of the consultation will be undertaken by the ICB's internal communications and engagement team[7]. It will be undertaken in line with the legal duty on NHS organisations to involve patients, staff, and the public. The consultation exercise will be undertaken over a 14-week period in line with best practice standards.

The purpose of the consultation is:

- To ensure people in NCL and surrounding areas who may be impacted by the proposals are aware of the public consultation and how to participate.
- To present the case for change and the proposed options, by providing clear, simple, and accessible information in a variety of formats.
- To provide a variety of methods and mechanisms to give and receive information, appropriate to different audiences and with a focus on groups with protected characteristics and those who may be more impacted by the proposed changes.
- To enable and encourage people to share their views on the proposed changes and the potential impacts.
- To understand the views relating to our proposals for maternity and neonatal services and what concerns and mitigations we should consider in relation to any future implementation.
- To ensure responses received are independently evaluated and the results published.
- To ensure decision-makers receive detailed outputs and feedback from the consultation exercise so that they are as well-informed as possible before any decisions are made.

Our plan builds on extensive engagement with staff, stakeholders, patients, carers and local communities during the pre-consultation period. To support the consultation, we have developed accessible materials, including a consultation document and questionnaire, that explain why

[7] On behalf of NHSE London Region Specialised Commissioning

change is needed, what the proposed changes are and the benefits we feel the proposals will bring. We have developed a communication and engagement plan which encompasses online and offline activity to maximise the opportunities for public, patient and staff to participate. We will focus efforts to engage with groups identified as potentially impacted through our interim IIA who may be less likely to give their feedback, as well as potentially impacted groups identified who reside outside of NCL.

Throughout the consultation period we will monitor responses to identify any demographic or other trends which may indicate a need to adapt our approach regarding consultation activity or refocus efforts to engage a specific group or locality. In line with best practice, we will commission an independent organisation to analyse responses and produce a non-biased objective report summarising all feedback.

1.11 Next steps and approvals

This PCBC and Edgware Birth Centre Addendum has been recommended by the Start Well Programme Board to the NCL ICB Board, supported by the London Joint Committee for specialised services and subsequently ratified by the London Regional Executive. NCL ICB plan to consult on the proposals for the location of maternity and neonatal services in NCL. Following consultation, all the consultation responses will be collated and taken into consideration. The business case will be updated into a full Decision-Making Business Case (DMBC) before any final decisions are made. There will also be an independent report compiled on the consultation responses which will be considered before a decision is made. We expect a decision on service change to be made 6-9 months following the consultation end. Timelines are dependent on the outcome of public consultation.

2. Introduction and context

This PCBC provides information on our proposal to reconfigure maternity and neonatal services in NCL. NCL ICB, as part of the wider ICS, is a statutory organisation which holds responsibility for planning NHS services. NHSE London Region Specialised Commissioning is the statutory organisation responsible for commissioning neonatal services. Given the interdependency between maternity and neonatal services, NCL ICB and NHSE London Region Specialised Commissioning will jointly give approval for this PCBC and plans to consult. The proposals have been developed with a wide range of stakeholders, including NCL ICB, provider organisations, neighbouring ICSs and local stakeholders, alongside the public, patients and staff.

2.1 Purpose and scope of pre-consultation business case (PCBC)

2.1.1 Purpose and aims of the PCBC

This document is a PCBC setting out the proposed changes to maternity and neonatal services in NCL. The Start Well programme was established to improve the clinical outcomes and quality of maternity and neonatal services and to ensure that services are aligned to the needs of the local population.

The aims of this document are:

1. To describe the **health needs of our population** and outline the **case for change**, which describes the clinical environment and infrastructure needed to support the delivery of the programme. The intent is to deliver the best care for our patients and provide a positive working environment for all staff. The case for change describes the **key challenges facing us**, opportunities for improvement and explains why change is necessary.
2. To describe the **decision-making process** we have followed and the **governance arrangements** required to support the proposed changes. This PCBC describes the process we have followed to ensure any decision-making is supported by clinical best practice, underlying evidence and has the support of local stakeholders.
3. To describe the **vision and care model** that was developed by local clinicians describing how patients' needs will be met, recognising co-dependencies, and aspiring to positive impacts on both patients and staff. The **benefits section** describes the benefits of the proposed clinical model and how it will meet the needs of our local population.
4. To set out the **options appraisal process** and show how we evaluated the longlist of options against a set of evaluation criteria to determine the shortlist of options, subsequently evaluating these in order to identify our options for consultation. The options appraisal process describes the approach we have taken to understand the possible options to address the opportunities for improvement as set out in our case for change and delivery of the model of care.
5. To outline the **key enablers** needed to implement our model of care, including workforce and estates.
6. To outline the **public and stakeholder engagement** that has been carried out at each stage of the programme, and how we plan to consult if a decision is made to proceed to consultation. The stakeholder engagement plan describes how key stakeholders have been engaged with, and involved in, our process.
7. To demonstrate the **planning and proposed implementation** if, following public consultation and due regard to the responses has been considered, a decision is made to move forward with the changes. The **governance section** of this document describes the role of the assurance bodies and scrutiny committees around decision-making.

The PCBC outlines a commissioner-led review of the potential service delivery models and service options. The intent is to then seek opinion from the public through a formal public consultation. The PCBC also demonstrates how we have met the five tests of assurance in line with regulatory requirements by NHSE[8]. The five tests for assurance are:

- **TEST #1**: The proposed change can demonstrate strong public and patient engagement.
- **TEST #2**: The proposed change is consistent with current and prospective need for patient choice.
- **TEST #3**: The proposed change is underpinned by a clear, clinical evidence base.
- **TEST #4**: The proposed change to service is owned and led by the commissioners.
- **TEST #5**: Proposals including significantly reducing hospital bed numbers will have to meet one of the following three conditions:

[8] NHS England. 2018. https://www.england.nhs.uk/wp-content/uploads/2018/03/planning-assuring-delivering-service-change-v6-1.pdf

- 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
- How 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).

This PCBC is therefore a technical and analytical document intended to provide sufficient information to enable the NCL ICB Board and NHSE London Region Specialised Commissioning (as the current commissioner of specialised neonatal services) to agree options for a service change to be part of a public consultation. The PCBC is prepared in accordance with the NHSE guidance on planning for major service change and reconfiguration[1] and aligns with guidance in His Majesty's (HM) Treasury Green Book [9].

2.2 The language used in this document

The audience for this document is broad. It has been written with the intention of being as easy to understand as possible for everyone that reads it. As far as possible, jargon-free, plain English has been used. A glossary has been included to support the understanding of abbreviations and terminology for those who may be less familiar with the terms used. This document will also be accompanied by other materials that summarise our proposals in a more accessible way.

We want this document to be as inclusive of everyone's experiences of healthcare as possible and it therefore refers to 'pregnant women and people' when describing those that use maternity services. Services should be appropriate, inclusive and sensitive to the needs of individuals whose gender identity does not align with the sex they were assigned at birth and in describing services and our proposals we hope to mirror that inclusivity and sensitivity.

2.3 NCL Integrated Care System (ICS)

On 1 July 2022, NCL formalised working as an ICS. The ICS covers five boroughs: Barnet, Camden, Enfield, Haringey and Islington (see Figure 1**Error! Reference source not found.**).

[9] Gov.UK, 2022. The Green Book. https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent/the-green-book-2020

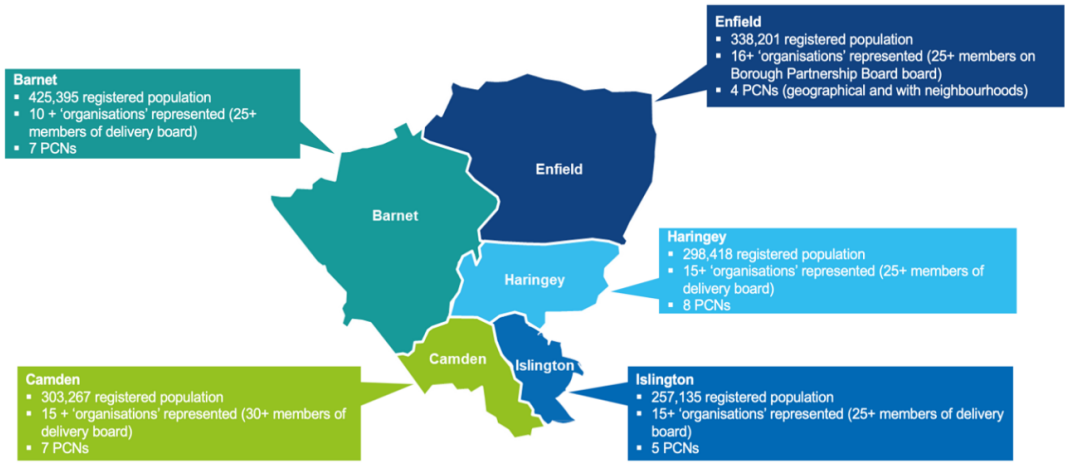


Figure 1: NCL geography

The principles informing the work of the NCL ICB are drawn from the Population Health and Integrated Care Strategy[10]:

- **Trust the strengths of individuals and our communities:** we will listen to our communities and develop care models that are strengths-based and focused on what communities need, not just what services have always delivered.
- **Break down barriers and make brave decisions that demonstrate our collective accountability for population health:** we understand each other's viewpoints and take shared responsibility for achieving our ICS outcomes and our role as anchor institutions.
- **Build from insights:** we create digital partnerships and use integrated qualitative and quantitative data to understand need.
- **Strengthen our Borough Partnerships:** we build a system approach for local decision making and accountability to support local action on physical and mental health inequalities and wider determinants.
- **Mobilise our system's world class improvement and academic expertise for innovation and learning:** we build the evidence base for population health improvements and innovative approaches to improve integrated working.
- **Break new ground in system finance for population health and inequalities:** we shift our investment toward prevention and proactive care models and create payment models based on outcomes.
- **Build 'one workforce' to deliver sustainable, integrated health and care service:** we maximise our workforce skills, efficiencies and capabilities across the system.
- **Support hyper-local delivery to tackle health inequalities and address wider determinants:** we make care more sustainable by creating local integrated teams that coordinate care around the communities they serve.
- **Relentlessly focus on communities with the greatest needs:** we embed Core20PLUS5 in all our programmes, with a particular focus on inclusion health to make sure no-one is left behind.

[10] https://nclhealthandcare.org.uk/wp-content/uploads/2023/05/PH-IC-Strategy-V.Final-long-version.pdf

- **Deliver more environmentally sustainable health and care services:** we prioritise activity which impacts our communities' health and environment, such as transport.

2.4 NCL and population health ambitions

Our vision in NCL is for our population to live better, healthier and longer, fulfilling their full potential over the course of their entire life. Our vision, as set out in **Error! Reference source not found.Error! Reference source not found.**Figure 2, is that people in NCL[11]:

- **Start Well:** every child has the best start in life and all children, adolescents and young people improve their mental health and emotional resilience.
- **Live Well:** better prevention and management of long-term conditions, reduced unemployment levels and parity of importance between physical and mental health.
- **Age Well:** people over 65 are independent and live in the community for longer, feel less isolated and more socially connected.

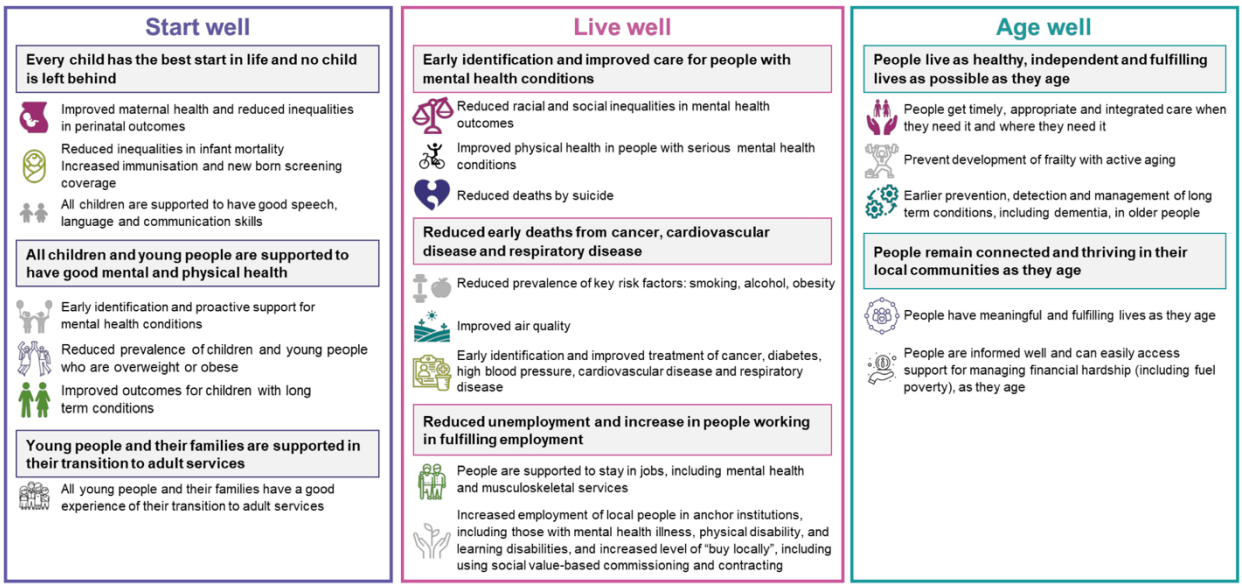


Figure 2: NCL priorities

To start life well is one of the core aims of North Central London's Integrated Care System; the way we deliver services for pregnant women and people, babies, children and young people can have a lasting impact on the rest of their lives, both in the immediate future and for years to come. The Start Well programme has provided an early opportunity to collaborate as an ICS and to work together practically, in a way that is true to the ICS's principles. This programme has been shaped by clinical and operational leaders in our partner organisations, neighbouring ICSs, operational delivery networks (ODNs), as well as those that use our services.

2.5 Start Well programme overview

[11] https://nclhealthandcare.org.uk/wp-content/uploads/2023/05/PH-IC-Strategy-V.Final-long-version.pdf

In November 2021, partner organisations in NCL ICS formally launched Start Well, a long-term programme looking at maternity, neonates, children and young people's services. The aim of the Start Well programme is to ensure that we are delivering the best care to meet the needs of pregnant women and people, babies, children, young people and their families. A number of drivers were identified for the programme, including the urgent need to address health inequalities identified through the pandemic, external reviews of services and learning from the temporary changes to local services during the pandemic. Taking a population health approach, examining services and outcomes through an equalities lens, particularly in understanding the impact of deprivation and ethnicity on outcomes and health, has underpinned the work to date.

2.6 Overview of Start Well programme timeline

The Start Well programme commenced in November 2021, with implementation, subject to consultation, not anticipated to start until at least Summer 2025 onwards. The steps of the programme are as follows:

- **Confirm case for change** (November 2021 to September 2022): including mobilising the Start Well programme, publishing the case for change and undertaking engagement on the findings.
- **Development of clinical models and options** (July 2022 to December 2023): including designing and agreeing the clinical model for maternity and neonates, identifying options for public consultation, developing the PCBC and ongoing stakeholder engagement.
- **Public consultation** (planned December 2023 to March 2024): consultation on the proposals with the public, including extensive engagement across the impacted populations.
- **Decision making** (6-9 months): consideration of the feedback from consultation and the decision making on the option to implement following engagement and consultation.
- **Outline business case (OBC) and full business case (FBC)** (12 months) development if required.
- **Transition to implementation**

The indicative timeline for the programme is shown in Figure 3: Indicative Programme timeline

. Timeline following public consultation is dependent on the outcome of consultation.

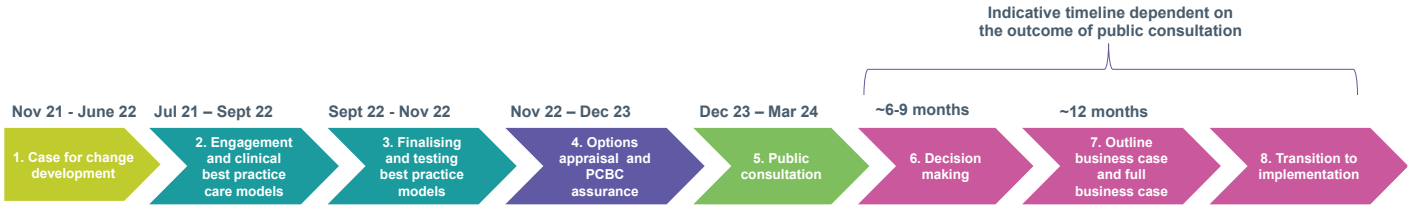


Figure 3: Indicative Programme timeline

2.7 Governance arrangements

NCL ICB Board and NHSE London Region Specialised Commissioning will make the final decisions on proposals covered by the consultation. The board comprises independent members,

including our Chair, Executives from NCL ICB and members from partner organisations, including trusts and local authorities.

The **Start Well Programme Board** reports to the ICB's Board of Members and makes recommendations on proposed changes to children and young people's services in NCL. The Programme Board provides oversight and steer for the Start Well programme. It is comprised of executive representatives from each provider in NCL, plus patient and local authority representatives, NHSE Specialised Commissioning and representatives from the neighbouring ICSs of NEL, NWL, Hertfordshire and West Essex.

The Programme Board is chaired by the ICB's Chief Medical Officer. The governance structure of the programme is set out in Figure 4. The Programme Board has agreed a set of principles to underpin the work, which includes taking a population-based approach, bringing a system-wide perspective and using evidence and best practice to inform the work.

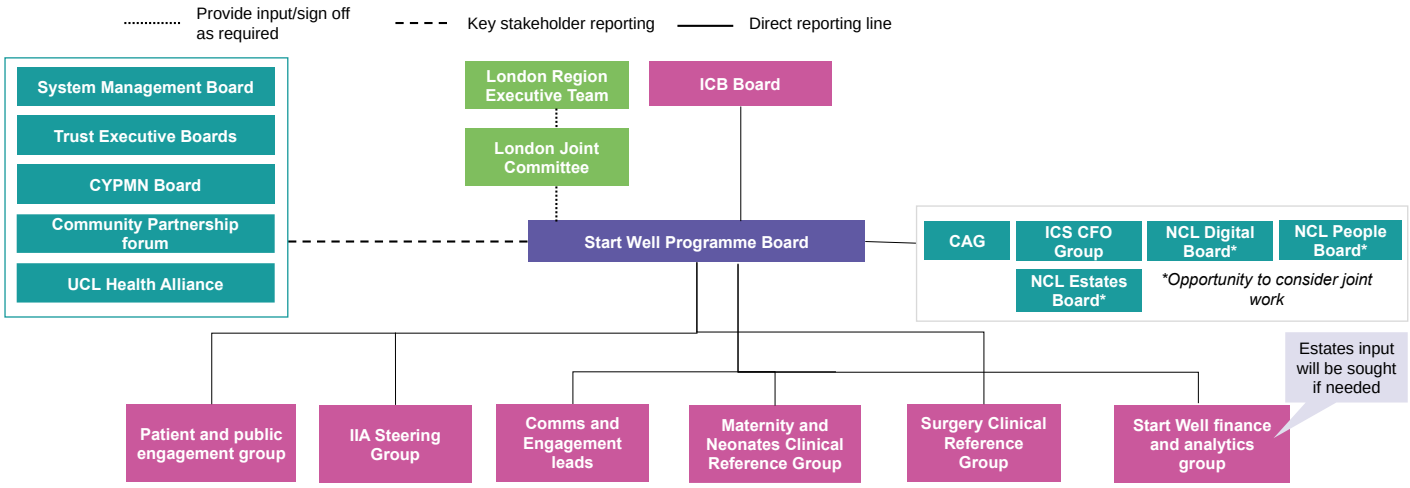


Figure 4: Start Well Programme governance structure

There are several groups, working to the Start Well Programme Board, which are undertaking the more detailed work as part of the development of these proposals. These include:

- **Maternity and Neonates Clinical Reference Group (CRG):** the Start Well Programme Board is advised by the CRG which provides clinical leadership and input into the programme. It was established in August 2022 (prior to this there had been workstream reference groups which were established in January 2022), and the group comprises members from provider organisations and across the different professional groups. This includes obstetricians, neonatal consultants, midwives, allied health professionals (AHPs), primary care and NHSE workforce, training and education directorate and NHSE Specialised Commissioning representatives.
- **Finance and Analytics Group:** leads on the financial aspects of the programme and has supported the work to understand the affordability and value for money of the proposals. The group supported the development of the case for change. The membership was refreshed in November 2022 to support the development of the PCBC and comprises members from each impacted provider organisation and the ICB.

- **Patient and Public Engagement Group (PPEG):** is comprised of patient representatives, Maternity Voices Partnership (MVP) representatives, voluntary and community sector representatives and provider engagement teams. The group leads on the access to care aspects of the programme, as well as providing input and feedback on other elements of the programme. This group was chaired by the Start Well Programme Board patient representative and includes members who have experienced paediatric, maternity and neonatal services.
- **Integrated Impact Assessment (IIA) Steering Group:** has provided insight and expertise on the interim IIA. The group is co-chaired by a director of public health and the Start Well Programme Senior Responsible Officer (SRO), with perspectives from the local authority, clinicians, public health teams, patients and local communities.
- **Communications and Engagement Group:** ensures that communication and engagement work is coordinated across all provider organisations in NCL and is taking place as required. It comprises communication and engagement leads from each NCL organisation represented on the Start Well Programme Board and is led by the ICB.

The work of the Start Well Programme Board is also supported by wider groups, to ensure there is coherence with other workstreams within NCL. These include:

- **System Management Board (SMB):** SMB is responsible for providing strategic oversight to reduce inequalities, reviewing system-wide transformation programmes, investment and disinvestment decisions, and ensuring their alignment with medium- and longer-term ICS priorities. SMB is chaired by the NCL ICB Chief Executive and has membership from all NCL trust CEOs, as well as other ICB executive directors and system leaders, including local authority and primary care. SMB has received regular updates on the programme at key intervals.
- **Children and Young People Maternity and Neonatal Board (CYPMN Board):** the CYPMN Board has broad representation from across the ICS and covers programmes which span beyond the scope of Start Well, including children and young people's community and mental health commissioning, the local maternity and neonatal system (LMNS) and the Children and Young People (CYP) regional improvement programme. Each of these programmes has a role in contributing to the ICS response to the broader opportunities identified through the Start Well case for change. Bringing programmes together in this way provides a bridge between the longer-term strategic work that Start Well and the two strategic reviews around mental health and community services are delivering, and the more business-as-usual elements of work being delivered through other ICS programmes of work.
- **UCL Health Alliance:** is a provider collaborative covering all sectors of NHS care within North Central London. It brings together 14 member organisations across acute, mental health, community, specialist, and primary care sectors, alongside a world-leading university partner to be the delivery vehicle for cross-provider innovation in NCL.
- **GP Provider Alliance:** the GP Provider Alliance brings together general practice as a unified provider voice to strategically lead, influence and enable primary care provision at the North Central London level. The alliance is a key partner in the Integrated Care System and ensures that primary care provides the best possible services for our communities, optimises health gains and reduces inequalities.

- **Clinical Advisory Group (CAG):** CAG is co-chaired by the ICB's Chief Nursing Officer and Chief Medical Officer. It reports into SMB in an advisory capacity, rather than making decisions on behalf of statutory organisations. The CAG membership is drawn from senior clinical leaders from across NCL organisations. The role of the CAG is to provide clinical oversight of pan-NCL service changes, new service developments and new ways of working. CAG has received updates at key intervals of the programme and provided their clinical endorsement.
- **ICS Chief Finance Officer (CFO) Group:** this is a group of directors of finance from across NCL, which meets on a regular basis. It is an informal, non-decision-making group.

There are other organisations that are not part of the ICS, but which have a role in the Start Well programme.

- **North Central London Joint Health Overview and Scrutiny Committee:** The Joint Health Overview and Scrutiny Committee (JHOSC) is made up of the Chairs of the Health Overview and Scrutiny Committees from the five North Central London boroughs: Barnet, Haringey, Camden, Islington and Enfield. They have received regular updates about the programme since November 2021.

2.7.1 Working with NHSE London Region Specialised Commissioning

NHSE London Region Specialised Commissioning is the current commissioner of NCL neonatal services as well as other specialist maternity services, such as fetal medicine. This means that they have a significant role as decision-makers on service change in the programme and will continue to do so as it moves forward. They are represented on the Start Well Programme Board and have clinical representation at the CRG through the Neonatal ODN and the Regional Medical Director and Nursing Director for Direct Commissioning.

Nationally, the commissioning of some specialised services (including neonatal services) is due to be delegated to ICBs. To support planning until delegation formally takes place (anticipated to happen in April 2025), joint working arrangements have been put in place between NHSE and ICSs through a statutory joint committee. In London, the London Joint Committee for specialised services has been established, consisting of representatives from all five ICBs and selected provider representatives, as well as representatives from other regions outside of London to join up decision making across boundaries. The joint committee reports into the London Regional Executive which includes the five ICB CEOs and the London region executive team. Regular reports on Start Well have been made to the joint committee.

NCL is linking existing work on population health, the Start Well programme and other strategies into these structures. This is to help achieve the benefits of delegation to ICBs in terms of integration of care and to ensure the long-term sustainability of services for our own population and for those who access our specialist services.

Given their continued role as the commissioner of neonatal services and the joint working that is taking place between the ICB and NHSE, approval to commence consultation has been sought

from both the ICB Board and the London Joint Committee for specialised services. The London Joint Committee for specialised services met and supported the proposals set out in the PCBCs and to initiate a public consultation. The decisions has been ratified by the London Regional Executive.

2.8 Geography and demography of North Central London

2.8.1 Population and demographics

NCL is made up of five boroughs (Barnet, Camden, Enfield, Haringey and Islington) has a population size of around 1.8 million. The population is younger than the national average and is set to increase by 5% by 2030, with the largest increase in 65+ year olds[12].

There are high levels of deprivation in some areas and NCL is the second most deprived ICS in London. More than 1 in 5 people in NCL live in deprivation, with particular concentrations of deprivation in the east of the system. The population living in NCL is also ethnically diverse; Barnet and Camden have larger Asian communities, while Haringey and Enfield have larger Black communities. The Marmot Review highlighted that deprivation and racial discrimination are strongly associated with health inequalities, which impact on all areas of people's lives, and health outcomes, from conception through to death[13]. The direct and indirect impacts of COVID-19 have starkly highlighted this[14]. The diversity of our local communities and their different cultures means that they may have different health needs and may want to access services in different ways.

Across NCL there are high levels of population health needs and inequalities; these have been explored in detail as part of the NCL population health strategy[15]. In recent years, life expectancy and healthy life expectancy (the average number of years that a person can expect to live in "full health") have declined. Life expectancy differs between our five boroughs. Residents in Barnet and Camden have a higher life expectancy than the London average, whilst Islington residents have a lower life expectancy. Between the most and least affluent areas in NCL, there is a variation of nearly 20 years in healthy life expectancy[16].

Over a quarter of the NCL population are currently women of childbearing age, defined as those aged 11-50 (439,000) (Figure 5)[17]. By 2041, this number is expected to increase to 443,000, in line with the total population of NCL, which is expected to grow from 1.5 million to 1.7 million people.

[12] North Central London Population Health and Integrated Care Strategy, 2023 [https://nclhealthandcare.org.uk/wp-content/uploads/2023/05/PH-IC-Strategy-V.Final-long-version.pdf]

[13] The Marmot Review: Fair Society, Healthy Lives. 2010. https://www.instituteofhealthequity.org/resources-reports/fair-society-healthy-lives-the-marmot-review/fair-society-healthy-lives-full-report-pdf.pdf (Accessed June 2023)

[14] Marmot M. Build Back Fairer: The COVID-19 Marmot Review. 2020. https://www.health.org.uk/publications/build-back-fairer-the-covid-19-marmot-review (Accessed June 2023)

[15] North Central London Population Health and Integrated Care Strategy, 2023 [https://nclhealthandcare.org.uk/wp-content/uploads/2023/05/PH-IC-Strategy-V.Final-long-version.pdf]

[16] North Central London Population Health and Integrated Care Strategy, 2023 [https://nclhealthandcare.org.uk/wp-content/uploads/2023/05/PH-IC-Strategy-V.Final-long-version.pdf]

[17] GLA. Housing-led projections. 2020.

ONS projected women of childbearing age population in NCL
Residents, 2021-41

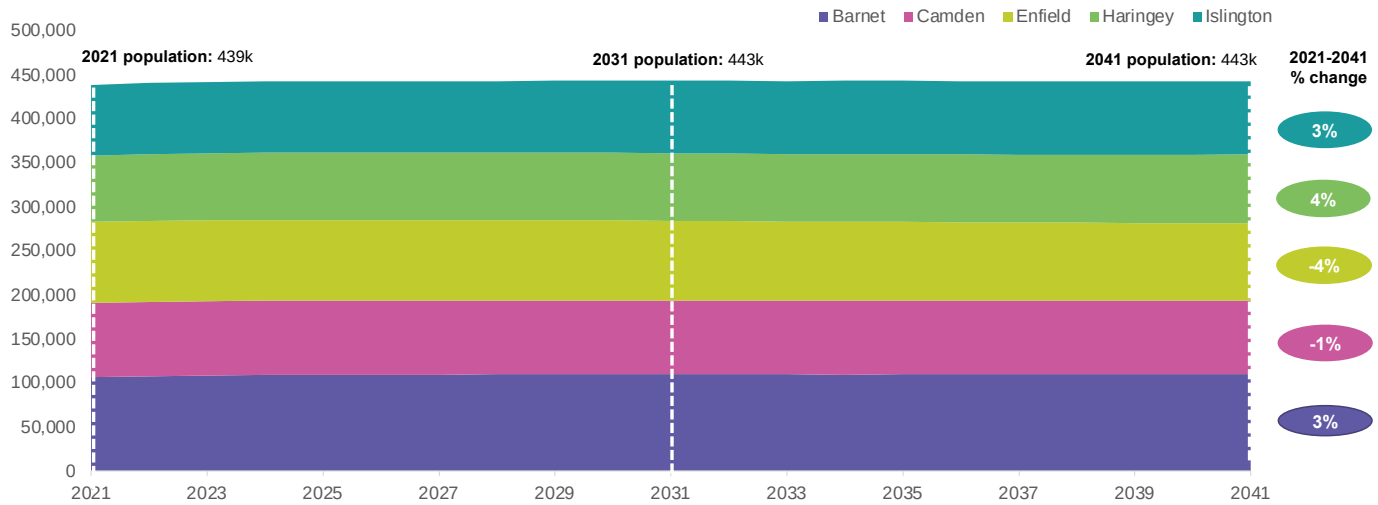


Figure 5: Women of child bearing age in NCL population projections

The number of live births in NCL has been declining across all five boroughs. In 2021, there were 17,066 live births of people living in NCL boroughs, compared to 18,800 in 2018[18]. Since 2018, the number of live births has declined by 10% and this decline is projected to continue[4]. There are more children being born within the more deprived areas of NCL[4]. Between 2018 and 2020, there were more than three times as many births in the 20% most deprived areas compared to the 20% least deprived areas[4]. Over half of all births in NCL in 2019/20 were in the 40% most deprived areas [4].

2.8.2 Maternity services in NCL

Maternity care refers to care provided by health professionals during pregnancy, labour, birth and up to six weeks after birth. It also encompasses the monitoring of the health and wellbeing of the mother and baby, health education and any additional support required.

The NHS offers a choice to pregnant women and people on where they would like to give birth[19]:

- **Home birth:** these women and people, who typically have a low risk of developing complications during delivery, have the support of two midwives at home.
- **Midwife-led unit:** this is a unit run by midwives and may be in either a standalone unit or in a unit at a hospital. These women and people, who typically have a low risk of developing complications during delivery, have the support of a midwife. This is at a standalone birth centre on a site separate to a hospital, or in an alongside unit at a hospital site. In a standalone unit, transfer for complications or pain relief require an ambulance or car.

[18] PHE Fingertips. 2021.

[19] https://www.nhs.uk/pregnancy/labour-and-birth/preparing-for-the-birth/where-to-give-birth-the-options/

- **Obstetric-led unit:** pregnant women and people with a moderate to high level of complexity are advised to give birth at an obstetric-led unit that provides sufficient care for all their needs. All obstetric-led units are co-located with a neonatal unit.

The choice of options available to a pregnant woman or person will depend on their needs, the risk factors in terms of their pregnancy and, sometimes, where they live.

Women and pregnant people who are healthy and have a lower risk of complications during pregnancy are classed as 'low risk' and are clinically able to use any of these birthing options. Those with pre-existing medical conditions, or conditions which develop during pregnancy, may be advised to give birth in an obstetric-led unit where specialists are available in case any input is needed during labour and delivery.

In order to safely care for the needs of a pregnant woman or person during labour, it is important that obstetric-led units have a full range of support services available 24/7, in case of any complications. This typically includes the following services:

- Access to an emergency operating theatre, in case a pregnant woman or person needs an operative procedure to manage safe delivery.
- Specialist obstetric anaesthetists available at all times, to provide anaesthetic support for a pregnant woman or person who may need to have a surgical procedure or provide other pain relief such as an epidural.
- High dependency or intensive care support should there be any complications during birth that lead to a pregnant woman or person becoming critically unwell and needing a higher level of medical care.
- Timely access to interventional radiology services. These services treat pregnant women and people who may have a significant bleed (known as postpartum haemorrhage) after giving birth. The Royal College of Obstetricians and Gynaecologists (RCOG) has produced guidance to urge all obstetric units to consider interventional radiology as an important tool in the prevention and management of postpartum haemorrhage[20].

Units leading in maternal medicine specialties need to be able to provide timely access to specialists who are able to support the needs of pregnant women and people with complex health conditions and who may need additional support during their delivery.

2.8.3 Neonatal services in NCL

Neonatal care is provided to babies born prematurely (before 37 weeks' gestation), and babies that are born unwell or with additional needs. These babies often need extra support to grow and thrive in the same way as a baby born at full term, or with no other health conditions. Care is delivered in a neonatal unit, or by specialist neonatal workforce working in other settings outside of a neonatal unit.

[20] Royal College of Obstetricians and Gynaecologists, The role of emergency and elective interventional radiology in postpartum haemorrhage. Available online: https://www.rcog.org.uk/media/4nbn0ffm/goodpractice6roleemergency2007.pdf [accessed May 2022]

Babies that are admitted to neonatal units are usually admitted directly at birth or are transferred from another neonatal unit or clinical environment. Some babies born very prematurely, or with a low birth weight, may spend a number of weeks, or even months, in a neonatal unit until they are ready to go home.

The NHS has defined three categories of neonatal unit in its Neonatal Critical Care Service Specification (E08/S/a)[21] as follows:

- **Special Care Unit (SCU) (level 1):** provides local care for babies born at 32 weeks or more and >1,000g birthweight who require only special care of short-term high dependency.
- **Local Neonatal Unit (LNU) (level 2):** provides care for all babies born at 27 weeks of gestation or more, >800g birthweight or multiple pregnancies >28 weeks. The units may also receive babies born at 27 – 31 weeks who require high dependency care.
- **Neonatal Intensive Care Unit (NICU) (level 3):** provides the full range of neonatal care. All babies born less than 27 weeks of gestation of birthweight less than 800g. Multiple pregnancies less than 28 weeks of gestation should receive perinatal and early neonatal care in a maternity service with a NICU (level 3) facility.
- **Specialist Neonatal Intensive Care (level 3):** provide specialist services such as neonatal surgery and cardiology.

Neonatal units are able to provide care not only at their maximum designation, but also at the lower acuity levels of care, as babies become more well. For example, a NICU (level 3) will have cots that provide intensive care support to babies, but also high dependency care, and special care.

The British Association of Perinatal Medicine (BAPM) is the professional association that produces evidence-based standards for perinatal care in the UK. It has developed several frameworks for practice that describe the optimum activity and staffing levels for neonatal units to maintain skills and experience of looking after neonates. Evidence demonstrates improved outcomes for extremely preterm babies delivered in larger units in the UK[22].

BAPM recommendations focus on the number of admissions of low birth-weight babies and delivery of respiratory care days (RCDs)[23]. RCDs are defined as days during which the newborn receives either invasive ventilator support via an endotracheal tube or tracheostomy, or non-invasive respiratory support with continuous positive airway pressure mask or high-flow nasal cannula.

Neonatal and maternity services work very closely together to ensure that any babies born prematurely, or requiring intensive care, are born in the most appropriate place for their anticipated

[21] NHS England. Neonatal Critical Care Service Specification. Available online: https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/01/e08-serv-spec-neonatal-critical.pdf [accessed March 2022]

[22] Marlow N, Bennett C, Draper ES, Hennessey EM, Morgan AS, Kosteloe KL. Perinatal outcomes for extremely preterm babies in relation to place of birth in England: the EPICure 2 study 2014 May; 99(3): F181– F188

[23] BAPM. Optimal arrangements for Local Neonatal Units and Special Care Units in the UK including guidance on their staffing: A Framework for Practice. Page 2. November 2018. Available online: https://www.bapm.org/resources/2-optimal-arrangements-for-local-neonatal-units-and-special-care-units-in-the-uk-2018 [accessed March 2022]

care needs. The Getting It Right First Time[24] (GIRFT) neonatology report highlighted that relationships and joint working across neonatology, obstetrics and maternity needs to be effective for services to deliver the best outcomes for babies[25].

Maternity sites that have an obstetric-led unit, as well as having the additional services already identified (high dependency unit/intensive therapy unit, anaesthetics, interventional radiology), are always co-located with a neonatal unit to ensure there are the staff and facilities to look after babies in case of complications. This is fundamentally important when considering the clinical safety of looking after both the pregnant woman or person and their baby and is particularly important when looking after those who have more complex pregnancies.

2.9 National challenges

Better Births was published in February 2016[26], and sets out a clear vision for maternity services to become safer, more personalised, kinder, more professional and more family friendly. It outlined how every pregnant woman and person should have access to information enabling them to make decisions about their care, and where they and their baby can access support that is centred on their individual needs and circumstances. It also called for all staff to be supported to deliver care which is person-centred, working in high-performing teams, in organisations which are well-led and in cultures which promote innovation, continuous learning and break down organisational and professional boundaries.

The Ockenden Report was an independent review of maternity services at Shrewsbury and Telford Hospital NHS Trust, commissioned by NHSE and NHS Improvement in the summer of 2017. It followed the collation of 23 cases of concern by the parents of two babies who died at the trust in 2009 and 2016 respectively. It reviewed the maternity care received by 1,486 families in 1,592 separate clinical incidents. The size and scale of this review is unprecedented in NHS history. The review of these incidents found that 201 babies and nine mothers could or would have survived if they had received better care. The impact on the lives of the families and loved ones who experienced death or serious complications as a result of maternity care is profound and permanent. The goal of the review was to ensure that the families who had been impacted by the maternity services at the trust were heard, and that lessons could be learned to ensure no other families have to go through what they did.

The report was published in two stages – the first in December 2020[27], followed by the final report in March 2022 [28] The first report covers a review of 250 cases, and it was published without

[24]Getting It Right First Time (GIRFT) is a national programme designed to improve the treatment and care of patients through in-depth review of services, benchmarking, and presenting a data-driven evidence base to support change. https://www.gettingitrightfirsttime.co.uk/

[25] Neonatology, GIRFT Programme National Specialty Report, April 2022

[26] https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf

[27] Ockenden Report. Emerging Findings and Recommendations from the Independent Review of Maternity Services at the Shrewsbury and Telford Hospital NHS Trust. December 2020. Available online: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/943011/Independent_review_of_maternity_services_at_Shrewsbury_and_Telford_Hospital_NHS_Trust.pdf [accessed March 2022]

[28] Ockenden Report-final. Final findings, conclusions and essential actions from the Ockenden review of maternity services at Shrewsbury and Telford Hospital NHS Trust. March 2022. Available online: https://www.gov.uk/government/publications/final-report-of-the-ockenden-review [Accessed June 2023]

finishing the full review of all incidents due to the urgency with which action was felt to be needed to improve the safety of maternity services at the trust, and to ensure learning was applied across services in England. The initial report identified seven immediate and essential actions to be implemented across all trusts in England. The final report identified a further fifteen actions, some of which built on the initial actions in the first report.

The final report highlighted failures including poor antenatal care for vulnerable pregnant women and people, repeated failures to correctly assess fetal growth, reluctance to refer women to tertiary centres to address fetal abnormalities, poor management of multiple pregnancies, poor management of gestational hypertension, failure to recognise sick or deteriorating women, failure to act on abnormal fetal heart patterns and failure to escalate concerns.

The report states an urgent, and sustainable, maternity-wide workforce plan is required without delay and this plan should continue into future years. It is essential that all trusts implement this plan to address the current and future requirements of all staff in and around maternity services. Without a robustly funded, trained and well-staffed workforce, maternity services will be unable to provide high-quality and safe care to pregnant women and people, and their families.

Following the report, NHSE has set out a three year delivery plan[29] for maternity and neonatal services. The plan sets out how the NHS will make maternity and neonatal care safer, more personalised and more equitable to women, people, babies and families.

Better Births highlighted several challenges facing neonatal medical and nurse staffing, nurse training, the provision of support staff and cot capacity at a national level. It recommended a dedicated review of neonatal services and in response NHSE commissioned the Neonatal Critical Care Review (NCCR)[30]. The resulting review set out the actions required by the local and regional NHS to improve the care of babies and enhance the experience of families. It was published in 2019 and highlighted seven key actions for neonatal care across the UK:

- Review and invest in neonatal capacity
- Develop transport pathways
- Develop the neonatal nursing workforce
- Optimise medical staffing
- Develop strategies for allied health professions
- Develop and invest in support for parents
- Develop local implementation plans.

2.10 Current organisation of maternity and neonatal services in NCL

In NCL, four secondary care hospital trusts provide both maternity and neonatal care, with a fifth also providing specialist neonatal care. Within NCL there were 20,117 deliveries in 2021/22, and this

[29] https://www.england.nhs.uk/publication/three-year-delivery-plan-for-maternity-and-neonatal-services/

[30] NHS England and NHS Improvement. Implementing the Recommendations of the Neonatal Critical Care Transformation Review. 2019. Available online: https://www.england.nhs.uk/wp-content/uploads/2019/12/Implementing-the-Recommendations-of-the-Neonatal-Critical-Care-Transformation-Review-FINAL.pdf [accessed March 2022]

includes people living within the NCL catchment and from neighbouring areas, including North West London, North East London and Hertfordshire and West Essex.

The four hospital trusts providing maternity and neonatal services across six sites that are within the scope of this pre consultation business case:

- **North Middlesex University Hospital NHS Trust (North Mid)** provides maternity services through an obstetric unit and alongside midwife-led birthing unit. The team also supports home births. The neonatal unit is designated a local neonatal unit (LNU) (level 2). The unit has strong links with North East London, and the agreed pathway for babies requiring more intensive care into a neonatal intensive care unit (NICU) (level 3) is to be transferred to Homerton University Hospital in Hackney.

- **Royal Free London NHS Foundation Trust (Royal Free Hospital)** provides maternity and neonatal services from three sites: Barnet Hospital, Edgware Community Hospital and the Royal Free Hospital.
    - **Barnet Hospital** provides maternity services through an obstetric-led unit and alongside midwife-led birthing unit. The team also supports home births. The neonatal unit is designated a local neonatal unit (LNU) (level 2).
    - **The Royal Free Hospital** provides maternity services through an obstetric-led and alongside midwife-led birthing unit. The neonatal unit is designated a special care unit (SCU) (level 1). The team also supports a home birth service.
    - **Edgware Community Hospital** provides a standalone midwifery-led birth centre (Edgware Birth Centre) with three ensuite birthing suites with birthing pools. The unit is staffed by Edgware midwifery team who are employed as part of the wider Barnet Hospital maternity team. The centre is also used as a centre for antenatal appointments for those booked to deliver their babies at either Edgware Birth Centre or Barnet Hospital. Further details on the context for Edgware Birth Centre can be found in our Edgware Birth Centre Addendum.

- **University College London Hospitals NHS Foundation Trust (UCLH)** provides maternity services through an obstetric-led unit and alongside midwifery-led birthing unit. The team also supports a home birth service. The unit is the lead provider for maternal medicine and for fetal medicine in NCL. The neonatal unit is designated a neonatal intensive care unit (NICU) (level 3). The neonatal teams at the UCLH and GOSH NICUs work closely with one another to provide care to very unwell or premature babies. UCLH does not provide neonatal surgery, therefore all babies who are admitted to the NICU (level 3) at UCLH needing surgery due to antenatally diagnosed congenital surgical conditions or who develop postnatal problems, must be transferred to GOSH for assessment and treatment.

- **Whittington Health NHS Trust (Whittington Hospital)** provides maternity services through an obstetric-led unit and alongside midwifery-led birthing centre. The team also supports a home birth service. The neonatal unit is designated a local neonatal unit (LNU) (level 2).

Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH) provides the most specialist support to babies with serious medical and surgical conditions that require intensive care

support through a NICU (level 3). Given the specialist nature of their neonatal service, the unit looks after babies from across London and the country, including NCL. Because of their very specialist nature, services provided at GOSH are outside of the scope of this pre consultation business case.

NCL has defined care pathways for pregnant women and people and their babies that ensure they are able to access the level of care that they need, at the right time. In NCL this mostly falls within the ICS footprint, with UCLH and GOSH acting as the NICUs (level 3), as well as serving a much wider footprint. There is one exception where the North Mid is part of the NEL Network and accesses the NICU (level three) at Homerton University Hospital in Hackney.

Local care pathways and transfer of babies between neonatal units is supported by the London neonatal transfer service (NTS). Transfers of neonates can be for when a baby needs more specialist support, or for when the baby's health has improved, and they are able to be transferred to an LNU (level 2) or SCU (level 1) to continue to become well enough to go home. The NTS is an integral part of the delivery of neonatal care in NCL and helps to ensure babies are transferred safely for care to be delivered in the best place for their level of need.

2.11 The role of the NCL Local Maternity and Neonatal System (LMNS)

The NCL LMNS has oversight of NCL's maternity and neonatal services and is the mechanism through which maternity departments in NCL work together to improve quality, safety and patient experience. The LMNS has worked to develop a shared clinical safety dashboard, putting in place initiatives to enable staff to work more flexibly between sites. It has also designed and supported the implementation of a new app 'Mother and Baby' for expectant parents. The Ockenden Report reinforced the importance of the LMNS's accountability for ensuring that maternity services they represent provide safe, personalised care for all who access them.

The LMNS has a number of workstreams supported by clinical leads who work within trust teams in order to move services forward. The priority workstreams for the LMNS are:

- Equity and equality in maternity services
- Midwifery continuity of carer and personalisation
- Improvements to maternity data and digitalisation of maternity services
- Workforce development, including initiatives to support recruitment and retention in maternity services
- A quality and safety forum with obstetric and midwifery clinical leads to ensure there is a strong response to national reviews of maternity care.

The workstreams are supporting NCL to address a number of opportunities identified in the case for change that sit outside of the proposals outlined in this PCBC.

The LMNS has fully engaged with the development of the proposed care model that is outlined in this document in section 4. Four members of the LMNS have been part of the CRG, including the neonatal lead, midwifery and obstetric co-chairs and the commissioning lead. The LMNS will continue to play a key role in supporting the programme with expertise and progressing actions that

relate to the more business-as-usual service development, as well as the priorities identified by the maternity transformation programme[31].

2.12 The role of the London Neonatal Operational Delivery Network (ODN)

Neonatal services across England are organised into Operational Delivery Networks (ODNs). London has a single ODN covering the whole capital, which is hosted by Guys and St Thomas' NHS Foundation Trust. The ODN brings together neonatal providers, NHSE, regional maternity leads, parent users and commissioners to improve outcomes and reduce variation in service delivery.

The aims of the network are:

- For mothers and babies to receive the care they need, as close to home as possible
- To promote and share best practice
- To give families consistent and high-quality information and support and involve them in the care they receive.

The ODN has played a key role in developing, supporting, and maintaining oversight of neonatal services in London, and has been leading on many aspects of the implementation of the Neonatal Critical Care Review[32] through several workstreams. This includes:

- Supporting the development and recruitment of allied health professionals in neonatal units.
- The recruitment of care coordinators who are responsible for supporting units to promote family centred and family integrated care.
- Recruitment of senior psychologists to work across ICS footprints to support staff, and psychological practitioners to improve the care given to families who have babies admitted to a neonatal unit.
- Working with the regional maternity team to implement the in-utero transfer guidance to support babies being born in the right unit for their clinical need.

The ODN has engaged fully with the development of the programme and new care model that is described in section 4 with the clinical director for the network being a member of the CRG.

2.13 Current maternity and neonatal activity in NCL

Across sites in NCL in 2021/22 there were 20,117 deliveries and 2,551 neonatal admissions. This includes activity for residents of NCL as well as service users from other ICSs, including other parts of London and neighbouring Hertfordshire and West Essex patients who use services in NCL.

Hospital	Volume of deliveries	Neonatal admissions
Barnet	5,152	555
Edgware Birth Centre	45	-

[31] https://www.england.nhs.uk/mat-transformation

[32] https://www.england.nhs.uk/publication/implementing-the-recommendations-of-the-neonatal-critical-care-transformation-review/

North Mid	3,868	537
Royal Free	2,560	259
UCLH	5,101	673
Whittington	3,391	527
Total	**20,117**	**2,551**

Figure 6 outlines the spread of maternity and neonatal activity across the sites in NCL.

Hospital	Volume of deliveries	Neonatal admissions
Barnet	5,152	555
Edgware Birth Centre	45	-
North Mid	3,868	537
Royal Free	2,560	259
UCLH	5,101	673
Whittington	3,391	527
Total	**20,117**	**2,551**

Figure 6: Number of deliveries and neonatal admissions at NCL sites in 2021/22

3. Case for change

The development of the Start Well case for change was clinically led with involvement from patients, provider organisations and wider system partners. This PCBC is focused on maternity and neonatal services and the opportunities for improvement for these services. The Start Well Case for Change is available online at here.

Our ambition is to ensure that all pregnant women and people have access to high-quality care that meets their needs. We know that across our units there are areas to improve, and currently not all our units are delivering the best quality care for local people. The Care Quality Commission (CQC) ratings for sites in NCL are set out in
Figure 7 and highlight that there are areas of improvement, particularly at Royal Free Hospital and Whittington Hospital. North Mid was inspected in summer 2023 and formal rating is expected to be published imminently.

Hospital Site	Formal CQC inspection rating	Unannounced CQC inspection rating
Barnet Hospital	Good (August 2016)	Not re-rated (June 2021)
North Middlesex Hospital	Good (September 2021)	N/A
Royal Free Hospital	Inadequate (October 2020)	Requires improvement (May 2021)

University College Hospital	Good (September 2023)	N/A
Whittington Hospital	Requires improvement (April 2023)	N/A

Figure 7: Maternity services Care Quality Commission (CQC) ratings

To realise our ambition, there is a need for us to change how we deliver our maternity and neonatal services across NCL to ensure that all pregnant women, people and babies have access to the same high-quality care. A number of opportunities for improvement for maternity and neonatal services have been identified and were published as part of our case for change. These are outlined in Figure 8.

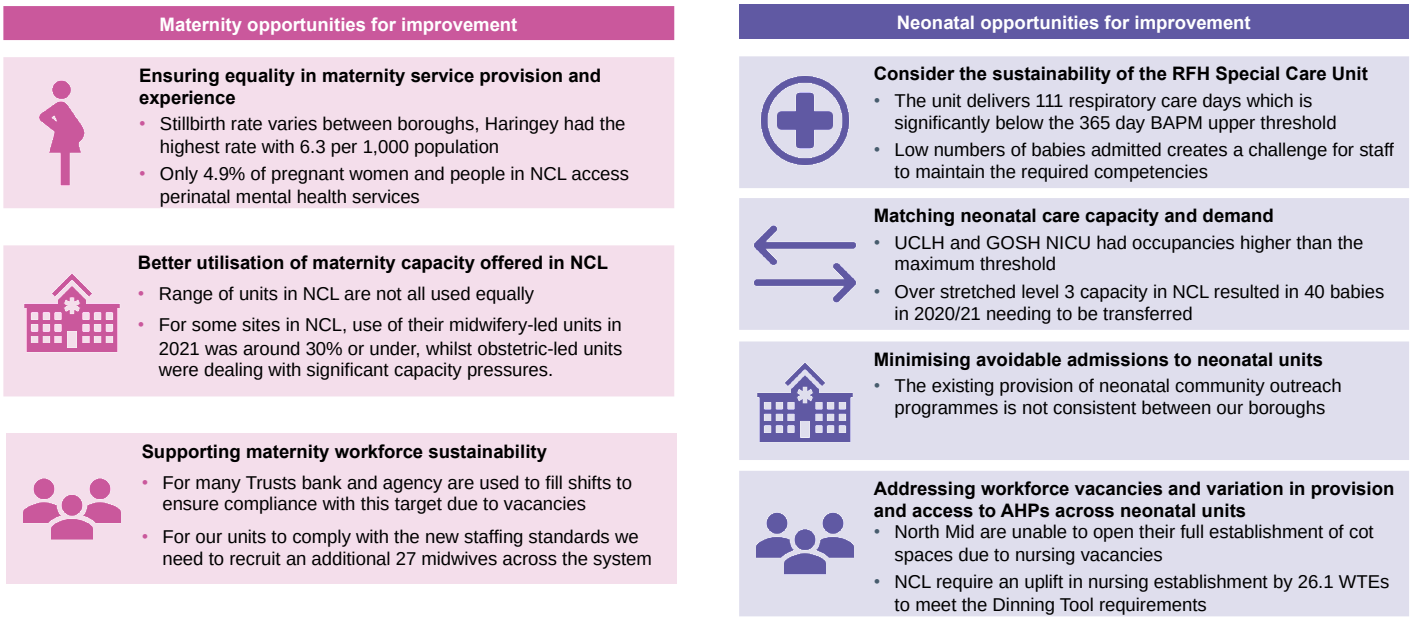


Figure 8: Maternity and neonatal opportunities for improvement identified in the case for change

The case for change identified a range of opportunities for improvement. Addressing some of these opportunities sits outside the proposals set out in this document, with work already underway. The key drivers for the proposals set out in this document are to ensure:

- Maternity and neonatal services are, and continue to be, high quality:
  - ensuring equality in maternity service provision and experience
  - minimising avoidable admissions to neonatal units
- Services are sustainable for the future, meeting population needs and providing an environment for staff to maintain their skills
  - addressing the low and declining use of the Royal Free Hospital SCU (level 1)
  - reducing the under-utilisation of midwife-led units in NCL
- Sufficient well-trained staff to deliver personalised and compassionate services:
  - reducing challenges in recruiting midwives and neonatal nurses
  - addressing workforce vacancies and variation in access to AHPs across neonatal units
- The right maternity and neonatal estate to provide a positive patient experience.

The other opportunities for improvement are being picked up and addressed through other ICB programmes. Detail on this work can be found here.

3.1 Ensuring that maternity and neonatal services are, and continue to be, high quality

3.1.1 Ensuring equality in maternity service provision and experience

Currently there is variation in maternal outcomes in NCL and there is also some variation in the quality of maternity services provided. This means that not all pregnant women and people have the same outcomes and experience of services.

Between 2018 and 2020, there were 238 stillbirths in NCL, with varying levels between the boroughs. Haringey had the highest stillbirth rate in England, according to the ONS data for this period. Although there are indications that this has reduced in recent years, which may be because of concerted efforts to reduce stillbirth rates, the differential between NCL boroughs is stark and there will need to be a determined focus as a system to investigate the reason for this high rate and address the root causes of it. A clinically led audit of stillbirths in Haringey is currently being delivered by the LMNS with reports to the CYPMN Board and ICB Quality and Safety Committee.

Currently, the number of women and people accessing perinatal mental health care in all boroughs is below the NHS Long Term Plan ambition and, with the exception of Camden, also below the NCL 2020/21 ambition. Access to perinatal mental health services is a national priority and there is work ongoing through the NCL Mental Health Programme to improve access rates across all boroughs through prioritised investment.

We need to focus on supporting those that use maternity services to have access to the right services. This means taking into account the diversity of our population and ensuring that maternity services are designed around women and pregnant people.

3.1.2 Minimising avoidable admissions to neonatal units

Maternity and neonatal services should be set up in a way that minimises separation of the woman or person that has given birth and their baby. The community outreach support available to neonatal teams at our hospitals can have an impact on whether a baby needs to be admitted to a neonatal unit and how long a baby stays in hospital.

As set out in
Figure 9 access to neonatal outreach programmes depends on where you live in NCL. The existing provision is inconsistent between our boroughs and does not represent equitable access. For example, in Islington, phototherapy (used for the treatment for jaundice) is available in the community, whereas for babies living elsewhere, they would likely have to stay in hospital for treatment.

	Barnet	Enfield	Haringey	Camden	Islington
Phototherapy	Not available	Not available	Not available	Not available	Available

Administration of IV antibiotics	Not available	Not available	Not available	Not available	Available
Monitoring of weight and growth	Available	Available	Available	Available	Available
Monitoring and establishment of feeding plans	Available	Available	Available	Available	Available
Blood tests	Available	Available	Available	Available	Available
Naso-gastric tube management	Available	Available	Available	Available	Available

Figure 9: Community outreach neonatal service in NCL

To address the case for change findings, our Community Services Programme has commenced implementation of hospital at home across NCL. The service has now been expanded to cover Enfield and there is an implementation plan underpinning roll-out across all NCL boroughs.

3.2 Ensuring the services are sustainable for the future, meeting population needs and providing an environment for staff to maintain skills

3.2.1 Addressing the low and declining use of the Royal Free Hospital Special Care Unit (SCU) (level 1)

The Royal Free Hospital neonatal unit is classified as a SCU (level 1). This type of unit can only provide the lowest acuity care of all the neonatal care unit types. There are very few of these types of units in London, the one at the Royal Free Hospital site being one of only three. West Middlesex Hospital and Epsom Hospital being the other two in the London ODNs. There are plans to upgrade the West Middlesex SCU (level 1) to an LNU (level 2) due to the high birth rate and to merge the Epsom SCU with the St. Helier LNU (level 2) onto a new hospital site.

The Royal Free Hospital neonatal unit looks after a low number of babies compared to the other units in NCL and does not accept babies born under 34 weeks' gestation. As outlined in Figure 10 the low numbers of babies being cared for in this unit meant that in 2021/22 just eight babies of a birth weight below 1,500g were admitted and only 111 respiratory care days were delivered (compared to the national standard of 365 care days), impacting workforce ability to maintain clinical competencies.

The number of admissions into this unit has been declining by 12% every year since 2018/19 and the occupancy of the unit in 2021/22 was 37% (43% in 2022/23), meaning over half of its cots were not occupied on any given day. The low number of admissions to the unit is against backdrop of a declining birth rate across NCL and changing demographic and lifestyle factors which are impacting on the profile of complexity. These factors suggest that the poor utilisation will only get worse in the future.

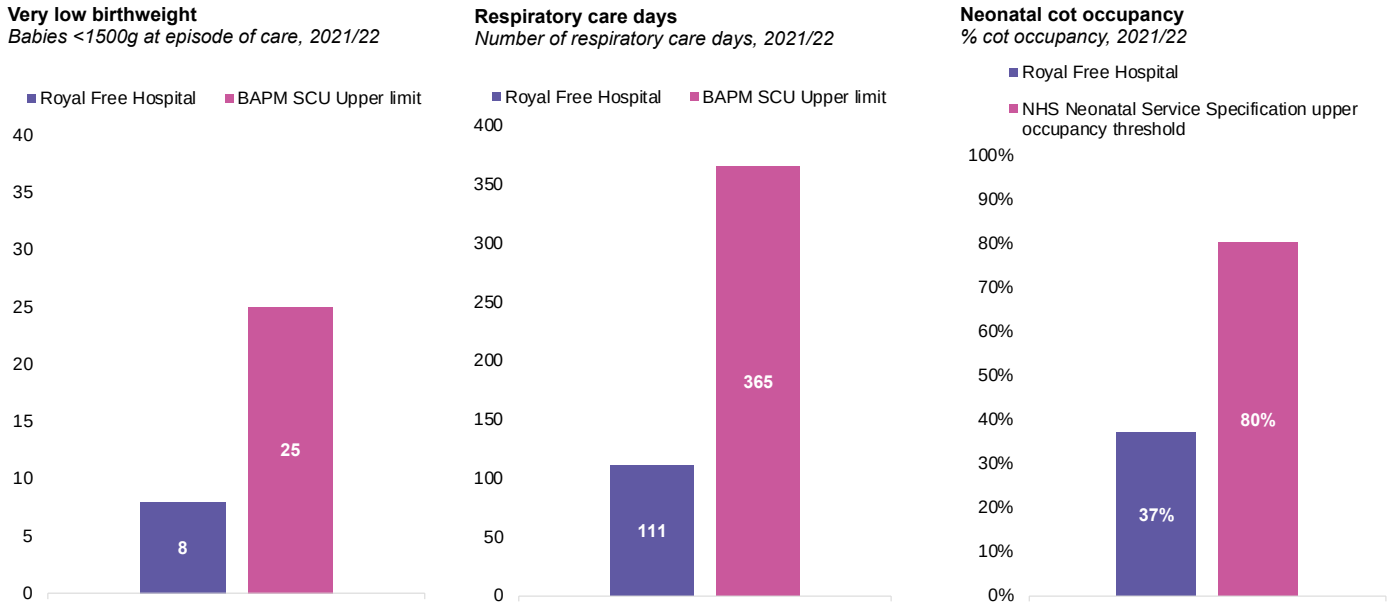


Figure 10: Royal Free SCU (level 1) admissions, respiratory care days and occupancy

This level of activity means that the unit falls far below the upper threshold suggested by standards set out by the British Association of Perinatal Medicine (BAPM)[33]. These standards are in place to ensure that staff caring for babies needing respiratory support have the required experience and competencies to do so. Being so far away from the upper threshold highlights that it is difficult for staff to effectively maintain their skills in looking after infants that need support with their breathing.

The short distances between hospitals in London mean that the need for this type of unit is less compared to more rural settings, where distances between hospitals are much greater and it is more appropriate to repatriate a baby to a more local hospital with an SCU (level 1) to reduce the travel burden on parents to see their child in a further away unit. Following the publication of the Neonatal Critical Care Review, the London Operational Delivery Network is encouraging all ICS areas where there is a SCU (level 1) to review the appropriateness of this in the context of their local system[34].

The low number of admissions creates a challenge for staff to maintain the required competencies to look after babies needing respiratory support. Mitigating actions are currently in place, including the provision of additional medical staff (7 WTE). In the longer term, the clinical risk around the unit remains and it will continue to be difficult to staff the unit in a sustainable way.

There are significant interdependencies between maternity and neonatal services. All hospital sites providing obstetric-led care need to have appropriate neonatal facilities on site that can support babies born there, should they require additional support at birth. At the Royal Free Hospital this currently represents a challenge, as the neonatal unit is only able to look after babies who require special care.

[33] BAPM. Service and Quality Standards for Provision of Neonatal Care in the UK. 2022.

[34] Regional Implementation Plan implementing the Recommendation of the Neonatal Critical Care Review, 2020

For those booking their maternity care at the Royal Free Hospital, if their babies are likely to need a higher level of neonatal care, a transfer to an obstetric unit with a higher-level co-located neonatal unit is arranged before the woman or person goes into labour.

In some instances, complications with a baby cannot be predicted and sometimes babies born at the Royal Free Hospital require urgent transfer to another hospital with an LNU (level two) or NICU (level three). Figure 11 shows the number of completed transfers to another neonatal unit. It highlights that 24% of the admissions to the Royal Free Hospital SCU (level 1) were transferred to another unit in 2020/21 – significantly higher than transfers from LNUs (level 2) which can manage babies with a greater degree of complex needs.

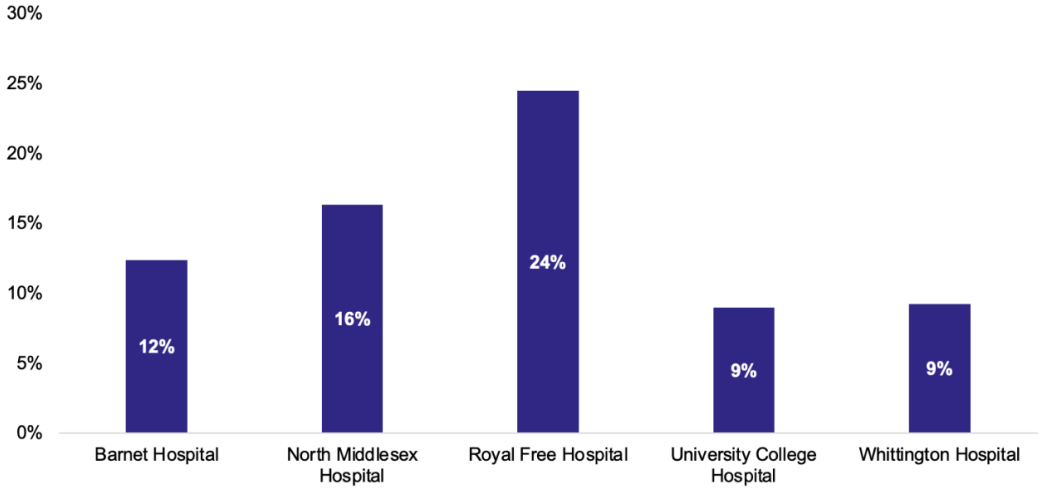


Figure 11: Neonatal admissions that resulted in a completed transfer

This high transfer rate is also in the context of restrictions on those who can give birth at the unit (not under 34 weeks), and those known to have babies requiring complex care are already transferred to other units before they go into labour.

The impact of the increased likelihood of transfer on pregnant women, people and their families are significant when this happens postnatally. Whilst every effort is made to safely transfer the baby, there is a risk related to transfer and stabilisation of a baby. A transfer also means the separation of the baby and the woman or person who has just given birth at a critically important time for the development of the bond between them. While the impact may be lessened if the pregnant woman or person is transferred to another hospital's care antenatally, the impact of late and unexpected changes on their experience of care should not be underestimated.

3.2.2 Reducing the under-utilisation of midwife-led units in NCL

Pregnant women and people can choose to deliver their baby in a range of different settings and as a result, the number of deliveries varies between each of the units within the system.

Currently, the units in NCL are not utilised in an equal way, with many pregnant women and people either choosing to deliver, or being recommended to deliver, in an obstetric-led setting. Data shows

that for some sites in NCL, the utilisation of their midwifery-led units was around 30% or under, whilst obstetric-led units were dealing with significant pressures. This means that currently, pregnant women and people giving birth in NCL are either not electing to give birth in midwifery-led settings in large numbers, or their level of complexity means that this would not be recommended.

It has also been highlighted that there are instances where midwifery-led units are required to close, or home birth services are temporarily unavailable, in order to ensure there is sufficient staffing for obstetric units. This means that although we are offering a choice of birth settings, this choice is not always able to be facilitated due to staffing constraints. During times of high demand, obstetric-led maternity units are sometimes forced to close to further admissions in order to ensure the safe care of the pregnant women and people they are already looking after. This suggests we are not able to utilise our current capacity in the best way possible to meet the needs and choices of pregnant women and people.

3.3 Ensuring we have sufficient well-trained staff to deliver services and ensure patient choice is maintained

3.3.1 Reducing challenges in recruiting midwives and neonatal nurses

Maternity workforce sustainability is a national challenge, and the recent Ockenden Report[35] has further highlighted the impact that unsafe staffing can have on the care and quality of maternity services. We know that across our maternity sites in NCL there are challenges in recruiting and retaining maternity staff. For our units to comply with the new staffing standards in place we need to recruit an additional 86 midwives across the system.

There are also gaps in the provision of obstetric consultant labour ward cover. The Royal College of Obstetricians and Gynaecologists set out recommended labour ward cover hours per week. The hours recommended relate to the unit's activity. For a unit with 4,000-5,000 deliveries per year, 98-hours per week is recommended and for a unit with 5,000-6,000 deliveries 168 hours per week is recommended. Following on from the Ockenden Report, an immediate essential action was that all units have a minimum of 84-hours per week. As set out in Figure 12 Barnet, Royal Free Hospital and UCLH do not currently meet the recommended consultant hours presence.

Site	Current deliveries (21/22)	Current consultant hours presence per week (21/22)	Recommended number of consultant hours presence on a labour ward per week	Current gap
Barnet	5,152	98 hrs	168 hrs	70 hrs
North Mid	3,868	98 hrs	84 hrs	-
Royal Free	2,560	82.5 hrs	84 hrs	1.5 hrs
Whittington	3,391	98 hrs	84 hrs	-
UCLH	5,101	97 hrs	168 hrs	71 hrs

Figure 12: Current consultant hours presence on a labour ward per week by site

[35] https://www.ockendenmaternityreview.org.uk/wp-content/uploads/2020/12/ockenden-report.pdf

The most recent Ockenden Report states that neonatal providers must ensure sufficient numbers of appropriately trained consultants, tier two staff (middle grade doctors or advanced neonatal nurse practitioners) and nurses are available in every type of neonatal unit (NICU, LNU and SCU) to deliver safe care at all times, in line with national service specifications[36].

Across the NCL units a safer nursing staffing establishment is in place to meet BAPM standards and there are many dedicated and experienced staff who deliver care across the units. There are, however, high levels of staff vacancies in the neonatal nursing workforce (Figure 13) especially at Barnet and North Mid. The vacancy rates vary throughout the year, but in Q2 in 2022 there were unfilled posts across all units in NCL. Vacancies place a strain on services and mean that teams are heavily reliant on temporary staff to fill gaps. For neonatal nurses, the vacancies mean that fewer staff can be released to do their qualified in speciality training, which is integral to the staffing of a safe neonatal unit. The number of vacancies at North Mid means that they cannot open their full establishment of cot spaces and only by running at reduced occupancy levels are they able to meet BAPM recommendations[37].

At times where temporary trained staff cannot be booked, a unit may have to take a decision to close to new admissions, which impacts on the wider maternity service and could affect whether deliveries can take place whilst the neonatal unit is closed. There is a clear escalation procedure in place at each unit, to safely manage this, if this situation arises.

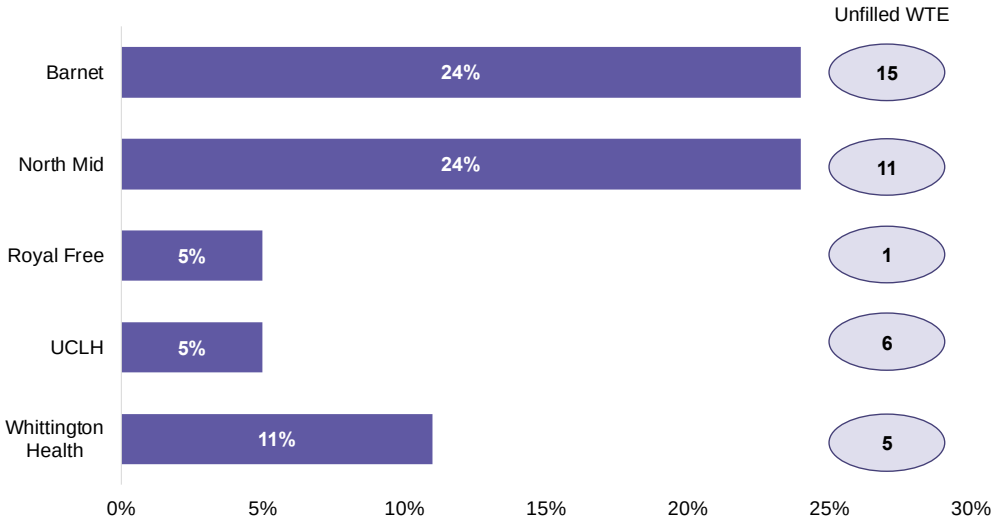


Figure 13: Neonatal nursing vacancies in Q2, 2022

3.3.2 Addressing workforce vacancies and variation in access to allied health professionals (AHPs) across neonatal units

It is not just the midwifery and neonatal nursing workforce that has vacancies. To care holistically for the breadth of needs of a baby admitted to neonatal unit and to ensure the embedding of

[36] Ockenden Review: summary of findings, conclusions and essential actions. 2022. (Accessed June 2023)

[37] BAPM. Service and Quality Standards for Provision of Neonatal Care in the UK. 2022

developmentally sensitive care in a unit, the provision of allied health professionals (AHPs) in units is essential. Working across the multi-disciplinary team (MDT), AHPs play a key role in reducing the need for ongoing therapy support in the future, especially for more complex babies, where some professions overlap. These disciplines include dietitians, occupational therapists, physiotherapists, speech and language therapists (SLTs), pharmacists and psychologists, amongst others.

Across NCL there is a need to increase AHP provision across all NCL units with the current number of AHPs in post below the recommended requirements. The current number of staff in-post across units in NCL is set out in Figure 14. AHP staffing has been compared with the recommended professional body levels and NCL is consistently under these levels for all disciplinesFigure 14. For example, units in NCL would need an additional four WTE dietetic staff and three WTE for physiotherapy in order to meet recommended levels.

	Dietetics (WTE)	Physiotherapist (WTE)	Occupational therapist (WTE)	SLT (WTE)
Barnet	0.4	0	0.4	0.6
North Mid	0	0	0	0
Royal Free Hospital	0	0	0	0
UCLH	0	0.92	0.4	1.2
Whittington Health	0.5	0.4	0.4	1.6
Total	**0.90**	**1.32**	**1.20**	**3.40**

Figure 14: AHP workforce in post in NCL by site

For many sites, the AHP staffing model is fragile. In many units, AHP input is provided by therapists who provide support to the neonatal unit as part of their job plan covering a number of other areas, such as the paediatric inpatient wards and paediatric outpatients. This makes the current model of care fragile and puts pressure on the therapists' time as they are managing a number of competing priorities.

3.4 Having the right maternity and neonatal estate to provider a positive patient experience

Hospital facilities should provide privacy, preferably labour rooms with ensuite bathrooms and space for the birth partner to join delivery when possible[38]. Every pregnant woman and person should feel that they have choice and control over their labour and birth to the extent possible. The hospital environment and facilities need to be supportive of the needs of the family.

Currently, the maternity and neonatal estate (alongside other estate) at Whittington Hospital does not meet modern standards for maternity and neonatal facilities. The maternity and neonatal services are located over four levels, in buildings from the late 19th century, with an estimated

[38] https://www.england.nhs.uk/wp-content/uploads/2021/05/HBN_09-02_Final.pdf

£12.3m in backlog maintenance to maintain the existing estate, IT and equipment over a 30 year time period. Any further improvements of the estate, which does not currently meet modern best practice building standards, would require additional investment. We also know that the current estate does not meet the needs of people using the service and their families. For example, although there are ensuite facilities in the midwifery-led birth centre on the site, there are no ensuite facilities in obstetric labour ward rooms. This does not always meet the needs for the privacy and dignity of women and people. These facilities also do not provide the optimum environment for those in labour and does not comply with the Department of Health and Social Care building note (HBN) which states that all birthing rooms (midwife and obstetric led) should have ensuite facilities[39].

There are also challenges around the space that is allocated at the Whittington Hospital's neonatal unit, given the number of cots. This means that there is not the optimum amount of space between each of the cots that would be in place if the unit was built now. The current space between neonatal cots is not HBN space standards, which puts pressure on infection control and prevents parents from being able to sit comfortably with their baby. These risks are mitigated by excellent staff and clinical processes; however, this does create increased pressure on staff to safely deliver the service. The current HBN neonatal space standards outline that intensive and high dependency care cots should have a space envelope of 13m^2 and special care cots should have 11m^2 of space.

When their child is admitted to a neonatal unit, parents should still be the primary care giver and should be supported by the clinical practice team to deliver as much cot-side care as is feasible. There are challenges with this for Whittington Hospital, as there is currently insufficient space for carers in the neonatal unit, which is overall not a parent-friendly environment.

4. Vision and care models

All pregnant women and people should have access to care that best suits their needs. Our vision for maternity and neonatal services in NCL is to deliver high-quality services which are safe, compassionate, personalised and family friendly. For babies, each neonatal unit should see the minimum number of admissions required by national guidelines, and, across NCL, families should have access to the same services, ensuring that care is delivered as close to home as possible. Staff should be able to maintain their skills and have access to training opportunities to support their development to maintain the high standards of care delivered.

Achieving this vision would reduce the variation in maternity and neonatal care delivered across units in NCL and improve outcomes and experience for pregnant women, people, babies and their families.

4.1 Vision for maternity and neonatal services

For maternity and neonatal services, our vision is to deliver high-quality, evidence-based, and clinically sustainable services that are personalised, with equity in access for all our local people.

[39] https://www.england.nhs.uk/wp-content/uploads/2021/05/HBN_09-02_Final.pdf

The new care models would:

- Consistently deliver care that meets the best practice recommendations set out in the Ockenden Maternity Review[40], Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK (MMBRACE-UK)[41] and the British Association of Perinatal Medicine Standards (BAPM)[42]
- Reduce inequalities in access and provision of services
- Deliver improved quality of care, patient experience and patient outcomes
- Provide enhanced training and development opportunities for our staff.

4.2 Approach to developing our care models

Developing the care models has been a collaborative exercise undertaken with a wide range of input from health and care stakeholders. Care model development has been overseen by the Maternity and Neonates Clinical Reference Group (CRG), which has membership from all NHS provider organisations across NCL, as well as other local and system partners. Over a five month period from July 2022 to November 2022 we engaged with over 100 individuals through two half day clinical workshops and dedicated task and finish groups. These focused task and finish groups explored areas such as training and education and maternal medicine. Themes from the case for change engagement were fed through to the groups to ensure this feedback informed the care model development.

The care models have been shared with a range of system stakeholders and we have also sought patient and public feedback through two meetings of the PPEG. A full list of the forums and groups where the care models have been tested can be found in Appendix A.

The guiding principles underpinning the care model design process, including placing those using the services and their families at the centre, ensuring equity and consistent standards of care and making best use of our resources, people, places and money.

The care models were reviewed and recommended by the Start Well Programme Board, which includes senior specialised commissioning representatives alongside senior clinical leaders. The proposals for the maternity and neonatal care model were formally signed off by the NCL ICB Board in November 2022, with representatives for NHSE London Region Specialised Commissioning in attendance.

Implementation of the proposed maternity and neonates care model would be contingent on adoption of one of the proposed options in this PCBC following public consultation.

4.3 Maternity care model

[40] https://www.ockendenmaternityreview.org.uk/wp-content/uploads/2022/03/FINAL_INDEPENDENT_MATERNITY_REVIEW_OF_MATERNITY_SERVICES_REPORT.pdf

[41] https://www.npeu.ox.ac.uk/mbrrace-uk

[42] https://www.bapm.org/resources/service-and-quality-standards-for-provision-of-neonatal-care-in-the-uk

We want a maternity care model that delivers equitable access and ensures our services are safe and compassionate. Our maternity care model can be separated into four sections. An overview of the proposed maternity model is set out in

and focuses on four elements:

- **Pre-conception and access to care:** personalised care for women or people considering pregnancy, focusing on increasing the chances of conception and reducing the chances of a miscarriage or stillbirth risks to the pregnant woman or person.
- **Antenatal care:** the care received from health professionals during pregnancy, which focuses on checking on the health of the baby and pregnant woman or person, providing accessible information and resources to help them to have a healthy pregnancy and discussing the options and choices for care during pregnancy, labour and birth. Also delivered as close as possible to home.
- **Birth:** providing choice to pregnant women and people best suited to their individual needs, ensuring safe, personalised and high-quality care. The focus of this PCBC is on this element of the pathway.
- **Postnatal care:** defined as the first six to eight weeks after birth. This care is a continuation of the care received throughout pregnancy, labour and birth. High-quality postnatal care ensures that the mother and baby are recovering well and can have a significant impact on the life chances and wellbeing of the women or person, baby and family.

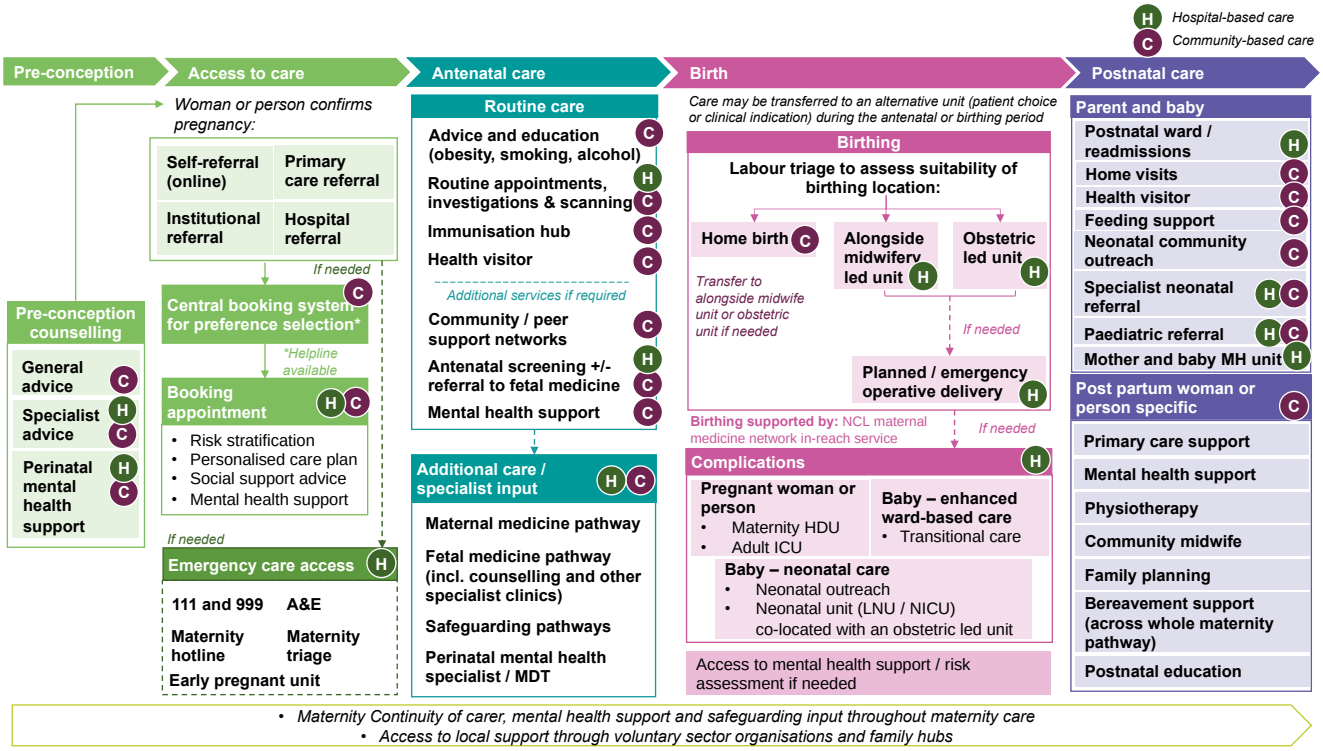


Figure 15: Proposed maternity care model

Critical to, and underpinning our model, is communication. We know from speaking with residents and patients that safe and compassionate care are paramount in maternity care. They felt that good communications were a vital component of good maternity services; information needed to be offered by health professionals at the right time, without patients having to ask a lot of questions. Further, it was important that health professionals took care to understand them and their needs and wishes – for example, where first languages were not English or where patients had learning differences. Across all elements of the proposed care model, we would have compassionate and inclusive communication, where information is accessible in a wide range of languages and cultural needs are considered and respected throughout. We are already working via the NCL LMNS with care professionals involved in maternity services to focus on this vital aspect of care.

4.3.1 Pre-conception and access to care

Whilst this PCBC focuses on the birth and treatment element of the pathway, it is important to acknowledge the pre-conception and access to care elements of the pathway. In NCL, our vision is that all women and people who are trying to conceive would have access to the right information to be able to make informed choices. Prospective parents would have access to pre-conception advice and counselling. This advice would be provided in the community but would be able to draw on clinical input from hospitals as needed. This is especially important for people with existing medical conditions. A recent review and implementation of fertility policies in NCL has been concluded to ensure that there is equitable provision across the five boroughs[43].

As part of the care model, we would continue to explore the benefits and feasibility of a central booking system. A centralised system has the potential ensure there is an equitable distribution of pregnant women and people to midwives, based on their geographical location and clinical needs. It could also facilitate early streamlined care.

4.3.2 Antenatal care

Antenatal care would be focused on providing proactive support and advice, using technology and within community settings to ensure appointments are provided as close to home as possible. These pathways are already in place in NCL and would continue to be available. By keeping these in the ICS, it supports our residents and patients to easily navigate services. A wide range of support would be available including:

- Advice and education (such as weight management, smoking cessation and alcohol advice)
- Routine appointments, investigations and scans, including detection of any maternal blood borne viruses
- Vaccination and immunisation hub in the community
- Antenatal screening (and referral to fetal medicine where necessary)
- Community and peer support networks
- Mental health and wellbeing support
- Safeguarding input throughout the maternity care journey, where necessary.

[43] https://nclhealthandcare.org.uk/wp-content/uploads/2022/11/Fertility-policy-NCL-ICB-V1.0_250722-V2.pdf

These services would be offered as a mixture of face-to-face or virtual appointments, enabling choice for the woman or pregnant person. Pregnant women or people would be made aware of services that are only accessible in either specific locations or face-to-face, to allow planning and minimise disruption to their routine, supporting freedom of choice and flexibility.

People would be advised of the level of risk of potential harm during pregnancy and birth and would be advised whether their birth should be consultant or midwife led, retaining choice for those women and pregnant people for whom either would be clinically safe. We recognise that women and pregnant people have differing needs depending on their own health and previous pregnancies. Women and pregnant people would be advised of the level of clinical support that best meets these needs.

An important principle of our care model is that as much care is delivered as close to home as possible. Currently, community midwifery teams see patients in a number of out of hospital settings. These include community and family centres, as well as post-natal visits to the homes of new parents. The staffing model for care in the community is through borough-based community midwifery teams.

Antenatal appointments are currently delivered at all sites that support intrapartum care. This is often where scans and screening take place. This provides women and people with the opportunity to familiarise themselves with the site that they will go to give birth. Under our new care model, we propose that the majority of appointments no longer take place at sites which do not support intrapartum care. These appointments would either be delivered at a local community-based site or would transfer to the site where the woman or person goes on to give birth. There may be some exceptions to this – for example, for women or people who have complex medical conditions and who may require the input of other specialists in their care, in line with maternal medicine pathways. Following consultation, and as part of any decision-making business case, there would need to be a full review of antenatal demand and capacity, including capacity and location of care available in the community, to ensure there is sufficient capacity in the right settings for all pregnant women and people.

Individuals who have a pre-existing chronic or acute condition that requires more specialist input and management during pregnancy, would be referred to a maternal medicine clinic. Depending on the severity of their condition, they may require an onward referral to the maternal medicine centre. At this unit, they would receive specialist maternal and fetal medicine input before, during and following pregnancy. This would be delivered in line with the NCL maternal medicine network pathways and follows the service specification as set out by NHSE[44].

If there are complications during the pregnancy, pregnant women and people would be able to access care via a maternity helpline, early pregnancy unit (<20 weeks), maternity triage (>20 weeks), labour ward or emergency department. Any inpatient care would be provided on an antenatal ward.

4.3.3 Birth

[44] https://www.england.nhs.uk/publication/maternal-medicine-networks-service-specification/

Choice is an important aspect of maternity care, and the National Maternity Review stressed the importance of pregnant women and people being able to make an informed personalised choice about where they would prefer to give birth[45]. The review stated that pregnant women and people need to be supported to make decisions on whether they would like to give birth at home, in a midwife-led unit or in an obstetric unit, after a full discussion of the benefits and risks of each setting.

In the proposed care model, pregnant women and people would have the choice to deliver at three birth settings:

- **Home birth**: women and people who typically have a low risk of developing complications during delivery would have the support of two midwives at home. When deciding on a home birth the woman or person would be fully informed of the transfer times to a consultant-led obstetric unit if it were to be required.
- **Alongside midwifery-led unit**: women and people who have a lower risk of pregnancy complications would be advised to give birth in an alongside midwifery-led unit. The type of unit is typically on the same or next floor of the same building as the obstetric-led unit for quick access to specialists should further input be required. However, the unit facilitates a non-medicalised birthing experience, with a homely feel.
- **Obstetric led unit**: pregnant women and people with moderate to high level of complexity would be advised to give birth at an obstetric-led unit that could provide sufficient care for all their needs. In line with national guidance, all obstetric-led units would be co-located with a neonatal unit, either a local neonatal unit (LNU) (level 2) or neonatal intensive care unit (NICU) (level 3). This would help to minimise transfers and avoid separation after birth. Many pregnant women and people give birth in an obstetric-led unit with little or no input from obstetricians because their birth progresses straightforwardly.

The Start Well Programme Board agreed in November 2022 that the proposed model of care would not include a standalone midwife-led birthing centre, for the reasons outlined in the case for change, as shown in section **Error! Reference source not found.**:

- Falling demand for standalone midwife-led care due to falling birth rates in NCL and increasing complexity of births.
- The small number of women and people who use what is currently the only standalone midwife-led unit in NCL at Edgware Birth Centre.
- The difficulty in significantly increasing the number of people using the birthing suites at Edgware Birth Centre.
- The availability of midwives, which can sometimes lead to short-term closures of the birthing suites at Edgware Birth Centre.

See the Edgware Birth Centre Addendum, found here, for more information.

4.3.3.1 Promoting choice of different birth settings

[45] https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf

As outlined, choice of birth location is an important aspect of maternity care. Ensuring that women and people are made aware of the options for their birth is an important aspect of our care model. To support this, the care model needs to ensure:

- There is access to impartial information regarding the options open to them, in a range of languages and formats.
- Information is made available locally to pregnant women and people in places where they can access it – for example, in primary care, family hubs, community spaces and antenatal clinics.
- Co-produced birth plans are personalised and pregnant women and people have the space to freely discuss all options; included in this should be a discussion about risks related to all delivery options.
- NCL-wide training, education, tools, and resources to ensure midwives have the right skills and competencies to undertake open, supportive conversations around risk factors and choice and can confidently help pregnant women and people explore the range of options available to them.

4.3.3.2 Home birth

The option to give birth at home is a very important choice for pregnant women and people who wish to give birth in a non-medicalised setting. NCL is committed to offering choice, so that everyone who wishes to give birth at home has the option to do so.

Under our care model, dedicated home birth teams will be available in all NCL boroughs, enabling pregnant women and people to give birth in familiar surroundings with the support from two midwives. To support those deciding whether home birth is the best option for them, throughout the antenatal period open and honest conversations with midwifery and obstetric teams will help identify individual levels of risk and therefore appropriateness to give birth at home.

If there is a complication during a home birth delivery, the individual would be transferred to the nearest obstetric-led unit.

4.3.3.3 Alongside midwife-led birthing unit

The National Institute for Health and Care Excellence (NICE) recommends that for 45% of pregnant women and people who are at a low risk of complications, midwife-led care is the most appropriate choice of birth setting[46]. Should a complication occur during labour or delivery, the pregnant woman or person would be transferred to the obstetric-led unit, which would be near the midwife-led unit and where there would be medical workforce available all day, every day to provide the necessary support. The midwife-led unit would be staffed in line with the BirthRate Plus® recommendations[47]. These staffing levels are based on the case mix, the unit's physical space and local population demographics.

[46] https://www.nice.org.uk/news/article/midwife-led-units-safest-for-straightforward-births

[47] https://birthrateplus.co.uk/ (safer midwifery staffing numbers)

We know that currently the alongside midwife-led unit estate could be enhanced to make it 'less medicalised', and birth centres given a more unique identity that creates the feeling of separation from the obstetric unit. In line with the guidance, all birthing suites would have ensuite facilities and families would have access to supportive services.

We know that alongside midwife-led units can currently face short-term closures due to staffing pressures. Through consolidation of the number of maternity units under our new model of care, we would aim to ensure that the choice of an alongside midwife-led unit can be facilitated on a more consistent basis. Further work would be done to safely increase the proportion giving birth in alongside midwife-led units and improve ability to deliver choice.

4.3.3.4 Obstetric-led unit

Any individual identified as having a higher risk of complications during birth would be advised to give birth in an obstetric-led unit. All units would be staffed in line with the midwifery safe staffing guidance and the minimum required consultant labour ward presence, in line with the minimum requirements set out in the Ockenden Report[48] and by the Royal College of Obstetricians and Gynaecologists[49].

Pregnant women and people and babies with identified additional care needs would be advised to deliver in obstetric-led birthing units where there is direct access to neonatal services should they be required.

4.3.4 Birthing complications: interventional radiology

Although individuals will be risk stratified and provided with the information to understand the choices best suited to their needs, complications during birth can occur. Postpartum haemorrhage (excessive bleeding which can sometimes happen after delivery of the baby) is a complication following delivery and the incidence of this is around 5 -10%[50] .

Timely access to interventional radiology (IR) services for obstetric emergencies has been identified by the Royal College of Obstetrics and Gynaecology (RCOG) as an important tool in the management of postpartum haemorrhage. This happens rarely, but when it does it is an emergency situation that needs to be managed quickly. All sites providing maternity care in NCL would have access to IR 24 hours a day seven days a week, either on site or through networked arrangements.

In order to provide a safe treatment (usually an embolisation) to obstetric emergencies, the following would be in place at the dedicated unit:

- An experienced interventional radiologist able to manage obstetric emergencies
- Specialist IR equipment within a theatre
- An obstetrician or gynaecologist, the wider IR team, including nursing staff and potentially a neonatologist or paediatrician

[48] Ockenden review: summary of findings, conclusions and essential actions. 2022.

[49] https://www.rcog.org.uk/guidance/browse-all-guidance/good-practice-papers/labour-ward-solutions-good-practice-no-10/

[50] https://patient.info/doctor/postpartum-haemorrhage

- A vascular surgeon may very occasionally be required to attend the emergency.

The numbers of obstetric emergencies who need access to IR are small, for example within NCL there were less than ten cases that required this intervention between the Royal Free Hospital and Barnet hospital sites in 2022/23. Clinicians have also reflected that these numbers have declined over recent years with improved obstetric management of emergencies. Through risk stratification pregnant women and people who are at risk of needing IR, for example those with abnormally invasive placenta, would be booked at the maternal medicine centre where there would be co-location of IR and other specialist services. This means the number of pregnant women and people requiring this intervention at other sites is low. In the event of an emergency, the pathway set out in Figure 16 would be followed.

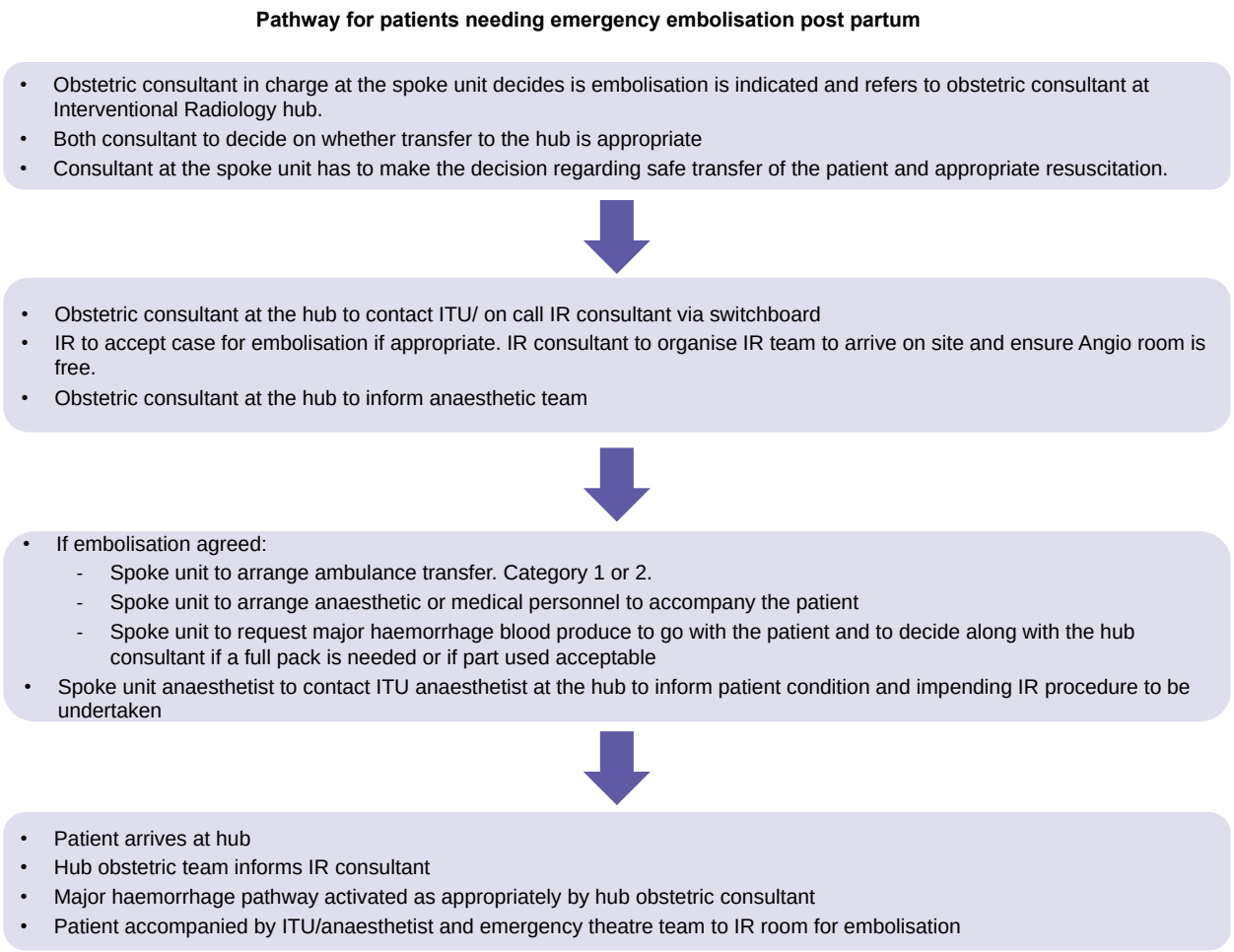


Figure 16: Pathway for patients needing emergency embolisation post-partum

4.3.5 Postnatal care

Following birth, the woman or person and baby would receive a range of support through pathways based within NCL. Having these pathways and services locally across our boroughs makes it easier to navigate following delivery at an NCL site. Postnatal services available would include:

- Community midwife, home visits to provide physical review, feeding support, contraception education, advice and guidance, and handing care over to a health visitor at the appropriate time.

- Postnatal education, including counselling for complications experienced during pregnancy, or discussing risk to the baby which would be preventable in future pregnancies, for example smoking and alcohol consumption.
- Postnatal admission guidance for those who need to seek medical attention in the postnatal period.
- Specialist neonatal referrals for babies who required neonatal care.
- Paediatric referral for babies with ongoing needs.
- Mental health support, including formal mental health services referral.
- Specialist services follow-up for those who required it during their pregnancy.
- Bereavement and loss support.

These would be delivered through a range of different methods, including home visits, virtual/group appointments and in community settings.

4.3.6 Continuity of carer

As was identified through the case for change, not all pregnant women and people have the same outcomes from maternity care in NCL. Our ambition is to reduce differential outcomes experienced and have a positive impact on health inequalities. Continuity of carer is where the patient sees the same midwife or team throughout their pregnancy and birth. It allows pregnant women and people to build a relationship with their midwife and reduces the need to repeat medical information or traumatic experiences. Continuity has been shown to have several beneficial outcomes, especially when prioritised for those at risk of poorer outcomes[51]. This has been recognised nationally through the inclusion of maternity, and specifically the provision of continuity of carer, in the CORE20PLUS5 framework. This is reflected locally in the work of the LMNS, who have a continuity clinical lead and workstream who are supporting trusts with their plans to expand continuity (as staffing allows in line with the Ockenden Report). There is an aspiration that all women and people will have continuity of carer in the future; consolidation of our workforce to a smaller number of sites makes the likelihood of achieving this more feasible.

4.3.7 Perinatal mental health

Access to perinatal mental health services is a national priority and this is reflected within services in NCL. Throughout the pregnancy pathway, pregnant women and people would have access to specialist perinatal mental health services should they need additional support. Improving access to perinatal mental health is a key priority of the Mental Health Programme and investment has been made to start to improve access and address the longstanding inequities in provision between boroughs.

4.3.8 Maternity workforce model

Obstetric-led units would be staffed in line with the guidance set out by the Royal College of Obstetricians and Gynaecologists, including ensuring there is consultant labour ward cover aligned

[51] https://www.rcm.org.uk/media/2265/continuity-of-care.pdf

to the projected unit activity. For midwives, units would be staffed in line with BirthRate plus®[52] which would be dependent on the unit case mix and activity.

4.4 Neonatal care model

In NCL, we need to reorganise our provision of neonatal care to meet guidelines recommended by BAPM[53] and ensure we have sustainable neonatal units for the future. We want a neonatal care model that ensures the same provision of care no matter which unit the baby is born in. The neonatal pathway can be separated into four sections and the pathway has been driven by the service and quality standards set out in the British Association of Perinatal Medicine (BAPM)[54]. An overview of the proposed neonatal care model is set out in Figure 17.

In developing the model, clinicians and the London Neonatal ODN acknowledged that SCUs (level 1) are more effective in a rural setting, to support repatriation of babies closer to home where travel times are much longer than in urban settings. The position of the London Neonatal ODN is that SCUs (level 1) do not represent the optimum model of care in London. It has become increasingly difficult to ensure that medical staff in SCUs (level 1) maintain essential clinical skills, due to the low volume of complex care that they are exposed to. The view of the ODN is that these units are not sustainable in the long term. It was therefore agreed that in NCL all neonatal units should be either an LNU (level 2) or NICU (level 3).

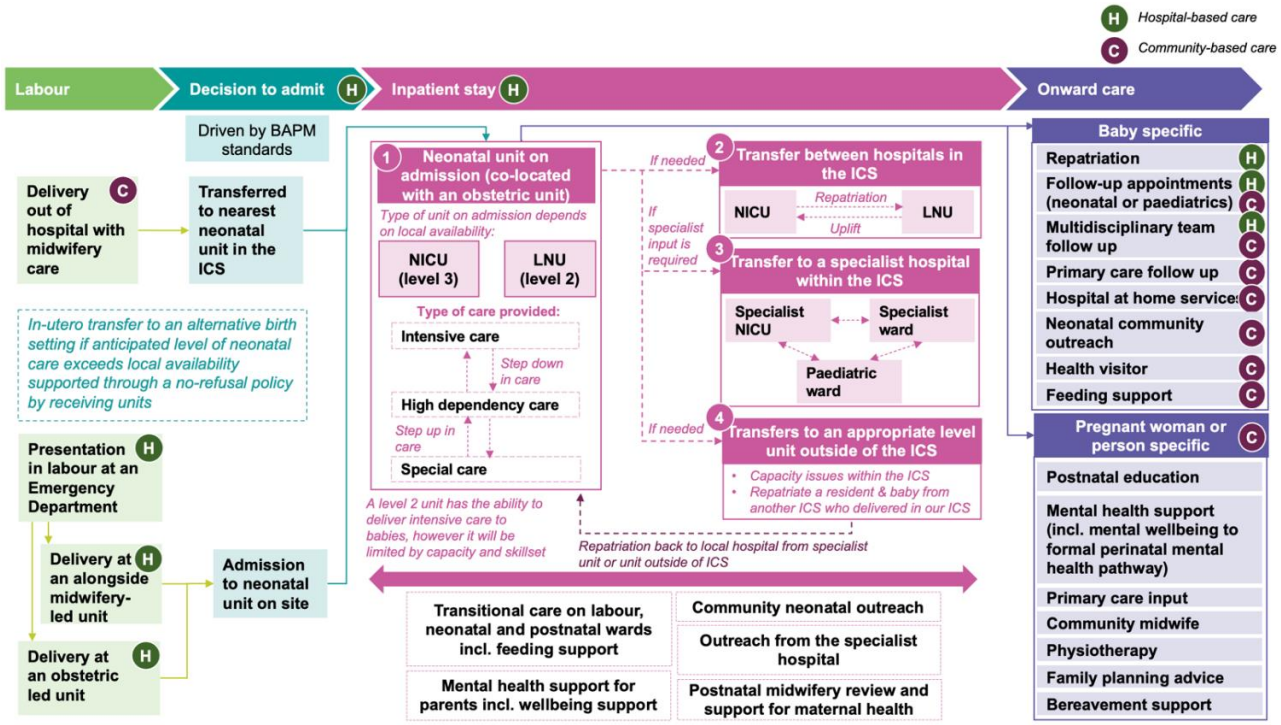


Figure 17: Proposed neonatal care model

[52] https://birthrateplus.co.uk

[53] BAPM. Service and Quality Standards for Provision of Neonatal Care in the UK. 2022. https://www.bapm.org/resources/service-and-quality-standards-for-provision-of-neonatal-care-in-the-uk

[54] https://hubble-live-assets.s3.amazonaws.com/bapm/file_asset/file/1494/BAPM_Service_Quality_Standards_FINAL.pdf

4.4.1 Labour and decision to admit to a neonatal unit

Pregnant women and people would be advised to deliver at a unit where the level of neonatal support available is in line with their baby's anticipated needs. Those whose babies are at high risk of requiring intensive care would deliver in an obstetric unit with a co-located NICU (level 3). If there was an unexpected complication (such as pre-term labour or a complication during labour), an in-utero transfer to an appropriate birth setting would ideally be undertaken.

Depending on the birth setting, a baby may be admitted to the neonatal unit on site, from either an obstetric-led unit or an alongside midwifery-led unit. Babies born at home who unexpectantly require an admission to a neonatal unit, would be transferred by ambulance to the nearest appropriate neonatal unit.

4.4.2 Inpatient stay

In the proposed care model, all hospital-based neonatal care would be delivered in either an LNU (level 2) or NICU (level 3). Babies admitted to these units may require special care, high-dependency care and/or intensive care and both types of units could deliver these three levels of care, although intensive care in a LNU (level 2) would only be provided on a short-term basis. These neonatal units would mean that the highest quality of initial care is provided to all babies born in NCL, no matter which unit they are born in.

These units would be staffed in line with the BAPM guidance[55] and would include specialist medical workforce as well as nursing staff and AHPs. The specialist medical and nursing workforce would be available 24/7 so babies would have access to specialist care at all times of the day and all days of the week.

If a baby's care needs are beyond the capabilities of the neonatal unit at their place of birth, they may require a transfer to another unit within or outside the ICS, or to a specialist hospital. This would typically mean moving from an LNU (level 2) to a NICU (level 3). The ICS ambition is that NCL providers operate a 'say yes' policy for all transfers within NCL.

To allow baby and mother, person or parent to be close to their family and support network, babies would be repatriated back to their nearest neonatal unit at the earliest opportunity it is safe to do so. Babies requiring specialist care may be transferred to a specialist NICU (level 3), specialist ward or paediatric ward within a specialist hospital.

4.4.3 Onward care

Following discharge, the mother or person and baby would have access to a range of onward care support services. Access to these services means that babies would be able to be treated closer to home, reduce the time spent in hospital and prevent further admissions. Onward care services available would include:

- Community children's hospital at home services
- Neonatal community outreach

[55] BAPM. Service and Quality Standards for Provision of Neonatal Care in the UK. 2022.

- Feeding support
- Postnatal education
- Mental health support, ranging from mental wellbeing to referral to specialist perinatal mental health services
- Community midwifery teams
- Family planning advice
- Bereavement and loss support.

These services would be available across NCL and would be delivered through a range of different methods, including home visits, virtual/group appointment and in the community.

4.4.4 Neonatal workforce model

Neonatal units in NCL would be staffed in line with BAPM guidance[13] with the projected capacity modelled based on cot requirements at 80% occupancy. For the medical workforce this would be:

Consultant workforce

- LNU (level 2) unit: minimum of **7 WTE neonatal paediatricians/neonatal consultant**
- NICU (level 3) unit: minimum of **7 WTE consultant neonatologist.** A consultant neonatologist has a certificate of Completion of Training (CCT) in neonatal medicine.

Middle grade workforce

- LNU (level 2) unit: shared rota with paediatrics, comprising a minimum of **8 WTE**
- NICU (level 3) unit: EWTD compliant rota with a minimum of **8 WTE staff.**

Neonatal nursing

In line with the BAPM guidance[56], neonatal nursing requirements would be based on the cot type as follows:

- Intensive care: 1:1 (one nurse for every baby)
- High dependency: 1:2 (one nurse for every two babies)
- Special care: 1:4 (one nurse for every four babies).

The units would also aim to meet the qualified in speciality (QIS) requirements outlined by the Department of Health, where 70% of staff on a neonatal ward should achieved QIS status by March 2024[57].

Allied health professionals (AHPs)

Units would aim to have the AHP support in line with guidance as follows:

- LNU (level 2) WTE requirement per cot:
    - **Dietetics:** 0.1 (intensive care cot), 0.05 (high dependency cot), 0.03 (special care cot)
    - **Occupational therapist:** 0.05
    - **Physiotherapy:** 0.05

[56] https://hubble-live-assets.s3.amazonaws.com/bapm/file_asset/file/101/BAPM_Guidance_on_Cot_Capacity_and_use_of_Nurse_Staffing_Standards_24-10-19.pdf

[57] https://www.hee.nhs.uk/sites/default/files/documents/RSM%20Neonatal%20QIS%20Review.pdf

- **Speech and language therapist:** 0.03.

- NICU (level 3) the WTE requirement per cot are:
  - **Dietetics:** 0.1 (intensive care cot), 0.05 (high dependency cot), 0.03 (special care cot)
  - **Occupational therapist:** 0.05
  - **Physiotherapy:** 0.05
  - **Speech and language therapist:** 0.04.

4.5 Maternity and neonatal co-dependencies

4.5.1 Clinical co-dependencies

High-quality maternity and neonatal services would be provided 24 hours a day, seven days a week. Consultant-led obstetric services would be supported by other services, in line with guidance set out in the South East Coast Clinical Senate, including emergency medicine, critical care and general anaesthetics[58]. An overview of all clinical co-dependencies is set out in Figure 18.

Services should be co-located in same hospital
Critical care adult
General anaesthetics
Neonatology
X-ray and diagnostic ultrasound
CT scan
Urgent diagnostic haematology and biochemistry

Service should come to patient, but could be provided by visiting/inreach
Acute and general medicine (within 4 hrs)
Respiratory medicine (within 4 hrs)
Medical gastroenterology (within 4 hrs)
Diabetes and endocrinology (within 4 hrs)
Gynaecology (within 2 hrs)
General surgery (upper GI and lower GI) (within 2 hrs)
Urology (within 2 hrs)
Vascular (within 2 hrs)

[58] https://secsenate.nhs.uk/wp-content/uploads/2020/06/The-Clinical-Co-dependencies-of-Acute-Hospital-Services.pdf

Plastic surgery (within 24 hrs)
Acute cardiology (within 4 hrs)
Nephrology (not including dialysis) (within 4 hrs)
Neurology (within 4 hrs)
Clinical microbiology / infection service (within 4 hrs)
Physiotherapy (within 24 hrs)
Urgent mental health services (within 4 hrs)

Ideally on same site but could alternatively networked
Urgent GI endoscopy
MRI scan
Interventional radiology
Dietetics

Figure 18: Obstetric service clinical co-dependencies

The proposed maternity and neonatal care model means that maternity care would be offered in an obstetric-led unit, an alongside midwife-led unit and in a home setting, and that neonatal care would be delivered in a neonatal intensive care unit (level 3), or local neonatal unit (level 2) as outlined in

Obstetric led unit	Alongside midwife led unit	Home birth	National Intensive Care Unit (Level 3)	Local Neonatal Unit (Level 2)
• Obstetric led units are staffed with medical and midwifery workforce • This birth setting has the highest level of medical intervention • Individuals at higher risk of having a complicated pregnancy would be advised to give birth in an obstetric led setting	• Alongside midwife units provide a setting for individuals to give birth without medical intervention • If complications were to arise, these individuals can be transferred to the obstetric led setting for intervention	• Home birth provides a non-medicalised setting for pregnant women and people to deliver their baby if clinically safe to do so • The delivery would be supported by a midwife • Home birth is offered across all boroughs in NCL	• Provides the highest acuity neonatal care • Babies will be transferred here from a Local Neonatal Unit if they require a more specialised level of care	• Provides neonatal care to babies when required • Babies will be repatriated back to LNU's when they no longer require Level 3 care

Figure 19. The next section (section 5) sets out the location options for these maternity and neonatal services in NCL.

Obstetric led unit	Alongside midwife led unit	Home birth	National Intensive Care Unit (Level 3)	Local Neonatal Unit (Level 2)
• Obstetric led units are staffed with medical and midwifery workforce • This birth setting has the highest level of medical intervention • Individuals at higher risk of having a complicated pregnancy would be advised to give birth in an obstetric led setting	• Alongside midwife units provide a setting for individuals to give birth without medical intervention • If complications were to arise, these individuals can be transferred to the obstetric led setting for intervention	• Home birth provides a non-medicalised setting for pregnant women and people to deliver their baby if clinically safe to do so • The delivery would be supported by a midwife • Home birth is offered across all boroughs in NCL	• Provides the highest acuity neonatal care • Babies will be transferred here from a Local Neonatal Unit if they require a more specialised level of care	• Provides neonatal care to babies when required • Babies will be repatriated back to LNU's when they no longer require Level 3 care

Figure 19: Overview of the type and location of maternity and neonatal units in NCL

4.5.2 Interdependency between obstetrics and gynaecology

Obstetric and gynaecology services are linked with one another through workforce. Doctors in obstetrics and gynaecology care for pregnant women and people and look after the sexual and reproductive health of women and people. When on call, doctors often cover both obstetrics and gynaecological emergencies out of hours, and have job plans which have include elements of both obstetrics and gynaecology service provision. Given this link, should any changes be made to obstetric services, there may be a resulting impact on gynaecology services at the site that no longer supports intrapartum care. Further detail about how this may be managed through implementation can be found in section 7.3.4.1.

5. Options appraisal: hospital-based maternity and neonatal services

5.1 Introduction

We are focused on addressing the specific challenges facing maternity and neonatal services in NCL. To address these challenges, we propose reconfiguring services to provide high-quality and accessible care for our residents.

In the case for change, we identified opportunities to:

- Make sure that neonatal care services are available, as required
- Consider the sustainability of the Royal Free Hospital special care unit (SCU) (level 1)
- Support maternity workforce sustainability
- Address workforce vacancies and variation in provision and access to AHPs across neonatal units
- Better utilise the maternity capacity available in NCL
- Ensure the estate is up to date and supports a positive patient experience.

Our new model of care, as set out in section 4, responds directly to our case for change, providing:

- Neonatal care delivered in two types of units – either an LNU (level 2) or NICU (level 3)
- AHP provision for each neonatal unit in line with the BAPM standards
- Maternity and neonatal medical workforce that meets best practice guidelines.

We have therefore developed and evaluated a set of options for the delivery of the proposed new model of care within NCL.

There were however, areas identified through the case for change that needed to be addressed urgently and so fall outside of the scope of this pre consultation business case. The LMNS is taking a lead role around these actions, which are highlighted in

Figure 2020, and they are being taken forward as part of the governance arrangements for the LMNS. Further detail about the work taking place across NCL outside of the proposals outlined in this document can be found on the Start Well website.

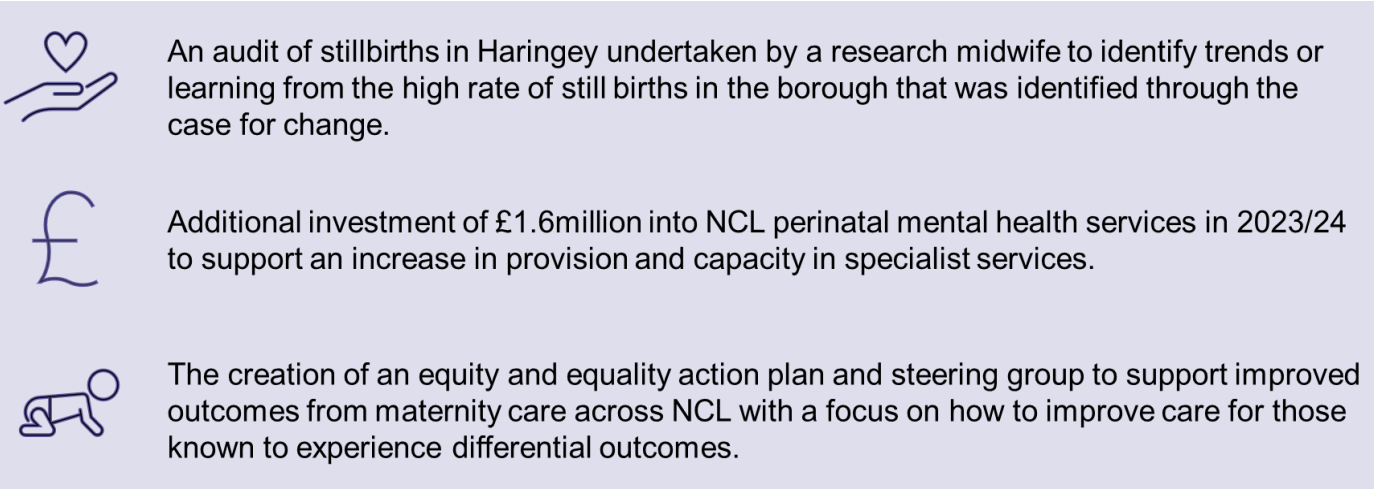


Figure 20: Actions being undertaken outside of the change programme to address opportunities in the case for change

5.2 Engagement in options development and appraisal

We have undertaken a structured approach to identifying and filtering a broad range of options. Our options appraisal process assesses all possible configurations for delivering our agreed model of care against a set of evaluation criteria, to identify options for consultation.

Our process included detailed review and evaluation of the options by the Maternity and Neonates Clinical Reference Group (CRG), the Public and Patient Engagement Group (PPEG) and the finance and analytics working group over a five-month period for the domains they were responsible for (from January 2023 to May 2023). The Start Well Programme Board then evaluated the options during an evaluation workshop. This process is shown in Figure 21.

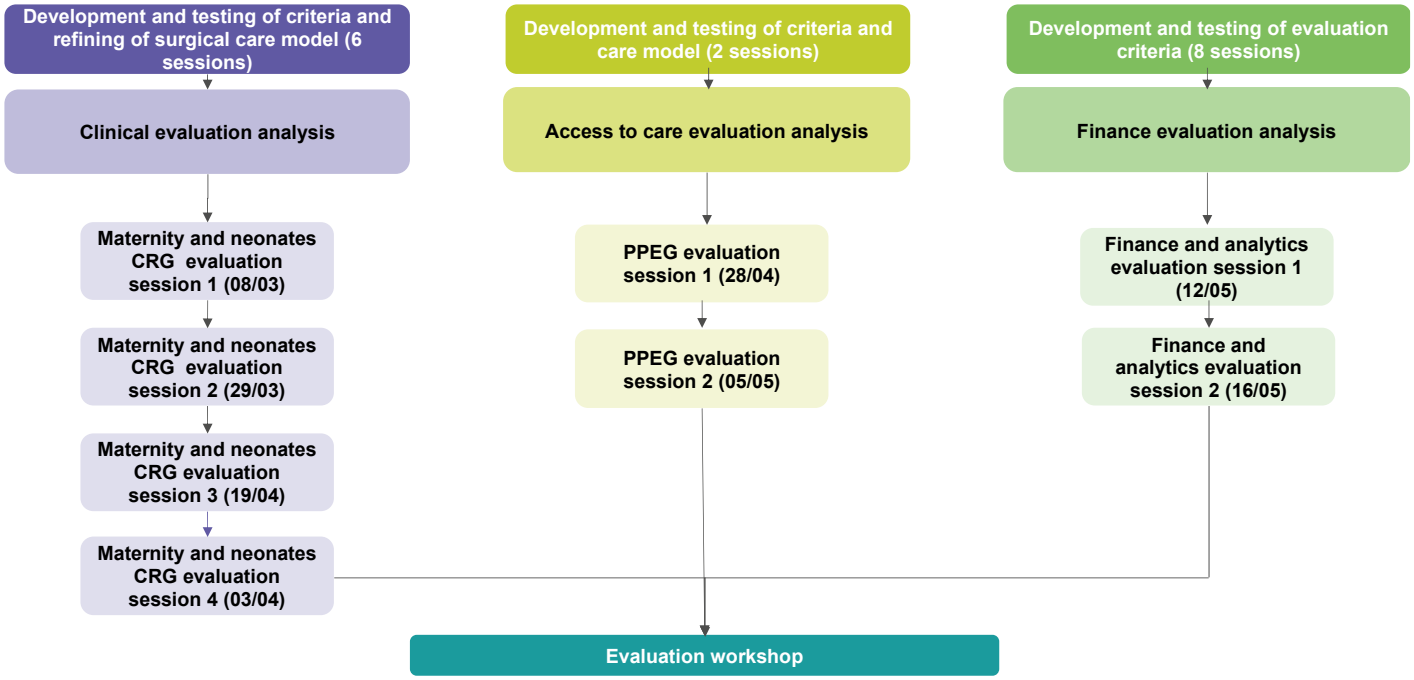


Figure 21: Options appraisal process

5.3 Our approach to appraising the options

Our options evaluation process enabled us to move through a filter 'funnel', from an initial number of options down to a small number of options to undergo further analysis, before agreeing the options to go to consultation. Figure 22 summarises how initial inputs were used to develop a longlist, which we then refined in subsequent phases of the options appraisal.

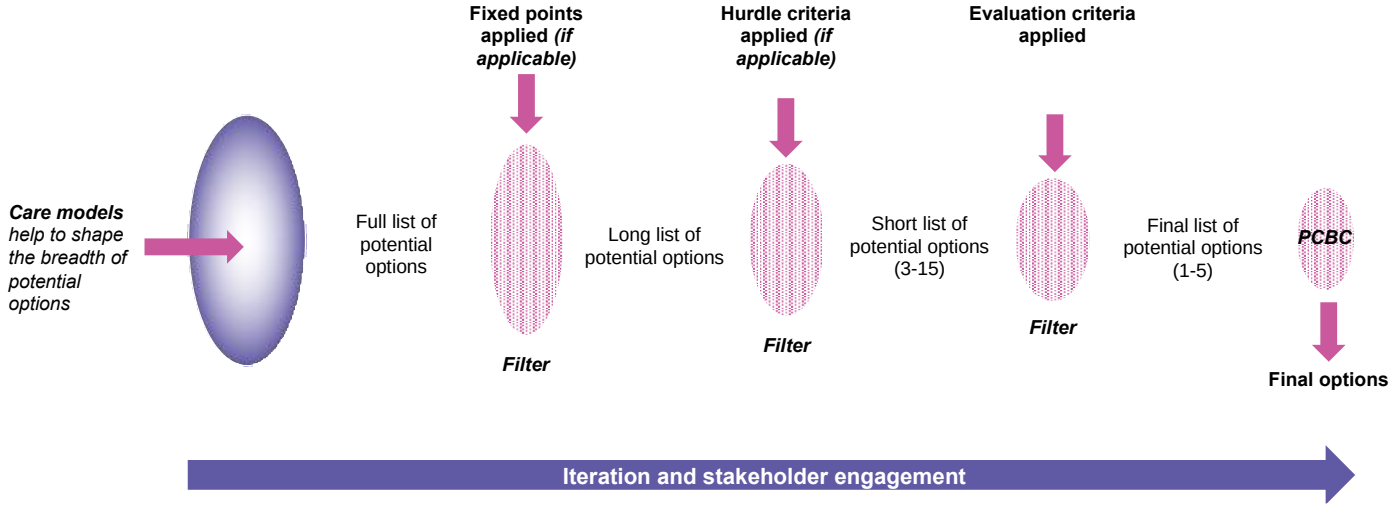


Figure 22: Summary of the options appraisal process

We undertook an extensive process to consider the full list of options. Our starting point was to understand the case for change (see section 3) and the care model that could meet these needs (see section 4). We then considered where services might best be located to meet the needs of residents and to resolve the issues in the case for change. We have considered all permutations of locations for maternity and neonatal services across NCL.

5.4 Reviewing the status quo

The case for change detailed in section 3 sets out the opportunities for improvement. Our analysis during the options appraisal involved consideration of options against the maternity and neonatal services as they currently are configured (i.e., "the status quo".) The option to maintain the status quo is not being put forward for public consultation. That is because the status quo is not sustainable in the long term, and more particularly for the following reasons:

- Maintaining the status quo does not meet the NCL ambition to deliver maternity and neonatal care in the right setting and at the right time. The current care model does not deliver the best practice care model and achieve the clinical standards as set out by professional bodies including the British Association of Perinatal Medicine (BAPM) and Royal College of Obstetricians and Gynaecology.
- The SCU (level 1) at the Royal Free Hospital falls significantly below the upper threshold of respiratory care days set out by BAPM for an SCU[59]. Only 211 respiratory care days were delivered in 2021/22 as compared to the upper threshold of 365. In 2021/22, the unit was only 37% occupied, meaning that only half the cots were occupied. A declining birth rate means that it is unlikely that future activity at the unit would increase. The low volumes of activity make it difficult for staff to maintain their skills and competencies when looking after infants that need support with their breathing. Mitigating actions are currently in place, including the provision of additional medical staff (7 WTE). In the longer term, the clinical risk around the unit remains and it will continue to be difficult to staff the unit in a sustainable

[59] BAPM. Service and Quality Standards for Provision of Neonatal Care in the UK. 2022.

way. If the status quo were maintained, there would continue to be sustainability challenges at the Royal Free Hospital neonatal unit which would still be designated a SCU (level 1) unit.

- Across the five units, there are gaps in the workforce, which means we are not meeting quality standards. There are high levels of staff vacancies, particularly in the neonatal nursing and midwifery workforce. This places a strain on services and means that teams are heavily reliant on temporary staff to fill gaps, and some services (such as midwifery-led units) are subject to temporary suspension due to lack of availability of staff. There is a national workforce challenge, meaning it would be difficult to meet the workforce quality standards across five units (as compared to proposed four) if the status quo were maintained.

For the above reasons, together with the anticipated benefits of the proposed new care model, the programme does not propose to consult on an option of maintaining the status quo.

5.5 Agreeing the number of maternity and neonatal units

The model of care (as detailed in section 4.4) proposes that all neonatal care is delivered in either an LNU (level 2) or a NICU (level 3) achieving 80% occupancy, either of which would be co-located with an obstetric-led maternity unit and an alongside midwife-led unit. This is to ensure equity of care for all babies, no matter where they are born.

To provide a high-quality, clinically sustainable service where staff can maintain their skills and competencies, there are minimum activity volumes that neonatal units should provide. NICUs (level 3) at a minimum must admit 100 very low birth weight babies and LNUs (level 2) must admit at least 25 very low birth weight babies[60]. In 2021/22, there were 215 very low birth weight admissions in NCL. This would suggest there is sufficient activity in NCL to sustain five units.

However, units also need to be staffed 24/7 by specialist staff to ensure all babies have access to a specialist workforce at all times. At a minimum, each unit needs to have seven WTE neonatal paediatrician/neonatal consultants and at least eight WTE middle grade medical clinicians. Based on the current NCL workforce it is only possible to staff a maximum of four LNUs (level 2), as shown in

Figure 2323. It is not possible to recruit additional staff due to national shortages, with 6% of consultant post unfilled nationally[61] and only 73.9% of neonatal nursing shifts staffed according to recommended levels[62].

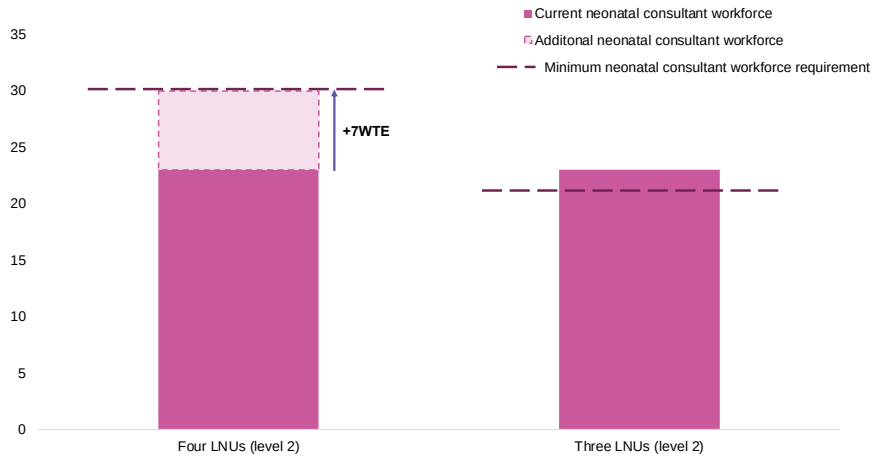


Figure 23: Neonatal consultant requirement based on the number of LNUs (level 2) in NCL

The Start Well Programme Board, which has clinical representation from each provider organisation and NHSE London Region Specialised Commissioning, considered minimum activity volumes and workforce requirements and agreed there should be four neonatal units in NCL, all of which would be designated either an LNU (level 2) or NICU (level 3). This will provide 24/7 access to specialist staff and also ensure that staff can maintain their skills and competencies. As each obstetric-led birthing unit needs a co-located LNU (level 2) or NICU (level 3), this means there would be four obstetric-led birthing units each with a co-located alongside midwife-led unit. Each of these would be co-located with a neonatal unit. This means there would be four neonatal units and one of these would also need to be a NICU (level 3). Figure 2424 shows the current and future configuration of hospital-based services in NCL. A home birth offer would be present in both the current and future configuration.

[61] https://www.england.nhs.uk/wp-content/uploads/2019/12/Implementing-the-Recommendations-of-the-Neonatal-Critical-Care-Transformation-Review-FINAL.pdf

[62] https://www.rcpch.ac.uk/resources/national-neonatal-audit-programme-summary-report-2021-data

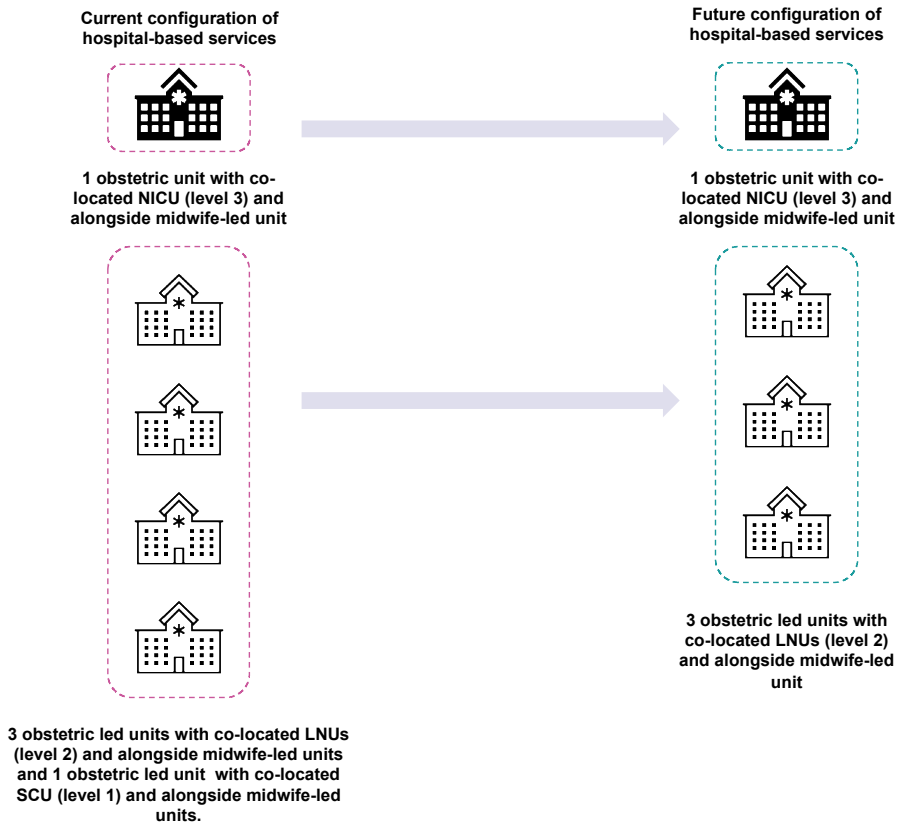


*Figure 24: Future configuration of hospital-based maternity and neonatal units in NCL**

*Figure 24 excludes the standalone midwife-led birth centre, as the proposals around this unit are separate to the overall number of hospital-based maternity and neonatal units.

5.6 University College London Hospital as a NICU (level 3)

At present, there are five neonatal units with co-located maternity units and one standalone midwifery-led birth centre in NCL, although they currently do not provide all the attributes in the model of care described in section 4. These maternity units are at Barnet, North Mid, Royal Free Hospital, UCLH and Whittington Hospital, as shown in Figure 25. UCLH currently has a NICU (level 3), which is a regionally designated service. Moving this unit would be very difficult because of co-located services and current networks, as agreed by NHS specialised commissioning and all partners[63].

[63] NHSE Specialised Commissioning, 2023

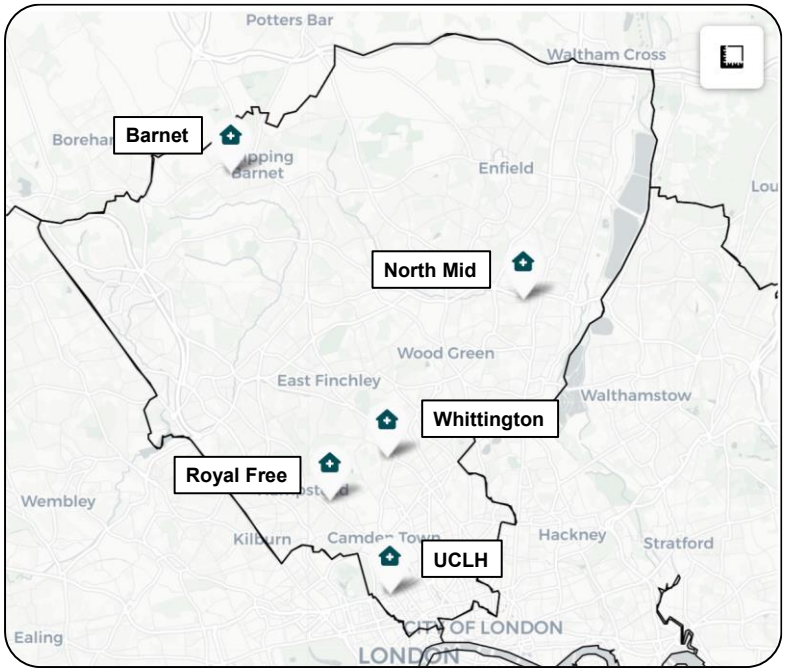


Figure 25: Current maternity and neonatal sites in NCL

5.7 Options for appraisal

As UCLH is a fixed point in all options, our approach has considered the location of the remaining three units at any of the other four sites that currently have a maternity unit. The remaining three units would be an LNU (level 2) in line with the proposed care model. This gave us four options as a longlist of options for further evaluation, as shown in Figure 26.

	Barnet	North Mid	Royal Free	UCLH	Whittington
Option 1: North Mid, Royal Free, Whittington, UCLH	No obstetric-led birthing unit, neonatal unit or alongside midwifery-led unit	Obstetric-led birthing unit with co-located Level 2 neonatal unit and alongside midwifery-led unit	Obstetric-led birthing unit with co-located Level 2 neonatal unit and alongside midwifery-led unit	Obstetric-led birthing unit with co-located Level 3 neonatal unit and alongside midwifery-led unit	Obstetric-led birthing unit with co-located Level 2 neonatal unit and alongside midwifery-led unit
Option 2: Barnet, Royal Free, Whittington UCLH	Obstetric-led birthing unit with co-located Level 2 neonatal unit and	No obstetric-led birthing unit, neonatal unit or alongside	Obstetric-led birthing unit with co-located Level 2 neonatal unit and	Obstetric-led birthing unit with co-located Level 3 neonatal unit and	Obstetric-led birthing unit with co-located Level 2 neonatal unit and alongside

	alongside midwifery-led unit	midwifery-led unit	alongside midwifery-led unit	alongside midwifery-led unit	midwifery-led unit
Option 3: Barnet, North Mid, Whittington, UCLH	Obstetric-led birthing unit with co-located Level 2 neonatal unit and alongside midwifery-led unit	Obstetric-led birthing unit with co-located Level 2 neonatal unit and alongside midwifery-led unit	No obstetric-led birthing unit, neonatal unit or alongside midwifery-led unit	Obstetric-led birthing unit with co-located Level 3 neonatal unit and alongside midwifery-led unit	Obstetric-led birthing unit with co-located Level 2 neonatal unit and alongside midwifery-led unit
Option 4: Barnet, North Mid, Royal Free, UCLH	Obstetric-led birthing unit with co-located Level 2 neonatal unit and alongside midwifery-led unit	Obstetric-led birthing unit with co-located Level 2 neonatal unit and alongside midwifery-led unit	Obstetric-led birthing unit with co-located Level 2 neonatal unit and alongside midwifery-led unit	Obstetric-led birthing unit with co-located Level 3 neonatal unit and alongside midwifery-led unit	No obstetric-led birthing unit, neonatal unit or alongside midwifery-led unit

Figure 26: Options taken forward for appraisal

No hurdle criteria were identified by the programme. Therefore, all four options were shortlisted and were fully evaluated against a set of evaluation criteria.

5.8 Evaluation criteria

We undertook a robust process that evaluated each of the four options for quality of care, workforce, access to care, and affordability and value for money. This evaluation was underpinned by a set of evaluation principles:

- The evaluation criteria should build on the case for change and be used once the options have been reduced to a manageable number.
- The criteria must enable differentiating assessments of each option and there must be available data to make comparison. Evaluation against these criteria creates understanding of the relative benefits and drawbacks of each option.
- Typically, an evaluation question will be proposed, and a metric will be agreed to measure this question. If a direct measure cannot be identified, a proxy measure may be agreed.

Each option was evaluated using evaluation criteria of ++, +, /, -, - - based on the evidence presented.

5.9 Quality of care

The Maternity and Neonatal Clinical Reference Group (CRG) considered several metrics that might be used to evaluate quality of care. The CRG agreed that all options would see a significantly improved quality of care as compared to the status quo as a result of implementing the new model of care detailed in section 4. Otherwise, although quality is extremely important, the CRG agreed most aspects of quality do not differentiate between the options as they measure current quality and not the quality that is expected once the new care model is implemented. A list of quality metrics that were considered by the CRG, and the reasons why they were agreed to be non-differentiating, is shown in Figure 27.

	Rationale as to why it was not taken forward as a criteria
Maternity incentive scheme actions	• In NCL all sites meet the ten actions required and are therefore not differentiating between the options.
Interventional radiology (IR) clinical co-dependency	• IR is delivered through a networked service and therefore doesn't lend itself to being an options appraisal criteria. Optimum arrangements for IR should there be any changes to maternity services and has been considered through the implementation planning.
Care Quality Commission (CQC)	• Ratings are historic and inspection years vary. Some staffing and estate factors driving ratings are picked up through workforce and affordability criteria
Friends and Family Test (FFT)	• Scores over the last three quarters have been reviewed. The results change significantly between quarters and response sizes are small (9 in some case).
Neonatal death rate and stillbirth rate	• Site performance against this metric will be impacted by the unit's level of acuity. Where there are known outliers, work is ongoing to understand the drivers for this now.
Staff Survey	• Staff experience is an important factor in the delivery of safe care, but the way staff are grouped under the survey varies. There are also many different questions that make up the survey and it would be difficult to choose a single score.
Provision of ensuite bathrooms	• Environment was considered as a potential proxy for patient experience, however the Clinical Reference Group (CRG) felt this was not a good measure to use. It was also not differentiating given future estate investments.

Figure 27: Additional quality metrics considered

5.9.1 Would there be a significant outflow of activity from NCL?

The CRG considered the evaluation question "Would there be a significant outflow of activity from NCL?". This is because patients modelled to flow to providers outside of NCL would make it more challenging to integrate with other existing NCL pathways outside of hospital and make it more difficult to deliver the best quality or experience of care for NCL residents. Outflows of patients outside of NCL could also make NCL units less viable as they would be smaller than if the activity was retained in NCL.

The future activity projection and flows have been modelled to take into account the next closest unit, as well as choice of the catchment population. The modelling has been undertaken using Lower Super Output Area (LSOA). This is the smallest granularity of geography that is used for

travel time analysis and there are typically 1,000 – 2,000 residents within each LSOA. It is modelled that everyone in an LSOA flows to their nearest unit by travel time. If this unit is modelled as closed, then the population will be modelled as flowing to the next nearest unit by travel time. However, if over 80% of people in any LSOA are currently choosing to go to a unit further away than their nearest by travel time, then everyone in that LSOA is modelled to travel further to the unit of choice. This assumption ensures that choice is being considered.

This analysis showed that the projected outflow of patients from NCL is significant for options 1 and 2, with projected outflows of over 2,000 deliveries and over 1,500 neonatal care days. In addition, the majority of these outflows would be to a single other hospital, Watford General Hospital in Hertfordshire in option 1 and Whipps Cross Hospital in NEL in option 2, as shown in Figure 28 and Figure 29Figure 29. It has been confirmed by Hertfordshire and West Essex ICS and NEL ICS that the relevant trusts do not have the capacity to absorb this activity.

There are significantly fewer projected patient outflows for options 3 and 4. In option 3, North West London (NWL) ICS (St Mary's Hospital and Northwick Park Hospital) has confirmed that the relevant providers would be able to provide services for the activity projected to flow to these units without requiring additional capacity. In option 4, NEL ICS (Homerton University Hospital) has confirmed that the activity could be delivered in the ICS, however this would be more difficult to deliver than it would for providers in NWL. This is because there are existing capacity constraints in the unit at the Homerton, estate constraints to deliver additional capacity and an increasing birth rate in some boroughs in NEL.

		Option 1: North Mid, Royal Free, Whittington	Option 2: Barnet, Royal Free, Whittington	Option 3: Barnet, North Mid, Whittington	Option 4: Barnet, North Mid, Royal Free
Total projected additional deliveries at non NCL sites (2021/22)	**Total projected deliveries* (2021/22)**	**20,072**	**20,072**	**20,072**	**20,072**
	Total projected deliveries* (2031/32)	**18,793**	**18,793**	**18,793**	**18,793**
	St Mary's Hospital	5 (<1%)	1 (<1%)	385 (15%)	12 (<1%)
	Northwick Park Hospital	443 (11%)	3 (<1%)	465 (11%)	8 (<1%)
	Homerton University Hospital	6 (<1%)	133 (4%)	5 (<1%)	322 (6%)
	Whipps Cross Hospital	31 (1%)	**1,915 (52%)**	11 (<1%)	24 (1%)
	The Royal London Hospital	2 (<1%)	1 (<1%)	2 (<1%)	13 (<1%)
	Princess Alexandra Hospital	210 (4%)	66 (2%)	13 (<1%)	10 (<1%)
	Watford General Hospital	**1,473 (31%)**	1 (<1%)	100 (4%)	3 (<1%)
	Lister Hospital	110 (2%)	1 (<1%)	5 (<1%)	3 (<1%)

	Luton Hospital	119 (2%)	1 (<1%)	8 (<1%)	7 (<1%)
	Newham Hospital	5 (<1%)	28 (1%)	12 (<1%)	14 (<1%)
	Other providers*	10 (<1%)	11 (<1%)	28 (<1%)	14 (<1%)
	Total projected outflow	**2,414**	**2,161**	**1,034**	**430**

Figure 28: Projected delivery outflows

		Option 1: North Mid, Royal Free, Whittington	**Option 2: Barnet, Royal Free, Whittington**	**Option 3: Barnet, North Mid, Whittington**	**Option 4: Barnet, North Mid, Royal Free**
Total projected additional neonatal care days at non - NCL sites (2031/32)	**Total projected neonatal care days* (2021/22)**	**31,794**	**31,827**	**31,703**	**31,475**
	Total projected neonatal care days* (2031/32)	**35,279**	**35,348**	**35,125**	**34,860**
	St Mary's Hospital	9	2	233	28
	Northwick Park Hospital	826	5	282	19
	Homerton University Hospital	11	241	3	741
	Whipps Cross Hospital	58	**3,467**	6	54
	The Royal London Hospital	4	2	1	31
	Princess Alexandra Hospital	392	120	8	24
	Watford General Hospital	**2,747**	2	60	7
	Lister Hospital	205	2	3	7
	Luton Hospital	222	2	5	17
	Newham Hospital	9	51	7	33
	Other providers*	28	40	32	33
	Total projected outflow	**4,511**	**3,934**	**640**	**994**

Figure 29: Projected neonatal care day outflows

On this basis, the CRG rated options 1 and 2 '- -', option 3 as '/' and option 4 '-' for quality of care, as shown in

Figure 30.

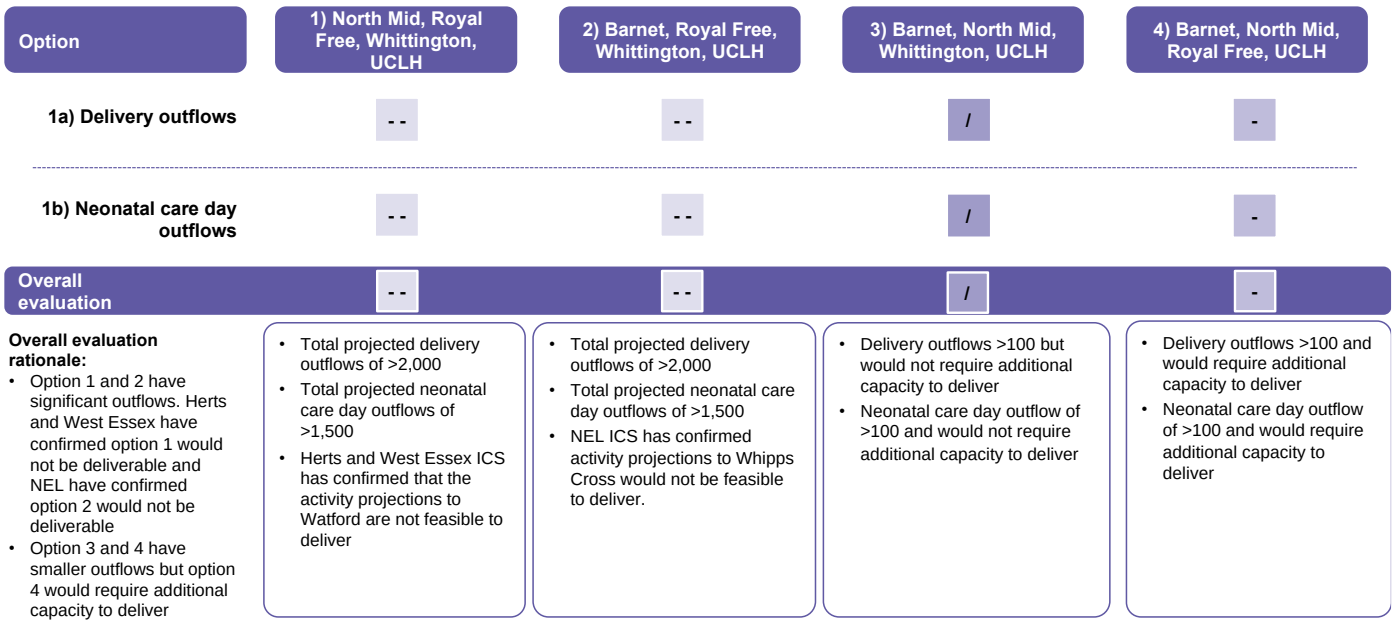


Figure 30: Overall evaluation: would there be a significant outflow of activity from NCL?

5.10 Workforce

The CRG considered two evaluation questions to assess the difference between the options with regards to workforce:

- How easy is it likely to be to implement the proposed care model?
- Does the option support training opportunities?

5.10.1 How easy is it to implement the proposed model of care?

Clinicians considered how easy it is likely to be to implement the model of care from a workforce perspective. This is because options that require the workforce to move to a different unit would be more difficult to implement. This included consideration of evaluation metrics around the workforce that would be required to deliver the agreed model of care (as detailed in section 4):

- How many additional neonatal consultants are required to meet the consultant 24/7 workforce rota standard?
- How many additional consultant presence labour ward hours per week are required to meet future activity requirements?
- How many middle grades would need to move units to support the LNU (level 2) middle grade rota requirements?
- How many additional neonatal nurses are required to meet future neonatal cot requirements?
- How many additional midwives are required to meet future activity requirements?

5.10.1.1 How many additional neonatal consultants are required to meet the consultant 24/7 workforce rota standard?

The CRG considered how many additional neonatal consultants would be required to meet the consultant 24/7 workforce rota standard. This is because any LNU (level 2) and NICU (level 3) would be required to have a minimum number of consultants to cover the on-call rota, to ensure there is access to specialist skills for sufficient hours in the day to improve quality and outcomes. Our model of care aspires to deliver the workforce standards set by British Association of Perinatal Medicine (BAPM)[64][65].

For all options, there is no additional recruitment required across NCL as there are more than the required 21 WTE neonatal paediatricians/neonatal consultants currently in post in NCL. However, at the Royal Free Hospital only one neonatal paediatrician/neonatal consultant is in post and therefore any option which includes the Royal Free Hospital would require workforce to move from other units. Six neonatal consultants would be required to move between sites in all options, with the exception of option 3.

Therefore, options 1, 2 and 4 have been evaluated '-' to account for the difficulty of moving workforce and the risk that workforce may choose to leave NCL rather than moving hospital. Option 4 has been evaluated with a '++' as no movement of workforce is required. This evaluation is shown in
Figure 31.

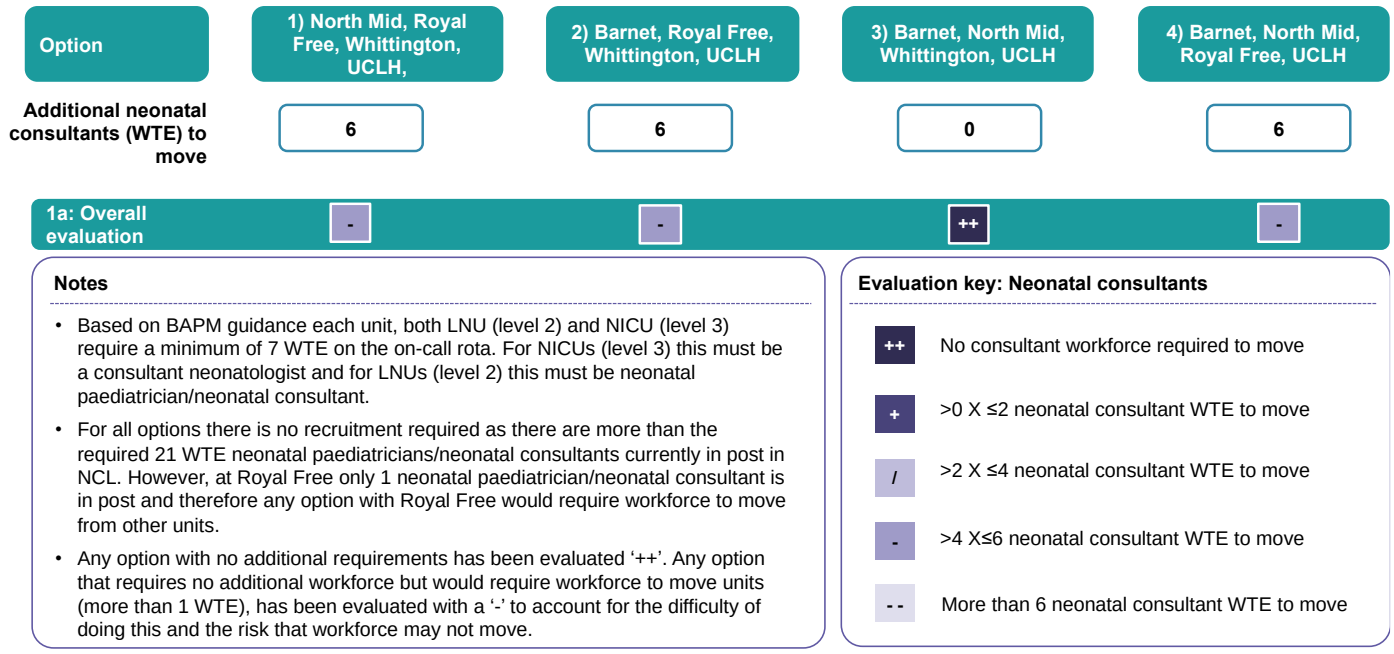


Figure 31: Additional neonatal consultant (WTE) to move option evaluation

[64] BAPM. Optimal arrangements for Local Neonatal Units and Special Care Units in the UK including guidance on their staffing: A Framework for Practice. 2018.

[65] BAPM. Optimal arrangements for Neonatal Intensive Care Units in the UK. 2021.

5.10.1.2 How many additional consultant presence labour ward hours per week are required to meet future activity requirements?

The CRG considered how many additional consultant presence labour ward hours per week are required to meet future activity requirements. Royal College of Obstetrician and Gynaecology (RCOG) and Ockenden clinical quality standards state that the number of consultant hours presence required on a labour ward is[66],[67]:

- <4,000 deliveries: 84 hours present
- 4,000 – 5,000 deliveries: 98 hours present
- 5,000 – 6,000 deliveries: 168 hours present.

The additional number of hours of consultant presence on the labour ward per week that would be required under each option is shown in Figure 3232. This includes units outside of NCL where there are outflows that would increase the consultant hours presence required.

Site	Current deliveries (21/22)	Current consultant hours presence (21/22)	Additional consultant hours presence on a labour ward by option			
			Option 1: North Mid, Royal Free, Whittington, UCLH	Option 2: Barnet, Royal Free, Whittington, UCLH	Option 3: Barnet, North Mid, Whittington, ULCH	Option 4: Barnet, North Mid, Royal Free, UCLH
Barnet	5,152	98 hrs	*(-98 hrs)*	+ 70 hrs	+ 70 hrs	+ 70 hrs
North Mid	3,868	98 hrs	+ 70 hrs	*(-98 hrs)*	0	+ 70 hrs
Royal Free	2,560	82.5 hrs	+1.5 hrs	*+1.5 hrs*	*(-82.5 hrs)*	+1.5 hrs
Whittington	3,391	98 hrs	0	0	0	*(- 98 hrs)*
UCLH	5,101	97 hrs	+ 71 hrs	+ 71 hrs	+ 71 hrs	+ 71 hrs
Northwick Park	3,924	98 hrs	0	-	0	-
Whipps Cross	4,122	84 hrs	-	+ 84 hrs	-	-
Watford General	3,950	98 hrs	+70 hrs	-	-	-
Princess Alexandra	3,834	84 hrs	+ 14 hrs	-	-	-
St Mary's	3,793	84 hrs	-	-	0	-
Homerton	5,541	98 hrs				
Total			**+128.5 hrs**	**+128.5 hrs**	**+58.5 hrs**	**+114.5 hrs**

Figure 32: Additional consultant hours presence on a labour ward per week by option

[66] RCOG. Labour Ward Standards. https://www.rcog.org.uk/media/rz1b0z3o/labourwardsolutiongoodpractice10a.pdf

[67] Ockenden Report. 2022.

All options would require an overall increase in consultant hours per week as a result of an increase in future deliveries. Options 1 and 2 require a significant increase in consultant presence and have been evaluated as '- -'. Option 4 requires a less significant increase and has been evaluated as '-'. In option 3, the additional increase is lowest, but an increase is still required, and it Figure 33.

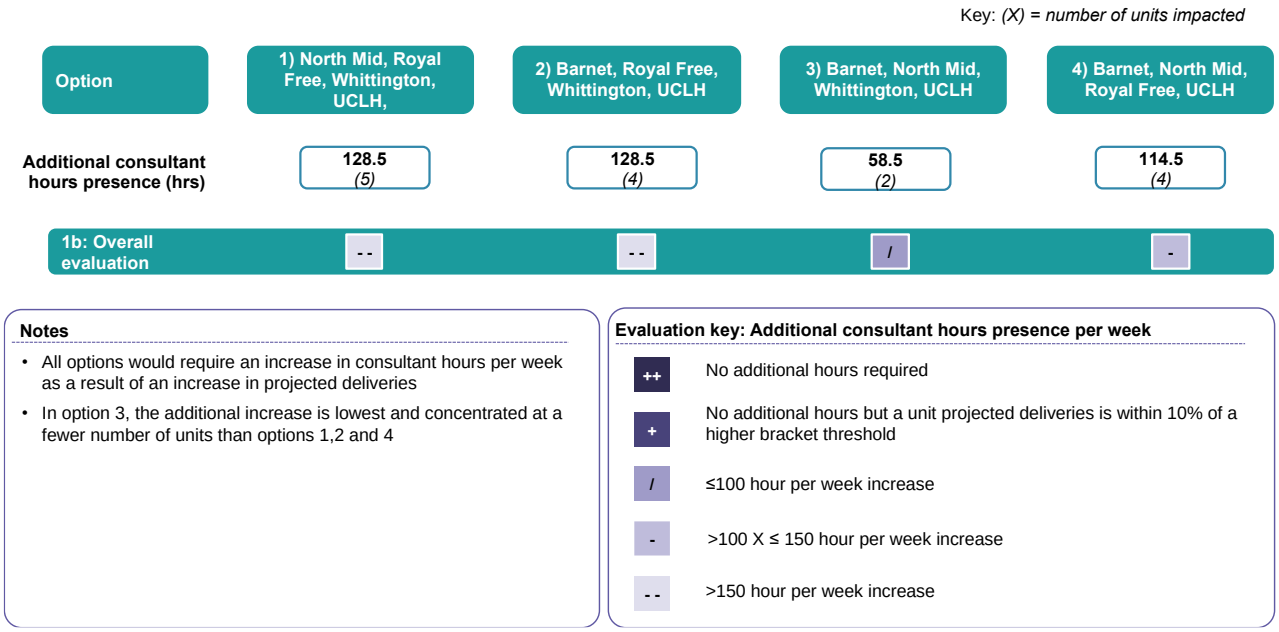


Figure 33: Additional consultant hours presence per week (hrs) option evaluation

5.10.1.3 How many middle grades would need to move units to support the LNU (level 2) middle grade rota requirements?

The CRG considered how many middle grade doctors would need to move units to support the LNU (level 2) middle grade doctor rota requirements. This is because BAPM guidance states minimum rota requirements to ensure there is access to specialist skills for sufficient hours in the day to improve quality and outcomes[68]. The minimum rota requirements are:

- LNU (level 2): shared rota with paediatrics, comprising a minimum of eight whole time equivalent (WTE) middle grade staff
- NICU (level 3): European working time directive (EWTD)-compliant rota with a minimum of eight WTE middle grade staff.

Any option would require a minimum of 32 WTE middle grade doctors to cover the middle grade rota requirements across NCL, and there are currently 35.5 WTE middle grade doctors in NCL so no additional doctors would be needed. The current WTE middle grade doctors by site and the gap to the required number of WTE middle grade doctors are shown in Figure 34.

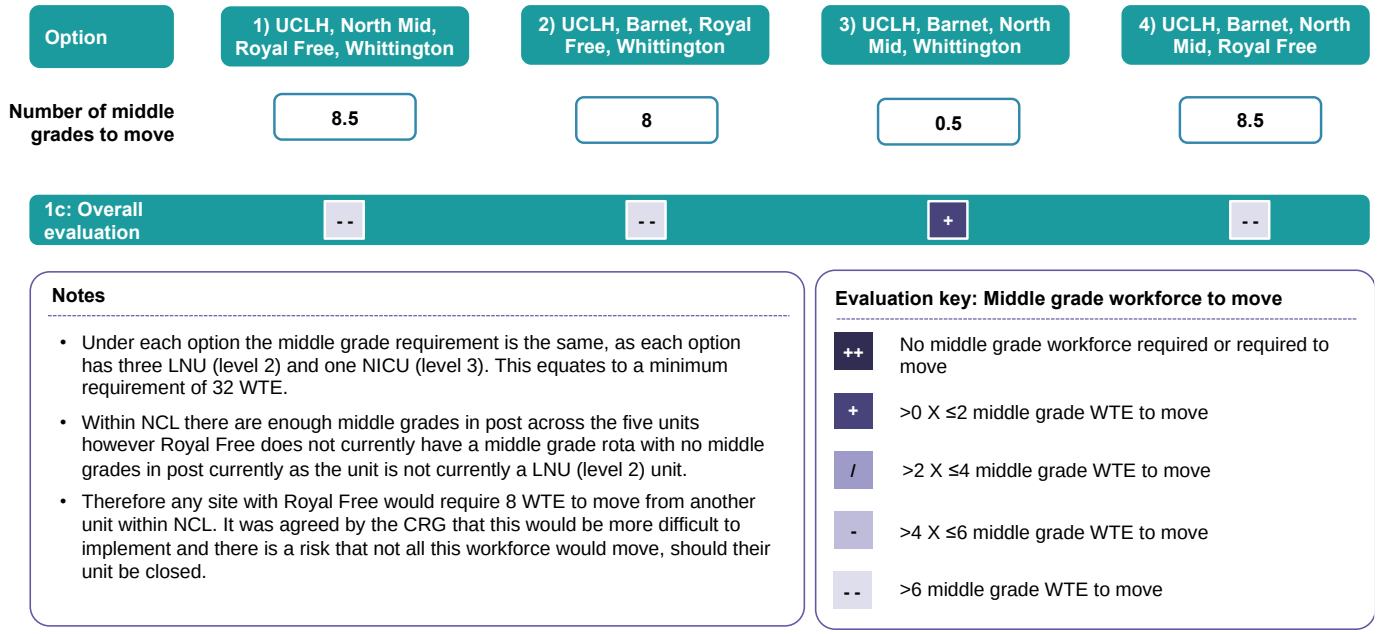
[68] BAPM Quality standards, 2022

Site	WTE supporting the middle grade rota (in post)	Gap to requirement (WTE)
Barnet	8	0
North Mid	7.5	-0.5
Royal Free	0	-8
Whittington	8	0
UCLH	12	0

Figure 34: Middle grade doctors (WTE) in post and gap to required numbers

For all options, no additional recruitment would be required across NCL as there are more than the required 32 WTE neonatal middle grade doctors currently in post in NCL. However, at Royal Free Hospital there are currently no middle grade doctors in post and therefore eight WTE middle grade doctors would be required to move to the Royal Free Hospital from other sites in any options that include the Royal Free Hospital. Any options with North Mid would require the movement of 0.5 WTE middle grade doctors as the unit currently has 7.5 WTE middle grade doctors.

Therefore, options 1, 2 and 4 have been evaluated '- -' to account for the difficulty of moving workforce and the risk that workforce may choose to leave NCL rather than move hospital. Option 3 has been evaluated with a '+' as only 0.5 WTE middle grade doctors would be required to move site. This evaluation is shown in Figure 35.



Source: Trust data returns (2022), BAPM Quality standards, 2022, CF analysis

Figure 35: Number of middle grades to move (WTE) option evaluation

5.10.1.4 How many additional neonatal nurses are required to meet future neonatal cot requirements?

The CRG considered how many additional neonatal nurses would be required to meet future neonatal cot requirements. This is because BAPM guidance is that there should be a minimum nursing to baby ratio in neonatal settings, as follows[69]:

- **Intensive care:** 1:1 (one neonatal nurse for every baby)
- **High dependency:** 1:2 (one neonatal nurse for every two babies)
- **Special care: 1:4** (one neonatal nurse for every four babies).

We would need 317 WTE neonatal nurses to deliver the agreed care model (as detailed in section 4.4) and we currently have 262 WTE neonatal nurses in NCL. The number of neonatal nurses that would need to move is also different between the options as there are currently different numbers of neonatal nurses on each site, as shown in Figure 36.

Option	Future neonatal workforce requirements (WTE)	Current NCL neonatal nursing workforce in post (WTE)	Neonatal workforce available to move (WTE)	Future workforce requirement gap (WTE)
Option 1: North Mid, Royal Free, Whittington, UCLH	317	262	49	-55
Option 2: Barnet, Royal Free, Whittington UCLH	317	262	36	-55
Option 3: Barnet, North Mid, Whittington, UCLH	317	262	19	-55
Option 4: Barnet, North Mid, Royal Free, UCLH	317	262	45	-55

Figure 36: Future neonatal nursing workforce requirement (WTE) by option

Therefore, options 1, 2 and 4 have been evaluated '- -' to account for the movement of more than 20 WTE, with the risk that neonatal nurses may choose to leave NCL rather than move hospital. Option 3 has been evaluated with a '-' as between 10 and 20 nurses would have to move. This evaluation is shown in Figure 37.

[69] BAPM Quality standards, 2022

Option	1) North Mid, Royal Free, Whittington, UCLH,	2) Barnet, Royal Free, Whittington, UCLH	3) Barnet, North Mid, Whittington, UCLH	4) Barnet, North Mid, Royal Free, UCLH
Additional neonatal nursing workforce required (WTE)	49	36	19	45
1d: Overall evaluation	--	--	-	--

Notes

- In all options the future neonatal nursing requirements would be 262.62 WTE. This is because all options have the same activity requirements and therefore cot requirements.
- The additional neonatal nursing workforce required for each option is driven by the current neonatal nursing workforce in post and the number of neonatal nurses in each option that could move (number dependent on which unit is modelled as closed)
- All options required movement of neonatal nursing so no option has been evaluated a '++'
- All units have a vacancies in the neonatal nursing workforce however it was acknowledged that NCL have a lower vacancy rate as compared to other regions in London. Any option that is implemented would require a detail recruitment plan which consider the site vacancy rates.

Evaluation key: Neonatal nursing workforce to move

++	No additional neonatal nursing required
+	Movement of ≤5 WTE neonatal nurses
/	Movement of >5 X ≤10 WTE neonatal nurses
-	Movement of >10 X≤20 WTE neonatal nurses
--	Movement of >20 WTE neonatal nurses

Figure 37: Additional neonatal nursing workforce required (WTE) option evaluation

5.10.1.5 How many additional midwives are required to meet future activity requirements?

The CRG considered how many additional midwives are required to meet future activity requirements. This is because BirthRate Plus guidance is that there should be a minimum midwife to babies ratio in obstetric-led birth settings, as follows[70]:

- Barnet, North Mid, Royal Free Hospital and Whittington Hospital: 1:24 (one midwife for every 24 babies). An average for units in NCL (excluding UCLH) was used as the future BirthRate Plus requirements may change as the activity and case mix may be different as a result of reconfiguration.
- UCLH: 1:23 (one midwife for every 23 babies).

We would need 846 WTE midwives to deliver our new care model (as detailed in section 4) and we currently have 869 WTE midwives in NCL. The number of midwives that would need to move is also different between the options, as shown in Figure 38, as there are currently different numbers of midwives at each site.

[70] BAPM Quality standards, 2022

Option	Future deliveries	Future midwifery workforce requirements (WTE)	Midwifery workforce required to move (WTE)
Option 1: North Mid, Royal Free, Whittington, UCLH	20,072	846	199
Option 2: Barnet, Royal Free, Whittington UCLH	20,072	846	153
Option 3: Barnet, North Mid, Whittington, UCLH	20,072	846	61
Option 4: Barnet, North Mid, Royal Free, UCLH	20,072	846	143

Figure 38: Future midwifery workforce requirement (WTE) by option

There are currently sufficient midwives to deliver the expected activity. There are currently differences in the number of midwifes at each site, particularly at the Royal Free Hospital, where there are currently fewer midwives than elsewhere in NCL, which means options that include the Royal Free Hospital would require more midwives to move sites.

Therefore, options 1, 2 and 4 have been evaluated '- -' because of the numbers of midwives who would need to move hospital and to account for the risk that midwives may choose to leave NCL rather than move hospital. Option 3 has been evaluated with a '-' as a large number of midwives would still need to move site, albeit fewer than in other options. This evaluation is shown in Figure 39.

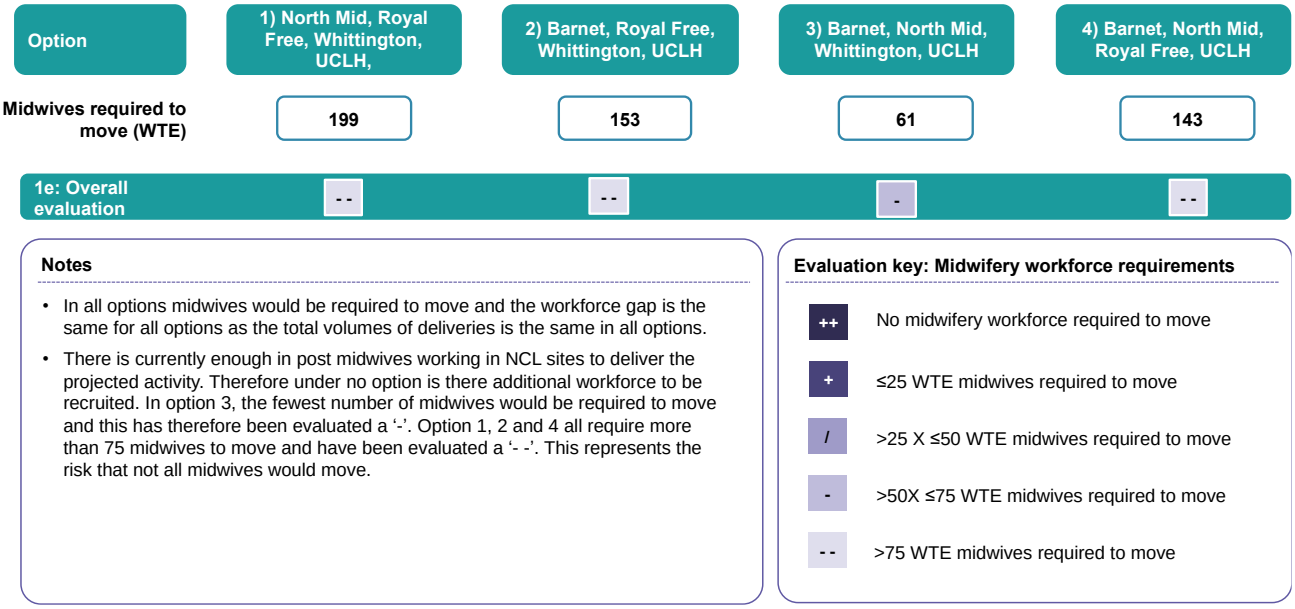


Figure 39: Midwives required to move (WTE) option evaluation

5.10.1.6 Overall evaluation: how easy is it to implement and deliver the proposed model of care?

The CRG reviewed all the evaluation questions to assess overall how easy each option would be to implement and deliver the proposed model of care.

Options 1 and 2 were rated '- -' overall because they would require:

- Neonatal consultant and middle grade workforce to move units
- Significant increase in labour ward consultant presence hours, including for out of area sites
- Over 20 neonatal nurses to move between units
- Over 75 midwives to move between units.

Option 3 was rated '+' overall because it would require:

- No neonatal consultant workforce to move units
- No middle grade doctors to move units
- The lowest increase in labour ward consultant hour presence
- Fewer number of neonatal nursing required to move (>10 WTE but <20 WTE)
- Between 50 and 75 midwives to move between units.

Option 4 was rated '-' overall because it would require:

- Neonatal consultant and middle grade workforce to move units
- Increase in labour ward consultant presence hours
- Neonatal nursing movement >20 WTE
- Over 75 midwives to move between units.

This overall evaluation is shown in

Figure 40.

Option	1) North Mid, Royal Free, Whittington, UCLH,	2) Barnet, Royal Free, Whittington, UCLH	3) Barnet, North Mid, Whittington, UCLH	4) Barnet, North Mid, Royal Free, UCLH
1a) Additional neonatal consultants (WTE)	-	-	++	-
1b) Additional obstetric consultant labour ward cover	--	--	/	-
1c) Number of neonatal middle grade WTE to move	--	--	+	--
1d) Number of neonatal nurses to move (WTE)	--	--	-	--
1e) Number of midwives to move (WTE)	--	--	-	--
Overall evaluation	--	--	+	-
Overall evaluation rationale: • Option 1, 2 and 4 would require a minimum of 6 WTE neonatal consultant and middle grade workforce to move • Option 3 has the lowest increase in consultant presence hours on the labour ward and requires no neonatal consultant and <1 WTE middle grade	• Neonatal consultant and middle grade workforce to move units • Significant increase in labour ward consultant presence hours, including for out of area • Over 20 neonatal nurses to move between units • Over 75 midwives to move between units	• Neonatal consultant and middle grade workforce to move units • Significant increase in labour ward consultant presence hours, including for out of area • Over 20 neonatal nurses to move between units • Over 75 midwives to move between units	• No neonatal consultant workforce to move units • No middle grade doctors to move units • The lowest increase in labour ward consultant hour presence • Neonatal nursing movement of >20 WTE • Between 50 and 75 midwives to move between units	• Neonatal consultant and middle grade workforce to move units • Increase in labour ward consultant presence hours • Neonatal nursing movement >20 WTE • Over 75 midwives to move between units

Figure 40: Overall option evaluation: how easy is it to implement and deliver the proposed model of care

5.10.2 Does the option support training opportunities?

Clinicians considered whether each option would support training opportunities. This is because sites that offer a larger number of placements would have a bigger impact on training opportunities in the future if the unit was to close, and because other sites would need to increase the training placements offered and this may impact on future training opportunities in NCL. This included consideration of the following evaluation metrics on the impact of training opportunities:

- What is the difference in total number of nursing student placements for neonates and maternity?
- What is the difference in total number of neonatal nursing qualified in specialty (QIS) training placements?
- What is the difference in total current number of student midwife placements?

5.10.2.1 What is the current total number of nursing student placements for neonates and maternity?

The CRG considered the current total number of nursing student placements for neonates and maternity. This is because any reduction in student nursing placements would have an impact on training opportunities in NCL. There is an ambition to keep trainees within NCL and clinicians agree that people who train in NCL are more likely to continue to work here once trained. The current nursing student placements by hospital and for each option are shown in Figure 41.

Number of nursing placement in maternity and neonatal services by site (2021/22)

Site	Student nursing placements
Barnet	10
North Mid	100
Royal Free	30
Whittington	80
UCLH	20
NCL total	**240**

Number of student nursing placements by option

Option	Student nursing placements by option
Option 1: North Mid, Royal Free, Whittington, UCLH	230
Option 2: Barnet, Royal Free, Whittington UCLH	140
Option 3: Barnet, North Mid, Whittington, UCLH	210
Option 4: Barnet, North Mid, Royal Free, UCLH	160

Figure 41: Current nursing student placements by hospital and for each option

The largest number of student nursing placements are at North Mid and Whittington Hospital. Options 2 and 4 are evaluated as '- -' because they do not include either North Mid or Whittington Hospital and therefore would result in fewer student nursing placements (reduction of more than 50 in each option). Option 3 would result in a reduction of between 10 and 30 placements and has been evaluated a '/'. Option 1 has the smallest reduction (fewer than 10 placements) and has been evaluated a '+'. This evaluation is shown in Figure 42.

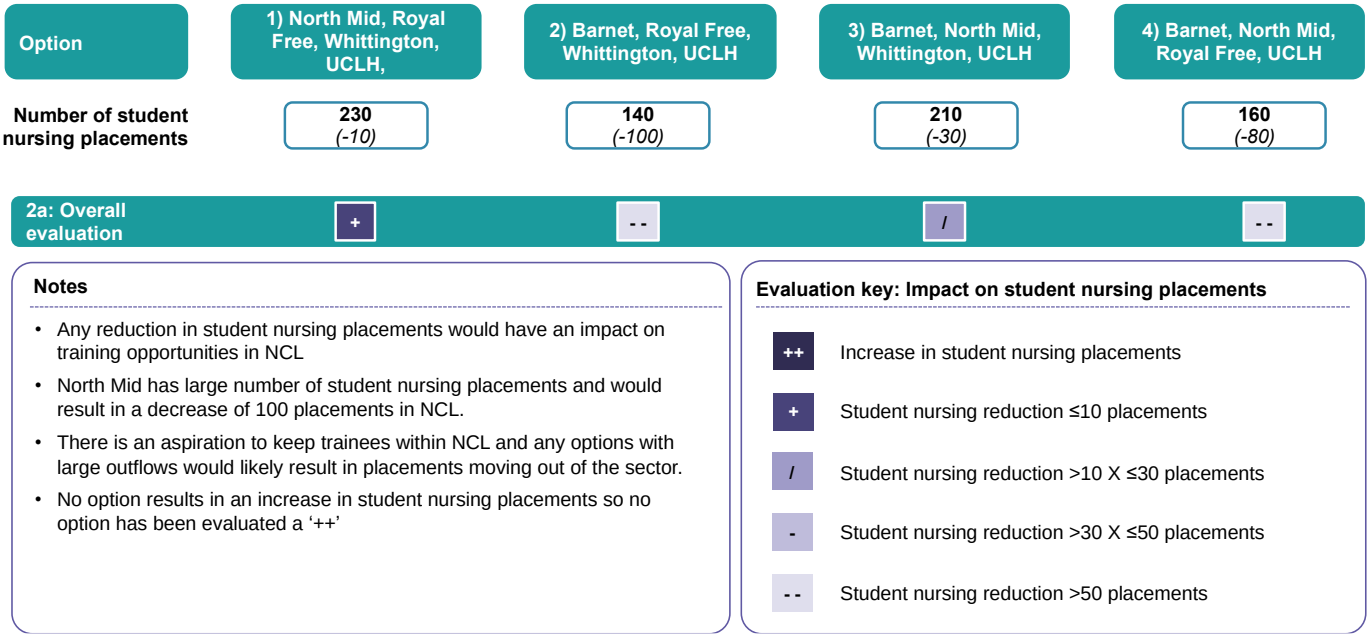


Figure 42: Number of student nursing placements option evaluation

5.10.2.2 What is the current total number of neonatal nursing qualified in specialty (QIS) training placements?

The CRG considered the current total number of neonatal nursing qualified in specialty (QIS) training placements. This is because any reduction in qualified in specialty nursing placements would have an impact on training opportunities, and there is an ambition to continue to train nurses to be specialists in delivering neonatal care within NCL. The current neonatal nursing qualified in specialty (QIS) placements by hospital and for each option are shown in Figure 43.

Number of neonatal nursing QIS placements by site (2021/22)

Option	Student nursing placements by option
Option 1: North Mid, Royal Free, Whittington, UCLH	**230**
Option 2: Barnet, Royal Free, Whittington UCLH	**140**
Option 3: Barnet, North Mid, Whittington, UCLH	**210**
Option 4: Barnet, North Mid, Royal Free, UCLH	**160**

Number of neonatal nursing QIS by option

Option	Neonatal nursing QIS placements
Option 1: North Mid, Royal Free, Whittington, UCLH	14
Option 2: Barnet, Royal Free, Whittington UCLH	16
Option 3: Barnet, North Mid, Whittington, UCLH	17
Option 4: Barnet, North Mid, Royal Free, UCLH	11

Figure 43: Current neonatal nursing qualified in specialty (QIS) placements by hospital and for each option

The largest number of neonatal nursing qualified in specialty (QIS) placements are at UCLH, Whittington Hospital and then Barnet. UCLH is included in every option therefore option 4 is evaluated as '- -' because it does not include the Whittington Hospital and so would result in the greatest reduction in neonatal nursing qualified in specialty (QIS) placements (six placements). Option 1 is evaluated as a '-' because it does not include Barnet and would therefore result in a reduction of three placements. Option 2 is evaluated as '/' because it would result in the loss of one placement whilst option 4 is evaluated as '+' because no placements are lost. This evaluation is shown in
Figure 44.

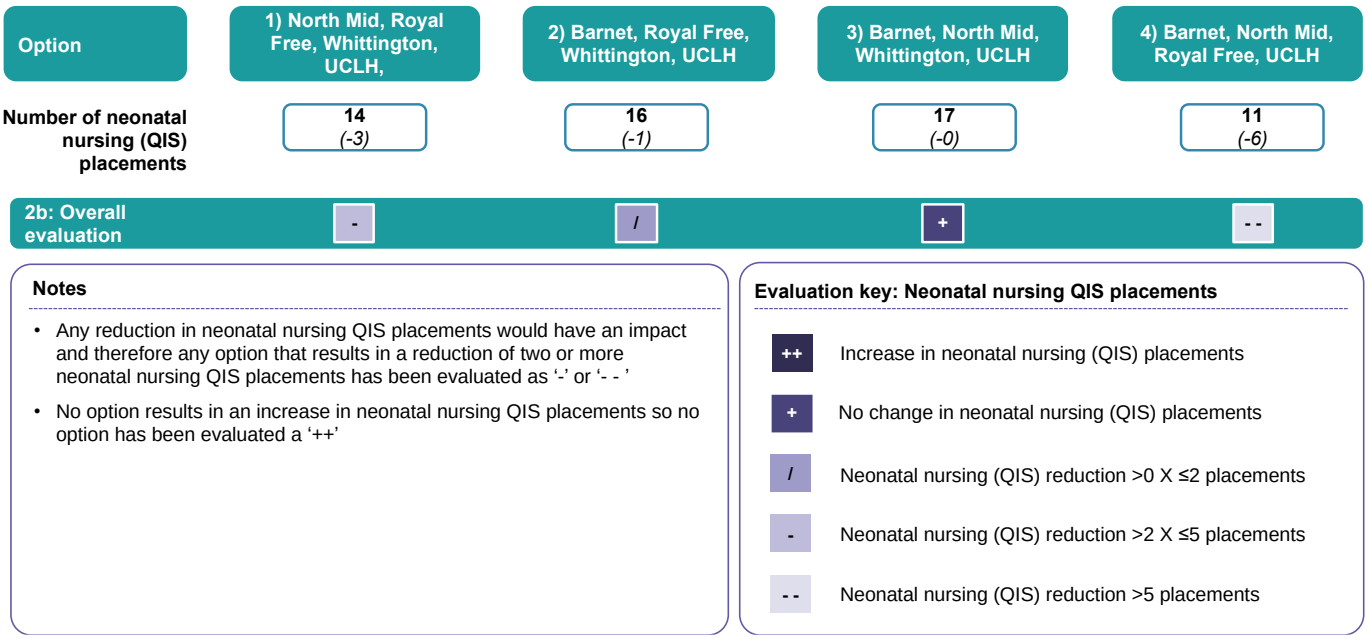


Figure 44: Number of neonatal nursing (QIS) placement option evaluation

5.10.2.3 What is the total current number of student midwife training placements?

The CRG considered the current total number of student midwife training placements. This is because any reduction in student nursing placements would have an impact on training opportunities in NCL. There is an ambition to keep trainees within NCL and clinicians agree that people who train in NCL are more likely to continue to work in NCL once trained. The current student midwife training placement hours for each option are shown in Figure 45.

Current number of student midwife placement hours by site

Site	Student midwife placement hours
Barnet	**90,743**
North Mid	**65,960**
Royal Free	**43,052**
Whittington	**34,096**
UCLH	**81,225**
NCL total	**315,076**

Number of student midwife placement hours by option

Option	Student midwife placement hours by option	Placement hour reduction (%)
Option 1: North Mid, Royal Free, Whittington, UCLH	**224,333**	**-29%**
Option 2: Barnet, Royal Free, Whittington UCLH	**249,116**	**-21%**
Option 3: Barnet, North Mid, Whittington, UCLH	**272,024**	**-14%**
Option 4: Barnet, North Mid, Royal Free, UCLH	**280,980**	**-11%**

Figure 45: Current student midwife training placement hours for each option

The largest number of student midwife placement hours are at Barnet and UCLH. All options would result in a reduction in placement hours in NCL which would have to be delivered elsewhere and therefore no option has been evaluated a '++' or '+'. Options 1 and 2 would have the most significant reduction in the number of student midwife placement hours in NCL and have therefore been rated '- -'. Options 3 and 4 would have a lower reduction in the number of student midwife placement hours in NCL and have therefore been rated '/'. This evaluation is shown in Figure 46.

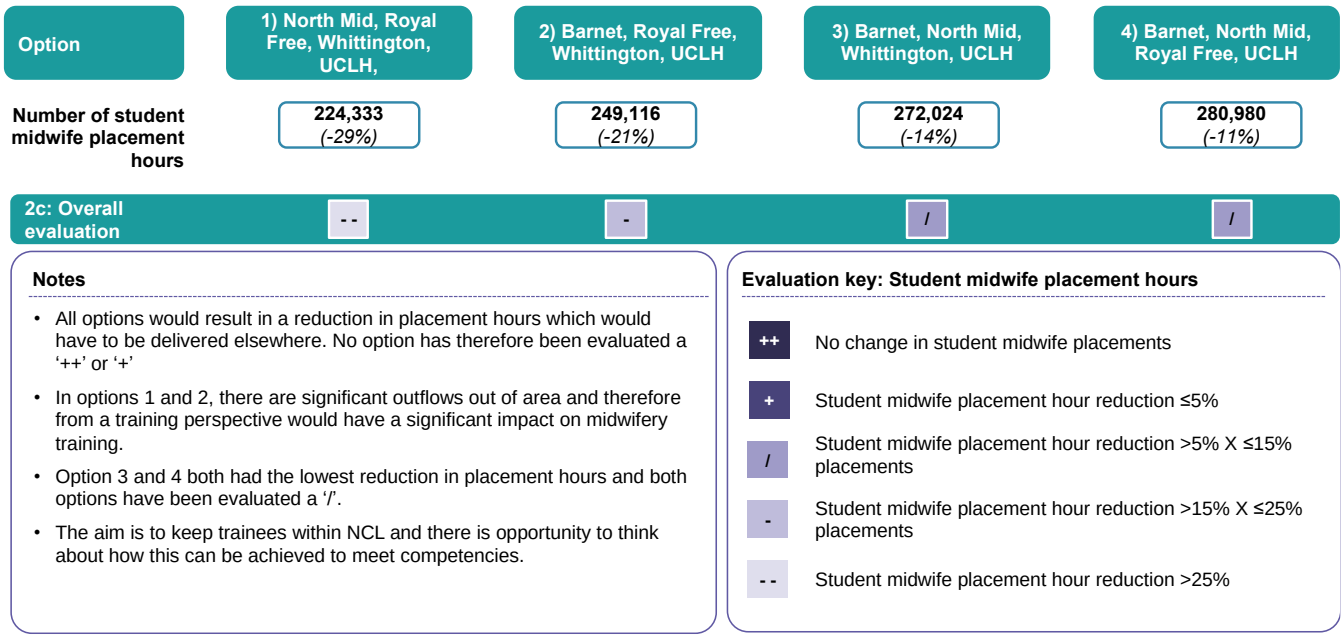


Figure 46: Number of student midwife student placement hours option evaluation

5.10.2.4 Overall evaluation: does the option support training opportunities?

The CRG reviewed all the evaluation questions to assess overall if the option supports training opportunities:

- Option 1 was rated '-' overall because it had the lowest reduction in student nursing placements but the second highest reduction in neonatal nursing (QIS) placements, and the greatest reduction in student midwife placements in NCL.
- Option 2 was rated '- -' overall because it had a large reduction (100) in student nursing placements but a small minimal reduction in neonatal nursing QIS placements, alongside a reduction in student midwife placements in NCL.
- Option 3 was rated '/' overall because it had no change in the neonatal nursing QIS placements, the lowest reduction in student midwife placement hours, and a smaller number of student midwife placements would be lost from NCL.
- Option 4 was rated '- -' overall because it had a large reduction in student nursing placements and the greatest reduction in neonatal nursing QIS placements, but a smaller number of student midwife placements would be lost from NCL.

The overall evaluation is shown in
Figure 47.

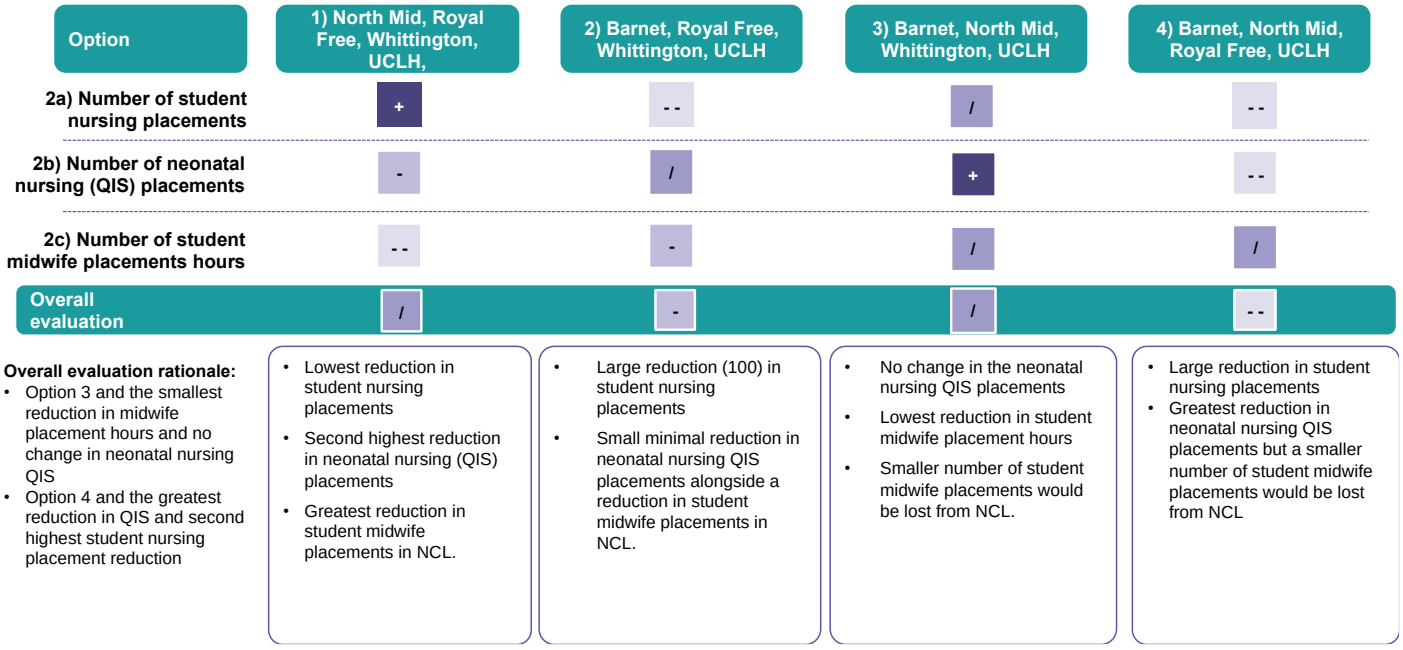


Figure 47: Overall evaluation: does the option support training opportunities?

5.11 Access to care

The Patient and Public Engagement Group (PPEG) considered metrics to evaluate access to care. The PPEG agreed that although people may need to travel further to access the new model of care, this would likely be offset by improvements in quality, outcomes and patient experience. The PPEG also agreed that, although the length of time it takes to travel to access services is important, there are other factors to consider, such as the cost of travel, and access to services once on site (which might include physical factors such as availability of parking and cultural/environmental factors such as neuro-divergent friendly environments and interpretation support). However, the PPEG recognised that implementing the new model of care would mean

that most of the cultural/environmental factors would not be differentiating between options. Instead, these factors have been considered as part of the impact of the options in section 6. The PPEG therefore evaluated options in terms of travel to services, travel accessibility as these are differentiating between options.

5.11.1 What is the impact on the average and maximum travel times?

The PPEG considered the evaluation question “What is the impact on the average and maximum travel times?”. This is because it is important to understand how much further people may need to travel to access services and the impact on people who will have to travel the furthest (maximum travel times). The PPEG reviewed travel times compared to current travel times so the increase in travel time could be seen. The group looked at journeys by off-peak driving/taxi/ambulance, peak driving/taxi and public transport.

5.11.1.1 Maximum and average travel time for off-peak and peak journeys

The PPEG considered the maximum and average travel time for off-peak journeys (which include journeys by private car, ambulance and taxi) for people for whom the sites under consideration (Barnet, North Mid, Royal Free Hospital, UCLH, Whittington Hospital) are the closest by driving, as shown in

Figure 48.

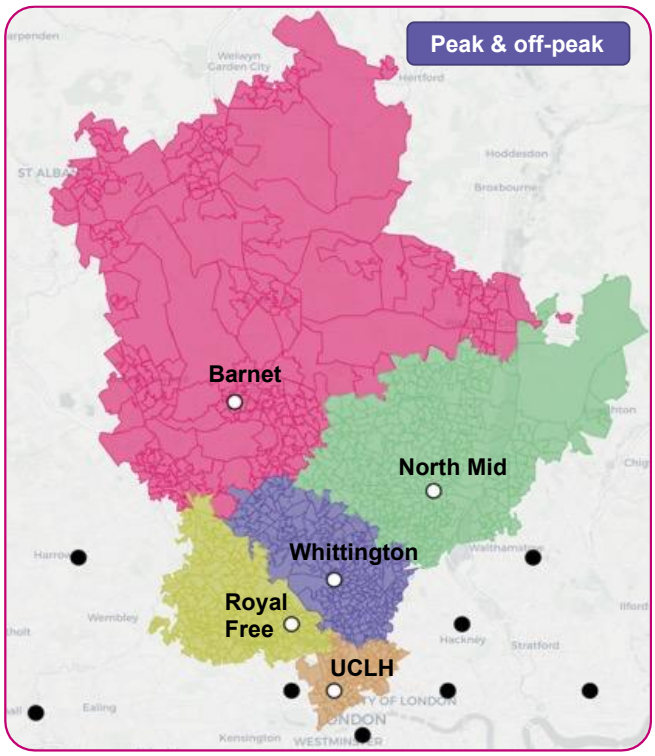


Figure 48: Peak and off-peak impacted populations

The average additional travel time for this catchment population is shown in Figure 49.

Option	Transport method	Average travel time to current closest unit (mins)	Average travel time (mins) to next closest unit	Difference for average (mins)	Maximum travel time to current closest unit (mins)	Maximum travel time (mins) to next closest unit	Difference for maximum (mins)
The current average travel time has been displayed for those who chose the unit that would be closed in the option and compared against the unit they are likely to chose in the new options							
Option 1: North Mid, Royal Free, Whittington, UCLH	Off-peak	18.8	25.5	6.7	29.3	35.4	6.1
	Peak	22.4	30.3	7.9	34.8	42.1	7.3
Option 2: Barnet, Royal Free, Whittington, UCLH	Off-peak	14.9	22.9	7.9	25.6	31	5.3
	Peak	17.8	27.1	9.3	30.3	36.8	6.5
Option 3: Barnet, North Mid, Whittington, UCLH	Off-peak	12.4	19.1	6.7	23	24.7	1.7
	Peak	14.4	19.6	5.3	26.9	29.5	2.6
Option 4: Barnet, North Mid, Royal Free, UCLH	Off-peak	12.1	17.5	5.4	22.2	23.4	1.2
	Peak	14.1	19.9	5.8	25.9	28.3	2.3

Figure 49: Average and maximum travel time (off-peak and peak) by option

All options would result in an increase in average and maximum travel times and therefore no option has been evaluated a '++' or a '+'. Options 3 and 4 would result in an increase in average and/or maximum travel times of between two and seven minutes for peak journeys and have been rated a '-' whilst options 1 and 2 would result in an increase of average and/or maximum travel times for peak journeys of more than seven minutes and have therefore been rated a '- -'. This evaluation is shown in Figure 50.

Key: (**X**) = Increase in minutes
(x%) = % increase

Option	1) UCLH, North Mid, Royal Free, Whittington	2) UCLH, Barnet, Royal Free, Whittington	3) UCLH, Barnet, North Mid, Whittington	4) UCLH, Barnet, North Mid, Royal Free
Maximum travel time difference (peak private car/taxi journey mins)	**+7.3 mins** *(21%)*	**+6.5 mins** *(22%)*	**+2.6 mins** *(10%)*	**+2.3 mins** *(9%)*
Average time difference (peak private car/taxi journey mins)	**+7.9 mins** *(35%)*	**+9.3 mins** *(53%)*	**+5.3 mins** *(37%)*	**+5.8 mins** *(42%)*
1a: Overall Evaluation	- -	- -	-	-

Notes

- Any increase in travel times would have an impact and therefore no option has been evaluated a '++ or +'
- Option 3 and 4 have similar increases in both average and maximum and have therefore been evaluated a '-'
- Options 1 and 2 have the greatest increase in travel times and been evaluated a '- -'

Evaluation key: Peak (private car/taxi)

++ Decrease in maximum and average travel time	- Average or maximum travel time increase >2 minutes X ≤7 minutes
+ No change in maximum and average travel time	- - Average or maximum travel time increase >7 minutes
/ Average or maximum travel time increase ≤2 minutes	

Figure 50: Maximum and average travel time difference (peak) option evaluation

All options would result in an increase in average and maximum travel times and therefore no option has been evaluated a '++' or a '+'. Options 3 and 4 would result in an increase in average and/or maximum travel times of between two and seven minutes for off-peak journeys and have been rated a '-' whilst options 1 and 2 would result in an increase of average and/or maximum travel times for off-peak journeys of more than seven minutes and have therefore been rated a '- -'. This evaluation is shown in Figure 51.

Key: (**X**) = Increase in minutes
(x%) = % increase

Option	1) UCLH, North Mid, Royal Free, Whittington	2) UCLH, Barnet, Royal Free, Whittington	3) UCLH, Barnet, North Mid, Whittington	4) UCLH, Barnet, North Mid, Royal Free
Maximum travel time difference (off-peak, mins)	**+6.1 mins** *(21%)*	**+5.3 mins** *(21%)*	**+1.7 mins** *(8%)*	**+1.2 mins** *(6%)*
Average travel time difference (off-peak, mins)	**+6.7 mins** *(35%)*	**+7.9 mins** *(53%)*	**+6.7 mins** *(35%)*	**+5.4 mins** *(41%)*
1b: Overall Evaluation	- -	- -	-	-

Notes

- Off peak is a proxy used for ambulance travel times
- Any increase in travel times would have an impact and therefore no option has been evaluated a '++ or +'
- Option 3 and 4 have similar increases in both average and maximum and have therefore been evaluated a '-'
- Options 1 and 2 have the greatest increase in travel times and been evaluated a '- -'

Evaluation key: Off-peak

++ Decrease in maximum and average travel time	- Average or maximum travel time increase >2 minutes X ≤7 minutes
+ No change in maximum and average travel time	- - Average or maximum travel time increase >7 minutes
/ Average or maximum travel time increase ≤2 minutes	

Figure 51: Maximum and average travel time difference (off-peak) option evaluation

5.11.1.2 Maximum and average travel time for public transport

The PPEG considered the maximum and average travel time for journeys by public transport for people for whom the sites under consideration (Barnet, North Mid, Royal Free Hospital, UCLH, Whittington Hospital) are the closest by public transport, as shown in

Figure 52.

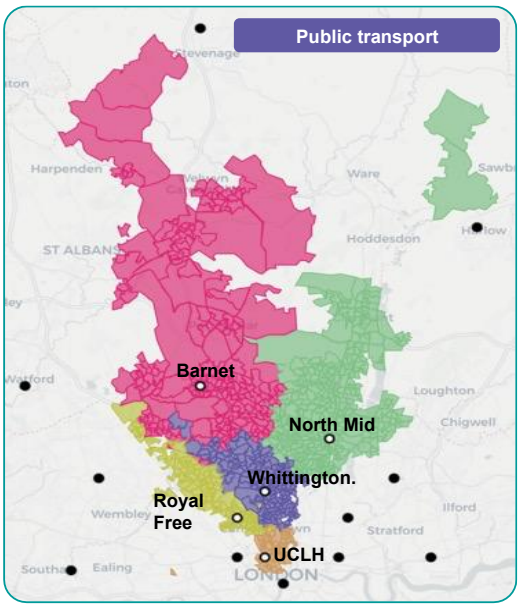


Figure 52: Impacted population, public transport

The additional average travel time for this catchment population is shown in Figure 53.

Option	Transport method	Average travel time to current closest unit (mins)	Average travel time (mins) to next closest unit	Difference for average (mins)	Maximum travel time to current closest unit (mins)	Maximum travel time (mins) to next closest unit	Difference for maximum (mins)
The current average travel time has been displayed for those who chose the unit that would be closed in the option and compared against the unit they are likely to chose in the new options							

Option 1: North Mid, Royal Free, Whittington, UCLH	Public transport	32.6	44	11.5	63.5	73.8	10.3
Option 2: Barnet, Royal Free, Whittington, UCLH	Public transport	28.7	41.3	12.6	74.6	79.9	5.3
Option 3: Barnet, North Mid, Whittington, UCLH	Public transport	22.3	28.6	6.3	106.9	114.7	7.8
Option 4: Barnet, North Mid, Royal Free, UCLH	Public transport	18.9	25.9	7	36.8	38.3	1.5

Figure 53: Average travel time (public transport) by option

All options would result in an increase in average and maximum travel times and therefore no option has been evaluated a '++' or a '+'. Options 3 and 4 would result in an increase in average and/or maximum travel times of between two and eight minutes for public transport journeys and have been rated a '-' whilst options 1 and 2 would result in an increase of average and/or maximum travel times for public transport journeys of more than eight minutes and have therefore been rated a '- -'. This evaluation is shown in Figure 54.

Figure 54: Maximum and average travel time difference (public transport) option evaluation

5.11.1.3 Overall evaluation: what is the impact on average and maximum travel times?

The PPEG reviewed all the evaluation questions to assess the overall impact on average and maximum travel times:

- Option 1 was rated '- -' overall because it saw a higher increase in travel times of greater than six minutes for average and/or maximum travel times for off-peak and peak journeys and greater than eight minutes for average and/or maximum travel times by public transport.
- Option 2 was rated '- -' overall because it saw a higher increase in travel times of greater than six minutes for average and/or maximum travel times for off-peak and peak journeys and greater than eight minutes for average and/or maximum travel times by public transport.
- Option 3 was rated '-' overall because it saw a slightly lower increase in travel times of two to six minutes for average and/or maximum travel times for off-peak and peak journeys and two to eight minutes for average and/or maximum travel times by public transport.
- Option 4 was rated '-' overall because it saw a slightly lower increase in travel times of two to six minutes for average and/or maximum travel times for off-peak and peak journeys and two to eight minutes for average and/or maximum travel times by public transport.

The overall evaluation is shown in Figure 55.

Option	1) UCLH, North Mid, Royal Free, Whittington	2) UCLH, Barnet, Royal Free, Whittington	3) UCLH, Barnet, North Mid, Whittington	4) UCLH, Barnet, North Mid, Royal Free
1a) Average and maximum (off-peak)	- -	- -	-	-
1b) Average and maximum (peak)	- -	- -	-	-
1c) Average and maximum (public transport)	- -	- -	-	-
1: Proposed overall evaluation	- -	- -	-	-
Overall evaluation rationale: • Options 1 and 2 have the greatest impact in average and maximum travel times • Options 3 and 4 both result in a small increase in average and maximum travel times.	• Increase in average or maximum travel time greater than 6 minutes for peak and off-peak • Increase in average or maximum travel time greater than 8 minutes for public transport	• Increase in average or maximum travel time greater than 6 minutes for peak and off-peak • Increase in average or maximum travel time greater than 8 minutes for public transport	• Increase in average or maximum travel time greater than 2 minutes but less than 6 minutes for peak and off-peak • Increase in average or maximum travel time greater than 2 minutes but less than 8 minutes for public transport	• Increase in average or maximum travel time greater than 2 minutes but less than 6 minutes for peak and off-peak • Increase in average or maximum travel time greater than 2 minutes but less than 8 minutes for public transport

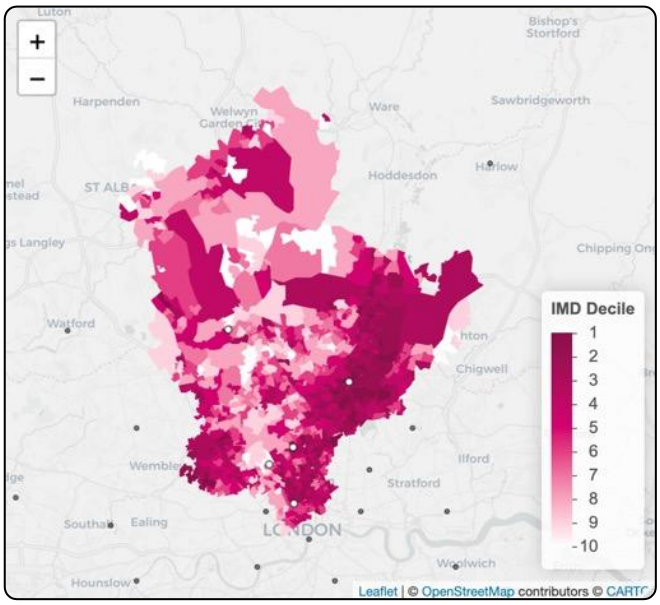
Figure 55: Overall evaluation for average and maximum travel times

5.11.2 Is there an impact on travel time for deprived populations?

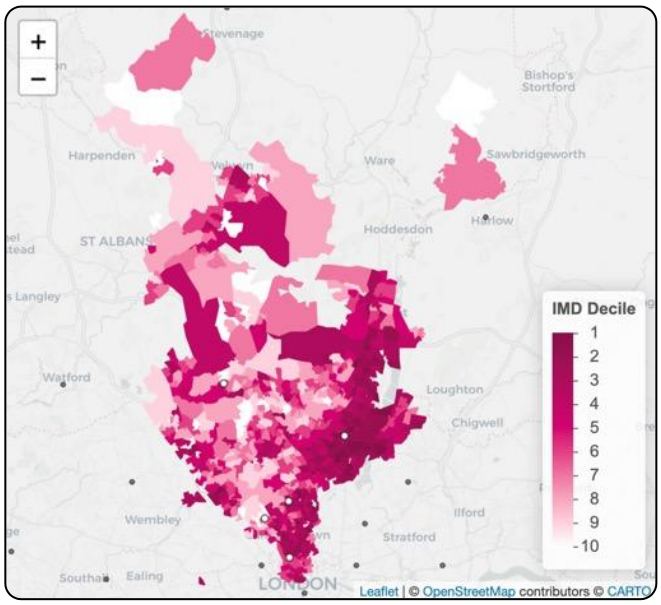
The PPEG considered the evaluation question "Is there an impact on travel time for deprived populations?". This is because it is important to understand how much further people from deprived populations may need to travel to access services and the impact on people from deprived populations who will have to travel the furthest (maximum travel times). The PPEG reviewed travel times compared to current travel times so the increase in travel time could be seen and looked at journeys for people from deprived populations by off-peak driving/taxi/ambulance, peak driving/taxi

and public transport. The deprived population is defined as the 20% most deprived households in NCL, as shown in Figure 56.

Deprivation map: peak/off peak catchments
IMD decile (1 = most deprived) in Peak/Off-Peak catchment



Deprivation map: public transport catchment
IMD decile (1 = most deprived) within public transport catchment



Source: ONS mid-2020 population estimates, ONS geospatial data, CF analysis (2011 LSOA boundaries)

Figure 56: Catchment population deprivation profile

The average additional travel time for people from the deprived population is shown in Figure 57.

Option	Transport method	Current Core20 population average travel time (mins)	Core20 population average travel time in the option (mins)	Difference to BAU Core20 population (mins)	Deprived (Core20) Households in catchment
Option 1: North Mid, Royal Free, Whittington, UCLH	Off-peak	18.16	30.39	12.24	76,255
	Peak	22.40	30.25	7.86	76,776
	Public transport	32.61	44.17	11.56	67,653
Option 2: Barnet, Royal Free, Whittington, UCLH	Off-peak	14.68	26.91	12.23	109,273
	Peak	17.46	26.88	9.42	108,696
	Public transport	28.35	43.94	15.59	120,741
Option 3: Barnet, North Mid, Whittington, UCLH	Off-peak	12.83	19.64	6.81	66,068
	Peak	15.02	20.01	4.99	64,656
	Public transport	18.07	24.17	6.10	36,059

Figure 57: Average travel time for deprived populations by option

Option 4: Barnet, North Mid, Royal Free, UCLH	Off-peak	12.04	17.28	5.24	73,383
	Peak	14.00	19.81	5.80	73,956
	Public transport	18.57	25.46	6.89	47,152

All options would result in an increase in average and maximum travel times and therefore no option has been evaluated a '++' or a '+'. Options 3 and 4 would result in an increase in average and/or maximum travel times of between six and 10 minutes for any journey and have been rated a '-' whilst options 1 and 2 would result in an increase of average and/or maximum travel times for any journey of more than 10 minutes and have therefore been rated a '- -'. This evaluation is shown in Figure 58.

Key: (x%) = % increase
(X) = Deprived households in the catchment

Option	1) UCLH, North Mid, Royal Free, Whittington	2) UCLH, Barnet, Royal Free, Whittington	3) UCLH, Barnet, North Mid, Whittington	4) UCLH, Barnet, North Mid, Royal Free
Average travel time difference (off-peak, mins)	**+12.3 mins** *(67%) (76,255)*	**+12.2 mins** *(83%) (109,273)*	**+6.8 mins** *(53%) (66,068)*	**+5.2 mins** *(44%) (73,383)*
Average travel time difference (peak, mins)	**+7.8 mins** *(35%) (76,776)*	**+9.4 mins** *(54%) (108,696)*	**+5.0 mins** *(33%) (64,656)*	**+5.8 mins** *(42%) (73,956)*
Average travel time difference (public transport, mins)	**+11.6 mins** *(35%) (67,653)*	**+15.6 mins** *(55%) (120,741)*	**+6.1 mins** *(34%) (36,059)*	**+6.9 mins** *(37%) (47,152)*
2: Overall evaluation	- -	- -	-	-

Notes
- Option 1 and 2 have the greatest increase in average travel time
- Option 2 has the greatest number of households impacted
- Option 3 and 4 have a similar increase in travel times, although option 4 have a higher number of households impacted

Evaluation key: Deprivation

++	Increase in any average travel time	+	No change in any average travel time		
/	Largest increase in average travel times ≤6 minutes	-	Largest increase in average >6 minutes X ≤10 minutes	- -	Largest increase in average travel times >10 minutes

Figure 58: Average travel time difference for deprived population option evaluation

5.11.3 What is the impact on travel accessibility?

The PPEG considered the evaluation question "What is the impact on travel accessibility?". This is because travel accessibility is also impacted by the availability of parking and the ease of using public transport.

5.11.3.1 Number of dedicated maternity car parking spaces

The PPEG considered the number of dedicated maternity car parking spaces as people need to be able to park if they arrive at the hospital in labour. None of the sites have dedicated maternity car parking spaces and the PPEG therefore considered the total parking spaces available under each option as a proxy measure. The number of car parking spaces available per option is shown in Figure 59.

Site	Total parking spaces
Royal Free Hospital	374
Barnet Hospital	898
North Middlesex University Hospital	605
Whittington Hospital	110
University College London Hospital	105
Total	***2,092***

Figure 59: Available parking spaces by site

5.11.3.2 Ease of public transport accessibility

The PPEG considered the ease of public transport accessibility. This is because a 45-minute reliable and frequent bus journey may be more accessible than an infrequent and unreliable 30-minute bus journey. The PPEG reviewed the 2015 PTAL (Public Transport Accessibility Levels[71]) score to assess public transport accessibility. This measured:

- Walking time to public transport access points
- The reliability of the public transport
- The number of public transport services available within an area
- The level of service at the public transport access points.

The PTAL ranking scores for each option are shown in

Figure *60*.

Option	1) UCLH, North Mid, Royal Free, Whittington	2) UCLH, Barnet, Royal Free, Whittington	3) UCLH, Barnet, North Mid, Whittington	4) UCLH, Barnet, North Mid, Royal Free
3b) Public transport accessibility of closed provider (0 = worst)	4.4	8.7	13.6	14.3

Figure 60: Public Transport Accessibility scores by option

5.11.3.3 Overall evaluation: what is the impact on travel accessibility?

The PPEG reviewed both evaluation questions to assess overall if there is an impact on overall accessibility.

- Option 1 was rated '- -' because the number of available car parking spaces in the closed unit is greater than 650 and a public transport accessibility rating of less than five.
- Option 2 was rated '-' because the number of available car parking spaces in the closed unit is between 450 and 650 and a public transport accessibility rating between five and 10.

[71] https://data.london.gov.uk/dataset/public-transport-accessibility-levels

- Option 3 was rated '/' because the number of available car parking spaces in the closed unit is less than 450 and a public transport accessibility rating greater than 10.
- Option 4 was rated '/' because the number of available car parking spaces in the closed unit is 450 and a public transport accessibility rating greater than 10.

This evaluation is shown in

Figure 6161.

3a Key: (X) = Absolute decrease in parking spaces
(X) = Old Parking spaces per 1,000 households in catchment population versus new

Option	1) UCLH, North Mid, Royal Free, Whittington	2) UCLH, Barnet, Royal Free, Whittington	3) UCLH, Barnet, North Mid, Whittington	4) UCLH, Barnet, North Mid, Royal Free
3a) Available parking spaces in closed unit	898	605	374	110
3b) Public transport accessibility (0 = worst)	4.4	8.7	13.6	14.3
3: Overall Evaluation	- -	-	/	/

Notes
- All options have a similar number of parking spaces per catchment population
- Option 3 and 4 have the lowest decrease in car parking spaces and better public transport accessibility
- Option 1 has the greatest decrease in car parking spaces and poorest public transport accessibility

Evaluation key: Accessibility

++	Change in available parking spaces in closed unit and accessibility > 10
+	No change in available parking spaces in closed unit and accessibility > 10
/	Change in available parking spaces in closed unit between 0 and 450 or accessibility >10
-	Change in available parking spaces in closed unit between 450 and 650 or accessibility between 10 and 5
- -	Change in available parking spaces in closed unit > 650 or accessibility < 5

Figure 61: Travel accessibility option evaluation

5.12 Affordability and value for money

The Finance and Analytics Group considered two evaluation questions to assess the affordability and value for money for all four options, in each case compared with the status quo:

- What is the capital investment required for each option?
- What is the benefit cost ratio (BCR) for each option?

5.12.1 What is the capital investment required for each option?

The Finance and Analytics Group considered the evaluation question "What is the capital investment required for each option?". This is because it is important to understand the capital implications of the proposed service change to ensure that it is affordable and therefore able to be consulted on.

5.12.1.1 Capital investment required

The Finance and Analytics Group considered the incremental capital investment required for each option, based on the additional capacity required to deliver the projected activity. The capital required was submitted by each organisation using a template. To ensure like for like comparability and consistency it was agreed that for all capital submissions:

- Where new capacity is being added to existing estate then the new estate would be in line with the HBN-standards (09-03 and 09-02).
- Capital required includes 20% optimism bias for Barnet, Royal Free Hospital, North Mid and UCLH and 15% for Whittington Hospital. This is to reflect the stage of development of the plans.
- 12.9% inflation for single year schemes and 20.1% inflation for multi-year schemes.
- 10% trust contingency.
- Includes capital investment required for refurbishment of estate as well as the lifecycle costs over the next 30-years for estate, equipment and IT.
- Includes design fees and commissioning costs.

The group reviewed all the submissions, and each organisation underwent an assurance session with the ICB's Chief Finance Officer and Director of System Financial Planning.

The capital investment required for the additional capacity required to deliver the projected activity has been calculated for each option. In addition, the lifecycle costs over a 30-year time period for estate, equipment and IT have also been included. These figures have been discounted in line with the HMT guidance. The business-as-usual costs for the unit closed in each option have been removed from the total capital requirements as it is assumed in any option that this would not be spent if the maternity and neonatal unit were to close.

All options would result in a capital investment therefore no option has been evaluated a '++' or a '+'. Options 1 and 2 would result in capital investment requirement of more than £50 million. Options 3 and 4 have each been evaluated a '-' as they would result in capital investment requirement of less than £50 million but more than £25 million. This evaluation is shown in Figure 62.

Option	1) North Mid, Royal Free, Whittington, UCLH,	2) Barnet, Royal Free, Whittington, UCLH	3) Barnet, North Mid, Whittington, UCLH	4) Barnet, North Mid, Royal Free, UCLH
Capital investment required (£s)	£67,975,030	£61,095,161	£42,361,291	£39,409,566
1: Overall evaluation	- -	- -	-	-

Notes

- Capital investment required includes the incremental requirements to deliver Start Well Programme and any associated lifecycle costs.
- Options 1 and 2 would require national approval for at least one capital scheme and have therefore been evaluated as '- -'
- Option 3 and 4 both have a capital requirement less than £50 million but more than £25 million so have been evaluated a '-'

Evaluation key: Capital investment

++	No capital investment is required
+	No capital investment is required
/	Total capital investment required is less than £25 million
-	Total capital investment required is more than £25 million but less than £50 million
- -	Total capital investment required is over £50 million

Figure 62: Capital investment requirement options evaluation

5.12.1 What is the benefit cost ratio (BCR) for each option?

The Finance and Analytics Group considered the evaluation question "What is the benefit cost ratio (BCR) for each option?". The BCR is used to understand the value for money (VfM) of the proposed service changes in each option. BCR has been used as it is a requirement of the Green Book[72] and has been recognised as best practice for service changes.

5.12.1.1 Benefit cost ratio (BCR)

The BCR calculation looks at the cash-releasing benefits of the proposed services changes in each option to compare against the costs of the proposed changes. The benefits have been considered at a whole system level over a 30-year period.

The Finance and Analytics group reviewed a number of benefits and the monetisable benefits used in the BCR calculation and the costs are shown in Figure 63. The benefits and costs are set out over a 30-year period. More detail on the proposed benefits of the service changes, including non-cash releasing benefits, is set out in section 8.3.

Option	Total benefits (£s)	Total costs (£s)	Benefit Cost Ratio
Option one: North Mid, Royal Free, Whittington, UCLH	£122,437,265	£100,550,745	**1.22**

[72] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1063330/Green_Book_2022.pdf

Option two: Barnet, Royal Free, Whittington, UCLH	£121,459,803	£102,758,404	**1.18**
Option three: Barnet, North Mid, Whittington, UCLH	£122,479,032	£83,114,014	**1.47**
Option four: Barnet, North Mid, Royal Free, UCLH	£149,949,483	£147,292,135	**1.02**

Figure 63: Benefits and costs by option

All options deliver a BCR greater than one, therefore no option has been evaluated a '- -'. All options result in a BCR greater than one but less than two, therefore have all been evaluated a '-'. This evaluation is shown in Figure 64.

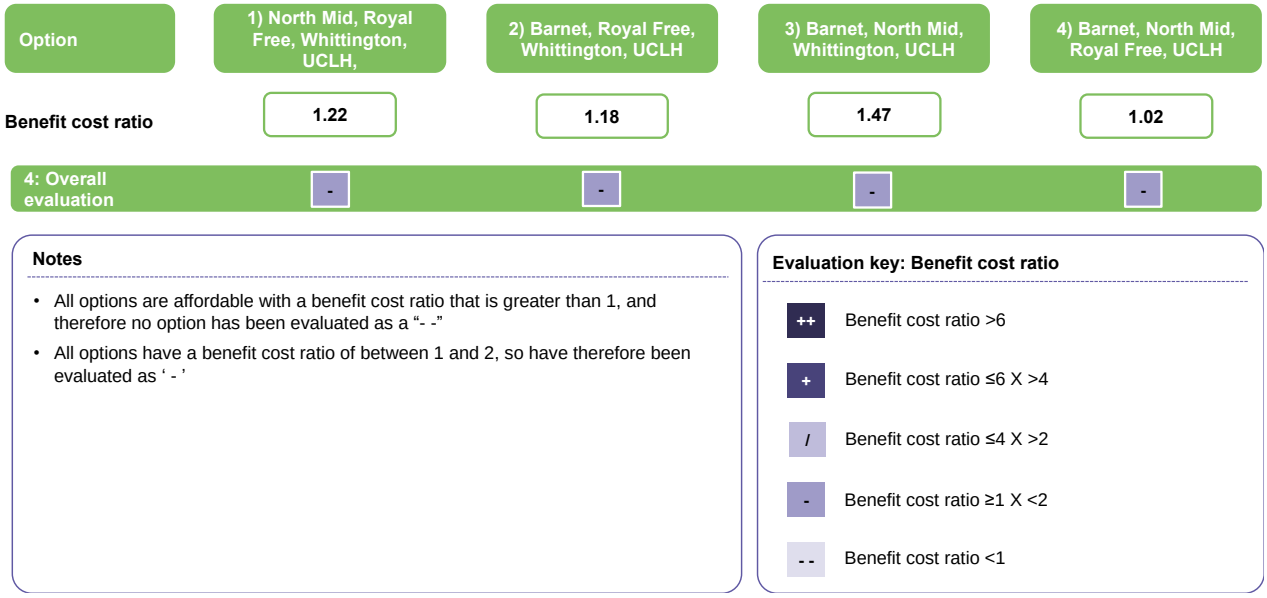


Figure 64: BCR option evaluation

5.13 Options for consultation

The overall evaluation of the options for consultation is shown in

Figure *65*.

		1) UCLH, North Mid, Royal Free, Whittington	2) UCLH, Barnet, Royal Free, Whittington	3) UCLH, Barnet, North Mid, Whittington	4) UCLH, Barnet, North Mid, Royal Free
1	**Quality of care:** Activity outflows	**- -**	**- -**	**/**	**-**

2	**Workforce:** Implementation and delivery	- -	- -	+	-
	Workforce: Training opportunities*	-	- -	/	- -
3	**Access to care:** Average and maximum travel time	- -	- -	-	-
	Access to care: Core20 Average and maximum travel time	- -	- -	-	-
	Access to care: General accessibility	- -	-	/	/
4	**Affordability and value for money:** Capital requirements	- -	- -	-	-
	Affordability and value for money: Benefit cost ratio	-	-	-	-
	Evaluation outcome	✗	✗	✓	✓

Figure 65: Maternity and neonates overall evaluation matrix

As a result of this process, we concluded that:

- Options 1 and 2 are not implementable given the significant projected outflows of people to non-NCL units, which are unable to accommodate this additional activity. This position was confirmed by neighbouring providers and Integrated Care Boards (ICBs) who have had Executive Director sit on the Start Well Programme Board and attended the options appraisal workshop. It was also confirmed by the Maternity and Neonatal Clinical Reference Group (CRG) who stated that the significant outflows from NCL may undermine the viability of NCL providers and would make it harder to provide integrated care before, during and after giving birth. Options 1 and 2 would also result in longer travel times for patients to access services than options 3 and 4. Therefore, these options are not being recommended to be taken forward for consultation.
- Option 3 and 4 are both implementable and both options are being recommended to go forward for consultation, with option 3 being recommended as the preferred option at this stage.
- Option 3 (unit at Royal Free Hospital closes) was recommended by senior clinicians from across NCL as the preferred option as it would be easier to implement from a workforce perspective and because the potential outflow of some patients to units outside NCL would be easier to manage and provide more benefits for those patients:

- It would be significantly easier to implement option 3 than option 4 from a workforce perspective because the Royal Free Hospital currently has a SCU (level 1) neonatal unit whilst the Whittington Hospital (option 4) already has a LNU (level 2); therefore option 3 would not require movement of any neonatal consultant medical staff and fewer midwifery and nursing staff would need to move between units.
- The reduction in training placements in NCL would be less for option 3 than for option 4 because there are currently higher number of placements for neonatal nurses qualified in speciality (QIS), student nurses and midwives at the Whittington Hospital, and the unit at the Whittington Hospital would close under option 4, losing these placements.
- Option 3 would result in projected patient flows of 850 deliveries per year to hospitals in North West London (NWL), which NWL ICB has confirmed could be delivered within existing capacity and would support the future sustainability of these units where the local birth rate has been declining. It would also provide benefits to women and people in NWL who currently deliver outside of NWL units in terms of continuity of care and integration of acute and community pathways. Option 4 would result in projected patient flows of 373 deliveries per year to hospitals in NEL (322 to Homerton University Hospital), but this would be much more difficult to deliver as there are existing severe capacity constraints within units in NEL, particularly at the Homerton Hospital, where activity would be expected to flow. This is also against a backdrop of increasing birth rate across some boroughs in NEL, which is expected to add to the current pressure on maternity and neonatal services in NEL.

- Senior clinicians from across NCL confirmed that option 4 (unit at Whittington Hospital closes) is a viable option for consultation but would be more difficult to implement than option 3 and as such is not the preferred option. Although the options are very similar in terms of care model, access and affordability, it would require more movement of specialist staff between units and the existing SCU (level 1) unit at Royal Free Hospital would need to be upgraded to an LNU (level 2), which would be more difficult to deliver (in terms of workforce and implementation) than expanding the existing LNU (level 2) at Whittington Hospital. The projected patient flow to NEL would be more difficult to manage than patient flow to NWL under option 3.

It is therefore recommended that options 3 and 4 are taken forward to consultation and that option 3 be consulted on as the preferred option (Figure 66). To avoid confusion **moving forward, option 3 will be referred to as option A and option 4 as option B.**

Option A (was option 3)	
UCLH	**Consultant-led obstetric unit with co-located NICU (level 3) neonatal intensive care unit and alongside midwife-led unit. On site access to emergency interventional radiology out of hours.**
North Mid	**Consultant-led obstetric unit with co-located LNU (level 2) and alongside midwife-led unit**
Barnet	**Consultant-led obstetric unit with co-located LNU (level 2) and alongside midwife-led unit**

Whittington	**Consultant-led obstetric unit with co-located LNU (level 2) and alongside midwife-led unit**

Option B (was option 4)	
UCLH	**Consultant-led obstetric unit with co-located NICU (level 3) neonatal intensive care unit and alongside midwife-led unit. On site access to emergency interventional radiology out of hours.**
North Mid	**Consultant-led obstetric unit with co-located LNU (level 2) and alongside midwife-led unit**
Barnet	**Consultant-led obstetric unit with co-located LNU (level 2) and alongside midwife-led unit**
Royal Free	**Consultant-led obstetric unit with co-located LNU (level 2) and alongside midwife-led unit. On site access to emergency interventional radiology out of hours.**

Figure 66: Options for public consultation

6. Options for consultation

6.1 Options for consultation

We are proposing that two options (option A and option B) be shortlisted for public consultation, as shown in Figure 66. The impact of keeping the status quo has also been captured and is not being put forward as an option for public consultation, for the reasons outlined in section 5.4. Options A and B have been evaluated against the status quo and are being proposed as options for public consultation.

6.1.1 Integrated care model

Under all options, we would provide maternity and neonatal capacity to meet projected demand and pregnant women and people would have access to the same level of neonatal provision. Our proposals are underpinned by a focus on pre- and post-natal care, including:

- Expanding the current hospital at home service for neonates to all boroughs within NCL.
- A focus on personalised care and treating all women and people with kindness and respect.
- A focus on provision of midwifery continuity of carer (as staffing allows) to those at risk of adverse outcomes.
- Availability of consistent, clear information about birth choices to support an informed choice of the most appropriate birth setting for the pregnant woman or person.
- The development of a personalised care plan at the point of booking which details preferences around pregnancy and birth.
- Access to digital maternity notes and health records.

- Antenatal advice and support for the pregnant woman or person in key areas, such as smoking cessation, weight management and alcohol use.
- Input from maternal medicine specialists where appropriate and needed.
- Post-natal breastfeeding support from healthcare professionals.
- Support from specialist perinatal mental health services before, during and after pregnancy, if needed.

6.1.2 Birthing

Both options would see the implementation of our new care model and changes to the location at which peri-natal care is provided. This includes the:

- Consolidation of obstetric- and midwifery-led maternity units from five sites to four.
- Consolidation of neonatal units from five sites to four, and there no longer being any SCU (level 1) units in NCL, in line with trends across the rest of London.
- Continuing provision of a NICU (level 3), an obstetric and midwifery-led unit at UCLH, alongside the maternal medicine and fetal medicine services for NCL.
- Choice of birthing at home, at an alongside midwife-led unit or in an obstetric-led unit.

The main differences between the options are:

- The location of one of the obstetric and midwifery-led maternity units, which would be at the Whittington Hospital in option A and the Royal Free Hospital in option B.
- The location of one of the LNUs (Level 2), which would be at the Whittington Hospital in option A and the Royal Free Hospital in option B. In option A, this would require an expansion of the existing LNUs (level 2), whereas in option B it would require an upgrade to the existing SCU (level 1) as well as an expansion of capacity at the Royal Free Hospital unit.
- Pathways for interventional radiology required for intrapartum care. Under option B, this would continue as it is currently, although there may be some changes in referral patterns to the Royal Free Hospital and UCLH for interventional radiology as demand changes over time. Under option A, the activity that is currently transferred to the Royal Free Hospital from Barnet and the North Mid (which is predominantly out-of-hours) may instead go to UCLH. Further detail of this would be developed through implementation planning should a service change be agreed.

6.2 Clinical impact of the options

Both options A and B would deliver the proposed maternity and neonatal care model and would therefore deliver positive impact in terms of clinical impact. Clinicians have outlined the following clinical impacts:

1. **Care that ensures equity of provision and experience**
    - Our care model has been designed to ensure that all pregnant women, people and babies have access to the same services. This includes community neonatal outreach services accessible across all boroughs and the same provision of neonatal care no matter which unit the baby is born in. We expect that the care model would

provide a more personalised experience and ensure that individuals are supported and communicated with and given information that best suits their own needs.

- Our care model also would enable all units in NCL to meet clinical standards around staffing. Currently, there are standards that are not being met and meeting these standards would require an uplift in staffing across the sector to deliver. Through consolidation of the number of units that we have in NCL, there is an opportunity to reach these staffing standards through using our workforce more effectively.
- All pregnant women and people would have the choice to have midwifery-led or obstetric-led care, across either a home birth, midwife-led unit or obstetric-led unit. Through implementing the changes and consolidating staff across fewer units, we would hope to be able to provide a more consistent offer of midwifery-led care across NCL and have services align to the choices and needs of our population.

2. **Services which are clinically sustainable**
    - Redesigning and reconfiguring our neonatal units in NCL will ensure that all units are either a designated LNU (level 2) or NICU (level 3). Reducing the number of neonatal units to four will allow units to meet the minimum activity requirements set out in national clinical standards.
    - Resolve the issues identified with running a SCU (level 1) at the Royal Free Hospital, which include low occupancy, insufficient activity and high levels of transfers.
    - Increase obstetric consultant labour ward cover so that all units in NCL provide labour ward cover at the level recommended by the Royal College of Obstetricians and Gynaecologists.
    - High-quality sustainable workforce, who are supported and offered training opportunities, will directly impact on the quality of care provided. Our care model delivers the minimum workforce requirements outlined in the national guidance and we believe that the consolidation of these services would better facilitate enhanced training opportunities for our staff. Enhanced training opportunities would help to support recruitment and retention of our workforce in NCL.

3. **Up-to-date estate and buildings which meet modern best practice building standards**
    - Investment in our existing maternity and neonatal estate so that all units meet modern best practice building standards and are designed to provide a positive birth experience. Any new capacity delivered will meet the latest space standards and this will have a role in delivering clinical benefits, improving efficiencies, supporting the reduction of the risk of hospital-acquired infection and delivering an attractive working environment for staff.

4. **Training and development opportunities**
    - Supporting training and development opportunities for staff through delivering sustainable volumes of neonatal activity at all neonatal units. Developing this expertise within the workforce and providing these opportunities would help to improve recruitment and retention of the workforce.
    - Reducing vacancies to make sure cots can be kept open and ensuring there are sufficient staff (specialist nurses, allied healthcare professionals, etc.) to provide expert care when required.

5. **Capacity to meet projected demand**
    - Investing in additional capacity for neonatal and maternity services would ensure that there is enough capacity available so that units are running at less than the 80% recommended occupancy rate and there are fewer refusals to admit due to not having enough space. This would reduce the likelihood for transferring babies to units outside of NCL.
    - All units being an LNU (level 2) or NICU (level 3) would reduce the number of transfers of babies from a SCU (level 1) and would minimise the separation of the woman or person that has given birth and their baby, especially outside of NCL.

6.2.1 Impact of the options on interdependent gynaecology services

As described in section 4.5.2, obstetrics and gynaecology services are linked with one another through shared medical workforce. If obstetric care is no longer to be delivered at a hospital site, this would impact on the delivery of gynaecology services and may have a particular impact in terms of the delivery of postgraduate medical education. Following consultation, a full impact analysis on gynaecology services would need to be undertaken as part of work on a decision-making business case. This would be in continued discussion with NHSE Workforce, Training and Education directorate and the relevant Head of School for obstetrics and gynaecology. The following principles would underpin any plans for implementation:

- **Sustainability of services:** gynaecology services at the site that no longer provides intrapartum care would need to be clinically sustainable, with careful consideration given to having the workforce available to support services.
- **Innovative workforce solutions:** it may be possible to staff gynaecology services in a different way to the way they are currently working. For example, there is the possibility of further cross-site working, for which there are other existing models in London which work well.
- **Support for trainees:** implementation would need to ensure that trainees continue to be supported with consultant oversight and opportunities to gain exposure to both obstetrics and gynaecology.
- **Clarity for emergency gynaecology pathways:** work with the London Ambulance Service (LAS) and other stakeholders to ensure that there are clear pathways for emergency gynaecology presentations across NCL.
- **Maintaining provision of elective activity:** it will be important to ensure that there is sufficient capacity to meet the demands for elective gynaecology activity.
- **Provision of pregnancy-related services:** in the early part of pregnancy, women and people are generally cared for under a gynaecology service. For example, people who experience early problems with pregnancy are often seen in early pregnancy units. Implementation planning would need to consider the appropriateness of continuing to have these services at a site that no longer supports intrapartum care, and if these would be better located at a site that has the wider support of a maternity team.

6.2.2 Impact on other clinical services

Through implementing changes, we would need to consider the impact on other services that are involved in the care of pregnant women and people and babies, such as imaging, pathology and

pharmacy. These support services facilitate safe care for patients across a number of other services at both the Royal Free Hospital and Whittington Hospital. As such, we anticipate that the impact of implementing either option A or B would not be hugely significant on these support services. However, they are integral to delivering safe care and as such, before making any final decision on service change, we would explore in more detail the impact of implementing a preferred option on these wider clinical services.

6.3 Interim Integrated Impact Assessment (IIA)

6.3.1 Approach to the interim impact assessment (IIA)

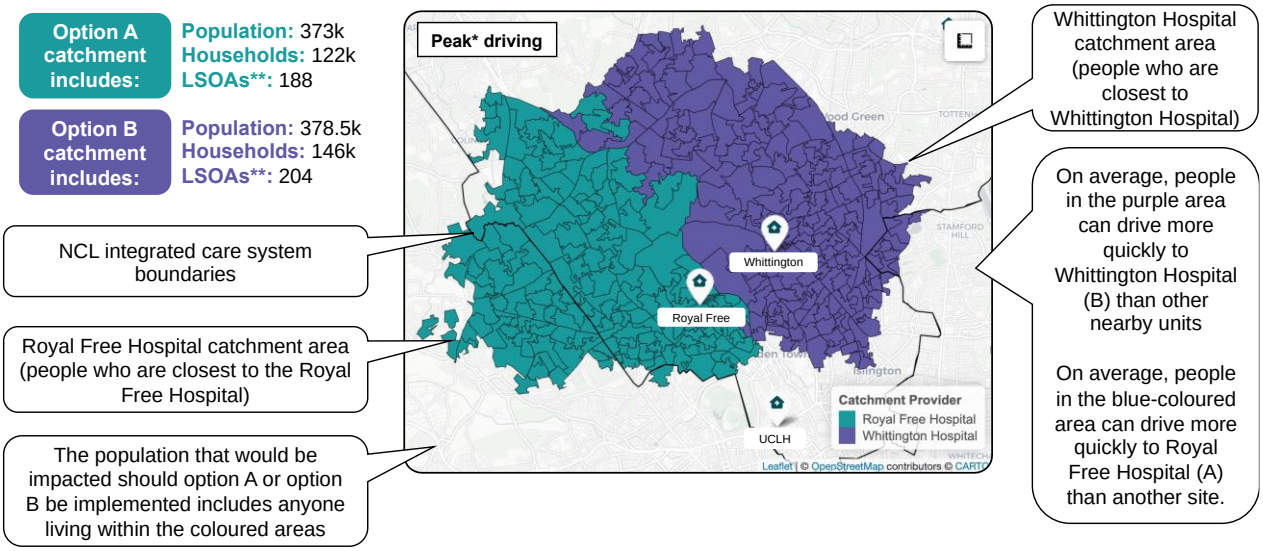
An interim Integrated Impact Assessment (IIA) was undertaken to assess the impact of each of the options. This interim IIA was undertaken by NCL ICB and NHSE London Region Specialised Commissioning to support evaluation of the options and to discharge their legal duties. The interim IIA is an iterative process, and the assessment has been updated throughout the planning process to ensure rigor and provide impartiality in relation to the proposed service change options. The interim IIA is used to understand the potential impact of the proposals on residents.

The full interim IIA can be found here and the report on the engagement that informed it can be found here. The interim IIA has been developed through in-depth analysis looking at areas such as travel time and demographics, patient engagement, and public health analysis. This has supported us to build up a picture of who may be impacted if either option A or B is implemented and how they may be impacted. It also supports us in identifying groups with protected characteristics or vulnerabilities and geographies to prioritise engagement with during the consultation.

6.3.2 Defining service users who may be impacted

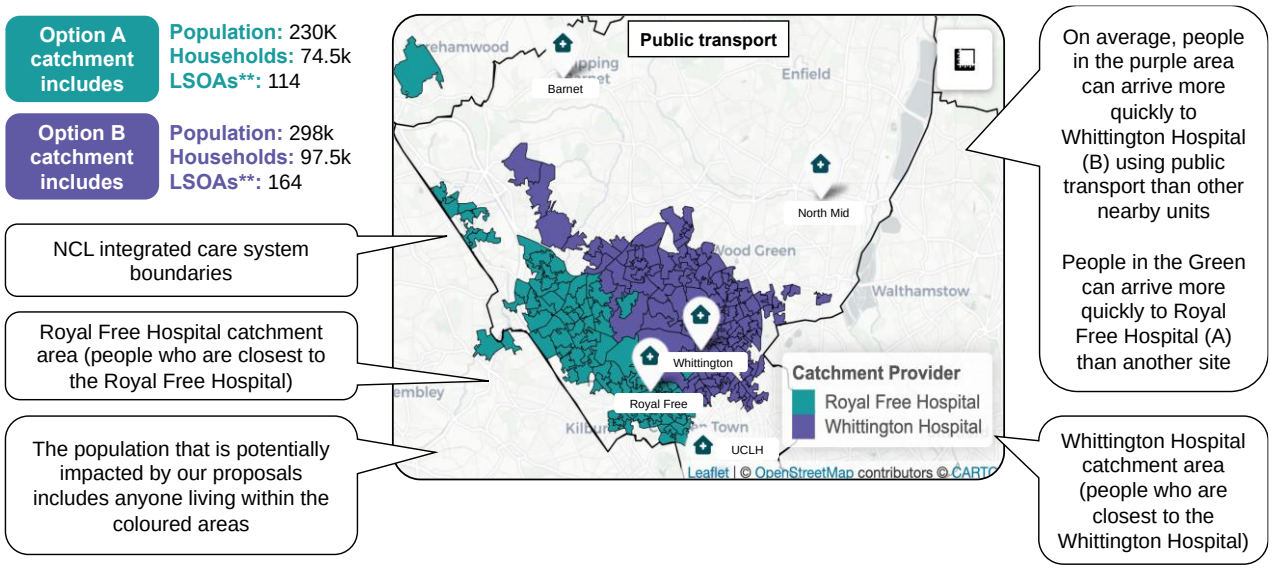
To define who may be impacted by proposed changes we have used travel times. Where currently either the Royal Free Hospital (option A) or Whittington Hospital (option B) would be someone's closest maternity unit, either by driving or public transport, they are defined as being potentially impacted under the option where that site no longer provides maternity and neonatal care. People who live in these areas would be classified as being within an 'impacted population'. In addition to this, from reviewing both our case for change and a subsequent public health evidence review, we identified groups where there is evidence of differential outcomes or experience of maternity and neonatal services. This supported us to identify a priority list of groups that we sought to engage with and understand the impact of changes on them in a more detailed way.

Given the geographical location of both hospitals and the use of travel times to inform our approach, there are different geographical areas that have been included in our analysis. The impacted populations, based on either driving or public transport, are identified in Figure 67 and Figure 68.



*Peak (private car / taxi) is defined as 9:00 AM on a Tuesday
**LSOAs are lower super output areas and are populations of around 1,000 – 3,000 people that are used to do travel analysis

Figure 67: Impacted populations for options A and B when driving at peak time



*Peak (public transport) is defined as 9:00 AM on a Tuesday
**LSOAs are lower super output areas and are populations of around 1,000 – 3,000 people that are used to do travel analysis

Figure 68: Impacted populations for options A and B for public transport travel times

In addition to geography, we also considered different characteristics that our populations may have, given our duties under the Equality Act 2010 and in order to ensure that we consider the different needs of service users. The characteristics or groups that we considered are highlighted in Figure 69.

Those with protected characteristics under the Equalities Act 2010	Other groups known to experience in equalities in health status, access to health care or where there is evidence of adverse maternity or neonatal outcomes

Figure 69: Population characteristics considered through the interim IIA

• Age • Sex • Race and ethnicity • Disability • Pregnancy and maternity • Marriage and civil partnership • Gender reassignment • Religion or belief • Sexual orientation	• People with poor English proficiency • People with a poor level of literacy • Carers, including parents of children with disabilities or long-term conditions • People living in areas of deprivation • Inclusion health groups, including people experiencing homelessness; drug and alcohol dependence; vulnerable migrants; Gypsy, Roma and Traveler communities; sex workers; people in contact with the justice system; and victims of modern slavery

Where possible, we have used both quantitative and qualitative analysis to understand what the impact of changes would be on the populations identified above. However, there are some groups for whom data is not available and where either engagement with service users has been used or a qualitative assessment has informed our impact assessment.

6.3.3 Demographics of the impacted populations for options A and B

The populations potentially impacted by changes are diverse. They have a range of different needs to be considered should changes be implemented. The characteristics of our potentially impacted population are:

- The percentage of women of child-bearing age is evenly distributed across the catchment population for the Royal Free Hospital (option A), whilst there is a concentration of women of child-bearing age east of the Whittington Hospital (impacted under option B).
- There are people considered to live in areas of deprivation as defined by the Indices of Multiple Deprivation:
    - Under option A, these households are concentrated to the west of the impacted population in Brent.
    - Under option B, this population is relatively close to the Whittington Hospital site.
- There are people who are considered to have poor English proficiency (including literacy):
    - For option A, they are concentrated to the west of the Royal Free Hospital in Brent.
    - Under option B, this population is in Wood Green, close to the Whittington Hospital.
- People with poor health are concentrated to the south of the Whittington Hospital (impacted by option B) and to the east of the Royal Free Hospital (impacted by option A). There are also some pockets of people with poor health in the west of the catchment (impacted by option A) in Harlesden and Willesden.
- The largest concentration of people with disabilities is between the Royal Free Hospital and the Whittington Hospital, with an above-average concentration of people with disabilities around the Whittington Hospital who would be impacted should option B be implemented.
- People from ethnic minority groups:
    - Black and Caribbean populations are located in the west of the impacted population for option A and close to the Whittington Hospital for option B.
    - Bangladeshi and Pakistani populations impacted by option A are located to the west and south of the Royal Free Hospital.
- The impacted population for option A includes a large group of people who are Orthodox Jewish.

Through analysis, we have identified two geographical areas that may have residents who could be more vulnerable to the impact of the proposed changes if they were implemented (Figure 70). These are:

1. Harlesden and Willesden for option A because:
    - 18% of people have poor English proficiency (including literacy)
    - 50% are people who are economically inactive
    - 64% are people from ethnic minority groups
2. Holloway and Finsbury for option B because:
    - 52% are people who are economically inactive
    - 15% of people have disabilities
    - 32% are people from ethnic minority groups

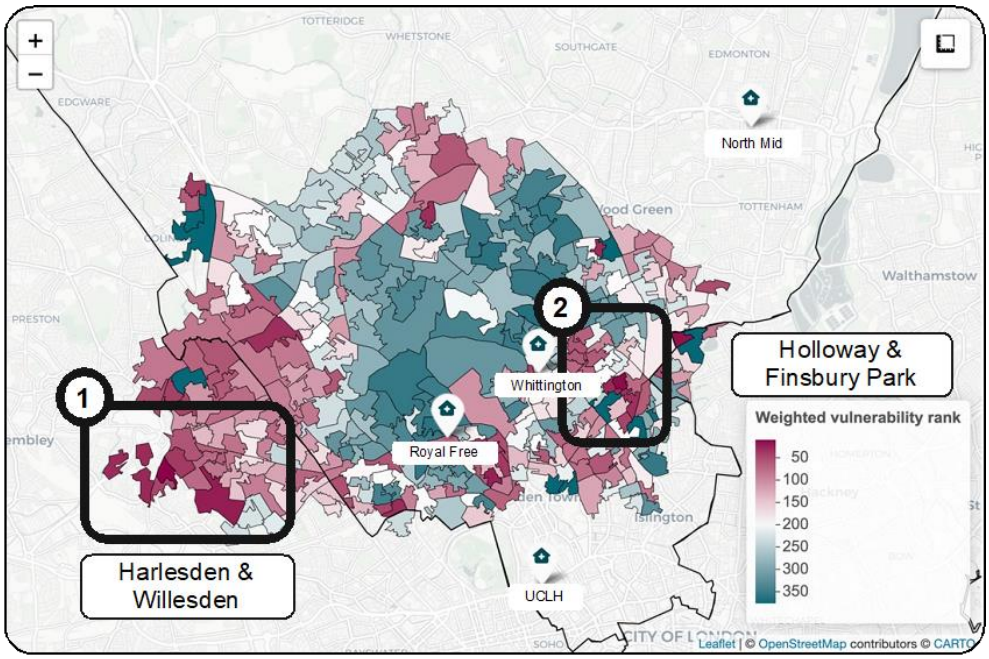


Figure 70: Geographical areas with residents who may be more vulnerable to the impact of changes if option A (Harlesden and Willesden) or option B (Holloway and Finsbury Park) were implemented

6.3.4 Assessment of the impact

The impact assessment aims to explore what we believe could be the impact of implementing either option A or option B on their respective potentially impacted populations. We have reviewed both accessibility (e.g., travel times) as well as wider potential impacts of changes on specific population groups.

6.3.4.1 Impact on accessibility

The potential impact on access of options A and B are similar for their respective potentially impacted populations. This is due to the relative geographical proximity of the Whittington Hospital and Royal Free Hospital, as well as the location of other nearby maternity units. The potential impact of the options on access is summarised in Figure 71 and includes:

- Implementation of either option could increase average car travel times by around five minutes for their respective potentially impacted populations.
- For travel by public transport, there is an average increase of 6-7 minutes for the potentially impacted populations.
- Options A and B would mean the potentially impacted population would be able to access an obstetrician-led maternity unit with a LNU (level 2) unit within 30 minutes when driving at peak time.
- There is a potential increase in average taxi costs of £4.43 for option A and £4.90 for option B. People living closest to each of the potentially moving units may pay up to an additional £11 per taxi journey. Option A could have a slightly higher potential increase in driving costs of £0.46 as compared to £0.42 for option B. This is likely to impact people who live in areas of deprivation more than other population groups.
- There is estimated to be a small impact of both options on driving costs of, on average, under £0.46 per journey.
- Accessibility by public transport is slightly better for the potentially impacted population for option B.

Option		Public transport travel times (mins)	Peak car/taxi travel times (mins)	Off-peak car/taxi/ ambulance travel times (mins)	Taxi costs	Driving costs
A	*Current*	*22.3*	*14.4*	*12.4*	*£17.55*	*£1.65*
	Future	+6.3	+5.3	+6.7	+£4.90	+£0.46
B	*Current*	*18.9*	*14.1*	*12.1*	*£16.10*	*£1.51*
	Future	+7	+5.8	+5.4	+£4.43	+£0.42

Figure 71: Impact on accessibility by option

We have undertaken travel time and cost analysis for potentially vulnerable populations, which can be found in the interim IIA. Through this we have identified that there is not an increased impact of travel time or cost as compared to the general population, but the impact of the additional time or cost for groups with vulnerabilities may require mitigations given the additional needs they have.

6.3.4.2 Other impacts of changes

Through both analysis and engagement with service users, we have sought to understand the wider impact of implementing changes. The impacts we have identified to date have been highlighted below:

- **Communicating and understanding the changes:** for groups who are not proficient in English or who have additional needs such as learning disabilities, it may be difficult to understand changes being made and therefore how to access the maternity and neonatal care they need.
- **Access and travel:** increased travel cost and journey times could impact on service users' ability to access care. This includes navigating to an unfamiliar hospital, cost of transport, travelling with other children to appointments, and availability of parking spaces.

- **Site accessibility:** wayfinding around an unfamiliar hospital and the physical accessibility of a hospital site may make it difficult for some service users to access services at an alternative maternity unit.
- **Wider needs:** some groups may need to attend hospital on a more frequent basis due to an underlying health condition that impacts on the complexity of their pregnancy. This could mean that they are more impacted by changes as the number of times they need to access care is greater.

6.3.4.3 Anticipated impact of the options

From undertaking both analysis and engagement, we have identified the potential impacts of each option on different groups within our potentially impacted populations. The benefits of the proposal are set out in section 8.2. In the table below, we have drawn out the groups we have considered and where there may be differences between the two options. Section 6.3.6 highlights the mitigations that have been developed for these impacts.

Option A potentially impacted population	Option B potentially impacted population
Overall, there is a smaller number of people living within this population both for peak driving (122,000 people) and public transport (74,500 people) compared to option B. There are fewer women of childbearing age, both as a percentage of the total population, and in absolute numbers.	There are more people living within this population for both peak driving (146,000) and public transport (97,500) compared to option A. There are more women of childbearing age, both as a percentage of the total population, and in absolute numbers.
On average, there is potentially a slightly higher increase in taxi costs for this population and they have slightly lower public transport accessibility compared to option B. Increased taxi costs may be impactful for this population as car ownership rates are on average 50% for this population. The areas with people who are experiencing socio-economic deprivation are further away from the maternity unit that may move, so the impact would not be as significant for this population compared to those who live close to the maternity unit.	On average, there is potentially a slightly lower taxi cost increase for this population. However, the area with people who experiencing socio-economic deprivation is close to the Wittington Hospital, so people may pay up to £11 more to travel to their nearest maternity unit. This is likely to be a significant impact for these people. This population has slightly lower car ownership rates than the population in option A (47%) and therefore may be more likely to use taxis to access care. This population does, however, have better access to public transport than option A.
There is a population of Black African and Black Caribbean people living in Harlesden and Willesden who would be impacted by option A. There is evidence that these people experience socio-economic deprivation and poorer maternity outcomes. There may be an impact around wayfinding, language and wider health needs given evidence of higher	There is a population of Black African and Black Caribbean people living in Finsbury Park. There is evidence that these people experience socio-economic deprivation and poorer maternity outcomes. There may be an impact around wayfinding, language and wider health needs given evidence of higher

prevalence of conditions such as obesity in this community. This population is located further away from the maternity unit that may move compared to other potentially impacted populations, and, by public transport, is already able to access either Northwick Park Hospital or St Mary's Hospital more quickly than the Royal Free Hospital. Therefore, they may not be as significantly impacted by increased taxi costs as those who reside closer to the maternity unit that may close (who are experiencing less economic deprivation and are less ethnically diverse). Given the potential vulnerabilities of this population, there would be a benefit to them accessing care at a maternity unit within the borough they reside in as this could support improved continuity of care pre- and postnatally.	prevalence of conditions such as obesity in this community. This population is located close to the maternity unit that may move compared to other potentially impacted populations, and is therefore likely to be more impacted by increased travel time and cost, although public transport accessibility in this area is better than for option A. It is of note that this geographical area is also the area with the highest number of people experiencing socio-economic deprivation within the potentially impacted population. There may be more of an impact on this population in terms of additional taxi costs and their ability to afford these higher costs. This population's next closest hospital would be in a different local authority borough; therefore, consideration would need to be given to how continuity of care could be maintained if they were no longer accessing maternity care from a hospital site within their local authority borough.
There is a large population of Bangladeshi and Pakistani people living within this catchment - both in Harlesden and Willesden and around Camden Town and Chalk Farm. The population located in Harlesden and Willesden is further away from the maternity unit that may move compared to other potentially impacted populations, and, by public transport, are already closer to either Northwick Park Hospital or St Mary's Hospital. Therefore, they may not be as significantly impacted by increased taxi costs as those that reside closer to the maternity unit that may close.	This impacted population has a higher proportion of disabled people as defined by the ONS description: people who assessed their day-to-day activities as limited by long-term physical or mental health conditions or illnesses are considered disabled[73]. There is an above-average concentration of people with a disability around the Whittington Hospital. People who are disabled have also been found to be less likely to own a car. The impact of increased taxi costs for this population could therefore be more significant than for the general population. People with disabilities may also be more impacted by other impacts such as wayfinding, accessing an unfamiliar hospital site, the physical

[73] https://www.ons.gov.uk/census/census2021dictionary/variablesbytopic/healthdisabilityandunpaidcarevariablescensus2021/disability#:~:text=People%20who%20assessed%20their%20day,the%20Equality%20Act%20(2010).

People who live in Chalk Farm and Camden Town are close to the maternity unit that may move, compared to other potentially impacted populations, and therefore there may be more of an impact for them in terms of travel times, although the public transport accessibility is better in this area making travel to another nearby site easier. There is evidence that these Bangladeshi and Pakistani people may experience worse maternity outcomes. There may be an impact around wayfinding, language and wider health needs given evidence of higher prevalence of conditions such as diabetes in this community.	accessibility of a hospital site and wider health needs that impact their maternity care.
There is a population of Orthodox Jewish people within the potentially impacted population, for whom changes may be impactful given specific needs they have around maternity care. This includes requirements around Kosher food, observance of Shabbat and the impact on travel and engagement with online or digital materials.	
People living in Harlesden and Willesden have additional vulnerabilities compared to the rest of the catchment population. They may be impacted by additional travel costs, accessing a hospital site if they are disabled or not proficient in English, finding care for dependents if they are a single parent and support with accessing online information and appointments due to low digital proficiency.	People living in Holloway and Finsbury have additional vulnerabilities compared to the rest of the catchment population. They may be impacted by additional travel costs, accessing a hospital site if they are disabled, finding care for dependents if they are a single parent and support with accessing online information and appointments due to low digital proficiency.
Black Somali is not a standard ethnic group within ethnicity recording, however, where this is recorded, over 90% of Somali communities live in the 40% most deprived areas of NCL, with 50% living in the 20% most deprived areas. This community is therefore potentially vulnerable to service changes due to their ability to afford additional travel costs, language and wider health needs.	Black Somali is not a standard ethnic group within ethnicity recording, however, where this is recorded, over 90% of Somali communities live in the 40% most deprived areas of NCL. This community is potentially vulnerable to service changes due to their ability to afford additional travel costs, language and wider health needs.

Analysis shows that there are Somali populations in the potentially impacted population for option A located in Kilburn.	Analysis shows that there are Somali populations in the potentially impacted population for option B, located to the east of the Whittington Hospital in Finsbury Park. Given their proximity to the Whittington Hospital, they may be impacted by the relatively higher increases in taxi costs to an alternative maternity unit.

In addition to the above identified impacts, we also have considered the impact on other groups for whom the data is not as readily available but who may experience different outcomes from maternity care. For all the below groups from the work to date, we have not found evidence of differential impact if either option A or B were to be implemented, however we will explore this further during formal consultation:

- **Older and younger pregnant women and people** are likely to have worse outcomes in childbirth compared to the general population. They may need to attend more appointments throughout their pregnancy and could be more impacted if these were further away.
- **People with learning disabilities** experience poorer maternal wellbeing and pregnancy outcomes. They may find navigating changes to services and accessing an unfamiliar hospital site more difficult.
- **People with serious mental illness** may have additional needs throughout their maternity care and may find navigating changes to services and accessing an unfamiliar hospital site more difficult.
- **People who are LGBTQ+** who are pregnant, and their partners, may have different needs during pregnancy, and engagement has shown that they can experience lack of inclusivity of language used throughout maternity care.
- People within **inclusion health groups** such as people who are homeless, dependent on drugs and alcohol, asylum seekers and Gypsy, Roma and Traveller communities, are known to experience poorer maternity outcomes. These groups may face barriers in terms of the cost to access care, digital exclusion and lack of proficiency in English.
- People who are **carers** for either children or adults with additional needs may need additional support to access maternity services, such as specific appointment times.
- People with **poor literacy** or who **do not speak English** may face barriers to understanding changes to services and travel, as well as accessing information about their care.
- The number of pregnant female to male **transgender people** in the catchment population is estimated to be extremely small, but these people may have complex medical needs and consistent support and engagement would need to be provided to ensure the impact on the female to male people who are transgender is understood and mitigated.
- There are potentially vulnerable people who access specific services that may change which we have considered - for example, there are midwifery teams that support vulnerable women and people at both the Royal Free Hospital and Whittington Hospital, and it would be important to maintain continuity of care as any changes are implemented, to facilitate the building up of trust between staff and service users.

6.3.5 Impact on sustainability

The NHS has set a clear and ambitious target to become net zero by 2040[74] and in line with this, NCL ICS has published a Green Plan[75] which aims to improve health and wellbeing through sustainable healthcare. The Green Plan is a coordinated effort across the system to align priorities to maximise impact. The Greener NCL Programme is clinically-led and brings together hospital trusts, primary care, local authorities and voluntary and community organisations and groups.

When considering changes to services, it is therefore important that we not only consider the impact of any resulting carbon impact from implementing changes, but also how to use the change to ensure we go further in making services more sustainable in the future. This section outlines what we anticipate the impact on sustainability to be of option A and B. In section 7, we outline the considerations for implementing the proposals from a sustainability perspective.

Four sustainability impact metrics have been reviewed to explore the potential sustainability impact:

- **Travel carbon impact:** additional distance travelled might result in higher carbon emissions, which needs to be examined from a net-zero standpoint.
- **Protected air quality:** the carbon impact from different options may have an adverse impact on air quality.
- **Building carbon impact:** building and refurbishing buildings causes carbon emissions, which are harmful to the environment.
- **Anchor institutions:** local hospitals are anchor institutions that support local communities and removal of services may impact adversely on local communities.

6.3.5.1 Impact of option A

These metrics provide an understanding of the impact on sustainability for option A. The impact on sustainability is outlined in Figure 72:

- **Carbon impact and protected air quality:** there is a small potential increase in carbon emissions, with an additional 216g per average journey, as a result of slightly increased travel times. This may need to be mitigated further as the option impacts on services within air quality management areas (AQMAs) for NO2 emissions and vehicular particulates.
- **Building carbon impact:** there would be a carbon impact due to refurbishing buildings in option A, but there would also be substantial environmental gains to be made in making the building more energy efficient, in line with government policy.
- **Anchor institution:** an estimated 127 WTE staff may move between hospital sites and the estate would be retained and repurposed so there is likely to be little impact on hospitals as anchor institutions.

Impact	Travel carbon impact	Protected air quality	Building carbon impact	Anchor institution
Option A	+ 216 g per average journey	AQMA: NO2 and vehicular particulates	Additional refurbishment as part	127.3 WTE moved

Figure 72: Sustainability impact for option A

[74] https://www.england.nhs.uk/greenernhs/national-ambition/

[75] https://nclhealthandcare.org.uk/wp-content/uploads/2022/04/North-Central-London-Green-Plan-2022-2025.pdf

			of Whittington's net zero strategy	(nurses, midwives, consultants & middle level)

6.3.5.2 Impact of option B

These metrics provide an understanding of the impact on sustainability for option B. The impact on sustainability is outlined in Figure 73 and is as follows:

- **Carbon impact and protected air quality:** there is a small potential increase in carbon emissions, with an additional 195g per average journey, as a result of slightly increased travel times. This may need to be mitigated further as the option impacts on services within air quality management areas (AQMAs) for NO2 emissions and vehicular particulates.
- **Building carbon impact:** there would be a carbon impact due to refurbishing buildings in option B, but there would also be substantial environmental gains to be made in making the building more energy efficient, in line with government policy.
- **Anchor institution:** an estimated 168 WTE of staff may move between hospital sites and the estate would be retained and repurposed, so there is likely to be little impact on hospitals as anchor institutions.

Impact	Travel carbon impact	Protected air quality	Building carbon impact	Anchor institution
Option B	+195 g per average journey	AQMA: NO2 and vehicular particulates	Additional refurbishment as part of Royal Free Trust net zero strategy	168.4 WTE moved (nurses, midwives, consultants & middle level)

Figure 73: Sustainability impact for option B

6.3.6 Mitigations for disbenefits

The work on the interim IIA, and particularly our engagement with service users, has supported the identification of impacts that would require mitigation should option A or B be implemented. There are some mitigations that would need to be put in place regardless of which option may be preferred and are set out in Figure 74. These focus on areas such as support for people accessing an unfamiliar hospital site and the cost of travel. There are however, some mitigations that are specific to either option A or option B based on the impacts that have been explored in section 6.3.6. These are set out in Figure 75 and Figure 76 respectively. Through consultation we would look to interrogate whether there are other impacts that have not yet been identified and what mitigations could be put in place to address these. The full list of mitigations can be found in Appendix B.

Mitigations needed should either option be implemented	
Theme	**Mitigations required**

Ongoing input into and feedback on our proposals	As the programme progresses, we need to continue to understand the impact of our proposals and develop mitigations through further engagement with potentially impacted groups. It is particularly important to ensure we hear from groups that are less likely to engage, or where there are barriers for them to do so.
Communicating around implementation should changes be agreed	Should a decision be taken to implement changes be made in future, changes need to be well communicated to residents. Mitigations will need to be put in place to ensure that all groups are informed of changes, and they understand their choices for maternity care. Clear information needs to be available to support and promote a choice of a maternity unit and birth setting that meets the need of expectant parents.
Mitigations for those who may need extra support to access an unfamiliar hospital	There are some service users for whom changes may mean attending a different hospital than they are used to. This change may be difficult to manage for some service users, and they would need extra support to manage this.
Information about how to travel to a hospital site	Should a decision be taken to implement any changes be made in future, it may result in service users going to a different hospital they are unfamiliar with. This may lead to changes to journeys to hospital that people are used to. Mitigations would be needed to ensure that people have information to plan their journeys to hospital.
Providing as much care locally as possible	Where possible, in order to mitigate the cost and time spent travelling to a hospital site, we would want to deliver as much care as close to home as possible.
Support with the costs of travel to hospital	There may be an impact on the cost of travel should changes be implemented. There will be some service users who are more impacted by this than others, and it is important that patients understand what is available to support them with cost of travel to hospital and any additional travel costs do not create a barrier to accessing care.
Access to parking	Access to parking spaces is variable across NCL sites. Parking has been raised as a particular consideration for parents who have a child admitted to a neonatal unit given their need to visit their child on an ongoing basis and in some instances over an extended period. Mitigations may be needed around parking to ensure that families can easily visit their child by car.
Supporting sustainability	The impact assessment identifies a small impact on carbon dioxide emissions as a result of changes to journey times as well as an impact of refurbishment of estate to deliver the capacity needed. Mitigations needed to address the impacts identified fall within the wider green agenda for the ICS and sites that are impacted. The NHS has a target to reach net zero by 2040 and the ICS and each individual Trust has their own plans to deliver on this.
Care for women who may have more complex pregnancies	Women and people with complex medical needs are looked after under networked arrangements with input from both obstetric physicians and other specialists. Under both options, mitigations may be needed to ensure that people with complex pregnancies can continue to access the specialist care they need

Figure 74: Mitigations needed if either option is implemented

Mitigations needed should Option A be implemented	
Theme	**Mitigations required**
There are specific mitigations that would need to be put in place	The populations of **Harlesden and Willesden** in the borough of Brent have been identified as a vulnerable population who are potentially more impacted should option

for the population of Harlesden and Willesden should a decision be taken in the future for option A to be implemented	A be implemented given their proximity to the Royal Free site.. Some specific mitigations that would need be taken forward for this population are: • **Engagement during the public consultation:** we would seek as part of consultation to engage with residents of this area to understand the impact of changes and any other mitigations that would need to be considered through implementation • **Communicating changes:** should changes be agreed, specific communication campaign should be considered. This would need to factor in the most commonly spoken languages within this area, and also non-digital formats given lower than average IT proficiency of the population • **Continuity of carer:** given population risk factors deprivation, ethnic diversity and ill-health, NCL would look to work with NWL to ensure that the population are considered to be prioritised to receive continuity of carer in their maternity pathway – we think that this could be a benefit to these patients to access maternity care within their borough as will mean increased provision of continuity post-natally • **Cost of travel:** when travelling by taxi, increased costs have been identified. We would look to put in place to range of mitigations identified under the proposals more generally but in a targeted way and ensure that NWL hospitals also have clear arrangements in place for: re-imbursement of expenses and other travel cost reimbursement (such as Congestion Charge and ULEZ reimbursement). We would also look to local VCS organisations who may be able to support further with the cost of travel expenses for groups that are particularly vulnerable
There are specific mitigations that would need to be put in place for the Orthodox Jewish community should a decision be taken in the future for the Royal Free to be the site that no longer provides maternity and neonatal care	There is an orthodox Jewish population who are within the current catchment of the Royal Free Hospital. Should this site no longer provide maternity care and neonatal care, mitigations would be needed to ensure that this group are not detrimentally impacted: • **Staff training:** Jewish women may have specific needs during their maternity care. Staff training in order to ensure requirements around Kosher food and Shabbat for example are understood would need to be put in place at sites anticipated to care for this population in the future • **Kosher food**: Ensuring all sites are set up to provide Kosher food for the pregnant woman or person during labour and permit food being brought from outside the Trust. • **Communication:** through engagement with the Orthodox Jewish community it has been identified that non-digital communication is more effective. Consideration should be given to ensuring communication of changes and subsequent communication about maternity care can be provided in a non-digital way. Working with community and VCS partners may be particularly effective in reaching the Orthodox Jewish community in NCL • **Observance of Shabbat:** specific considerations need to be made around observance of Shabbat. This may include avoiding discharge and not using the call bell. Sites need to ensure that appropriate protocols are in place to ensure that Shabbat can be observed by families receiving maternity care • **Modesty**: Orthodox women may choose clothes that cover their elbows and knees, as well as a wig, scarf or other head covering. Long-sleeved gowns should be made available during birth and permit the mother to wear a hair covering

Figure 75: Mitigations needed should option A be implemented

Mitigations needed should Option B be implemented	
Theme	**Mitigations required**
There are specific mitigations that would need to be put in place for the population of Holloway and Finsbury should a decision be taken in the future to implement option B	The populations of **Holloway and Finsbury** in the borough of **Islington** have been identified as a vulnerable population who are potentially more impacted should option B be implemented given their proximity to the Whittington Hospital. Some specific mitigations that would need be taken forward for this population are: • **Engagement during the public consultation:** we would seek as part of consultation to engage with residents of this area to understand the impact of changes and any other mitigations that would need to be considered through implementation • **Communicating changes:** should changes be agreed, specific communication campaign should be considered. This would need to factor in the most commonly spoken languages within this area, and also non-digital formats given lower than average IT proficiency of the population • **Continuity of carer:** given population risk factors of deprivation and ethnic diversity, NCL would look to work to ensure that the population are considered to be prioritised to receive continuity of carer in their maternity pathway. This would need to include a review of the catchment areas for community midwifery, to ensure coverage across Islington as well as ensuring that borough-based community antenatal provision being maintained. • **Cost of travel:** when travelling by taxi, increased costs have been identified. We would look to put in place to range of mitigations identified under the proposals more generally but in a targeted way and ensure that hospitals (some of which are in NEL) have clear arrangements in place for: re-imbursement of expenses and other travel cost reimbursement (such as Congestion Charge and ULEZ reimbursement). We would also look to local VCS organisations who may be able to support further with the cost of travel expenses for groups that are particularly vulnerable

There are specific mitigations that would need to be put in place for disabled populations who live close to the Whittington should a decision be taken in the future for Whittington Health to be the site that no longer provides maternity and neonatal care	The IIA identifies the largest concentration of disabled people between the Royal Free and Whittington, with an above average concentration around the Whittington. The ONS defines disability as “people who assessed their day-to-day activities as limited by long-term physical or mental health conditions or illnesses are considered disabled”. In order to put effective mitigations in place, we need to better understand the type of disabilities that there are within this population. Through the consultation, and further engagement with local groups we would seek to do this and develop specific mitigations that will support individuals continue to access maternity and neonatal care.

Figure 76: Mitigations needed should option B be implemented

6.4 Financial impact and implementation timelines

The key financial test set out by NHSE is that any proposal is affordable in terms of capital and revenue. It is also important that the proposals deliver value for money (VfM) for the taxpayer, although the proposals set out for maternity and neonatal services are quality driven.

The financial analysis undertaken at the PCBC stage outlines the capital and revenue requirements for both option A and option B. This has been assured by NCL finance team and by the regional finance team at the level appropriate for this stage in the process.

Letters of support have been received from the relevant trust boards and neighbouring ICBs for each of the options.

6.4.1 Capital costs

The approach to determine total capital requirements has been worked on by each trust, using a standard template. Assumptions (set out in Appendix E) in relation to inflation, fees, contingency and optimism bias have been agreed and tested through the Finance and Analytics working group as follows:

- Optimism bias of 20% where the capital works are at RIBA stage 0-1[76]. This is for all organisations with the exception of Whittington Hospital where capital works is at stage 3 and therefore has a 15% optimism bias assumption.
- Trust contingency of 10%
- Inclusion of design and commissioning fees in the cost per m^2
- Inflation assumption of 12.9% in single year schemes and 20.1% in multi-year schemes.

[76] https://www.architecture.com/knowledge-and-resources/resources-landing-page/riba-plan-of-work

Trust capital costs have been tested through check and challenge sessions with the NCL ICB Chief Finance Officer.

Both option A and option B would require a similar capital investment. The capital for delivering each of the options has been adjusted assuming the lifecycle costs for the site not in the option would not be incurred:

- **Option A**: would require a total capital investment of **£42.4m to deliver the additional estate requirements**. This includes the incremental estate, equipment and IT costs over the next 30 years. Based on current thinking this would be delivered over a 4-year period, although this may be subject to change. Additional estate requirements would be a combination of new build and refurbishment of existing estate. Where new estate is required, this estate would be compliant with the latest HBN standards for maternity and neonatal estate.
- **Option B:** would require a total capital investment of **£39.4m to deliver the additional estate requirements**. This total capital investment includes the incremental estate, equipment and IT costs over the next 30 years. Based on current thinking this would be delivered over a 4-year period, although this may be subject to change. Additional estate requirements would be a combination of new build and refurbishment of existing estate. Where new build is required, this estate would be compliant with the latest HBN standards for maternity and neonatal estate.

For both option A and option B the full capital requirements would be funded through the NCL ICB CDEL envelope.

7. Implementing the proposals

We have developed high-level implementation plans for our proposed options for consultation. Subject to the outcome of the public consultation, we expect a decision to be made on the proposal 6-9 months following the end of the consultation period. The information set out in this section outlines the high-level implementation plan as well as any enablers that would be required to support implementing the proposals. More detailed work would take place as part of the decision-making business case (DMBC). This includes access to capital, workforce, digital and communication and engagement. High-level risks and mitigations have also been considered.

7.1 Introduction

Oversight of the implementation process would be the responsibility of the relevant governance groups of relevant commissioners. This will include NCL ICB and potentially NHSE London Region Specialised Commissioning, depending on whether delegation of services has taken place at the point of implementation taking place.

The Start Well Programme Board would oversee the development and implementation of the new care model. Throughout implementation, it would meet regularly to provide direction, ensure central co-ordination, and manage risks and interdependencies. The Start Well Programme Board includes representatives from the ICB, providers, NHSE London Region Specialised Commissioning, local

authorities, and neighbouring ICS regions. As the programme moves into implementation, current membership would be reviewed.

Executive Leads from each organisation, with support from the Start Well programme team, have been supporting the Start Well work and would take accountability for the implementation alongside a named senior operational lead from each hospital site. They would be responsible for ensuring effective working relationships across NCL, and neighbouring ICSs as needed for planning and implementing the changes. Several workstreams would be established to lead on both the planning and development required to support changes in service provision. Governance arrangements would have clear links with ICB arrangements, as well with impacted trusts, to ensure that implementation plans and management of risk across the system are aligned. The implementation plans for changes to individual sites would be developed at site level and would feed into the overarching plan across the ICS.

7.2 Timelines for implementation

Pre-consultation activities and the next stages of the business case process (i.e., decision-making business case, outline business case (OBC) and full business case (FBC)) would be dependent on the outcome of public consultation. Indicative timelines would mean a decision is made 6-9 months following the end of public consultation, with completion of the OBC and FBC 12 months following a decision.

Following a final decision by the NCL ICB Board and NHSE London Region Specialised Commissioning, and depending on the option chosen, more detailed and organisation specific implementation plans would need to be developed. A high-level implementation plan is outlined in Figure 77.

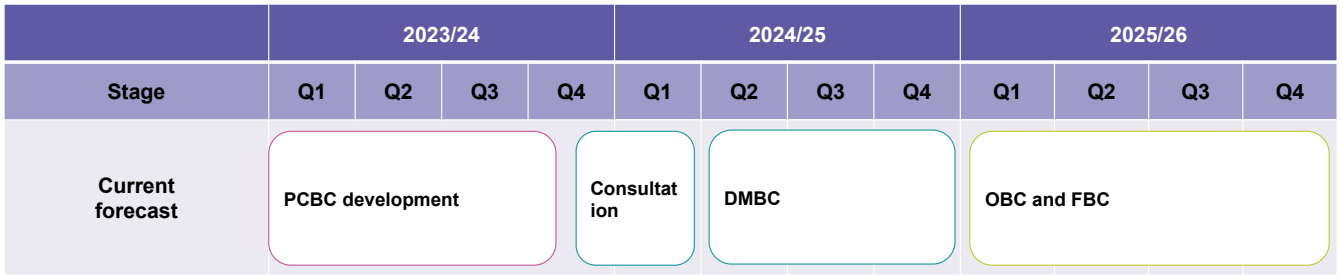


Figure 77: High level implementation plan

7.3 Key enablers for implementation

There are key enablers which are vital for implementation of option A and option B, and which have been considered in the planning and impact of the option for consultation. These are access to capital, transition cost funding, workforce, digital and estates. Workforce underpins the delivery of our plans, and both options would require some staff to change their site of work. Careful planning would seek to ensure that we are able to support our workforce through transition and that the risks of implementation for all impacted units are fully considered.

7.3.1 Further engagement and cocreation of implementation plans

Key to the programme's work to date has been the engagement and input from both staff and service users. Through implementation we will seek to continue to involve a range of stakeholders and service users in the development of plans. This will ensure that they are informed by expertise and experience, which in turn will ensure plans are fit for purpose and can be implemented successfully. There will be elements of these implementation plans that need to be owned at a place or neighbourhood level. This will ensure that they are informed by local knowledge and will ensure that important linkages between local care providers such as primary care, community services and social services are maintained as changes are implemented.

7.3.2 Promoting choice and enhancing midwifery-led care

As is outlined in the care model section, midwifery-led care provides clinical benefits for women and people who have uncomplicated pregnancies. We know that currently our midwifery-led services (both birth centres and home births) can be impacted at times by staffing shortages, which means that this option is not consistently available. Through implementing the changes and consolidating staff across fewer units, we would hope to be able to provide a more consistent offer of midwifery-led care. In addition to ensuring that the offer is made more consistently available, there needs to be further enhancements to both home birth services and midwifery-led units. Through doing this we anticipate being able to make better use of the capacity we have in NCL and ensure that women and people can give birth in settings that meet their needs and preferences.

7.3.2.1 Home birth

Through implementation, we would need to consider the following areas to ensure there is a consistent, high-quality home birth service in NCL:

- Through the LMNS, sector-wide policies and procedures would be developed and put in place to standardise home birth care.
- Referrals from pregnant women and people where there are no active clinical issues and no maternal or fetal factors, who indicate they wish to have a home birth, would be sent directly to the home birth team to facilitate early conversations, and support informed decision making.
- Ensure there continues to be a process of shared learning from outcomes of home births between providers across maternity units, through the LMNS quality and safety forum.
- To enable pregnant women and people to give birth in the setting of their choice and avoid the suspension of home birth services, local and NCL-wide escalation procedures and support mechanisms would be in place for home birthing teams, such as utilisation of alternative midwifery or specialist staff and mutual aid.
- Working with the regional team, NCL would implement guidelines for those who wish to give birth outside of guidance, with midwives working in partnership to ensure individual choices can be respected as safely as possible.
- Clear pathways are already in place for pregnant women and people who require transfer to a nearby obstetric unit should complications arise. Should any changes be made to the obstetric units in NCL, these pathways would be reviewed and clearly articulated.
- As home birth teams are staffed by different trusts and cover a geographical footprint, a review of home birth geographical boundaries would be required should any changes be

made to the overall number of maternity units, to ensure a consistent and equitable distribution of teams is in place.

7.3.2.2 Midwifery-led birthing units

The other option for women to be supported to have a midwifery-led birth is to give birth in a birthing unit. During implementation we would need to consider the following areas to ensure that all midwifery-led birthing units support high-quality care:

- Work would be needed to enhance the unique identity of NCL midwifery-led birthing units, to ensure the public can recognise each centre as separate entity from the hospital obstetric unit.
- The environment in all NCL midwifery-led birthing units would be reviewed to ensure a warm, welcoming, relaxed, non-medicalised environment is available. This may include ensuite facilities, a double bed, mood lighting and music.
- Birthing pools, birthing balls, bean bags, birthing stools and other aids would be available to support women and people giving birth in our birth centres.
- All forms of pain relief would be available, with the exception of an epidural which requires administration by an anaesthetist. Anyone who requires an epidural would be transferred to the co-located obstetric unit.
- Should a complication occur during labour or delivery, pathways would be in place to ensure timely transfer of the pregnant woman or person to the obstetric-led unit, which is near the midwifery-led birthing unit.
- To ensure pregnant women and people can give birth in the setting of their choice and minimise the temporary closure of midwife-led units due to insufficient staff, escalation procedures and support mechanisms would be in place, such as utilisation of alternative midwifery or specialist staff and mutual aid.

7.3.3 Finance

Delivering the required capacity and estate requirements is critical for both options. The capital investment would be funded within the ICB CDEL envelope and through the organisations involved. Where capital requirements exceed £25m for Whittington Hospital in option A, an OBC and an FBC would be required. This would be in line with the guidance set out by NHSE.

The impact of the proposal has been modelled to show that the changes are affordable. As changes are made, there are expected to be some costs associated with transition. These include:

- Programme team of £1 million to support decision making and implementation of the programme over at least 24 months
- Communication and engagement of £200,000 to communicate the proposed changes to the public and community workforce.
- Training costs of £244,000 to train 81 WTE nurses across NCL to be QIS to meet the required standards.

The expected capital costs to deliver the enabling schemes would be captured within the capital costs. There are also double running revenue costs to consider due to the costs of implementing

services during the implementation phase of the programme. These would be explored further in the OBC.

7.3.4 Workforce

Supporting our workforce both through the next steps of the programme and through the transition to new arrangements should changes be agreed would be fundamentally important to the successful implementation of proposals. In addition to this, through implementing the changes there would be an opportunity to improve recruitment and retention of staff across NCL through improved staff experience and enhanced training and development opportunities. It is important that if the proposals are implemented, NCL retains the current workforce and ensures that staff working in our maternity and neonatal units are reflective of our local populations.

The NCL ICS People Strategy (2023-2028) is key to the delivery of the ICS Population Health Improvement and Integration Strategy and as such is critical in its ability to pivot the health and care system to realise ambitions for improved health outcomes for residents and beyond. The strategy has been co-designed with colleagues across partner health and care organisations within NCL and this strategy represents the breadth, depth and diversity of workforce challenges and opportunities across our newly formed ICS. It sets out the ambition for how the workforce will operate over the next five years and paves the way for a future of increased efficiency and productivity and better health outcomes for the population of NCL. This strategy would be a critical enabler to delivering the workforce requirements set out in the proposed care model.

To meet population health improvement goals, support local social and economic development (as anchor institutions) and move from reactive, episodic care to coordinated, preventative and community-based services, there is a priority to reimagine the workforce model and realise the ambition of increasing health and social care integration over the next five years. This includes each organisation's commitment within their local place system as anchor organisations and also includes contribution to apprenticeship programmes, presence at career and job fairs and local engagement and interaction with local schools and colleges (offering work experience and mentoring schemes). Anchor work is driven through the local borough integration partnerships, as well as through the NCL People Board.

The NCL ICS People Strategy is focused on strengthening development of effective working relationships between health and care professionals, both spanning the levels of healthcare from primary to quaternary services and across the wider social care, community, voluntary and third sector provision, whilst recognising the valuable work that unpaid carers do every day.

Building on the aims of ‘One Workforce for NCL’ the proposed changes would reduce fragmentation and variation in staff experience across maternity and neonatal units and would build and encourage collaboration and eliminate competing for staffing. As part of the DMBC development, the staffing will be remodelled to ensure safer staffing establishments are reset.

Compliance against BAPM staffing standards for neonatal units would be an indicator of success, as well as meeting Ockenden recommendations. A focus on optimising talent and ensuring staff are working at the top of their skillset is central to the people strategy; it has been adopted by the

Start Well change programme to create a flexible and dynamic workforce which would be adaptable to meet local needs and continually deliver high-quality sustainable care.

Following the decision by the NCL ICB Board and NHSE London Region Specialised Commissioning, a comprehensive programme of work would be developed to plan and manage changes and developments across NCL and the impacted organisations. This will need to be led by NCL ICB, NHSE London Region Specialised Commissioning, and providers working collaboratively, ensuring that staff are supported throughout the changes and that they continue to feel valued and developed.

7.3.4.1 Supporting staff and organisational development (OD) through the changes

The continued engagement of our workforce is key to delivering proposals. Part of the rationale for undertaking this work is to ensure that staff have the opportunity to work in environments that are set up to enable them to deliver high-quality patient care, and we want to ensure that they continue to feel valued as the programme progresses.

The programme has already made efforts to ensure this is the case through careful communication and engagement with staff. This has included:

- Executive-level leadership from each of the impacted trusts on the programme to ensure all trusts are represented.
- Coordinated staff briefings across sites at key programme intervals.
- Consistent written updates published on staff intranets.
- Involvement of senior clinical, finance and analytics teams in the programme through membership of the CRG and finance group.
- An organisational development programme during the case for change development through which some senior clinical staff received 1:1 coaching, specialty specific action learning sets were undertaken, and wider workshops were held.

As the programme moves into consultation, it will be integral to continue with this level of consistency and engagement with staff to ensure that they understand the proposals being put forward, are clear how they can provide their feedback and understand that at this stage, no decisions have been taken to implement any changes. Throughout consultation we will do this through:

- Coordinated, consistent staff briefings around the commencement of the consultation.
- Offering multiple mechanisms for staff to provide feedback.
- Providing information to staff about where they can seek support.
- Being clear about the potential timeline following consultation and decision making for implementation, and what support would be in place for staff should any proposals be implemented.

Should there be any agreement to implement proposals, the impact of changes on workforce, change in ways of working and the uncertainty that this creates would be one of the more difficult aspects of the transition and implementation. The impact of changes on staff numbers and structures is potentially one of the most complex areas for transition and one likely to create

significant concern amongst the current workforce. Policies for staff transition would be developed as part of implementation planning. It would be critically important to communicate plans quickly and comprehensively with any affected staff. Regular briefings, individual 1:1s, support to senior leaders within organisations and engagement events would be held with all staff likely to be affected by the proposed changes.

7.3.4.2 Workforce development, recruitment, and retention

As has been outlined in our case for change, challenges around recruitment and retention and the gaps this leads to in staffing can sometimes have an impact on the delivery of maternity and neonatal care. Through implementing changes, we would want to use the opportunity to improve staff experience as well as reduce vacancies. NCL ICS recently published a People Strategy[77] which outlines the ambition of 'one workforce' for NCL, which will allow staff to have meaningful work and multiple careers within the ICS. In implementing the proposals, we would use the three pillars outlined in the strategy to improve recruitment, retention and wellbeing of staff: workforce supply, workforce development and workforce transformation. As implementation plans progress, we would also make the most of opportunities and new roles identified in the NHS Long Term Workforce Plan[78]. This would mean the following:

- Working closely with education providers to provide routes into careers in maternity and neonatal care.
- Making sure that career opportunities are made available to our local populations. This may be done through considering further provision of apprenticeship placements, as well as placements for T-Levels[79]
- Providing the infrastructure to support staff to work across sites to maximise training opportunities and sharing of specialist knowledge.
- Maximising the breadth of training opportunities in NCL through joint training, development and Continuing Professional Development between providers supported by the LMNS.
- Continuing to engage with NHSE Workforce, Training and Education directorate, who have been a key member of our clinical reference group, to ensure that continuity of training would be maintained through implementation and that the model of care maximises the opportunity to improve training and education for all levels of staff.
- Supporting the inclusion and diversity of our workforce.
- Adopting new ways of working, including through making best use of digital advancements.
- Further development and expansion of existing initiatives around recruitment and retention, such as the NCL Capital Nurse and Capital Midwife international recruitment[80]

To ensure our staff in maternity and neonatal units are representative of our local population, we would build on the NCL approach to equality, diversity, and inclusion (EDI) across each of the key strategic pillars within the people strategy. The system has commissioned an inclusivity audit of recruitment services through eight diversity lenses, developed an executive talent pipeline, is supporting 14 aspiring directors via a 'Future Leaders' programme and has built system networks

[77] https://nclhealthandcare.org.uk/wp-content/uploads/2023/07/NCL-ICS-People-Strategy-FULL-Final.pdf

[78] https://www.england.nhs.uk/publication/nhs-long-term-workforce-plan/

[79] https://www.tlevels.gov.uk/

[80] https://www.capitalnurselondon.co.uk/about-us/

for EDI and talent management. The LMNS and the NCL People Board are monitoring progress of diversity within the workforce to ensure it better reflects our local population and this would be an important consideration should the programme progress to the next stage.

7.3.4.3 Student nursing and midwifery placements

As is outlined in section 5.11.2, NCL sites including both the Royal Free Hospital and Whittington Hospital host a number of student midwife and nursing placements. Should either option be implemented, there would be a resulting impact on these placements that would need consideration during implementation. The impact would be considered in more detail with the education providers' deans and programme leads, however the following principles to placements would be considered:

- Where possible, we would like to retain placements in NCL to ensure we continue to train our future nursing and midwifery workforce.
- Deans and programme leads would be engaged at an early stage to ensure they are aware of implementation timelines and the impact on placements.
- The timing of implementation would be considered, to ensure the least amount of disruption to students during the academic year.
- Changes provide the opportunity to consider the provision of placements for apprenticeship roles in nursing and midwifery, training for maternity support workers and Health T-level placements.

7.3.4.4 Supporting post-graduate doctors in training

Post-graduate doctors in training play a key role in the services outlined in the PCBC. If changes were implemented, there would be an impact on training posts in NCL for paediatrics, obstetrics and gynaecology and anaesthetics. In order to implement changes, we would continue to have a dialogue with relevant heads of school and post-graduate deans, to ensure that training posts were retained within NCL where possible and that each unit had the right mix of training posts to support both service delivery and training. The timing of implementation would also need to be considered with those that coordinate training rotations in order to minimise any disruption. More detailed work around this would be undertaken should a decision-making business case be developed.

7.3.4.5 Allied healthcare professional (AHP) recruitment

The neonatal care model identifies that AHP and psychologist provision in neonatal units should be in line with BAPM standards[81]. Through the work on the options appraisal and case for change it has been identified that NCL currently has a significant deficit of AHPs and psychologists compared to the standards. This is an issue across London and nationally and is something that was identified as a priority by the Neonatal Critical Care Review[82].

[81] BAPM. Service and Quality Standards for Provision of Neonatal Care in the UK. 2022. https://www.bapm.org/resources/service-and-quality-standards-for-provision-of-neonatal-care-in-the-uk

[82] NHS England. Implementing the Recommendations of the Neonatal Critical Care Transformation Review. 2019.

The London Neonatal ODN is taking an important role in supporting units to address the deficit in AHP and psychology staffing. They have employed lead AHPs in occupational therapy, physiotherapy, speech and language therapy (SLT) and dietetics, as well as a lead clinical psychologist. These leads are working across the London ODN region to support recruitment, retention and training of therapists in these disciplines.

The ODN recently prioritised the allocation of additional funding to support recruitment of AHPs in neonatal units across London to support implementation of the Ockenden Report recommendations [83]. Units in NCL have been allocated an additional 1.6 WTE across occupational therapy, dietetics and speech and language therapy. Recruitment is currently underway into these roles. The ODN has also supported the recruitment of a 0.4 WTE clinical psychologist to work across NCL neonatal units, who will support existing psychology colleagues with training and supervision for complex cases, whilst linking in with local care coordinators to embed family integrated care.

These actions have improved provision to AHPs and psychologists in NCL, however there remains a gap in provision that needs to be addressed. Given the scarcity of AHPs nationally, the ODN is working with trust teams as well as their leads across the disciplines to think about more innovative workforce models for provision, such as networked arrangements and the optimum utilisation of AHPs in line with the needs of a neonatal unit. They are also working to ensure that AHPs have the support and training opportunities to make the roles they are recruited to attractive and ensure that their career development is supported. This is done through bringing together the professionals as a multi-disciplinary team (MDT) to create a supportive network of experienced staff.

In the longer term, there is ongoing work to better understand the impact of AHPs in neonatal units through the appointment of a clinical research psychologist. This role will aim to better quantify the benefit of AHPs to neonatal units by looking at aspects including length of stay and developmental outcomes. This will support improved articulation of the improvements that can be achieved through improved AHP provision.

7.3.5 Digital

The Start Well programme aims to promote the use of technology in line with the ICS vision of helping our residents to live the fullest lives possible and tackling health inequalities. By working in partnership to harness the latest digital technology and joined-up information, we will ensure pregnant women and people can access the right care quickly and effectively. In tandem with the NCL digital programme, work is underway through a dedicated digital workstream in the NCL Local Maternity and Neonatal System (LMNS) to digitally transform maternity services by developing a clear strategy and improving data quality.

At present there are a range of different IT systems in place across NCL, which makes sharing data between different NCL organisations challenging. Thorough the LMNS digital workstream, work has commenced to consider how interoperability could be improved and a standardised data

[83] Ockenden review: summary of findings, conclusions and essential actions. 2022.

set for maternity be agreed. This will need to align and be part of the overall NCL Digital Strategy, which is in development.

Digital support for pregnant women and people has improved through the recent implementation of the ‘Mum and Baby’ app in spring 2023. The app enables self-referral to maternity services, provides a personalised guide to services and helps residents navigate their choices for maternity care in NCL.

In addition to the regional and NCL work on improving data quality and exploring data sharing mechanisms, we are continuing to explore the benefits and feasibility of a central booking system. The centralised system has the potential ensure there is an equitable distribution of pregnant women and people to midwives based on their geographical location and facilitate early streamlined care.

7.3.6 Embedding sustainability

In section 6.6, we outline what we anticipate the impact of each option to be from a sustainability perspective. During implementation, we would seek to ensure that sustainability is embedded through all workstreams, and that opportunities are taken to make services as sustainable as possible. This would need to draw on the NCL ICS Green Plan, as well as each trust’s own green agendas, which focus on carbon reduction strategies. We feel that delivering this change could provide a real opportunity for our services to be made more sustainable. Areas that we would explore during implementation include:

- How greener staff and patient (where appropriate) travel to hospital could be promoted.
- Ensuring that appointments would be offered in community settings or virtually, to reduce emissions from travel to hospital sites.
- How building work required to implement changes could be done in the most sustainable way.
- Considering how any new building capacity can be made as energy efficient as possible.
- Ensuring that building capacity would be used effectively - we know that some of our capacity is currently underutilised, and if this could be repurposed or used differently it would have a positive impact on sustainability.
- Considering how emissions from leaking anaesthetic gases, particularly nitrous oxide - otherwise known as ‘gas and air’ - can be minimised. This may involve providers considering how their gas is supplied.
- Climate resilience of services considering our changing climate, and how these could be mitigated against - for example trust contingency plans around flooding or heatwaves.

7.3.7 Stakeholder engagement

The Start Well programme would continue to actively engage stakeholders in the detailed planning for, and during, implementation. Our approach to communications and engagement would follow the same principles, will be inclusive and co-ordinated and would include the following groups:

- **Patients, public and wider stakeholders:** to ensure that patients and wider stakeholders (such as MPs and local authorities) are well informed about what changes are proposed and

how it will impact on them and can contribute to co-design of the implementation plans as appropriate.

- **Providers:** would be taking a lead in the planning and implementation of service change, particularly to support service change impacts that need to be implemented smoothly across multiple trusts.
- **NHS staff:** to actively engage with affected staff to build awareness of the proposals and to consider and promote their central role in making these changes happen, so that they can contribute to co-design of the implementation plans as appropriate.
- **Clinicians:** would need to be actively involved in the planning and implementation of service change to ensure patient safety is not compromised as changes are made. They would also need to contribute to co-design of the implementation plans as appropriate.

7.4 Implementation risks and dependencies

7.4.1 Approach to risk management

Effective risk management is imperative not only to provide a safe environment and improved quality of care for patients and staff, but also for the management and planning of publicly accountable health services. The consolidation of clinical services across organisations brings risks which would need to be carefully managed throughout implementation and beyond.

The risk management process involves the identification, evaluation, and mitigation of risk as part of continuous practice aimed at reducing the incidence and impact of risks, which may include risks related to patients, people, performance, and partnerships. Risk management is therefore a fundamental part of both the operational and strategic thinking of every part of service delivery.

Risk management would be undertaken on an ongoing basis to monitor the transition and early years of implementation. It would be integral to ensure that risks are managed both at an ICS and trust level and that there is connectivity between risk registers held between organisations. This would ensure that ambitions can be met, any unintended consequences can be highlighted, with mitigating actions swiftly agreed.

7.4.2 Programme risks

The timelines outlined are indicative, however once a decision has been taken on changes to services, any sites impacted by the proposals may be affected as follows:

- Vacancy rates may begin to increase as it becomes difficult to recruit staff.
- The service may become less attractive to trainees.
- Units could become increasingly difficult to operate safely if they find it difficult to recruit and retain staff.
- Any improvement initiatives and capital developments may be postponed or halted with a potential consequent impact on quality of care and patient experience.
- People may choose not to go the impacted units during the decision-making or implementation phase and overwhelm units that are common in all options.

These potential risks have been recognised and discussed by the Maternity and Neonates CRG. As part of the implementation planning, consideration into mitigations against risks have been developed as outlined in Figure 78.

Category	Risk	Mitigations discussed
Quality	Quality and safety of current services at the impacted unit is not maintained due to destabilisation through the consultation and implementation process	• Work with other units in NCL to help support the impacted unit and provide resource as needed • Ensure communication with staff impacted is clear and undertaken early. Provide reassurance there are opportunities to move to another unit and the benefits of the proposed changes.
	During the transition, pregnant women and people do not choose to deliver at the impacted units and overwhelm the other units in NCL which are common in both options	• Ensure clear and early communications to the public which outline the timeline of proposed changes. Specifically engage with those who are booked in to deliver at impacted units. • Monitor the activity and bookings at alternate units in NCL to ensure there is capacity to deal with any potential additional activity
	A different provider configuration could disrupt established relationships with local authorities and their teams e.g., Health Visiting	• Engagement of local care providers through implementation planning to ensure that dependencies and touchpoints between organisations (including local authorities) are understood
	The proposed clinical models may not address the needs of the Integrated Care Board (ICB) population, address existing health inequalities and create inequitable access to services for some groups.	• Integrated Impact Assessment (IIA) has been developed and has identified the groups within the population who are potentially adversely impacted by the proposals. Engagement with these groups to determine any impacts is underway, including working through the potential mitigations.
Workforce and transition period	Staff from the closing unit may not move to other units within NCL resulting in a workforce gap that would be required to recruit to	• Communicate plans with staff across NCL quickly • Undertake regular briefings, individual 1:1s and host engagement event with all staff likely to be affected by the proposed changes • Develop a system workforce and OD plan to help manage the change and transition, working with Trust Organisational Development Leads
	Unable to recruit to the workforce standards outlined in the care model which would mean units do not meet the workforce standards	• Develop NCL wide recruitment and shared set of principle • Communicate the positive benefits for the future reconfiguration including the training and development opportunities for staff
	Units across NCL are unable to recruit as a result of the proposed changes	• Communicate the implementation timeline and future job prospects with potential candidates • Work with ICS to explore offering NCL roles, rather than organisational roles

Communications and engagement	Pregnant women and people turn up to the closed unit during the implementation	• Develop communications plan and ensure women and people booked into impacted units are clearly communicated with • Work with local Maternity Voices Partners (MVPs) and Voluntary and Community Sector (VSC) to reach groups that may be harder to reach • Have clearly defined protocols in place in case a pregnant women or person turns up to the closed unit
Capital and revenue affordability	Investment in UCLH neonatal capacity as part of the BAU capital plans are not implemented which would impact the capital requirements in both option A and option B	• Progress for this works will be monitored and ongoing communication between the Programme and UCLH will help to endure any risks to delivery are flagged early
	Based on historic trends and economic instability inflationary impact may be higher than expected and result in understated capital estimates	• Prudent inflationary assumptions have been used in both options
	Capital requirements may be higher and not affordable in the NCL ICB CDEL envelope	• Assumptions used in determining capital requirements have been prudent and account for the relative stage the capital plans are at. The cost per m^2 have been benchmarked against other schemes which have been recently delivered. All capital requirements include significant contingency values (between 30-40%). • Phasing of the capital schemes will be reviewed and can be updated if needed

Figure 78: High level risks and mitigations

In addition to monitoring the operational risks resulting from formally consulting on the proposed changes, the programme is continuing to review the current clinical quality of care delivered across all maternity units. The current focus of the CYPMN Board and LMNS is about improving the care at all the maternity units now and this includes focusing on Ockenden and CQC recommendations. North Middlesex University Hospital NHS Trust is due to have a published CQC report following an inspection in summer 2023, and work would be ongoing across all units throughout this programme to continue to improve the care at all maternity units.

7.5 Decision-making process

Decision making on these proposals will be preceded and informed by:

- The outputs of early engagement
- The options consideration process
- Independent review by the Clinical Senate of the care model
- Assurance by NHSE of this PCBC
- An interim IIA with mitigations
- Formal public consultation.

Following assurance and consultation, a DMBC will be developed to review the outcomes and set out final recommendations for change. As set out in the NHS guidance 'planning, assuring, and delivering service change for patients'[84], the DMBC will ensure that:

- The final proposal is clinically, economically and financially sustainable
- The proposal can be delivered within the planned envelope for capital spend
- A full account is given of how views were captured during consultation.

The DMBC may be assured by NHSE before final decision making. Implementation of our proposals is therefore dependent on the outcomes of public consultation and decisions taken as part of the DMBC.

For major spending proposals (capital investment over £25 million for NHS trusts and foundation trusts in financial distress and of £50m for foundation trusts not in financial distress), there are key stages in the development of a business case, which correspond to the key stages in the spending approval process for NHSE. Following the development of the SOC, an OBC or FBC would be required.

8. Benefits

Delivering our vision would change the way in which maternity and neonatal services are organised and delivered. The proposed care model is expected to deliver a range of benefits. These benefits would be felt by those who use our services, their families, staff and the local populations we serve. Reconfiguring our services, investing in our estate and providing improved training opportunities would help us realise our ambition of delivering high-quality care for everyone, improving health outcomes and would ensure future sustainability of maternity and neonatal services.

The expected benefits outlined demonstrate how our proposals for services address the opportunities for improvement highlighted in the case for change. We expect these proposals would deliver positive impacts in terms of clinical benefits, economic, workforce and estate benefits.

8.1 Benefits framework

The benefits framework enables the quantification and monitoring of the successful delivery of benefits from the changes that are implemented. It is important to translate the proposals into specific benefits, so that the public can have a better understanding of what will be achieved and improvements from the Start Well programme can be measured. The benefits framework aligns to the opportunities for improvement outlined in the case for change:

- Ensuring equality in maternity service provision and experience
- Ensuring choice is maintained for our local population
- Matching the capacity and choice to the current and future needs of our local population

[84] https://www.england.nhs.uk/wp-content/uploads/2018/03/planning-assuring-delivering-service-change-v6-1.pdf

- Sustainability of the Royal Free Hospital SCU (level 1)
- Addressing workforce vacancies and improving recruitment and retention
- Having the right maternity and neonatal estate.

Setting out the benefits framework also demonstrates that clear benefits can be realised through the proposals and that consideration has been given to how this will be achieved. The benefits set out have been informed and tested with clinicians through the Maternity and Neonatal CRG, and the finance and analytics group (where the benefits are cash-releasing).

8.2 High-level benefits

The main benefits of the proposal would be:

1. **Care that ensures equity of provision and experience**
    - Our care model has been designed to ensure that all pregnant women, people and babies have access to the same services. This includes providing community neonatal outreach services as part of the NCL virtual ward rollout that is accessible across all boroughs and the same provision of neonatal care no matter which unit the baby is born in. We expect that the care model would provide a more personalised experience and ensure that individuals are supported and communicated in a way that best suits their own needs.
    - All pregnant women and people in NCL would maintain the current choice of care that is obstetric, or midwifery-led and the choice of a home birth, birth centre or obstetric-led unit delivery. The proposals present an opportunity to improve the environment of alongside midwife-led units and ensure that all pregnant women and people have access to the same maternity and neonatal services and that these align to the requirements of the population.
    - The proposed care model provides an opportunity to promote continuity and integration with other local services. The projected flows back to NWL or NEL, particularly for pregnant women and people who reside in these boroughs, provides an opportunity to improve the continuity of care for these individuals. This includes being able to integrate the acute care pathway with local services.

2. **Services which are clinically sustainable**
    - Reconfiguring our neonatal units in NCL and ensuring all units are either a designated LNU (level 2) or NICU (level 3). Reducing the number of neonatal units to four would allow units to meet the minimum activity requirements set out in national clinical standards and ensure that all units would meet the workforce quality standards. As set out in section 5.5, there would not be sufficient workforce to sustain five neonatal units in NCL and meet the minimum workforce requirements as set out by BAPM.
    - Resolve the challenges identified with running a SCU (level 1) at the Royal Free Hospital which has low occupancy, insufficient activity and high levels of transfers.
    - Increase obstetric consultant labour ward cover so that all units in NCL provide labour ward cover at the level recommended by the Royal College of Obstetricians and Gynaecologists.

- High-quality, sustainable workforce, who are supported and offered training opportunities will directly impact on the quality of care provided. Our model of care delivers the minimum workforce requirements outlined in the national guidance and we believe that the consolidation of these services would better facilitate enhanced training opportunities for our staff.

3. **Training and development opportunities**
    - Supporting training and development opportunities for staff through delivering sustainable volumes of neonatal activity at all neonatal units. Developing this expertise within the workforce and providing these opportunities would help to improve recruitment and retention of the workforce.
    - Reducing vacancies to make sure cots can be kept open and ensure there are sufficient staff (specialist nurses, allied healthcare professionals, etc.) to provide expert care when required.

4. **Up-to-date estate and buildings which meet modern best practice building standards**
    - Investment in our maternity and neonatal estate so that all units meet modern best practice building standards and are designed to provide a positive birth experience. Any new capacity delivered will meet the latest standards and this will have a role in delivering clinical benefits, improving efficiencies, support reducing the risk of hospital-acquired infection and delivering an attractive working environment for staff.

Our proposals will also resolve the issues around the sustainability of Edgware Birth Centre, where currently the birthing suites are each being used on average once per month, by closing these birthing suites and redeploying resources to improve the home birth service and alongside midwife-led units.

8.3 Detailed benefits

Benefits can be a combination of cash-releasing, quantifiable but not cash-releasing, and qualitative. Cash-releasing benefits identify where money can be reallocated or the cost of delivering a service is reduced. Non-cash-releasing benefits are efficiency savings such as staff time saved, but the cost of delivering the services may stay the same[85].

Where it has been possible to do so, benefits have been quantified in terms of cash-releasing or non-cash-releasing. An overview of the expected benefits is outlined in Figure 79.

[85] https://digital.nhs.uk/services/personal-health-records-adoption-service/personal-health-records-adoption-toolkit/benefits-of-personal-health-records/financial-benefits-of-personal-health-records#:~:text=cash%2d%20Releasing%20benefits%20are%20there,release%20money%20back%20to%20%20budgets

Category	Benefit description	Outcome	Benefit type	Option A (annual saving)	Option B (annual saving)
Care that ensures equity of provision and experience	• Pregnant women, people and babies have access to the same services. This includes community neonatal outreach services accessible across all boroughs and the same provision of neonatal care no matter which unit the baby is born in. • Provide a more personalised experience and ensure the individuals are supported and communicated with that best suits their own needs	Improved patient experience and outcomes	Qualitative	-	-
		Reduced Maternity clinical negligence scheme premium for Trusts (CNST)	Cash-releasing	£4,168,029	£3,705,966
		Reduced normal care days delivered in an acute setting through enhanced delivery of community services	Cash-releasing	£607,322	£607,322
Services which are clinically sustainable	• Redesigning and reconfiguring our neonatal units in NCL, ensuring all units are either a designated LNU (level 2) or NICU (level 3).	Reduced neonatal transfers between units	Cash-releasing	£7,570	£7,570
Training and development opportunities	• Supporting training and development opportunities for staff through delivering sustainable volumes of neonatal activity at all neonatal units. • Reducing vacancies to make sure cots can be kept open and ensure there are sufficient staff (specialist nurses, allied healthcare professionals, etc) to provide expert care when required	No consultant workforce rota supporting the SCU (level 1) Consolidation of existing workforce into four units	Cash-releasing	£2,727,393	£5,144,537
		Improved recruitment and retention	Non cash-releasing	-	-

Capacity to meet projected demand	• Neonatal units are running at less than the 80% recommended occupancy rate	Reduced risk of separating women or person from their baby and improving their experience	Qualitative	-	-
Up to date estate and buildings which are fit for purpose	• Investment in our existing maternity and neonatal estate so that all units are fit for purpose facilities and are designed to provide a positive birth experience • Any new capacity delivered will meet the latest space standards and this will have a role in delivering clinical benefits	Improved efficiencies	Cash-releasing	£3,573,706	-
		Improved staff experience by enhancing staff environment	Qualitative	-	

Figure 79: High level benefits

8.4 Patient experience and quality outcomes benefits

In addition to what has been outlined, it is integral that the experience of women and people and their families, who use maternity and neonatal services, are monitored and improvements to quality and safety are tracked. At implementation stage we would further develop metrics with greater specificity and potentially co-create a framework with service users that can be monitored. There are several existing mechanisms which may support with this:

- The Friends and Family test - this is used by trusts and commissioners to monitor patient feedback.
- The CQC maternity survey - this is an annual survey conducted by the CQC as part of the NHS Patient Survey Programme[86]. The feedback gained through this is reviewed at an NCL level through the LMNS. We would continue to review the outcome of the survey and anticipate seeing an improvement in the individual trust feedback following implementation.
- Working with the MVPs to gain insights into experience. The MVPs have an integral role in representing the voice of service users in maternity services. We would look to work with the MVPs to co-create a plan to gain insights from families about their experiences, with a particular focus on the groups that have been identified through the work on the interim IIA who are at risk of poorer outcomes and experience from maternity care.
- The LMNS quality and safety group meets regularly to review outcomes data and quality and safety reports and incidents. This group would be integral to the creation of a framework

[86] https://www.cqc.org.uk/publications/surveys/nhs-patient-survey-programme-outline-programme-publication-dates

to monitor quality and patient experience improvements in services as a result of implementing the changes.

8.5 Benefits realisation

It is important to make sure that the benefits are delivered, and, after consultation, the benefits framework will be extended to describe the benefits realisation of the proposals.

Benefits realisation needs careful management and close measurement. Benefits measures should focus on and record both outputs (e.g., reduced number of neonatal care days) and expected outcomes (e.g., reduced mortality) to demonstrate the success of delivery. A realistic list of measurable performance indicators will sit alongside the benefits outlined in the benefits framework. It is recognised that there can sometimes be a 'dip' in performance during implementation and that some changes will not always be viewed positively by individual patients or staff. However, patient safety will remain paramount.

Benefits tracking is firmly embedded within performance management arrangements under business as usual. There will be strong clinical leadership of this benefits realisation to support successful delivery of the programme. Wherever possible, existing mechanisms and systems will be used to monitor the realisation of benefits, rather than creating an additional data burden.

8.6 When benefits can expect to be realised

A high-level implementation timeline has been included in this PCBC (see section 7) and is part of the public consultation process. Whilst different elements of the proposals may have differing associated timescales, changes to services would start as soon as possible, and realisation of benefits would follow. However, all benefits would be likely to be maximised after the plans are fully implemented.

It is sometimes difficult to isolate benefits from specific changes, but measuring benefits alongside implementation plans would help. Some improvements may be attributable to several factors, but also, not seeing improvements against a particular measure may not necessarily mean that the changes have been unsuccessful. Other factors may have arisen which mean improvements are not seen but the benefits framework would allow investigation and rectification, if required.

8.7 Monitoring of benefits realisation

Clear benefits realisation would be part of implementation, with:

- Clinically-led, clear and comprehensive implementation plans
- A pragmatic benefits realisation framework, with associated governance arrangements and processes to:
    - formally track progress of benefits realisation
    - identify actions in response to any benefits not being realised
    - define reporting requirements visible to all organisations involved, patients and the public.

Further work to develop the approach to benefits realisation will be done prior to the DMBC. This would include finalising metrics to be used to support benefits realisation and would focus on the final set of proposals being developed by the programme.

9. Stakeholder engagement

9.1 Communications and engagement context

Effective communication and engagement with staff, stakeholders, patients, and residents has been key to the programme and has informed its direction from the beginning. An early communications and engagement plan was approved by the Start Well Programme Board and has been regularly updated as we move into different phases of the programme.

The CYPMN Board members all agreed to adopt specific communications and engagement principles for the Start Well programme in December 2021. We committed to:

- Work collaboratively, openly and transparently, involving residents.
- Ensure the experiences and aspirations of local people directly influence the programme.
- Make every effort to involve communities who experience poorer health outcomes and greater health inequalities.
- Work to flexible timelines to allow time for meaningful, authentic engagement, balanced against the need to maintain momentum.
- Use a variety of methods, tailoring our approach to be accessible to diverse communities and remove barriers to participation.
- Be inclusive and ensure a wide and diverse range of stakeholders have an opportunity to meaningfully contribute.
- Work in partnership with local voluntary, community and social enterprise sector (VCSE) organisations and councils and draw on their specialist engagement expertise and advice.
- Tell staff, families and children and young people (CYP) how their feedback has helped to shape the programme and informed decision-making.

Following feedback from stakeholders, including partners from our council children's services teams, the Start Well Programme Board also made a commitment to engage with children and young people throughout the programme. We have worked to ensure that their voices are heard, and their views have informed the development of this programme.

The programme team understood that it was very important to have extensive input from a wide range of stakeholders, including clinicians, officers from council public health and children's services teams, educators including NHSE - Workforce, Training and Education directorate, North Thames Paediatric Network, NHSE London Region Specialised Commissioning and representatives from neighbouring ICSs. All these groups are represented on the Start Well Programme Board and have been involved in the development of the case for change, care models and options appraisal.

9.2 Approaches taken to stakeholder engagement

The Start Well programme has demonstrated ICS system working, delivered through collaborative engagement between organisations and with clinical leaders from across NCL, ODNs, NHSE London Region Specialised Commissioning and neighbouring ICSs.

9.2.1 Staff communications and engagement

We have worked collaboratively with communications leads in the NHS trusts delivering maternity and neonatal services in scope of Start Well – UCLH, Royal Free London, North Mid and Whittington Health. We established the Communication and Engagement Leads Group as an advisory group formed to provide expert input and insights to the Start Well Programme Board.

All staff have received regular and consistent information about the progress of the programme and have been provided with ongoing opportunities to give broad feedback, ask questions and raise concerns. Additionally, staff update sessions were offered by trusts, delivered by their executive lead for the programme. These offered opportunities for two-way dialogue, for the programme to give information to staff and the staff to provide feedback to the programme. These were supported by regular internal staff communications and an online feedback form was promoted on trust intranets, and in regular communications and e-bulletins.

9.2.2 Identifying programme stakeholders

We carried out a series of actions to identify all key Start Well stakeholders. This included:

- Desktop research and a review of existing reports and papers on maternity, neonatal and paediatric services locally and nationally.
- A stakeholder mapping and prioritisation exercise to establish which stakeholders we would want to communicate and engage with.
- A number of briefings to partners and forums such as Health and Wellbeing Boards where we asked for suggested groups and communities that we should include in our stakeholder lists.
- Developing a stakeholder database with over 200 partners and voluntary and community sector organisations, with a particular focus on communities who experience poorer health outcomes and greater health inequalities.
- To support our engagement, we created an engagement log which records details of all briefings, meetings and engagement activity.

9.2.3 Clinical workstreams and reference group

Key to the progress of the programme has been the input from clinical leaders from across NCL organisations and the wider NHS. At all stages we have had an engaged group of professionals from a range of different professional backgrounds and organisations who have contributed to the programme. This has been done through:

- Clinical workstreams that have focused on different elements of the programme - for example, during development of the case for change, we had three workstreams: emergency paediatrics, planned paediatrics and maternity and neonatal care. These were all led by the executive leads from each of the Trusts who are themselves clinicians.

- System-wide workshops at key points in the programme that have engaged broader clinical teams from across NCL.
- Clinical reference groups were established to support the options appraisal. There was one group with a focus on maternity and neonates and another to support the paediatric surgery options appraisal.

These groups have involved: medical, nursing and allied health leadership from across NCL, as well as representation from community clinicians and general practice. The intention of this has been to ensure that the programme benefits from the range of knowledge and expertise that staff with these different perspectives bring to the programme.

9.2.4 Youth summits and mentoring

The establishment of youth summits and a mentoring scheme for clinical leads was agreed, to ensure that the voices of young people are at the centre of the programme.

In partnership with a specialist youth engagement agency, Participation People, starting in summer 2022, a group of young people from across NCL took part in a series of 'Youth Summits'. The input of these young people has been sought at key milestones in the programme, with summits planned to coincide with school holidays to maximise participation. The youth summits have focused on reflecting on the opportunities for improvement listed in the case for change, the areas that young people feel are important when planning for these services, the development of care models and access to services.

In addition to the summits, several young people act as 'Youth Mentors' to the programme to ensure that clinical leaders are given the opportunity to listen to the views of young service users and are challenged in some of their perceptions about what is important to children and young people.

9.2.5 Patient and Public Engagement Group (PPEG)

The PPEG is an advisory group that has been formed to provide expert input and insights to the Start Well Programme Board. The group provides feedback and oversight of planning and delivery in relation to communication and engagement with patients and the public, and members are able to influence and inform the development of the care models and options appraisal.

In carrying out its responsibilities, the PPEG has committed to:

- Pay particular attention to the duties of public sector organisations relating to groups with protected characteristics set out in the Equality Act 2010 and in the NHS Act 2006
- Provide challenge to the programme on behalf of patients and residents of NCL
- Provide information or expertise to the PPEG to support effective communications and engagement activity to aid well-informed decision-making
- Respect differing views, experiences and be conscious of biases in discussions
- Ensure that the process and outputs of the programme are led by population health needs rather than those of individual organisations.
- Champion the interest of the public, patients, carers and staff

9.2.6 Working with voluntary community and social enterprise (VCSE) organisations and partners

As we developed our stakeholder database, we have forged relationships with VCSE partners who have existing trusted relationships with some of the groups and communities who experience poorer health outcomes and greater health inequalities. We have worked collaboratively with our VCSE partners, such as Manor Gardens, Umoja, Interlink, and with the patient experience teams within the NHS trusts, to run engagement activities.

9.3 Engagement objectives and methodologies

Broadly, our engagement objectives have been to:

- To ensure all staff in relevant service areas had opportunities to respond and feedback and identify any additional themes or areas to explore when considering these services.
- To maximise opportunities for local patients, residents and wider stakeholders to share their views, experiences and what they feel is important when planning for these services.
- To ensure the range of voices heard from during engagement reflected the diversity of local communities, including those who are most at risk of health inequalities, deprivation, ill health or who have barriers to accessing services.
- To employ a broad range of engagement techniques to gain feedback from patients and residents, providing opportunities for all who wish to contribute, whilst focusing on gaining deeper feedback from those identified in our stakeholder prioritisation exercise.
- To work in partnership with local authority, voluntary and community sector (VCS) partners and established patient groups and networks and to establish new relationships where necessary.

9.3.1 Phase 1: case for change development

In the development of the case for change document, a range of approaches were used to ensure a variety of views and insights were captured from across the system, as follows:

- **Staff interviews**: close to 60 clinical leaders from across NCL took part in one-to-one interviews with the Start Well programme team. The interviews were an opportunity to explore the needs of our local population and to identify both strengths and challenges in how services are currently delivered.
- **Clinical workstream reference groups**: bringing together clinical and operational expertise, the clinical reference groups met to provide feedback and insights on the data analysis, identify interdependencies with other services and review best practice standards.
- **Wider clinical workshops:** two half-day workshops, with around one hundred participants, were held to explore current patient care pathways in more depth and reflect on themes that had emerged through the workstreams, interviews and data analysis.
- **Broader stakeholder engagement:** we wrote and offered briefings to ICS stakeholders on the establishment of the programme, a number of face-to-face briefings were held with local MPs and lead members for health and children's services. We also attended

meetings to present on the aims and scope of the programme, including Health and Wellbeing Boards, Children's Partnership Boards, meetings with the Directors of Public Health and Directors of Children's Services and NCL Social Partnership Forum.

- **Patient and public representation**: an online patient panel was recruited in February 2022, with the aim of establishing a group of local representatives interested in, and with experience of, using services for children and young people, and maternity and neonatal services in NCL. In May 2022, eight individuals from the online panel were involved in smaller focus groups, where they have shared their experiences.
- **Patient representative groups**: we provided briefings to patient representative organisations including our local Maternity Voices Partnerships in all trusts and our five local Healthwatches.
- **Targeted public engagement:** a number of priority groups were invited to take part in conversations with the Start Well programme team to ensure that the voices of those who may not normally participate or who may be disproportionately disadvantaged (as outlined in our population analysis) have been captured. Due to the vulnerability or communication barriers of some groups, community and voluntary sector organisations were asked to undertake engagement on our behalf and insight was captured using a structured interview format. Examples include a group of young people who were previously in care, women with experience of domestic violence and an Asian women's group.

9.3.2 Phase 2: engagement on the case for change

A 10-week programme of engagement on the case for change ran between 4 July 2022 and 9 September 2022. The engagement aimed to establish whether the opportunities for improvement set out in the case for change reflected the views and experiences of staff, stakeholders, patients and residents. We also asked participants to tell us what they felt were the important factors to be considered when planning for these services.

We developed materials to support this engagement, including a summary of the case for change, also available in easy read and six community languages (Arabic, Bengali, Farsi, Polish, Somali, Turkish), a questionnaire which was available both online and in paper form and a discussion guide for use at engagement meetings and focus groups. The Case for Change Summary and Questionnaire were tested by a patient reader panel and their feedback was incorporated to ensure the materials were as clear and accessible as possible.

A range of engagement activities were carried out, including 43 events with patients and the public, one of which was a youth summit, resulting in over 200 in-depth conversations. A survey was available online and on paper and 389 surveys were completed. Methods of engagement also included presentations and feedback sessions at community meetings, online discussion and focus groups, attendance at hospital outpatient and antenatal clinics, targeted social media advertising, attendance at community groups for parents and carers and via community newsletters and networks.

We heard from:

- **Staff and clinicians:** via staff meetings and briefings, information cascades through managers, internal intranets and newsletters. All staff were encouraged to feedback via the online survey.
- **Patients and the public:** we worked with voluntary and community organisations to involve NCL's diverse communities and focus on those who might have specific insights including:
    - Early years services
    - Baby and child loss organisations
    - Women's and family centres
    - Youth justice
    - Carers
    - Parents with young children
    - Children and young people
    - People with LD and Autism
    - Children with mental health illness and long-term conditions.
- **Stakeholders:** feedback was sought from a wide range of local and national stakeholders who were identified as potentially impacted by or interested in the case for change. Key stakeholders included local MPs, elected members, professional bodies, educators, neighbouring ICS areas, the London Clinical Senate and Patient Representation Group.

From the completed surveys we heard from current or recent service users (42%), staff (28%) and most people (90%) were resident in Barnet, Camden, Enfield, Haringey or Islington.

Qualitative and quantitative data was produced during the engagement, which was independently evaluated, and a report was published which can be found here.

The survey found that 79% of people who responded agreed with the opportunities for improvement for maternity and neonatal services as set out in the case for change.

The headline findings of important factors from the engagement are:

- **Maternity care**: safe and compassionate care and good communications.
- **Choice of maternity care**: the qualitative data gained through the engagement showed that people commonly choose maternity care based on one or more of three factors: recommendations from friends and family, proximity to home and familiarity with a hospital.
- **Neonatal care**: the best possible services delivered by specialists and good communications.

9.3.3 Phase 3: care model development

In response to the case for change, new care models were developed which aim to address the opportunities for improvement that were identified. Developing the care models was a collaborative exercise undertaken with a wide range of input from a number of system partners. The future care model development was overseen by the Clinical Reference Group (CRG), which had membership from across all organisations as well as local system partners.

Other clinical engagement, outlined in Figure 80, included 90 individuals through two half day clinical workshops and nine dedicated task and finish groups. These focused task and finish groups explored areas such training and education and maternal medicine.

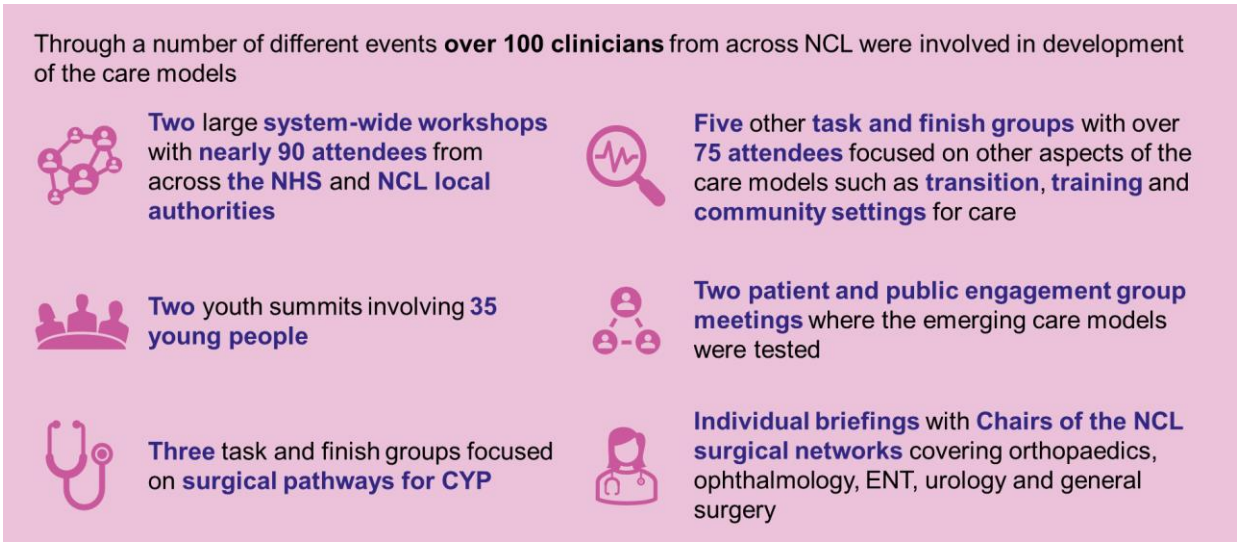


Figure 80: Care model clinical engagement

Themes from the case for change engagement were fed through to the groups to ensure this feedback informed the care model development. The care models were shared at several system groups, including the Network Oversight Group which bring together all surgical clinical networks, Primary Care Operations Group and one-to-one meetings with the clinical chairs of the six NCL surgical networks. A full list of the forums the care models have been tested at can be found in Appendix A.

We also sought patient and public feedback through two meetings of the PPEG and a youth summit session which captured the views on the emerging children and young people's care models from around 35 young people who are residents of NCL. Relevant themes from these events have been shared with the CRG and task and finish groups to ensure that patient voice is at the centre of the care model development.

A set of principles underpinned the design process of the care models; these included placing those using the services and their families at the centre, ensuring equity and consistent standards of care, and making best use of our resources, people, places and money.

The care models were reviewed and approved by both the Start Well Programme Board (which included representatives from specialised commissioning), and the NCL Integrated Care Board. The paper that was taken through the NCL ICB Board of Members can be found here.

9.3.3.1 How patient feedback has influenced the care models

The care models were shaped through the clinical feedback we received during this phase of the programme. It was, however, also crucially important that the care models were seen by patients. Some of the areas that were included as a direct result of PPEG feedback are highlighted below:

- Mental health support for parents during a neonatal admission.
- Physical health / routine postnatal review by midwives during the neonatal admission.
- Transitional care with a focus towards feeding support and identifying tongue-tie.
- Community-level support available after discharge from the neonatal unit, in particular relating to feeding and tongue-tie.
- Mental health and wellbeing support available throughout, including post-natally in the community.
- A focus on provision of continuity of care for those most at risk of adverse maternity outcomes.
- Ensuring effective communication between service users and clinical staff.

9.3.4 Phase 4: options development

In November 2022, NCL ICB Board approved for the programme to commence an options appraisal to explore the implementation of the maternity and neonatal care model. Since then, the programme has been engaging with a number of different groups in order to deliver this work. The groups involved have been:

- Maternity and Neonates CRG
- Finance and Analytics Group
- Patient and Public Engagement Group.

The engagement of these groups has been key to the progress of the options appraisal, influencing both the criteria that were used in the options appraisal and an initial evaluation against these criteria. The role of these groups in the process has been outlined below:

- **Maternity and neonates Clinical Reference Group (CRG):** the CRG was focused on the quality and workforce evaluation criteria. They met a total of eight times in order to support the options appraisal process. This included four meetings in order to develop the criteria that were used for the evaluation, and then a further four meetings in order to undertake the evaluation.
- **Finance and Analytics Group:** this group were focused on the affordability and value for money criteria. The group met on 14 occasions following the November NCL ICB Board of Members approval to commence the options appraisal.
- **Patient and Public Engagement Group (PPEG):** The PPEG were focused on the access to care criteria for the options appraisal. They were responsible for developing both the criteria used and an evaluation against these criteria. The group met a total of seven times to undertake this work, which included four sessions to develop the criteria and three to undertake the evaluation.

The role of the Start Well Programme Board in the options appraisal
The Start Well Programme Board has been responsible for overseeing the options appraisal. They have met at key intervals throughout the progress of the work and signed off on recommendations made through other groups involved in the process.

The Programme Board came together for a full day workshop in order to review the work undertaken through the CRG, finance and analytics group and PPEG. The purpose of this workshop was to undertake a calibration of the initial evaluation conducted by the groups and review the different options in the round, considering all criteria to understand if any option(s) would not be implementable.

The workshop had all members or representatives of the Start Well Programme Board in attendance (see Appendix A), as well as some additional system partners whose organisations may be impacted by possible changes, namely NEL, NWL and Hertfordshire and West Essex ICBs.

9.3.4.1 How the options appraisal was conducted

The options appraisal workshop was set up to ensure that all criteria were reviewed, with input from the representatives of the relevant groups. Members of the CRG and finance group attended the workshop at intervals throughout the day to ensure they could answer questions about the criteria used or the initial evaluation that was undertaken. The Programme Board then discussed each of the criteria to understand if there were any moderations to be made to the evaluation. This ensured that all criteria were reviewed in a systematic way, and that rationale for the initial evaluation by the groups inputting into the process could be shared. Section 5 of this document describes in more detail the options which were considered and how they have been taken forward.

9.3.5 Phase 5: Interim IIA engagement

An important part of building up a picture of the potential impact of any changes to services for the interim IIA was engagement with recent service users. The purpose of engagement was to gain an understanding of people's experiences and identify where there may be impacts that need to be mitigated. The engagement focused on groups that either have protected characteristics or who have been identified as potentially differentially impacted by changes due to their circumstances or disproportionate health impacts were identified through the case for change and a subsequent literature review. There was also some engagement with specialist staff to gain their insights into caring for women and people who would be considered vulnerable. Figure 81and Figure 82 highlight the groups that were reached as part of this engagement.

Engagement with service users	Number of events	Number of attendees
Online discussion groups or interviews with women aged 35+	5	8
Online discussion groups with Jewish women convened by charities in North Central London that support Jewish families	3	17
In person discussion group with women at a community centre in Islington who support vulnerable people including asylum seekers	1	8
Online discussion group convened by a Camden and Islington based charity that supports African communities	1	7
In person discussion group with parents of children who have learning disabilities and autism convened by a Barnet-based charity	1	5
One to one interview with an advocate for parents who have learning disabilities and autism	1	1
In person discussion group with parents who have learning disabilities	1	5
Interviews or online discussion groups with women who have given birth at Edgware	3	5
In person discussion group at a Haringey based community centre who support people who originate from outside the UK	1	22
Online discussion group with parents who have experienced bereavement	1	7
Online discussion groups with parents who have had recent experience of neonatal care across NCL sites	9	18
Online discussion groups facilitated through a charity that supports LGBT+ parents	2	4
In person discussion with parents who are deaf and deafblind	1	2
Online discussion with parents who are seeking asylum facilitated through a charity that supports those seeking asylum	1	2
In person discussion group with parents of Eastern European background	1	2

Figure 81: IIA Engagement with service users

Engagement with specialist staff	Number of events	Number of attendees
Online interview with a hospital chaplain who supports women who experience bereavement	1	1
Online interview with a midwife who supports vulnerable women with a focus on women who are homeless	1	1
Online discussion group with clinicians who support women who have experienced female genital mutilation (FGM)	1	3
Online discussion groups with midwives who support women who have experienced domestic violence or have severe mental illness	2	4
Online discussion group with specialist midwives who support women who have experienced bereavement	1	2
Online interview with a hospital chaplain who supports women who experience bereavement	1	1
Online interview with a midwife who supports vulnerable women with a focus on women who are homeless	1	1
Online discussion group with clinicians who support women who have experienced female genital mutilation (FGM)	1	3

Figure 83: IIA Engagement with specialist staff

Topic guides were developed to support the engagement, and covered four main areas:

- **Information**: e.g., making appointments, communications and any barriers, such as language barriers.
- **Continuity of care**: what is important to people?
- **Travel**: what considerations people have, what barriers there are, how far people would be willing to travel
- **Access to services**: e.g., physical access to sites, what is important for people with disabilities?

The findings of the engagement and the specific impacts that have been drafted into a separate report. Actions to address some of the engagement themes that sit outside of the proposal are underway and the detail of these programmes can be found here.

An important part of the interim IIA is to develop mitigations for the possible impacts that have been identified. A collaborative approach was taken to do this through two large workshops involving a range of patient representatives as well as system partners working in both the NHS and local authorities. In total, over 50 people attended the two workshops which were held in the late summer and early autumn. We also gained further feedback on the mitigations through our patient and public engagement group who reviewed and inputted into the mitigations.

10. Quality assurance

We have undertaken a robust quality assurance process which underpins the programme and gives assurance to this PCBC. Clinicians have been at the heart of setting out the case for change and designing the care model and proposal set out in this document. Our proposals have been independently reviewed by the London Clinical Senate who provided us with feedback, which we have acted upon and built into this business case. The proposals have been scrutinised by the JHOSC. The proposals have also been assured by NHSE and going to public consultation was dependent on this assurance being received. The programme has met the four tests for reconfiguration set out by the Secretary of State, plus the fifth bed test set out by NHSE (five tests). The Start Well programme complies with NHSE guidance on the business case process major service change[87] and HM Treasury's Green Book requirements for significant capital investments[88], where applicable.

10.1 Approvals process for the programme recommendations

In line with the programme governance set out in section 2.7, the approval process for this document is:

- The Maternity and Neonates CRG, Finance and Analytics Group and PPEG have ratified the information that they were responsible for evaluating which has formed part of this document before being submitted to the Start Well Programme Board

[87] NHS England, 2018. Planning, assuring and delivering service change for patients. https://www.england.nhs.uk/wp-content/uploads/2018/03/planning-assuring-delivering-service-change-v6-1.pdf

[88] Gov.uk, 2022. The Green Book. https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent/the-green-book-2020

- The Start Well Programme Board reviewed this document and the Edgware Birth Centre Addendum and submitted them to NHSE for assurance.
- A recommendation was made to each of the provider trust boards for discussion, assurance, and support.
- The London Joint Committee for specialised services met and supported the PCBC and public consultation. This has been ratified by the London Regional Executive.
- A decision on whether to proceed to consultation has been made on the basis of this PCBC and the Edgware Birth Centre Addendum by a meeting in public of the NCL ICB Board of Members.

10.2 Engagement and review with the London Clinical Senate

The proposals and new care model have undergone a review by the London Clinical Senate. Clinical Senates are a source of independent and objective clinical advice and guidance to local health and care systems, to help them to make the best decisions about healthcare for the populations they represent. A formal review of the of the proposal and care model was undertaken on 12 July 2023. A link to the senate's report on our proposals can be found here. Prior to the review session, a set of supporting materials was submitted to the senate panel. Queries generated were shared back with the programme team to enable a full and informed discussion on the day.

The London Clinical Senate are supportive of the proposals as outlined in the PCBC. The panel agreed the case for change is underpinned by evidence and best practice guidance and that our ambition to improve was informed by national policy. They considered that proposals to consolidate services on fewer sites would provide the opportunity to improve quality of care and outcomes, as well as better managing staff pressures.

The Clinical Senate provided some recommendations to strengthen the work we have done to date. Some of these have been directly addressed through further work on this document, whilst others will be addressed within the DMBC. The detailed recommendations, and how these have been addressed or will be addressed, can be found in Appendix C. At a high level, recommendations focus on the following areas:

- Further detail around the model of care
- Workforce planning
- Further evidencing demand and capacity modelling
- Detailing the other areas of service improvement that the ICS is working on to improve outcomes for the population
- Continued engagement with service users and wider stakeholders.

10.3 Joint Health Overview and Scrutiny Committee (JHOSC) engagement

We have engaged with the JHOSC throughout the Start Well programme. This has included updates on progress, the proposed changes, and engagement on the approach to public consultation which has helped to inform our consultation approach set out in section 11.

10.4 Assurance by NHS England (NHSE)

NHSE has the responsibility of overseeing that integrated care boards meet their statutory duties and other responsibilities under the *NHS Oversight Framework*[89]. It has a role to both support and assure the development of proposals for service change. NHSE supports commissioners and local partners to produce evidence-based proposals for service change, and to undertake assurance to ensure they can progress, with due consideration for the government's four tests of service change and the test for any proposed bed closures (five tests).

Prior to public consultation, NHSE considers the proposal in terms of both capital and revenue and its financial sustainability. This ensures any option submitted for public consultation is:

- Sustainable in service and revenue and capital affordability terms
- Proportionate in terms of scheme size
- Capable of meeting applicable value for money and return on investment criteria.

NHSE operates a two-stage assurance process prior to public consultation, and the outcome of this process is shown in section 12.1.

10.4.1 NHS reconfiguration five tests

There are five "reconfiguration tests" for the NHS that must be applied to all significant service change proposals, as specified in national policy and guidance. NHSE guidance on service change is intended to support commissioners and partner organisations in navigating a clear path from inception to implementation. It aims to assist organisations in taking forward their proposals, enabling them to reach robust decisions on change in the best interests of patients. National guidance is set out in 'planning, assuring, and delivering service change for patients' and the addendum added in May 2022.[90,91]

These tests are designed to demonstrate that there has been a consistent approach to managing change, and therefore build confidence within the service, and with patients and the public. This section demonstrates how we meet the government's four tests for service reconfiguration and change, and how the final test set out by NHSE is not applicable. These tests are:

- **TEST #1**: The proposed change can demonstrate strong public and patient engagement.
- **TEST #2**: The proposed change is consistent with current and prospective need for patient choice.
- **TEST #3**: The proposed change is underpinned by a clear, clinical evidence base.
- **TEST #4**: The proposed change to service is owned and led by the commissioners.
- **TEST #5**: Proposals including significantly reducing hospital bed numbers will have to meet one of the following three conditions:

[89] https://www.england.nhs.uk/publication/nhs-oversight-framework-22-23/

[90] NHS England, 2018. 'Planning, assuring and delivering services change for patients'. https://www.england.nhs.uk/wp-content/uploads/2018/03/planning-assuring-delivering-service-change-v6-1.pdf

[91] NHS England, 2022. 'Addendum to Planning, assuring and delivering service change for patients (March 2018)'. https://www.england.nhs.uk/wp-content/uploads/2018/03/B0595_addendum-to-planning-assuring-and-delivering-service-change-for-patients_may-2022.pdf

- 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
- How 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).

NHSE assured the proposed services changes prior to the launch of public consultation. The five tests have been applied throughout the pre-consultation phases of the Start Well programme. The following section demonstrates how we met each of the tests of service change and assurance.

10.4.2 Test 1 – The proposed change can demonstrate strong public and patient engagement

This test evaluates how service users, and the public are involved in the development of the proposals for change, and how their views and insights are considered throughout each stage of the programme.

Patients and the public have been involved throughout the development, planning and decision making of the proposed service change. We have been able to involve diverse communities through both our engagement on the case for change and the subsequent pre-consultation engagement for the interim IIA. Through both these periods of engagement we have used connections with the local voluntary sector and local authorities to ensure we engaged with a range of diverse service users. We have also engaged on an ongoing basis with a group of patients through our PPEG, who were represented by their Chair at our options evaluation workshop in May 2023.

We have had early involvement with patients and the public through multiple communication streams, to ensure an ongoing dialogue could take place at all stages of proposal development. The communications and engagement workstream has developed a communications and engagement plan to set out objectives and methods to monitor engagement and to provide assurance. We have made sure that our methods and materials are tailored to meet specific audiences, provided opportunities for vulnerable and seldom heard groups to participate, and offered accessible forms of documentation. The principles we used to define our approach to demonstrate strong public and patient engagement can be found in section 11.2 and the plan for consultation in section 11.

10.4.3 Test 2 – The proposed change is consistent with current and prospective need for patient choice

This test looks at whether any proposed redevelopment and/or changes to services would maintain the availability of service user choice. Patient choice in this context refers to the statutory

requirements set out in the *NHS Choice Framework*[92] which sets out patients' rights around choice of provider for planned care and maternity services (as well as choice of GP and some other services out of scope for this programme of work).

Our proposals would ensure that pregnant women and people still have the choice to deliver in a home setting, midwifery-led unit or obstetric-led unit.

It is also important to note that the patient choice test does not extend to the specific location of the provider. Moving the location of a particular service from one part of a geography to another still maintains patient's ability to choose their provider.

10.4.4 Test 3 – The proposed change is underpinned by a clear, clinical evidence base

The proposed change in service is underpinned by a care model that has been clinically-led in line with local guidance, national policy and best practice. The care model was developed using clinical evidence and clinical best practice. There has been clinical leadership and engagement in the development of the clinical model and implementation plans.

Developing the care model was a collaborative exercise undertaken with a wide range of input from system partners. The development of the future care model was overseen by the Maternity and Neonates CRG, which had membership from across the five NCL potentially impacted trusts, as well as a range of other system leaders.

There was wider clinical engagement to develop the care model, which included:

- Two half day workshops attended by nearly 90 individuals from both the NHS and local authorities
- Nine dedicated task and finish groups

There was also significant clinical engagement to develop our case for change which is outlined in section 9.3.1.

The proposed changes have been taken to the London Clinical Senate as a source of independent, strategic advice and guidance to help us make the best decisions for the population of NCL. A review of this process is set out in section 10.2. Section 3 outlines the case for change, with a proposed maternity and neonatal care model that is underpinned by a clear, clinical evidence base in more detail.

10.4.5 Test 4 – The proposed change to the service is owned and led by the commissioners

NCL ICB has led the development of the PCBC, and the Start Well programme has been progressed through the NCL ICB Board of Members governance arrangements, in accordance with the organisation's constitution. Supporting documents and workstream outputs from the Start Well

[92] NHS Choice Framework (Department of Health and Social Care, 2020)

programme have been taken to the Start Well Programme Board (followed by the ICB Board and London Executive Team) to ensure process rigor and quality of content.

The Start Well programme has robust governance arrangements that cover how the programme will manage the inevitable complexity and interdependencies and bring the different aspects together. NCL ICB is an integral member of the Start Well programme and is leading the proposed service changes. The Start Well Programme Board has representation from the ICB. The governance for the programme can be found in section 2.7.

10.4.6 Test 5 – Proposals including significantly reducing hospital bed numbers

The proposed service change would not reduce hospital bed numbers and therefore the conditions set out by this test do not apply.

10.5 London Mayor's six tests

The London Mayor's six tests[93] are applied to major service reconfigurations in London alongside the five tests from the Department of Health and Social Care and NHSE, and the statutory consultation processes which accompany large scale change. These tests are initially applied at the point of public consultation, and then to the decision-making business case should the proposals reach that stage. To date, we have engaged with the Greater London Authority (GLA) and we will continue to work collaboratively with the GLA through the consultation to support the mayor's assurance of our proposals.

11. Plans for consultation

The proposals to be considered during the consultation will set out the potential solutions for delivering high-quality maternity and neonatal care for the residents of North Central London. We will aim to obtain a broad range of views from our local communities, services users and their representatives and partners on our proposals.

No decisions about changes to services will be made until after a full public consultation has taken place and all the information, including the feedback from the consultation, has been considered by NCL ICB and partners in line with Gunning principles[94].

The purpose of the consultation is to:

- Ensure people in NCL and surrounding areas are aware of the public consultation and how to participate.
- Present the case for change and the proposed options, by providing clear, simple and accessible information in a variety of formats.

[93] https://www.london.gov.uk/programmes-strategies/health-and-wellbeing/champion-challenge-collaborate

[94] https://www.local.gov.uk/sites/default/files/documents/The%20Gunning%20Principles.pdf

- Provide a variety of methods and mechanisms to give and receive information, appropriate to different audiences, with a focus on groups with protected characteristics and those who may be more impacted by the proposed changes.
- Enable and encourage people to feed in their views on the proposed changes and the potential impacts.
- Understand the views relating to our proposals for maternity and neonatal services and what concerns and mitigations we should consider in relation to any future implementation.
- Ensure responses received are independently evaluated and the results published.
- Ensure decision-makers receive detailed outputs and feedback from the consultation exercise so that they are as well-informed as possible before any decisions are made.

The consideration of all feedback and additional evidence gathered during consultation will help NCL Integrated Care Board and NHSE London Region Specialised Commissioning to make an informed decision on progressing the future shape of services. We will commission an independent partner to analyse all the consultation responses and outputs from all engagement methods.

On conclusion of the analysis, the independent partner will produce a final written report which will be publicly available and shared with the Joint Health and Overview Scrutiny Committee. The report will be used to support deliberation and decision making by NCL ICB Board of Members and NHSE London Region Specialised Commissioning.

11.1 Delivering a consultation

Subject to approval of this PCBC, we are committed to undertaking a full public consultation to seek views on the proposed options. Our consultation plan outlines our approach of how we intend to gather and respond to views from our local communities and partners. Our plan has been developed with input from Start Well Programme Board. The plan will be updated and iterated throughout the consultation period to ensure that we are meeting our consultation purpose and obtaining a diverse range of views from patients, public, staff and stakeholders.

Under Section 14Z2 and Section 13Q of the NHS Act 2006, NHSE and ICB have a duty to ensure that people who use NHS services are involved in the development and consideration of proposals for change in the way that services are provided. We will also be complying with our duty to consult the local authority, under the Local Authority (Public Health, Health and Wellbeing Boards and Health Scrutiny) Regulations 2013, made under section 244 NHS Act 2006.

We will deliver a best practice consultation, based upon the Start Well communication and engagement principles and will ensure that all our statutory duties are met.

11.2 Consultation principles

We committed to continuing to work to the programme's engagement principles throughout the public consultation. These were agreed through the communication leads working group and Start Well Programme Board:

- Work collaboratively, openly and transparently, involving residents.
- Ensure the experiences and aspirations of local people directly influence the programme.

- Make every effort to involve communities who experience poorer health outcomes and greater health inequalities.
- Work to flexible timelines to allow time for meaningful, authentic engagement, balanced against the need to maintain momentum.
- Use a variety of methods, tailoring our approach to be accessible to diverse communities and remove barriers to participation.
- Be inclusive and ensure a wide and diverse range of stakeholders have an opportunity to meaningfully contribute.
- Work in partnership with local voluntary, community and social enterprise sector (VCSE) organisations and councils and draw on their specialist engagement expertise and advice.
- Tell staff, families and pregnant women and people how their feedback has helped to shape the programme and informed decision making.

11.3 Consultation oversight

For the purposes of this consultation, the proposals are being put forward by NCL ICB, on behalf of NCL ICS (comprising the boroughs of Barnet, Camden, Enfield, Haringey and Islington) and NHSE London Region Specialised Commissioning. The consultation will be overseen by the Start Well Programme Board.

We will also seek feedback on the consultation from local groups, such as Healthwatch. These groups will support with:

- Commenting on consultation documentation and communications materials and their accessibility
- Ensuring we are facilitating involvement from a wide range of communities, including all relevant groups identified in the interim IIA
- Commenting on methods to raise awareness of the consultation with NCL residents and stakeholders
- Particularly ensuring that we are engaging with children and young people in a meaningful way to allow them to participate in the consultation
- Championing the voices of patients and residents

11.4 Co-designing the consultation plan

The approach and methods used for the consultation will be developed in line with best practice. The plan is a working document and will iterate during the life of the consultation as we monitor responses and participation. In developing the draft plan, we have considered feedback from all our early engagement and interim IIA engagement activities.

11.5 Audiences

The consultation aims to engage as effectively as possible with the following groups across NCL and neighbouring ICS areas, particularly NEL, NWL and Hertfordshire and West Essex.
To inform our decision making, we are seeking views about the proposed change from:

- People who have experienced maternity or neonatal care in the past, at one of the existing sites

- People who may need services in the future
- The families and carers of affected groups, including local residents and the public
- Community representatives, including the voluntary sector
- Staff in directly impacted services
- Staff and partners in health and social care in primary, secondary, community and social care
- Councillors and MPs
- Unions, and professional bodies including royal colleges and education providers
- Relevant councils
- Neighbouring integrated care boards who commission similar services
- Local media

11.6 Consultation methods and materials

We will use a range of materials and methods to encourage a wide range of local people to take part in the consultation and talk to us about the proposals. Our methodology falls into two parts: giving information and getting information.

Our consultation document will clearly lay out the basis on which we are consulting, the background to the consultation, a summary of how the proposals have been developed and a clear, simple explanation of what the proposals are and what they will mean for patients and users of these services. We will signpost more detailed technical information and data where appropriate.

Our consultation materials and methods will highlight the different ways in which people may choose to participate, allowing for different levels of engagement or interest. By using a mix of methods, we will support a wide range and breadth of feedback and enable people to contribute in the way that best suits them.

We will seek to engage with patients, carers, their families, healthcare staff at NHS trusts and in the community, local people, families, carers and their representatives through a range of activities:

- Online engagement through our residents' health panel.
- Using NCL public participation and engagement networks to reach local residents.
- Stakeholder and community outreach activities such as voluntary sector facilitated groups and working with voluntary, community and social enterprise (VCSE) partners to convene discussion groups with particular communities.
- Staff meetings and feedback facilitated through communication leads at each of the sites in NCL.
- We also may commission external, independent experts to deliver some of the engagement activities and to analyse the responses from groups that may be particularly challenging to reach or where there may be barriers to their participation.

A range of consultation materials will be developed to support the process, including:

- A full consultation document which lays out proposals in a clear and easy to understand way. This will be available in a number of formats (such as Easy Read) and languages
- Summary consultation document

- Posters promoting the consultation and encouraging participation
- Short film/animation explaining the proposals
- Presentation outlining the proposals for use in meetings
- A range of visual aids, including maps, infographics, and example patient pathways
- Quotes and talking heads from local clinicians
- Interim IIA

11.7 Handling responses

It is important that patients, the public, staff and other stakeholders feel that their feedback is valued and that they can give feedback easily. We have appointed an independent evaluation partner who will support with the consultation response and ensure that all responses are recorded, captured, and can subsequently be independently analysed. The mechanisms for response will include:

- Freepost address for return of the consultation questionnaire or other written responses
- Online questionnaire (echoing the paper version)
- Generic email address
- Freephone telephone number
- Verbal feedback captured through notes recorded at engagement events

11.8 Raising awareness of the consultation

We will aim to raise awareness of the consultation process, questions and timelines throughout the consultation period. We will achieve this through a dedicated marketing and communication plan. This plan will focus particularly on populations identified as potentially impacted through our interim IIA. Our plan will include:

- Media releases
- Social media activity with content, assets and engagement activity
- News stories and case studies for community newsletters
- Advertising
- Displays and information in public buildings, such as clinics, hospitals, libraries
- Newsletter
- Website pages
- QR code

11.9 Consultation analysis and decision making

Once the formal consultation data input has taken place and the data analysed, all the feedback will be captured in an evaluation report, produced by an independent organisation, which specialises in consultation analysis. The report will capture all responses and highlight the following:

- Relevant to and/or having implications for the model of care and/or one or more of the options.
- Well-evidenced submissions that point to evidence for alternative options that may not have been considered.

- The impact of proposals on particular groups that have been highlighted through the integrated impact assessment.
- Suggestions for how implementation can be effectively managed and any mitigations that may need to be put in place for certain groups.

12. Next steps and approvals

Following approval of this PCBC, we plan to undertake a public consultation which will inform the development of the DMBC. The DMBC will be used to decide on a preferred option.

12.1 Regulatory assurance

We have been developing the proposal for this PCBC and the Edgware Birth Centre Addendum since November 2021, ensuring that there has been sufficient time and engagement to make sure that the proposed changes are as robust as possible. It was submitted to NHSE for stage two of the national assurance process for service change and reconfiguration on 9 November 2023 and they gave formal approval for us to proceed to consultation.

12.1.1 System assurance and the 'decision to consult'

The PCBC and Edgware Birth Centre Addendum was reviewed and supported by the London Joint Committee for specialised services and has been ratified by the London Region Executive. A decision on whether to proceed to consultation is being made on the basis of this PCBC and the Edgware Birth Centre Addendum by a meeting in public of the NCL ICB Board of Members.

12.2 Next steps for stakeholder engagement

12.2.1 Moving to formal public consultation

Section 11 sets out our approach and plans for consultation. We are planning to run the consultation for 14-weeks and we will continue to work with our stakeholders to refine our consultation plan.

12.2.2 Joint Health overview and scrutiny committee (JHOSC)

In addition to informing the approach to consultation, we will conduct a full public consultation on our proposals for change. We have consulted directly with local authorities on our proposals via the JHOSC. This is as per our Section 244 duty under the National Health Service (as amended by the Health and Social Care Act 2021) which requires NHS bodies to consult relevant local authority overview and scrutiny committees on any proposals for substantial variations or substantial developments of health services.

We will meet with NCL JHOSC members during the consultation period to hear members' views, answer questions, and update the committee on the progress of the public consultation. Given there is a potential impact from our proposals for people who live in Brent, we have also engaged

with the Brent Overview and Scrutiny committee Chair as part of our pre-consultation engagement. We will seek a further meeting at the end of the consultation period, once we have an independent report of the consultation findings to share with the committee. We will agree regular meetings to keep the committee updated through the next stage of our work and preparation of our DMBC, before the NCL ICB and NHSE London Region Specialised Commissioning makes a final decision on the proposals for change.

12.2.3 Post consultation

After the consultation closes, the responses received from members of the public, patients, staff, stakeholders, and partner organisations would be independently analysed, as per best practice. A report based on this analysis will be submitted to the ICB Board and NHS London Region Specialised Commissioning to help inform its decision making. This will be considered alongside all the other evidence and data gathered throughout the lifecycle of the programme.

12.3 Developing a decision-making business case

The process to develop the DMBC would be supported formally through the established Start Well Programme governance. Additional workshop sessions will be undertaken to support Board members to consider consultation responses carefully and conscientiously. These sessions will happen as part of the preparation for their decision-making meeting and consideration of the DMBC in the round.

On approval of the DMBC by the NCL ICB Board and NHS London Region Specialised Commissioning, the OBC and FBC will be finalised for approval by Trust Boards and HMT, if required.

12.1 Next steps for the interim Integrated Impact Assessment (IIA)

The NCL ICB and NHSE London Region Specialised Commissioning commissioned an interim independent IIA in 2023 to assess the potential impact of the proposals. The interim IIA was used to understand the potential impact of the proposals on local residents and explores the impact of our proposals on inequalities and vulnerable groups. The interim IIA report sets out an assessment of the potential impacts which may be experienced because of the proposed changes to maternity and neonatal services across NCL and, in line with commissioners' public sector equality duty, helps to ensure that genuine consideration is given to equality as part of the decision-making process.

The interim IIA will be revisited over the course of the public consultation process and beyond, as part of an iterative process. We will review and refresh the interim IIA, considering the findings from public consultation.

13. Glossary

	Meaning
AHP	Allied Health Professionals (physiotherapy, occupational therapy, dietetics, speech and language therapy, psychologists and pharmacists)
AQMAs	Air quality management areas
BAPM	British Association of Perinatal Medicine
BAU	Business as usual
BCR	Benefit cost ratio
BirthRate Plus	Midwifery-specific, national tool that gives the intelligence and insights needed to be able to model midwifery numbers, skill mix and deployment and to inform decision making about safe and sustainable services
CAG	Clinical Advisory Group
CDEL	Capital departmental expenditure limit
CEO	Chief executive officer
CFC	Case for change
CNST	Clinical Negligence Scheme for Trusts
Core20PLUS5	National NHS England approach to inform action to reduce healthcare inequalities at both national and system level
CQC	Care Quality Commission
CRG	Clinical Reference Group
CYP	Children and young people
CYPMN Board	Children, Young People, Maternity and Neonatal Board
DHSC	Department of Health and Social Care
DMBC	Decision-Making Business Case
DoF	Directors of Finance Group
EBC	Edgware Birth Centre
FBC	Full business case
FFT	Family and Friends Test
GIRFT	Getting it Right First Time
GLA	Greater London Authority
GMC	General Medical Council
GOSH	Great Ormond Street Hospital for Children NHS Foundation Trust
HBN	Health Building Note
HES	Hospital Episode Statistics is a database containing details of all admissions to hospital, A&E attendances and outpatient appointments at NHS hospitals in England
HMT	His Majesty's Treasury
Home birth	A birth that takes place in a residence rather than in a hospital or a midwife-led unit
HRA	Human Rights Act
ICB	Integrated Care Board
ICS	Integrated Care System
IIA	Integrated Impact Assessment
IMD	Index of Multiple Deprivation, a UK government qualitative study of deprived areas in English local councils.

IR	Interventional Radiology
ITU	Intensive Care Unit
JHOSC	Joint Health and Overview Scrutiny Committee, with representatives from each of the borough Health Overview and Scrutiny Committees
LD	Learning Disability
LMNS	Local Maternity and Neonatal System
LNU	Local Neonatal Unit
LOS	Length of Stay. How long a patient is in hospital and is calculated subtracting the day of admission from day of discharge
LSOA	Lower Super Output Area
M&M	Mortality and morbidity
MDT	Multi-disciplinary team
MFF	Market forces factor
Midwife-led unit	A maternity unit where care is delivered by midwives
MMBRACE-UK	Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK
MP	Member of Parliament
MVP	Maternity Voices Partnership
NCCR	Neonatal Critical Care Review
NCL	North Central London
NCPs	National Car Parks
NEL	North East London
NICU	Neonatal Intensive Care
NHS	National Health Service
NHSE	NHS England
NICE	National Institute for Health and Clinical Excellence
NO2	Nitrous oxide
North Mid	North Middlesex University Hospital NHS Trust
NTS	Neonatal transfer service
NWL	North West London
OBC	Outline business case
Obstetric led unit	A maternity unit within a hospital where doctors are available to provide medical care if needed
OD	Organisational Development
ODN	Operational Delivery Network
ONS	Office of National Statistics
PCBC	Pre consultation business case
PPEG	Patient and Public Engagement group
PTAL	Public Transport Accessibility Levels
QIS	Qualified in specialty
RCD	Respiratory care days
RCOG	Royal College of Obstetricians and Gynaecologists
Royal Free	Royal Free London NHS Foundation Trust comprising of Barnet Hospital, Royal Free Hospital and Chase Farm Hospital
RTT	Referral to treatment
SLT	Speech and language therapist

SMB	System Management Board
SCU	Special Care Unit
SRO	Senior responsible officer
TFL	Transport for London
UCLH	University College London Hospitals NHS Foundation Trust
ULEZ	Ultra Low Emission Zone
VCSE	Voluntary, community and social enterprise
Whittington Health	Whittington Health NHS Trust
WTE	Whole time equivalent

14. Appendix

14.1 Appendix A: Care model development meetings

Meeting	Meeting Focus	Date	Number of Attendees
Care model development workshop #1	A workshop with a range of attendees from both the NHS and Local Authorities were invited to commence work on best practice models of care.	14/07/22	49
Start Well Clinical Reference Group	The first meeting of the CRG split the group into two break outs; one covering maternity and neonates the other covering paediatrics and asked for their feedback on the developing models of care.	31/08/22	20
Care model workshop #2	The second large workshop where attendees reviewed of the best practice models of care and provided feedback.	08/09/22	40
Start Well Clinical Reference Group	The CRG were asked review the proposed task and finish groups and then split into two groups to consider some specific questions on the care models as well as starting to look at co-dependencies	14/09/22	19
Start Well Clinical Reference Group	the CRG were presented with the emerging themes from the engagement and reviewed the proposed membership of the task and finish groups.	28/09/22	14
Task and finish group: Maternity #1	Obstetric and maternity with midwifery leads where invited to explore elements of the maternity model of care	12/10/22	12
Task and finish group: Maternity #2	Obstetric and midwifery leads when invited to further explore elements of the maternity model of care.	21/10/22	4
Start Well Patient Participation and Engagement Group	The group were shown the emerging neonatal care model and ask for their feedback.	21/10/22	7
Task and finish group: Maternal Medicine	Obstetric and maternal medicine leads as well as lead midwives explored NCL maternal medicine pathways.	28/10/22	6
Start Well Patient Participation and Engagement Group	Initial meeting to discuss terms of reference and determine ways of working.	30/09/22	7
Start Well Patient Participation and Engagement Group	Discussion regarding draft best practice model of care for neonates.	31/10/22	7
Task And Finish Group: HEE	Heads of the school for paediatrics, anaesthetics, general practice an obstetrics and gynaecology were invited to comment on the potential impact of the care modules on training.	31/10/22	4
Start Well Patient Participation and Engagement Group	Discussion regarding draft best practice model of care for maternity.	11/11/22	7
Primary Care Silver Group	The care models were shared with the group and feedback invited, with a specific focus on primary care elements of the pathways	17/11/22	50

14.2 Appendix B: Interim IIA mitigations

Mitigations required across both options	
As the programme progresses, we need to continue to understand the impact of our proposals and develop mitigations through further engagement with potentially impacted groups. It is particularly important to ensure we hear from groups that are less likely to engage, or where there are barriers for them to do so.	• Information about proposals should be clear and easy to understand. It should be translated into the most commonly spoken languages in NCL, with others available upon request. It should be made available in different formats (easy read / large print) to account for the spectrum of communication needs. • Information about proposals needs to be widely shared to ensure maximum engagement. This should build on existing partnerships to reach communities or utilise organisations who have existing routes to engage with groups. Consideration should be given to innovative mechanisms to obtain feedback, and ensuring communication preferences of groups are considered. • Ambition to engage with the range of service users identified through the interim IIA and hear from those that we were less successful in engaging with during the engagement for the interim IIA. • There should be a focus during engagement on groups that are likely to be more materially impacted – be that geographically or because of any other characteristics that make them more impacted by changes (e.g., have poorer outcomes from services or are more likely to need to

	use services that may be changing). Response rates will be actively reviewed during the consultation to enable additional focus on groups where response rate may be lower. • The programme should continue to review impact of possible changes on different groups and ensure any new impacts are included and mitigations developed to address negative impacts.
Should a decision to implement changes be made in future, changes need to be well communicated to residents. Mitigations will need to be put in place to ensure that all groups are informed of changes, and they understand their choices for maternity care. Clear information needs to be available to support and promote a choice of a maternity unit and birth setting that meets the needs of expectant parents.	• Ensure there is accessible information about choices of maternity care online and that this information is available in non-digital formats for those who are less able to access the internet. • Uniformity in how information about maternity services is hosted on individual trust webpages would help users better navigate to the information that they need. • Providing information in different formats to meet the communication needs of a range of service users, including different languages, easy read, large and small print, audio, braille and sign language. • Building links with local community groups, particularly for more transient and migrant communities who may not engage as well with published material. • Disseminating information through local community groups and local GPs to help ensure that pregnant women and people have accurate information regarding the service changes and what this means for them.
There are some service users for whom changes may mean attending a different hospital than they are used to. This change may be difficult to manage for some service users, and they would need extra support to manage this.	• Offering opportunities to visit the site outside of planned appointments or birth to familiarise expectant parents with the unit. • Providing access to videos, pictures and additional information about the unit or what to expect in advance of appointments, in order that people can better prepare for their visit to the site. • Detailed information about how to navigate to the right area of the hospital where appointments or admissions are scheduled, as part of communication with service users • Consider innovative tools or technology to support wayfinding or giving directions within a hospital. • Ensure all sites meet access standards, particularly for families with young children or where a family member may be disabled. • Ensure sensory adjustments can be put in place where appropriate in clinical areas, such as access to a private room and the ability to dim lighting. • Consider patients' needs around appointment times, and where possible offer appointments that may better meet the needs of those travelling to hospital for appointments. • Working with the neonatal care coordinator as part of implementation to ensure that there is consistent information and support available to parents who have a child admitted to a neonatal unit.
Should a decision to implement any changes be made in future, it may result in service users going to a different hospital that they are unfamiliar with. This may lead to changes to journeys to hospital that people are used to. Mitigations would be needed to ensure that people have information to plan their journeys to hospital.	• Provide clear information to service users about travel and transport options to all maternity units. • Make this information available in different languages and formats to suit the range of communication needs of service users likely to be impacted. • Link to live journey planners such as TFL to ensure that accurate, up-to-date information about journeys can be accessed. • Working with the neonatal care coordinator to ensure that there is information available to families about travel when their child is admitted to a neonatal unit.

Where possible, to mitigate the cost and time spent travelling to a hospital site, we would want to deliver as much care as possible close to home	• Provision of appropriate appointments in community settings, for example, family hubs and children's centres. • Offer of virtual appointments where appropriate and clinically recommended. • Implementation of hospital at home / community neonatal care to ensure babies avoid admission to a neonatal unit or can be discharged as early as possible – reducing the burden of travel to visit babies during an admission to a neonatal unit.
There may be an impact on the cost of travel should changes be implemented. There will be some service users who are more impacted by this than others, and it is important that patients understand what is available to support them with cost of travel to hospital and that any additional travel costs do not create a barrier to accessing care.	• Raise awareness of schemes to support patients with travel costs, as well as how to make a claim, including: - Healthcare Travel Costs Scheme - financial assistance for patients (and their carers) who do not have a medical need for ambulance transport, but who require assistance with their travel. - ULEZ and Congestion Charge reimbursement schemes where applicable. - Blue badge schemes – these support key groups with travel and are increasingly being made available to those with a mental health condition. - Information about these schemes to be available in different languages and formats to suit needs of service users. • Provide information about trust-level arrangements for the reimbursement of transport costs under the Healthcare Costs Travel Scheme, including location and opening hours of cashier kiosks. • Include a discussion about cost of travel when booking appointments, to identify if cost of transport may impact on service users' ability to access maternity care • Support patients by working with charitable and VCS partners to consider the feasibility of a pre-paid travel card for service users identified as vulnerable for whom travel costs would limit their access to maternity care. • Continue arrangements for patients who have eligibility for hospital patient transport schemes. • Ensure service users are aware of other financial support schemes available during pregnancy, such as NHS Healthy Start where they can get help to buy food and milk, and the maternity exemption certificate. • Working with neonatal care coordinators to ensure there is clear information about the financial support available to families when a child is admitted to a neonatal unit. This could include information about benefits people may be entitled to, and support from charities and other VCS partners.
Access to parking spaces is variable across NCL sites. Parking has been raised as a particular consideration for parents who have a child admitted to a neonatal unit, given their need to visit their child on an ongoing basis and in some instances over an extended period. Mitigations may be needed around parking to ensure that families can easily visit their child by car.	• Ensure that there are consistent arrangements in place for families with a baby admitted to a neonatal unit in relation to parking. Consider the provision of a permit to allow discounted parking for the duration of the baby's admission. • Putting in place capacity that meets demand to ensure fewer neonatal transfers out of NCL, thereby reducing the overall travel distance for families. • Particular consideration should be given to those with disabilities, to ensure access to disabled parking spaces. • Consider the promotion of other transport arrangements as an alternative to driving, where appropriate. • NCL/trusts could explore with NCPs (National Car Parks) for lower/ discounted rates for maternity/neonatal services that do not have a car park on site.

The interim IIA identifies a small impact on carbon dioxide emissions as a result of changes to journey times, as well as an impact of refurbishment of estate to deliver the capacity needed. Mitigations needed to address the impacts identified fall within the wider green agenda for the ICS and sites that are impacted. The NHS has a target to reach net zero by 2040 and the ICS and each individual trust have their own plans to deliver on this.	• Through the refurbishment that will be undertaken, buildings will increase their energy efficiency and thus have a positive impact in the longer term on energy usage. • Trusts to explore the possibility of using their own energy sources to provide energy to refurbished areas (for example, heat pumps). • Providing appropriate appointments in community settings or online which negate the need to travel to a hospital site will support a reduction in the overall number of journeys taken to access maternity care. • In line with national targets of a 40% reduction in nitrous oxide emissions, trusts to review their use to determine if it is possible to reduce waste that may be associated with leaks in pipes. • Continue to work on the travel components of the ICS and local trust green plans and encourage active travel or travel via public transport where possible.
Women and people with complex medical needs are looked after under networked arrangements with input from both obstetric physicians and other specialists. Under both options, mitigations may be needed to ensure that people with complex pregnancies can continue to access the specialist care they need.	Detailed condition-specific pathway reviews to be undertaken during planning for implementation once a preferred option has been reached, to be led by the NCL Maternal Medicine Network. This would need to determine: • The areas of specialism that are provided at the site no longer supporting intrapartum care, and determining what the optimum pathway would be in the future. • The level of input from other non-obstetric specialists required both during intrapartum care and antenatally. • Consideration given to continuing some appointments at the site which no longer supports births, should this be the most appropriate model. • The possibility of specialists providing in-reach to another hospital site to support patients with additional needs during their intrapartum care, should it be required.
Mitigations for option A	
There are specific mitigations that would need to be put in place for the population of Harlesden and Willesden should a decision be taken in the future for option A to be implemented.	The populations of **Harlesden and Willesden,** in the borough of Brent, have been identified as a vulnerable population who are potentially more impacted should option A be implemented given their proximity to the Royal Free site. Some specific mitigations that would need be taken forward for this population are: • **Engagement during the public consultation:** as part of consultation, we would seek to engage with residents of this area to understand the impact of changes and any other mitigations that would need to be considered through implementation. • **Communicating changes:** should changes be agreed, a specific communication campaign should be considered. This would need to factor in the most commonly spoken languages in this area, and non-digital formats, given a lower than average IT proficiency of the population. • **Continuity of carer:** given population risk factors, deprivation, ethnic diversity and ill-health, NCL would l work with NWL to ensure that the population is considered to be prioritised to receive continuity of carer in their maternity pathway – we think that this could be beneficial to these patients to access maternity care within their borough as it will mean increased provision of continuity postnatally. • **Cost of travel:** when travelling by taxi, increased costs have been identified. We would look to put in place a range of mitigations, identified under the proposals more generally, but in a targeted way and ensure that NWL hospitals also have clear arrangements in place for re-imbursement of expenses and other travel cost

	reimbursement (such as Congestion Charge and ULEZ reimbursement). We would also look to local VCS organisations who may be able to support further with the cost of travel expenses for groups that are particularly vulnerable.
There are specific mitigations that would need to be put in place for the Orthodox Jewish community should a decision be taken in the future for the Royal Free Hospital to be the site that no longer provides maternity and neonatal care.	There is an orthodox Jewish population within the current catchment of the Royal Free Hospital. Should this site no longer provide maternity care and neonatal care, mitigations would be needed to ensure that this group is not detrimentally impacted: • **Staff training:** Jewish women may have specific needs during their maternity care. Staff training to ensure requirements such as Kosher food and Shabbat are understood, would need to be put in place at sites anticipated to care for this population in the future. • **Kosher food**: ensuring all sites are set up to provide Kosher food for the pregnant woman or person during labour and permit food to be brought in from outside the trust. • **Communication:** through engagement with the Orthodox Jewish community, it has been identified that non-digital communication is more effective. Consideration should be given to ensuring communication of changes, and subsequent communication about maternity care, can be provided in a non-digital way. Working with the community and VCS partners may be particularly effective in reaching the Orthodox Jewish community in NCL. • **Observance of Shabbat:** specific considerations need to be made around observance of Shabbat. This may include avoiding discharge and not using the call bell. Sites need to ensure that appropriate protocols are in place to ensure that Shabbat can be observed by families receiving maternity care. • **Modesty**: Orthodox women may choose clothes that cover their elbows and knees, as well as a wig, scarf or other head covering. Long-sleeved gowns should be made available during birth and the mother permitted to wear a hair covering.
Mitigations for option B	
There are specific mitigations that would need to be put in place for the population of Holloway and Finsbury should a decision be taken in the future to implement option B.	The populations of **Holloway and Finsbury** in the borough of **Islington** have been identified as vulnerable populations who are potentially more impacted should option B be implemented given their proximity to the Whittington Hospital. Some specific mitigations that would need be taken forward for this population are: • **Engagement during the public consultation:** we would seek, as part of the consultation, to engage with residents of this area to understand the impact of changes and any other mitigations that would need to be considered during implementation. • **Communicating changes:** should changes be agreed, a specific communications campaign should be considered. This would need to factor in the most commonly spoken languages in this area, and also non-digital formats, given lower than average IT proficiency of the populations. • **Continuity of carer:** given population risk factors of deprivation and ethnic diversity, NCL would work to ensure that the populations are prioritised to receive continuity of carer in their maternity pathway. This would need to include a review of the catchment areas for community midwifery, to ensure coverage across Islington as well as ensuring that borough-based community antenatal provision is maintained. • **Cost of travel:** when travelling by taxi, increased costs have been identified. We would look to put in place a range of mitigations

	identified under the proposals more generally, but in a targeted way and ensure that hospitals (some of which are in NEL) have clear arrangements in place for re-imbursement of expenses and other travel cost reimbursement (such as Congestion Charge and ULEZ reimbursement). We would also look to local VCS organisations who may be able to support further with the cost of travel expenses for groups that are particularly vulnerable.
Specific mitigations would need to be put in place for disabled populations who live close to the Whittington Hospital should a decision be taken in the future for Whittington Hospital to be the site that no longer provides maternity and neonatal care.	The interim IIA identifies the largest concentration of disabled people as being between the Royal Free Hospital and Whittington Hospital, with an above average concentration around the Whittington Hospital. The ONS defines disability as “people who assessed their day-to-day activities as limited by long-term physical or mental health conditions or illnesses are considered disabled”. To put effective mitigations in place, we need to better understand the types of disabilities within this population. Through the consultation and further engagement with local groups, we would seek to do this and develop specific mitigations that will support individuals to continue to access maternity and neonatal care.

14.3 Appendix C: London Clinical Senate recommendations

Area	Recommendation		Where this is reflected or being addressed
Case for change	**R1**	The Case for Change is clearly articulated; it could be strengthened further to emphasise why the status quo is likely to be unsustainable and to describe how the proposals provide greater opportunities for improvement.	This has been further drawn out in section 5.4 of the maternity and neonatal PCBC.
	R2	Improvements to quality and safety are clear drivers of the case for change and would benefit from greater specificity; there may be opportunities to co-produce these with public and patients. It is important that they are regularly tracked and monitored, including to being alert to and facilitate the mitigation of unintended consequences.	Further work would be needed to define metrics and an approach to monitoring them at DMBC stage. Section 8.4 of the PCBC outlines some areas that we may utilise as a starting point for this.
	R3	There are several quality and safety improvement projects that are in progress alongside the proposed service reconfiguration e.g., addressing variation in stillbirth rates and improving access to perinatal mental health care. Clearly referencing these as aligned but independent pieces of work would add clarity.	A paper has been drafted which outlines the work going on in our services that are outside of the direct scope of the reconfiguration. This can be found here.
Outcomes & Equity	**R4**	The PCBC and discussion on the day emphasised that the proposed changes would improve service provision and outcomes for the whole population, with focussed improvement on the most vulnerable groups and communities. This could be articulated more fully in the PCBC and the Decision-Making Business Case (DMBC): • Further describe how access will be improved for all populations e.g., more care and assessment being provided closer to home (community or virtual); integration with place-based services including primary care and pre-natal, post-natal and health visiting, pre-surgery, post-surgery. • Provide further specificity on how inequities and inequalities will be positively addressed for the most vulnerable populations e.g., prioritising continuity of care and local access.	A key component of our care model is as much care is to be delivered locally as possible. This is outlined in Section 4.3 of the PCBC. A key criterion for evaluating the options that we are consulting on are that they would mean that the greatest number of births for NCL residents remain at NCL sites. This supports greater integration of care and pathways in the community. The option with the largest number of outflows (option A) may result in more NWL residents accessing maternity care within their own boroughs, which would contribute to greater pre- and post-natal continuity. Our LMNS continue to work with providers to ensure continuity is prioritised for populations who may be most vulnerable as staffing allows. Section 4.3.6 highlights that through consolidation of our workforce our ambition is that this can contribute to an increase provision of continuity of care as our workforce would be less thinly spread.
	R5	Continue work on the Integrated Impact Assessment to ensure that where access to care is negatively impacted by the proposed changes, specific mitigating actions are clearly articulated. For example, timely presentation and transport issues and costs for the populations potentially most disadvantaged, particularly CORE20plus and those with protected characteristics.	We have worked to identify mitigations for areas identified in the impact assessment. These were co-created with stakeholders, including patient representatives. These mitigations include support for our most vulnerable populations and cover things like cost of travel and support to access an unfamiliar hospital site. A high level summary of these can be found in section 6.9 of the PCBC, with the full list of mitigations in Appendix B.
Workforce	**R6**	There is potential to explore and describe further North Central London's role as an anchor institution with possibility of recruiting, developing, and educating people from local communities.	Our interim IIA highlights that the proposals have a small impact on our providers' role as an anchor institution as the services potentially impacted form a small part of a much wider workforce. Section 7.3.3.2 highlights the ambition to develop and train our workforce, ensuring that opportunities are provided for the local population. It highlights that through implementation we would explore the possibility

			of further apprenticeship and T-level placements.
	R7	Organisational development (OD) work during the consultation and implementation phase can help to ensure that staff contribute to and strengthen plans throughout the change process, that their wellbeing is supported, and the risk of attrition is reduced. Illustrating links to the NCL people plan, and associated OD is likely to support this.	We recognise the uncertainty that the proposals create for staff. We have worked hard throughout the programme to ensure that staff are kept informed and updated in a consistent way throughout the programme. We would aim to continue to do this as the consultation starts and then through any further subsequent stages of the programme. Section 7.3.3.1 outlines our approach to this
	R8	Further describe how continued liaison with education providers and staff while the changes are implemented will maintain continuity of training and optimise opportunities to further improve skills and experience.	We have had ongoing input into the programme from NHSE - Workforce, Training and Education directorate as well as with Heads of School for impacted specialties. We would continue this dialogue as we move through the programme. This is highlighted in section 7.3.3 of the PCBC
	R9	Continue to develop thinking on workforce: opportunities exist aligned to the Long-Term workforce plan, new roles, new ways of working, and lead employer contracts. Ensure effective dovetailing between funding recently made available to meet standards as well as investment aligned specifically to Start Well.	Workforce has been identified as a key enabler to implementation of our proposals, and as implementation plans progress, we will look to ensure that new roles identified through the Long Term Workforce plan are considered. Our approach to workforce through implementation is outlined in Section 7.3.3 of the PCBC.
Estates & Environmental Sustainability	**R10**	The midwifery and neonatal integrated impact assessment includes sustainability. There is opportunity to build on this to specify how the proposals will further all NHS providers to improve environmental sustainability and net zero. This aligns to the role as an anchor institution, community models and digital opportunity.	Achieving the NHS ambition of Net Zero will require collective effort across all services and organisations. We recognise that when you make changes to services it provides the opportunity to go further and embed sustainability within services. Section 6.6 outlines what we believe to be impact of implementing the options from a sustainability perspective. Section 7.3.6 outlines how we would ensure to embed sustainability within our implementation approach.
Data & Digital	**R11**	Ensure that improving data quality in maternity and supporting digital alignment (e.g., integration with other information systems and move to a single records system) are prioritised. This should support the proposals and enable implementation of different care models and specialist outreach. It should also include mitigations for digitally excluded populations.	Data has been identified as an enabler to implementation, but it is also a business as usual priority for our Local Maternity and Neonatal System. We are looking to ensure that maternity and neonatal services are included as part of a wider digital strategy that the ICS is developing. Our approach to digital through implementation is outlined in Section 7.3.4 of the PCBC.
Patient & Public Engagement	**R12**	The PCBC is clear on the ambition to work with more disadvantaged and deprived populations. It is important that the communication plan demonstrates multi channelled and sustained communication on what might be or is different, and why.	The plans for consultation (section 11) outline the approach taken to consultation. We have also included mitigations in Appendix B which highlight the importance of using a wide range of channels and methods to reach a diverse range of service users.
	R13	During implementation there should be opportunities for service users to co-design and influence the way services are delivered at Place and Neighbourhood level (with their linkages to Primary Care, Community Services, Schools, and Social Care). Some of the priorities are articulated in the Three-Year Delivery Plan for maternity and neonatal services.	A high-level approach to implementation is outlined in section 7 of the PCBC, which we would look to further develop at DMBC stage. Section 7.3.1 outlines the ambition for implementation planning to involve a range of stakeholders, including service users and also ensure that appropriate elements can be owned locally to ensure that they are informed by local expertise.
Communication with clinicians and wider stakeholders	**R14**	Ensure that there is connectivity between risk registers held at ICS level and provider level, which inform the proposals and monitor the transition and early years of implementation to provide assurance that ambitions are met, and unintended consequences are rapidly highlighted for mitigating action.	Risk management is an important part of implementation. Some high-level risks and an approach to how these will be managed is outlined in section 7.4 of the PCBC

	R15	A different provider configuration could disrupt established relationships with local authorities and their teams e.g., Health Visiting and Children and Young People's health. It would be helpful to reference plans for approach during implementation.	Mitigation around this potential risk is covered in section 7.4.2. This would be explored in more detail at DMBC stage.
Activity and Capacity	**R16**	Provide further detail on the methodology and confidence of changed activity flows for the potential scenarios A and B.	Further detail around the methodology for activity flows can be found in section 5.9.
Patient Flows	**R17**	Continue engagement with neighbouring ICBs and trusts where proposed changes might impact on flows, namely at St Mary's, Northwick Park and Homerton but wider as necessary. Outline the additional activity flows for receiving trusts in each potential scenario and what would be required to effectively serve patients e.g., facilities and staffing.	Engagement will continue both through consultation and in any subsequent stages of the programme. The activity flows to these organisations is outlined in section 5. NWL ICB has confirmed could be delivered within existing capacity and would support the future sustainability of these units where the local birth rate has been declining. It would also provide benefits to women and people in NWL who currently deliver outside of NWL units in terms of continuity of care and integration of acute and community pathways. Following engagement with NEL ICB has confirmed that the Homerton Hospital site is physically constrained and there is a backdrop of increasing births in NEL in line with increasing population. There is therefore challenge in accommodating additional births from other areas, although across the system as a whole it is likely to be broadly manageable if effectively spread.
	R18	Include details of in-utero transfers, transfer rates and repatriation pathways within the PCBC demonstrating the safety considerations that have informed the pathway and proposal.	Section 3.1.4 outlines the in-utero transfer refusals at UCLH due to limited capacity.
Facilities	**R19**	Include detail on birthing facilities within each site, and the anticipated additional facilities required based on the projected activity associated with scenarios A and B. The panel understands this has commenced but it was not included in the PCBC which was shared.	Further detail around the current and modelled future capacity can be found in Appendix D. this was not available to the panel at the time the review took place.
	R20	There are opportunities within both options A and B for keeping mothers and babies together, provide care at home for moderate to late preterm infants i.e., home NGT feeding, phototherapy services and virtual hospital at home. Provide additional detail in the modelling of all neonatal cot numbers, including transitional care cots, family integrated facilities and neonatal community outreach facilities to demonstrate potential quality and safety improvements.	Neonatal hospital at home services are being implemented across NCL through our virtual ward programme. A key feature of our care model (section 4 of this PCBC) outlines the ambition to provide as much care outside of a neonatal unit as possible through both transitional and community care. Modelling around neonatal cots has been undertaken using agreed methodology with the neonatal Operational Delivery Network. Should the programme go on to write a decision-making business case, we would undertake further modelling around cot requirements as part of this.
Service model/ patient pathway	**R21**	Include an indication of the likely patient pathway in relation to all sites under the proposed scenarios and including the proposed closed site. Clarify: • Where antenatal and post-natal facilities will be available including high risk clinics, scanning, and screening. • The implications for other services e.g., Emergency Department presentations if Early Pregnancy Assessment Units close.	Where possible, antenatal clinics will continue to take place in the community, as close to the home of patients as possible. It is anticipated that should changes be agreed, the site that no longer supports intrapartum care would also cease to host the majority of antenatal appointments. Section 4.2.3 outlines this, but also outlines that for certain complex maternal clinics where other specialists may need to be involved in maternity care this may continue at the site that no longer supports intrapartum care.

			Section 6.4.1 outlines the impact of the options on interdependent gynaecology services and outlines principles that would be adopted through implementation around the management of any changes.
	R22	Further articulate the opportunities enabled by the collaborative model between primary, community, and hospital care and services that would become available in the community e.g., phototherapy and postpartum care - (See R4).	Section 4 outlines our future care models. In this, we describe that antenatal and post-natal care would continue to be provided as close to home as possible at community sites. We also describe that we are rolling out community neonatal provision across NCL boroughs through our virtual ward programme. Should changes be agreed we would look to work with community providers and primary care through implementation to ensure that services are joined up with one another. This may be supported through enhancements to digital interoperability which is a key priority for the ICS.
Workforce	**R23**	Further develop and respond to the clinical co dependencies and workforce implications as started in Figure 20 of the PCBC: • Decoupling the obstetric workforce from the gynaecology workforce on emergency presentations and the impact on the workforce who might continue to work across both specialities. • Workforce distribution to achieve safe and sustainable services. • Impact on wider services such as imaging, specialist nurses and pathology.	Section 6.4 describes the clinical impact of the options that are being put forward for consultation this includes a section on obstetrics and gynaecology services as well as wider clinical services such as pharmacy, pathology, and imaging.
Edgware Birth Centre	**R24**	Ensure that the total service demand is reflected in the PCBC include the number of times people were booked to birth at the Edgware Birth Centre but were redirected due to staffing/ capacity issues.	This is reflected in the Edgware Birth Centre Addendum document (found here).
	R25	The closure of the birthing suites at the Edgware Birth Centre would release resources. Ensure there is a clear read across as to how investment will improve quality of provision and realise the greater equity of outcomes. For example, services for high-risk pregnancies and increasing the support available to vulnerable communities.	As part of proposals around Edgware we propose that antenatal and post-natal care would be maintained at the site and potentially expanded. Following consultation, we would look in more detail at how best this resource could be used to provide further support to people who may be at risk of adverse maternity outcomes.
	R26	Clearly articulate how choice (midwifery led centre, home births, obstetric unit) will be enhanced by the service changes particularly for those communities most affected by the change, either through service location or other vulnerabilities and inequalities.	We describe in our case for change (section 3.1.2) that our midwife-led units and home births are sometimes suspended due to staffing pressures and therefore although we are offering choice to women at the time of booking, this choice is not always facilitated on a consistent basis. In section 4.3 we outline our maternity care model which highlights the importance of three choices of birthing location (home, alongside midwifery-led and obstetric). We also describe in this section that we believe moving from five to four sites will mean we can facilitate choice of birth setting on a more consistent basis by having staff spread over a smaller number of units, and it will be more achievable for services to be staffed in line with standards.
	R27	Strengthen proposals to ensure that choice for low-risk women and birthing people is maximised. Demonstrate how choice for people with low-risk pregnancies will be promoted, how opportunities for home births will be enabled and promoted, and how a home from home environment in birth settings might be further	We recognise the importance of promoting choice in maternity care and the benefits that midwifery-led can provide for low risk women and people. Section 4.3 outlines our new care model which includes ensuring that midwifery-led care is promoted. We outline that we feel choice of a midwifery-led unit and home births

		developed through facilities available e.g., birthing pools and cultural environment.	will be able to be facilitated on a more consistent basis by consolidating our staff over fewer units. In section 7.3.2 we also outline the areas we would consider through implementation to enhance experience of midwifery-led care both at alongside midwifery-led units and homebirths
	R28	Consider strengthening the language around choice for maternity and neonatal care, not only in relation to the Edgware Birth Centre but to the full range of options. The importance of language was a key theme shared from the engagement work to date.	Section 7.3.2 highlights the importance that we place on choice of birth setting and we see facilitating choice as a key enabler for implementation of changes. We have also included specific mitigations in our interim IIA around choice to ensure that people understand the choices available to them in maternity care should changes be implemented.

14.4 Appendix D: Activity and capacity modelling

Activity projections

Projected deliveries

	Option A: Barnet, North Mid, Whittington, UCLH		Option B: Barnet, North Mid, Royal Free, UCLH	
Hospital	**2021/22 activity**	**Additional deliveries**	**2021/22 activity**	**Additional deliveries**
Barnet Hospital	5,606	+454	5,339	+187
North Middlesex Hospital	3,962	+94	4,960	+1,092
Royal Free Hospital			3,917	+1,357
University College Hospital	5,167	+66	5,424	+323
The Whittington Hospital	4,304	+913		
St Mary's Hospital		+385		+12
Northwick Park Hospital		+465		+8
Homerton University Hospital		+5		+322
Whipps Cross Hospital		+10		+23
The Royal London Hospital		+2		+13
Princess Alexandra Hospital		+13		+10
Watford General Hospital		+100		+3
Lister Hospital		+5		+3
Luton Hospital		+8		+7
Newham Hospital		+12		+14
Other providers		+28		+14

Projected neonatal care days

	Current neonatal care days (2021/22)	Option A: Barnet, North Mid, Whittington, UCLH		Option B: Barnet, North Mid, Royal Free, UCLH	
Hospital		**2031/32 activity**	**Additional care days**	**2031/32 activity**	**Additional care days**
Barnet Hospital	7,770	8,938	+1,168	9,093	+1,323
North Middlesex Hospital	6,237	6,416	+179	8,808	+2,571
Royal Free Hospital	1,901			4,534	+2,633
University College Hospital	10,252	10,937	+685	11,641	+1,389
The Whittington Hospital	6,123	8,363	+2,240		
St Mary's Hospital			+233		+28
Northwick Park Hospital	5,692		+282		+19
Homerton University Hospital	12,427		+3		+741
Whipps Cross Hospital	4,800		+6		+54
The Royal London Hospital	12,766		+1		+31
Princess Alexandra Hospital			+8		+24
Watford General Hospital			+60		+7
Lister Hospital			+3		+7
Luton Hospital			+5		+17
Newham Hospital	6,934		+7		+33
Other providers			+32		+64

Future capacity requirements

Maternity capacity

Option A: Barnet, North Mid, Whittington, UCLH		
Hospital	**Current delivery suite capacity**	**Additional delivery suite capacity requirement**
Barnet	16	+3
North Mid	22	+0
Royal Free		
Whittington	14	+2
UCLH	16	+0
Non-NCL providers	-	+7

Option B: Barnet, North Mid, Royal Free, UCLH		
Hospital	**Current delivery suite capacity**	**Additional delivery suite capacity requirement**
Barnet	16	+2
North Mid	22	0
Royal Free	8	+6
Whittington		
UCLH	16	+2
Non-NCL providers	-	+3

Neonatal capacity

Option A: Barnet, North Mid, Whittington, UCLH		
Hospital	**Current neonatal cot capacity**	**Additional neonatal cot capacity requirement**
Barnet	30	+2
North Mid	24	+0
Royal Free		
Whittington	23	+7
UCLH	32*	+0
Non-NCL providers	-	+5

Option B: Barnet, North Mid, Royal Free, UCLH		
Hospital	**Current neonatal cot capacity requirement**	**Additional neonatal cot capacity requirement**
Barnet	30	+2
North Mid	24	+8
Royal Free	14	+1
Whittington		
UCLH	32*	+0
Non-NCL providers	-	+6

*An expansion of neonatal cot capacity is planned under a business as usual scenario. This has been factored into the future cot capacity requirement modelling.

14.5 Appendix E: Finance information

The following information sets out the key figures for option A and option B for the proposals related to hospital based maternity and neonatal services as well as the key information relating to financial aspects of the service reconfiguration process.

	Option A: Barnet, North Mid, Whittington, UCLH	**Option B: Barnet, North Mid, Royal Free, UCLH**
Gross capital investment	£42.4m	£39.4m
ICS capital funding	£42.4m	£39.4m
Are capital costs affordable?	Yes	Yes
Are the revenue costs affordable for each Trust?	Yes	Yes
Asset life cycle	30 years	30 years
PUBSEC[1] index baseline	Q2 2022	Q2 2022
RIBA[2] stage	• Barnet: Stage 0-1 • Whittington: Stage 3	• Barnet: Stage 0-1 • North Mid: Stage 0-1 • Royal Free: Stage 0-1 • UCLH: Stage 0-1
Optimism bias assumption	• Barnet: 20% • Whittington: 15%	• Barnet: 20% • North Mid: 20% • Royal Free: 20% • UCLH: 20%
Inflation assumption	• Barnet: 20.1% • Whittington: 20.1%	• Barnet: 12.9% • North Mid: 12.9% • Royal Free: 20.1% • UCLH: 20.1%
Trust contingency value	10%	10%
Fees (design and commissioning)	Fees included in the cost per m^2	Fees included in the cost per m^2

1 - The Tender Price Index of Public Sector Building Non-Housing **(PUBSEC)** measure the movement of prices in tenders for building contracts in the public sector.

2- The RIBA Plan of Work organises the process of briefing, designing, constructing and operating building projects into eight stages. The RIBA Plan of Work eight stages can be found here.

Key financial information on the reconfiguration process

What is the role of finance in the option appraisal process?

The key financial test, as set out by NHS England in the 'Planning Assuring and Delivering Service Change for Patients 2018', is that any proposal is affordable in capital and revenue terms ahead of public consultation. Both options have been agreed by NHS England as affordable in terms of revenue and capital requirements.

The financial implications of the potential service changes have been fully considered as part of the development of the PCBC. The financial implications have been signed off through the Start Well Programme's governance and has been assured by NHSE London Region.

What about other costs that might be relevant?

Transition costs are short-term costs associated with the service change. This may include the costs of staff time or Programme team time that is needed to ensure that the service change is managed effectively.

Stranded costs are costs that an organisation may continue to incur after the service change has happened, even though the hospital may not be delivering maternity and neonatal services. Typically, an organisation may review operational and clinical processes to reduce and eliminate these. Further work will be needed by the impacted Trust after a decision has been to review the estimate of these costs.