Appendix 5.1: Horton Strategic Review

STRATEGIC REVIEW OF THE HORTON GENERAL HOSPITAL:

An opportunity to design a 21st century hospital at Banbury

OCTOBER 2016
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1. Introduction

1.1. Responding to our challenges: an opportunity to design a 21st century hospital at Banbury

The Horton General Hospital (the Horton General) is rightly cherished by the people of Banbury, and the surrounding localities, as the hospital that has delivered acute hospital care to them since 1872. During the last century as it grew and adapted to changing health economic circumstances and the needs of its population, it first became a National Health Service (NHS) Trust in 1993 and then, part of the Oxford Radcliffe Hospitals NHS Trust in 1998. At its heart, throughout this period, the model of healthcare delivery at the Horton General has remained largely unchanged since the inception of the NHS for the last 50 years; providing secondary care, including hospital bed-based care, for the acutely ill on its site in Banbury.

There have been significant changes since that time. More than ever, the NHS is facing unprecedented pressures and is in the midst of a process of reform to respond to the challenges of the future, within a fixed envelope of funding. All NHS institutions including Oxford University Hospitals NHS Foundation Trust (OUHFT) are participating in this reform to equip themselves best to face these challenges. As such, this is an opportunity to reassess how the Horton General can be part of a wider healthcare system transformation that delivers the best care for local people and ensures its sustainability. OUHFT sees this as a real opportunity and is committing significant financial investment, to support the continued evolution of the Horton General, by designing and developing a 21st century hospital at Banbury within a larger system of healthcare, with the capacity and capability to meet the health needs of the population it serves, for the next 20 years and beyond.

Since the turn of the century, the Horton General has continued to function as a traditional District General Hospital (DGH) in the north of the county. Increasing life expectancy, changes in the pattern of demand, medical and technological advances and workforce developments have all placed increasing pressures on it to discharge its role while functioning as a standalone hospital. While it delivers demonstrably good care in some areas such as the hip fracture service, in common with other small DGHs in the country it struggles to meet many challenges:

- Sufficient scale to maintain acute services that require minimum staffing levels to maintain viable rotas that sustain care 24/7
- Sufficient scale to maintain many specialist services, which require concentrations of expertise, capital investment in complex technology and co-location of supporting services
- Providing advanced diagnostics closer to home, thereby reducing unnecessary travel times
- Developing partnership working with other healthcare institutions to maintain equity of access to best care for their populations

All these factors have contributed to small DGHs being vulnerable to minor quality gaps between the services they deliver and those delivered by the tertiary healthcare providers, which have been tolerated in exchange for the benefits of local delivery and local ownership. Increasing mobility in the population and greater specialisation of medicine, however, has meant that any

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1 National Hip Fracture Database; [www.nhfd.co.uk](http://www.nhfd.co.uk)
widening of the gap between DGH provision and national guidelines and best practice is harder to justify in the interest of the population. Attempts to address this with certain services at the Horton General such as anaesthetics, paediatrics and obstetrics, furthermore, have required top up payments over and above tariff as they are no longer financially viable.

This review provides an opportunity to assess the challenges facing some of these services provided at the Horton General as part of a more extensive Trust-wide exercise, and to design better pathways of care for these services in line with best practice, which are sustainable and provide a true value benefit to the local population. It is an opportunity to reassess critically and to make choices in the best interest of the population of north Oxfordshire and the surrounding area.

1.2. Healthcare today

The NHS today is facing unprecedented challenges to meet the healthcare needs of the population. The NHS recorded a deficit of £1.85 billion in 2015/16, which is the largest in its history. The deficit for the whole provider sector was close to £2.5 billion. This deficit reflects the huge financial and operational pressures placed on providing healthcare to the population, because funding has not kept pace with demand. The primacy of financial balance remains a priority of the new government and productivity, therefore, will remain the focus together with the maintenance of quality of care.

Despite annual efficiency savings of between 0.75 and 1.2% over the last 30 years, the NHS is committed to deliver a further £22 billion of efficiency savings by 2020. This is increasingly difficult to achieve in the context of maintaining and improving the quality of healthcare that is delivered. It is imperative today, therefore, that the NHS maximises the value of each £ sterling spent on healthcare, to ensure that our population receives the quality of care it deserves.

If the NHS is to respond to these efficiency challenges without impacting on quality it will need to work in different ways. No longer should institutions provide healthcare in isolation and see competition as the only way to obtain maximum value from resources. Greater collaboration between all sectors of the healthcare economy through partnerships should replace competition, and there is a move to work increasingly together to develop New Models of Care, as a new and alternative response to this productivity challenge.

Within any healthcare system the hospital is an expensive, but essential resource through which to deliver healthcare. It is, however, not the sole focus for the delivery of emergency, acute and elective services. In this context, the hospital must assume a new role. It must work within the system interacting in unity with other providers and with commissioners to provide high quality, safe care in the setting where the patient’s clinical care and support needs can be best met. It must advocate, be part of and deliver services designed around the seven domains of quality and facilitate an integrated approach with the broader healthcare system: a system through which patients move seamlessly from initial referral, through local hospitals to specialist tertiary centres,

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3 Future Hospitals Commission (2013) Future Hospital: Caring for Medical Patients A report from the Future Hospital Commission to the Royal College of Physicians
and subsequently have their care transferred to appropriate care facilities (home, care home, community hospital with intermediate care). This service provision must be of the same quality and availability regardless of the age, clinical disorder or social circumstances of the patient and will ensure that care is delivered in the appropriate location.

Patients have expressed a clear preference to be treated in the community, whenever possible\(^4\),\(^5\),\(^6\). There is real mutual benefit to be gained, therefore, by providing care closer to home. In reality, this means developing and expanding a model of ambulatory care, which avoids bed-based care and supports the patient to continue to live and be treated in the community. Introduction of initiatives such as day case surgery have returned important efficiency savings to the NHS and simultaneously increased patient satisfaction\(^7\), providing enhanced value to the population.

There is also evidence which demonstrates that quality is increased and sustained for some services if provision is focused on fewer sites, rather than spreading them thinly across many sites\(^8\),\(^9\),\(^10\). Many of these advantages accrue from the concentration of expensive human resource, equipment and estate on one site serving a demand large enough to ensure high levels of utilisation of the facility, rather than accepting periods of plant idleness. These include:

- Adequate volumes of procedures for operators working in these facilities to permit them to develop and maintain a skill set more easily than in lower volume centres
- The presence of a group of operators, which allows greater opportunity for shared learning
- Centralisation, which facilitates the co-location of certain services that are interdependent on each other

This centralisation of certain specialised services has been a second strategic objective of OUHFT, and has already been successfully realised in several regional services including Primary Percutaneous Coronary Intervention (PPCI), interventional radiology and major trauma, the Hyper-acute Stroke Unit (HASU) and vascular surgery. These regional services require large catchment areas and in reality the proportion of patients in any given locality who will benefit from such centralised delivery is very small. In the context of localities of the size of the Horton General’s catchment population, however, these centralised services are dependent on enhanced elements of the pathway, which are delivered locally such as Early Supported Discharge for stroke.

Under the umbrella of greater partnership working and networking, these then are two major tenets in the development of healthcare in this country today;

\(^8\) Future Hospitals Commission (2013) Future Hospital: Caring for Medical Patients A report from the Future Hospital Commission to the Royal College of Physicians
\(^10\) NHS England (2014) Five Year Forward View
Provision as much as possible of care closer to home
Concentration of specialist services in hospital facilities with appropriate scale

If progress is to be made in these two areas, the clinical workforce, which appreciates and understands the issues that are important for delivery of healthcare must play an integral role in developments and be increasingly engaged in the design and development of better pathways of care.

The NHS is an organisation that has always responded to illness. The size of this task has meant that it rarely focuses beyond treatment, but clearly the prevention of disease is more effective and more efficient than the treatment of it\(^\text{(11)}\). Some of this prevention is driven by clinical expertise, but the majority is dependent on a public taking greater ownership of its own health. Improving the health and wellbeing and maximising the value of every £ sterling spent on healthcare can only be achieved by the public engaging in maintaining their own health. But, this is not enough. Maximising the value of a given healthcare budget must also involve the public in making difficult choices around the spending of a defined financial envelope for healthcare.

This Strategic Review seeks to capture all these elements. It has fostered collaboration between organisations and professionals involved in commissioning and providing primary and secondary care, to identify solutions for the system of healthcare for OUHFT’s patients in north Oxfordshire and surrounding geography. It has engaged the frontline clinicians to define clinically viable pathways of care. It will then involve the public in the shape of service provision, as well as the important act of prioritising the spending of the budget for healthcare for its community.

1.3. Oxfordshire’s Healthcare Strategy

In December 2015, NHS England in ‘Delivering the Forward View’\(^\text{(12)}\) announced a new delivery mechanism for the specific funding set aside to introduce new models of care to ensure that health and care delivery is built around the needs of populations and derives greater value from investment in healthcare. This funding can be accessed through 44 Sustainability and Transformation Plans (STP) footprints. Oxfordshire is a partner in a STP footprint that includes Oxfordshire, Buckinghamshire and West Berkshire (BOB), and is developing its contribution to the BOB STP to describe how healthcare services will evolve and become sustainable in Oxfordshire over the next five years.

The annual spend for health and social care services across Oxfordshire is about £1.2 billion today, and is anticipated to rise to £1.3 billion by 2020/2.\(^\text{(13)}\) Despite this increase, if healthcare continues to be delivered as it is today, it is anticipated that by 2020/21 there will be a deficit of £200m for Oxfordshire. Such deficits can only have detrimental effects on healthcare across Oxfordshire and Oxfordshire Clinical Commissioning Group (OCCG) recognises that there “is a strong case for change”\(^\text{(14)}\). Alongside this projected deficit are real challenges in workforce recruitment and retention, and in the maintenance and replacement of ageing estate across all sectors.

\(^{11}\) NHS England (2014) Five Year Forward View
\(^{12}\) NHS England (2015) Delivering the Forward View
\(^{13}\) Oxfordshire Clinical Commissioning Group, Pre-Consultation Business Case for Oxfordshire Transformation Programme, August 2016
\(^{14}\) ibid
OCCG is in the process, therefore, of developing its Transformation Programme for the county, which will lay out proposals to ensure that financial resources for healthcare are spent efficiently to provide the best outcomes for every patient over the next five to ten years. This Transformation Programme, which addresses the projected £200m deficit and other challenges will feed into the STP for BOB. Built on strong clinical foundations the Oxfordshire Transformation Programme recognises that doing “business as usual” will not address the unsustainable working practices and financial pressures in its healthcare system. Rather than focusing on service cuts, the Programme looks to transform the manner of healthcare commissioning and delivery to ensure that a 21st century system provides healthcare to the population of Oxfordshire.

This Transformation Programme contains six relevant workstreams focusing on service models:
- primary care,
- urgent and emergency care,
- planned care,
- maternity services,
- children’s services
- mental health services.

While some of these workstreams are not directly within the domain of OUHFT, as the main acute hospital provider it is contributing to developing those proposals that lie within its main spheres of influence and participating in discussions within the workstreams for primary care and mental health services. It is important, therefore, that OUHFT strategic plans are aligned with the OCCG Transformation Plan and that this piece of work is closely aligned with the BOB STP, which is the access route for additional funding for investing in healthcare.

1.4. OUHFT’s Strategic Objectives

In October 2015, OUHFT was granted Foundation Trust status and a new Chief Executive took up post. Since then, it has embarked on designing and developing a strategy that will improve the quality of its healthcare delivery, ensure its sustainability and enable it to flourish in the 21st century as a leading NHS Trust. As part of the Oxfordshire health economy OUHFT has to undergo a transformation exercise that examines its current practice and seeks solutions to respond to the challenges of providing best care within its own defined financial envelope. OUHFT is committed to improving the quality of its services and delivering increased value from its budget, which in turn will lead to it to address a savings requirement of £140m (£35m per year) between now and 2020/21.

This Horton Strategic Review is built on a number of pillars which can be linked to many of OUHFT strategic themes. These pillars are:
- increasingly taking integrated care into the community (“home sweet home”)
- continuing to concentrate on service improvement that provides high quality services to the population it serves (“high quality costs less”)
- prioritising investment in services to develop world class excellence (“focus of excellence”)
- accelerating the adoption of technological innovations including digital transformation (“go digital”)
- rationalising its estate (“the master plan”).
Quality of care will be improved by taking care closer to home, where appropriate, and by concentrating on delivering specialist services from fewer sites to extract the quality benefits of scale. This, in turn, will allow OUHFT to derive greater value from its financial envelope and ensuring that every £ sterling is best spent. This is a trust-wide OUHFT strategy that all Trust sites must embrace in its entirety, if it is to be effective in delivering quality, value and sustainability. There is no room for selective participation in this strategic transformation, as this would prevent its population and patients from experiencing the benefits of the programme.

As part of this transformation, in late 2015 OUHFT realigned its Headington bed base by 73 beds, through discharging patients who no longer required acute hospital care into the community and where appropriate home. Plans are in place to realign a further 118 beds from all its hospital sites. Not only will this deliver more healthcare to its population closer to their homes, but it will also facilitate an estate reconfiguration that reduces the hospital footprint, particularly on its Headington sites and releases resources for the healthcare benefit of the population.

The Horton General is an integral component of this OUHFT transformation. Its location means that it is a crucial means of delivering acute medical care to the population of north Oxfordshire and the surrounding geography, and thereby relieving the excessive pressure on service provision at Headington. By investing in its plant and establishing new care models and pathways, OUHFT will be able to deliver more care to the north Oxfordshire population on the Banbury site and thereby reduce its footprint at Headington. Even more crucially, it is the mechanism by which it can reduce any unwarranted variation in access to high quality care across Oxfordshire and in particular, across north Oxfordshire and the surrounding geography.

1.5. The Horton General: the case for further evolution

1.5.1. Previous Independent Review, 2008

In 2008, an Independent Reconfiguration Panel (IRP) rejected the then Oxford Radcliffe Hospitals Trust’s proposals for the Horton General, on the basis that they were driven by future medical staffing constraints. While these predictions have materialised, the IRP stated that the foundation of any change proposal should be a drive for quality improvement that will bring “overall benefits to people from the proposed changes”. It also found that there had been no intention to align the Trust’s strategic proposals and the strategy of the Oxfordshire Primary Care Trust “for children’s, maternity and emergency services for north Oxfordshire or Oxfordshire as a whole”.

As already described, these are very different times today and OUHFT together with OCCG and partners are participating in a Transformation Programme that will make Oxfordshire’s healthcare system fit for this century. This is an exciting opportunity for OUHFT to forge a new hospital service across all its hospital sites within an emerging transformational health economy; it is also an opportunity to improve the healthcare services for the population of north Oxfordshire and the surrounding geography by developing a hospital for the 21st century on the Horton General site.

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15 Independent Reconfiguration Panel (2008) Advice on changes proposed by the Oxford Radcliffe Hospitals NHS Trust to paediatric services, obstetrics, gynaecology and the special care baby unit at the Horton General Hospital in Banbury
16 ibid, page 39
1.5.2. Importance of the Horton General

The Horton General is strategically an integral member of OUHFT’s group of hospitals. It provides an important base for the delivery of secondary care to the population of north Oxfordshire and the neighbouring counties. In doing so, it also secures a vital catchment area for OUHFT’s tertiary services. Since merger in 1998, however, it has been allowed to develop at a distance, apart from its Headington sister sites. While supporting it to maintain its distinctive local personality, it has not been supported sufficiently like its sister hospitals to participate in research, which is often seen as a sign of good care. There has been a gradual erosion of its medical training profile, which is another indication of high quality care. Recently, the Oxford Academic Health Science Network supported a clinical innovation adoption project to establish the use of pneumatic compression stockings to avoid venous thrombosis in patients with stroke\(^{17}\). It was found that while the OUHFT’s Headington site performed best in adopting the innovation across three counties, that the Horton General performed worst at adopting this proven clinical innovation. It is not the norm, furthermore, for clinical staff to work across the Banbury and Headington sites and there is a tendency for the staff groups at each site to work independently. An OUHFT strategic transformation must address this and instil a common ethos across all its hospital sites.

As described, since 1948 the Horton General has developed as a DGH providing hospital care for its population. As specialist hospital services developed in this country the north Oxfordshire population began to travel to Oxford, which housed the major clinical specialist services. As these specialist services evolved and grew further over the last 30 years, the gaps in care capability between Banbury and Headington have widened and its population has increasingly had to travel 23 miles to Oxford for a specialist opinion.

It is estimated that in 2016/17, the Horton General’s local population will attend the Headington sites for nearly 96,000 clinical spells, which could be delivered on the Banbury site. It is time to change this as part of a Trust-wide plan of bringing care closer to home and reducing the cumulative burden of travel to Oxford, while ensuring equity of access for the Horton General population to specialist opinion and care.

An independent assessment\(^{18}\) reported that the Horton General estate had many facilities that were in an “unacceptable” state (Reference slide 66). Making changes piecemeal to this estate is expensive. The replacement of the current CT scanner with modern equipment is anticipated to cost £3m, rather than £900k, because of the additional cost of addressing poor quality estate. A new build at the Horton General would not only lead to a state of the art facility that increases and improves clinical care on this footprint, but could also realise the savings of scale from a planned and coordinated estate improvement plan, which will be required on any account.

The design of a 21\(^{st}\) century hospital at Banbury will form an integral north Oxfordshire part of the wider Transformation Programme for the health economy of Oxfordshire. This OUHFT piece of work is already being coordinated with the relevant workstreams of the Transformation Programme (urgent and emergency care, planned care, maternity and children’s services) to ensure proper alignment.

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\(^{17}\) Oxford Academic Health Science Network (2015) Reducing risk of venous thromboembolism and improving survival rates following stroke

\(^{18}\) Green and Kassab and AECOM reports (2016) to Oxford University Hospitals NHS Foundation Trust
1.5.3. Current provision of healthcare services for the Horton General population

The Horton General is located in the southern part of Banbury, a market town of some 45,000 people located in North Oxfordshire. It is a significant commercial and retail centre for the surrounding areas. It is 23 miles from Oxford. Transport links to Banbury are good; it is near to a junction for the M40 motorway linking London to the Midlands, and Banbury station is located on the railway line between the North (via Birmingham), and South (via Oxford and Reading), as well as on a London line.

The health needs for the north Oxfordshire population are met in the community by 26 general practices coming together in a GP Federation, a freestanding midwife led unit (MLU) at Chipping Norton, 5 walk-in centres and 4 community and mental health facilities run by Oxford Health Foundation Trust.

The Horton General provides hospital services for a catchment population of about 170,000 (Reference slide 3). It is one of the smallest DGHs in the country with 145 beds, with a building footprint of 27,500m$^2$ within 27 hectares of land. Services include a 24/7 Emergency Department (ED), which received 37,816 attendances in 2014/15. Of these there were 8,948 non-elective spells$^{19}$ (NELS), which were primarily for acute medical conditions.

There were only 488 critical care admissions in 2015/6, 41 of which were for Level 3 care. There is no provision for emergency surgery, and in its place, clear pathways exist for the assessment and transfer of patients requiring urgent intervention to Headington. Patients requiring certain specialist services, such as primary percutaneous coronary intervention (PPCI) or treatment of major trauma are already directed directly to the tertiary centre at Oxford.

The Horton General provides acute general medicine and day case, elective general surgery, minor trauma, obstetrics and gynaecology, paediatrics and critical care. The Brodey Centre offers treatment for cancer. Outpatient clinics are provided in the following specialities: dermatology, neurology, ophthalmology, oral surgery, paediatric cardiology, radiotherapy, rheumatology, oncology, pain rehabilitation, urology, ENT and plastic surgery. The acute general medicine service includes a medical assessment unit, a day hospital as part of specialised elderly care rehabilitation services, and a cardiology service. Other clinical services include dietetics, occupational therapy, pathology, physiotherapy and radiology.

It has one of the smallest obstetric-led maternity units in the country, which is at the opposite end of the spectrum to the obstetric-led maternity unit at the John Radcliffe Hospital in Headington. With paediatrics, there is almost the same disparity with 2699 NELS in 2014/15. There is a Special Care Baby Unit (SCBU), which admitted 219 babies in 2014/15. It is already a moderately sized elective centre with 7934 day cases and 539 inpatient spells. Just over 82,000 outpatient appointments were provided and over 57,000 diagnostic images were performed during this period. A more comprehensive breakdown of the activity can be found in the table on Reference Slide 11.

$^{19}$ A NEL is “A Non-Elective Admission is one that has not been arranged in advance. It may be an emergency admission, a maternity admission or a transfer from a Hospital Bed in another Health Care Provider”.
2. Demography and Population Health

2.1. Catchment population of the Horton General Hospital

The catchment population for a Trust hospital is not defined geographically, but is an estimate of the population actually using (or potentially able to use) its hospitals.\(^\text{20}\) The Public Health England map of the catchment population for the Horton General is shown below. Data are available on this population at ward level, and a map approximating to the 37 wards covered by the catchment is shown below. Of these, 23 wards are in Cherwell and 7 in West Oxfordshire Districts (both Districts within the County of Oxfordshire), and the remaining 7 wards are in Northamptonshire and Warwickshire counties.

Map 1: Catchment population approximated to ward level maps\(^\text{21}\)

2.2. Planned major developments of transport infrastructure, economy, and housing within the catchment population areas

There are planned major developments in transport infrastructure and economic development in Bicester. These transport infrastructure changes include new passenger trains which should be operational on all of the Western section (East-West rail) by March 2019, improving links between Oxfordshire, Buckinghamshire, Northamptonshire and London, and bringing economic and housing growth. Increased connectivity in Bicester will encourage businesses to develop, as well

\(^{20}\) This population was determined for all Trusts in England in 2013/14 by Public Health England using the postcode data of all people admitted to each Trust over the preceding 3 year period.

\(^{21}\) Larger green circles indicate bigger ward population Public Health England ‘Local Health’ tool, using ONS data
as employees and commuters to settle, boosting house building and swelling the working age population.

A substantial increase in housing is planned for Bicester and Banbury between now and 2030. Bicester was named in the Oxfordshire Local Economic Partnership (LEP) as one of 3 key sites of economic growth in the County to 2030 on the ‘Oxfordshire Knowledge Spine’. These sites are to be prioritised for interventions in the form of infrastructure and land developments, in order to develop greater economic opportunity. In 2015, Bicester was also selected as a ‘Healthy New Town’ by NHSE with a focus on shaping the health of the community. In total, it is projected that some 15,425 homes are planned to be built in the catchment area of the Horton General by 2026, with large growth planned for Bicester and Banbury in particular. These developments would be expected to increase the working age population in and around Bicester.

2.3. Demography

Using the data for the ward population shown in map 1, the total population for the Horton General is 163,578. The large majority of the population are working age adults aged 16-64. Nearly 28,000 (17%), however, are over 65. There are 32,000 children in the catchment area. The largest population centres are the towns of Banbury (47,000) and Bicester (31,000). Chipping Norton is the third most populous, but much smaller at 6,400. The rest of the population live in smaller rural populations, though cumulatively this accounts for a substantial percentage of the total population. Some 118,671 (73%) live in Cherwell District, 20,153 (12%) in West Oxfordshire, and 24,754 (15%) in the three other districts of South Northamptonshire, Stratford and Daventry.

The age structure of the catchment population is similar to the England average. The proportion of children and adults over 25 is higher than average with fewer young adults (see figure below). The proportion of 65-84 year olds and people over 85 is in line with the England average. Older adults (85 years plus) make up a higher percentage of the population in rural areas, though Bicester town ward also has a relatively high percentage (3.4%). Banbury and other wards in and around Bicester tend to have a younger population.

Table 1: Catchment population by age group, 2012 Source: PHE Local Health tool

<table>
<thead>
<tr>
<th>Ages (years)</th>
<th>Catchment population</th>
<th>Proportion of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 16</td>
<td>32,332</td>
<td>19.7</td>
</tr>
<tr>
<td>16-24</td>
<td>15,255</td>
<td>9.3</td>
</tr>
<tr>
<td>25-64</td>
<td>88,058</td>
<td>53.8</td>
</tr>
<tr>
<td>65-84</td>
<td>24,302</td>
<td>14.9</td>
</tr>
<tr>
<td>85 and over</td>
<td>3,631</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>163,578</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

In 2012, the fertile population (defined as females aged between 15-44 years of age) was 30,398, or 37% of the total female population. This is slightly lower than regional and national comparators, reflecting a relatively older female population over the whole catchment. The general fertility rate (66.9 live births per 1000 fertile population), however, is higher than the England and regional averages. Compared to the rest of England, the population is less ethnically diverse with only 6.1% from a Black and Minority ethnic population.
2.4. Projected growth of catchment population

The catchment population size is projected to increase to at least 190,000 by 2026, though growth as high as 207,000 is possible if all planned housing is taken into account, with continued growth forecast at least as far as 2050 (Reference slide 6). Using the pre-Strategic Housing Market Assessment (SHMA) estimates\(^\text{22}\), the population is projected to grow by 26,600 (16%) between 2012 and 2026, of which 24,860 is in catchment Oxfordshire wards, and 23,000 (86% of growth) is in the Cherwell District wards alone. Detailed year on year growth estimates are not available for the catchment population, but using Cherwell District population projections as an approximation, the highest annual growth rates are expected between 2015 and 2020.

Most age groups will see increases in their population size. The largest increase in numbers by 2026 will be of older adults aged over 65, whose share of the population will increase from 17% to 23%. Conversely, the number of working age adults is expected to only modestly increase. The number of births will remain stable, but deaths will increase substantially with an ageing population, as will the numbers of elderly with a limiting illness. The largest absolute and relative increases will be in older adults (the number of adults aged 90+ will double), as both the ‘baby boomer’ generation enters older age, and older adults benefit from an increasing life expectancy. This could put substantial pressure on secondary care provision.

Expected large decreases in the number of younger and middle-aged adults have been mitigated to an extent by housing growth expected to be taken up by this age group. The net effect is a larger population, with an increase in the percentage of the population aged over 65. As shown in Table 2, the expected population composition for the ONS projection is similar, but with a higher percentage of 65+ adults due to less growth in the other sub-populations.

\textbf{Table 2: Projected catchment population growth 2012-2026}\(^\text{23}\)

<table>
<thead>
<tr>
<th>Projection</th>
<th>Base</th>
<th>2026</th>
<th>Change</th>
<th>Change (%)</th>
<th>Average Annual growth %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONS</td>
<td>163,578</td>
<td>177,968</td>
<td>14,390</td>
<td>8.8</td>
<td>0.6%</td>
</tr>
<tr>
<td>Pre-SHMA</td>
<td>190,225</td>
<td>207,189</td>
<td>43,611</td>
<td>26.7</td>
<td>1.9%</td>
</tr>
<tr>
<td>Post-SHMA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This impact of housing (giving a proportionately larger increase in children and working age adults than growth without large-scale housing expansion) is likely to be magnified should the post-SHMA projection prove accurate, though the number of elderly will still see a very significant increase.

\(^{22}\) The ‘pre-SHMA’ projection incorporates Oxfordshire Insight data on housing growth and household composition factors (before the extra developments that were announced) as well as birth, deaths and migration. The most detailed information on growth and composition is available for this projection and is referred to in this section of the report.

\(^{23}\) Oxfordshire Insight ward level projection data for Oxon catchment wards only, and ONS district level data applied to non-Oxon catchment wards.
2.5. Population Projections beyond 2026

In depth projections for the catchment population are not available beyond 2026 due to absence of ward-level data for the duration of this projection. District level projections, however, have been produced by Oxfordshire Insight, including Cherwell District whose population is a reasonable proxy to that of the catchment area for the Horton General. Producing such long-range projections are open to considerable uncertainties, but shows how the population could change if individual factors that affect population size occur in particular combinations (i.e. births, deaths, migration, housing and economy).

The range of projections is for Cherwell District to 2052 based on pre-SHMA (Strategic Housing Market Assessment) data. There are 5 different scenarios, but the black line ‘principal’ scenario predicts an increase in the population to just below 200,000, a 38% increase, though the margin of error or range is 142,000 to 242,000). Those aged over 85 are likely to see the largest proportional increase of all age groups, from 2% to 6% of the population.

2.6. Social factors – education and income

Generally speaking, lower income and educational attainment are associated with adverse health behaviours such as tobacco use, poor diet and physical inactivity, which in turn are important risk factors for developing chronic disease. In the Horton General catchment area, GCSE educational attainment is slightly higher than the England average, with 60% of pupils achieving 5 A*-C grades in 2011/12. The percentage is markedly lower in parts of Banbury (41% lowest), Bicester and Chipping Norton.

The catchment population as a whole is relatively wealthy with only 8% of the population living in low income families on means tested benefits, compared to a national average of 14.7%. There are, however, some areas with a higher number of families on low incomes, particularly in Banbury where it ranges from 15-24% (Reference slide 5).

2.7. Health behaviours, causes of ill health and prevalence of disease

Table 3: Risk factors for ill health

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Prevalence % (England figure % in brackets)</th>
<th>Number affected in catchment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking prevalence 2014*</td>
<td>13.6 (18)</td>
<td>17,849</td>
</tr>
<tr>
<td>Physically inactive adults 2014*</td>
<td>39.2 (43)</td>
<td>48,191</td>
</tr>
<tr>
<td>Excess weight in adults 2012-14 average*</td>
<td>64.1 (64.6)</td>
<td>79,213</td>
</tr>
<tr>
<td>Obese children (reception) 2010-2013 average</td>
<td>7.4 (9.4)</td>
<td>-</td>
</tr>
<tr>
<td>Obese children (year 6) 2010-2013 average</td>
<td>15.8 (19.1)</td>
<td>-</td>
</tr>
</tbody>
</table>

Certain health behaviours are recognised major determinants of premature ill health and mortality. The above data are both from Cherwell District, which gives a good estimate of

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24 See reference 22 for explanation
25 Cherwell prevalence applied to catchment population, other data is from catchment population wards
prevalence in the catchment area of the Horton General, and specifically from some of the catchment population wards.

Though generally healthier than the rest of the country, these risk factors are still very common in the population and will cause a substantial burden of disease. The average prevalence for all risk factors combined across the population is 23.1% (compared to England which is 24.1%). There is a significant association with income deprivation and lower educational attainment, and prevalence rates are higher in some ethnic minorities and age groups.

2.8. Causes of ill health

Chronic, non-communicable diseases are the main drivers of secondary care spend for a population\textsuperscript{26}. Prevalence rates (the number of adults who have a disease at a given time) are not available at catchment population level for most illnesses, but Oxfordshire CCG figures (Quality and Outcomes Framework data) provide a reasonable estimate, as outlined in Reference slide 7.

These estimates are based on general practice registers and, therefore, dependent on actual disease detection. They are likely to be significant underestimates of the true burden of diseases with a covert onset (osteoporosis, diabetes and hypertension), or with a stigma attached to seeking treatment (mental health disorders and dementia). Oxfordshire and the catchment population both have a higher incidence of cancer (new diagnoses of cancer) than the South East and England average, though mortality from cancer is similar to the average, suggesting earlier diagnosis may explain at least some of this higher rate.

2.9. Burden of ill health across the catchment

The percentage reporting a limiting long-term illness or disability is a population marker for chronic illness. Rates of limiting illness and disability across the catchment, at 14.3%, are lower than the national average (17.6%).

Non-communicable diseases cause the vast majority of disease burden in the catchment population. Much of this burden is caused by almost wholly preventable illnesses such as diabetes. The percentage of the population with a limiting illness or poor self-reported health is lower than the national average for the catchment as a whole, and life expectancy is longer. There are, however, pockets where there are higher percentages affected by poor health, and shorter life expectancy, than the national average, particularly in Banbury and Bicester.

2.10. Life expectancy

Average life expectancies at birth are higher in the population of north Oxfordshire and surrounding geography than the England average (84 years for females compared to 82.8 for England and 81 years for males compared to 78.9 years for England) signalling overall better health, but the variation in life expectancy across the catchment demonstrates some health inequality that exists within this population (Reference slide 4).

\textsuperscript{26} Centre for Health Economics (2014) The importance of multimorbidity in explaining utilisation and costs across health and social care settings: evidence from South Somerset’s Symphony Project. CHE Research Paper 96, University of York
### 2.11. Access to healthcare

Inadequate access to high quality primary care can increase demand on secondary care providers. Though not available for the catchment population, NHS Outcomes Framework (indicator 4.4i) aims to capture the experience of patients accessing GP services, by measuring the weighted percentage of people who report their experience of making a GP appointment as ‘fairly good’ or ‘very good’. The closest approximating population for whom this data are available is for Cherwell District, where performance is good at around 80%, and similar to regional and national averages.

Access in urban areas is generally better than for the rest of England, though certain small pockets are still within the lowest 20% in England. Access in rural areas, however, is more consistently amongst the 10% of the most deprived in the country, potentially adding pressure onto secondary care services in Banbury.

Ambulatory care sensitive conditions (ACSCs) are conditions for which effective management and treatment should often prevent admission to hospital\(^{27}\). High levels of admissions for ACSCs often indicate a dated approach to patient care and poor co-ordination between elements of the health care system, in particular primary and secondary care. In Cherwell District, rates of admission for ACSCs are significantly higher than for the South East region, and overall emergency admission rates are significantly higher than in other localities of Oxfordshire. This strongly suggests that the model of care delivery and/or its provision require significant revision, to ensure best outcomes, patient experience and resource use (Reference slide 9).

### 2.12. Summary of North Oxfordshire demography and public health

In summary:

- The Horton General services a catchment population of approx. 170,000 people.
- The population is relatively healthy and of better socioeconomic circumstance in comparison to the rest of England. It has a relatively high life expectancy.
- Like anywhere in the country, however, there are pockets of north Oxfordshire and surrounding geography where socio economic factors and health indices are below the national average (mainly Banbury and Bicester).
- Access to healthcare is good when compared to England, but is worse than the rest of the region with significant inequalities in some pockets.
- Demographic analysis suggests that the population of north Oxfordshire and surrounding geography that represents the catchment population of the Horton General will continue to grow up to 2050.
- Much of the growth will occur early until 2020. There will be growth in all age groups, but the significant growth will be in the over 65 and over 85.

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\(^{27}\) Data briefing (2012) Emergency hospital admissions for ambulatory care-sensitive conditions: identifying the potential for reduction. The King’s Fund
3. The Case for Change

3.1. Introduction

This Strategic Review offers the Horton General Hospital not only an opportunity to transform its model of delivery of healthcare services and become a beacon of 21st century healthcare, but also the commitment of significant financial investment to make it possible. It is vital, therefore, that all members of the healthcare system patients, the public, clinicians and non-clinicians do not focus on survival and with it the maintenance of outdated, wasteful and potentially harmful practices that do not meet the need of all the population, but instead adopt a positive approach to explore opportunities and find high value solutions for meeting the needs of the population.

The survival of the Horton General is not in question. OUHFT is willing to invest significantly in one of its important hospital sites. In today’s financial circumstances, however, it and the public have a responsibility to identify solutions that improve the quality of the healthcare services and return the best value from the investment. Protecting outdated models and practices that are wasteful and potentially prevent improved outcomes cannot form the basis for future models of healthcare delivery.

In line with the Oxfordshire Transformation Programme, OUHFT has identified four clinical pathways, where there is a real need for change in the patient’s and the public’s interest. In this chapter the four Clinical Review Groups describe national and college standards and guidance and examples of best practice and identify the local case for change.

3.2. Urgent and emergency care, including stroke care and critical care

3.2.1. National perspective (standards, guidelines and best practice)

Urgent Care

The NHS Five Year Forward View (5YFV) published in October 2014\(^2\) described the need to redesign urgent and emergency care services for people of all ages. The vision it presented is as follows:

- For adults and children with urgent care needs, we should provide a highly responsive service that delivers care as close to home as possible, minimising disruption and inconvenience for patients, carers and families.
- For those people with more serious or life-threatening emergency care needs, we should ensure they are treated in centres with the right expertise, processes and facilities to maximise the prospects of survival and a good recovery.

Related to this the Future Hospitals Commission (FHC)\(^3\) report considered how patients could in future receive 'safe, high-quality, sustainable care centred around their needs and delivered in an appropriate setting by respectful, compassionate, expert health professionals'.

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\(^2\) NHS England, Five Year Forward View, October 2014

\(^3\) Future Hospitals Commission (2013) Future Hospital: Caring for Medical Patients A report from the Future Hospital Commission to the Royal College of Physicians
The need for Integrated Care – improved quality through patient-centred coordination of complex care across traditional boundaries – leads the FHC to conclude that the specialist resources available in hospital need to be deployed in a way that supports the whole community and the health and social care system. This means clinicians working both inside and outside hospitals, and more closely with community teams to provide a progressive, collaborative spectrum of support illustrated in the Figure 1 below (Reference slide 13).

Figure 1: Components of the Future Hospital model of Hospital based Centres of Acute Care

The FHC report advocates a model of 'hospital-based centres of acute care' supported by the extension of currently hospital-based services into or close to the patient's home, with staff linked to local hospitals working with primary and social care services. Preventing patient deterioration and crises in care at home should be a prime focus, but when a crisis does occur, the default should be to provide integrated, patient-centred care at home or in a community setting close to home; if care in the hospital is required, access should be provided without delay and then services must support prompt return to the community.

The care of patients with complex needs, delivered across settings and by several teams, requires excellent coordination. The FHC describes a Clinical Coordination Centre (CCC) in hospitals such as the Horton General, as a base for the hospital's clinical teams coordinating care for patients with active clinical needs in both hospital and community. Crucially, the CCC supports clinicians (GPs, nurses, ambulance practitioners and others) outside hospital with ‘patients in crisis’, with advice in determining the best immediate care and ongoing care pathway, and with the direct provision of care whenever appropriate.

Such a change to partnership working and collaboration is crucial to deliver necessary quality and value improvements for the population and to overcome fragmentation in pathways and service delivery.
Stroke Care

Stroke commonly causes death or severe disability. In the first hours of a stroke, immediate access to advanced tests, treatments and teams results in better outcomes. These include Computerised Tomography (CT) and Magnetic Resonance Imaging (MRI) scanning, thrombolysis (clot-dissolving drugs) and increasingly thrombectomy (physical removal of clots from arteries supplying the brain), and the 24-hour presence of specialist stroke doctors and nurses, and complementary specialist teams such as neurosurgery and neuroradiology.

The clinical evidence is that the best outcomes for patients are delivered within units that have adopted these measures. These outcomes are seen when the initial care of all patients with acute stroke (other than rare exceptions such as end-of-life care) are assessed initially in a Hyper-acute Stroke Unit (HASU) with access to all the services that might help survival and recovery. As soon as the hyper-acute phase is over, care is then transferred to a specialist team providing rehabilitation in a stroke rehabilitation ward, or when possible at home (Early Supported Discharge), where patient satisfaction and outcomes are better than for rehabilitation in hospital\textsuperscript{30, 31} (Reference slides 21 and 22).

3.2.2. North Oxfordshire and surrounding area

Urgent Care

The provision of urgent and emergency care in north Oxfordshire is confusing, dis-integrated, and poorly aligned with contemporary principles of service organisation and delivery. In common with the rest of the county there is insufficient capacity within primary care to meet the demand for urgent appointments, and patients face a confusing array of alternative options, including the Out of Hours (OOH) GP centre within the Horton General site, the Darzi Walk-In Centre in the town centre, and the Horton General ED. This, alongside other factors such as the breadth of capability, visibility and central location of the ED have led to attendance rates much higher than in other areas of Oxfordshire with 37,816 attendances in 2014/15 and growth in demand since then, well in excess of local population growth and national trends in ED attendance (Reference slides 15 and 16).

Current arrangements contribute to inefficient and repetitive assessments, excessive delays, overcrowded facilities, and a lack of service resilience (for example severe vulnerability to staff sickness), impacting on patient experience and measurable aspects of quality such as the four hour standard of care (Reference slides 17 and 18).

High attendances at the Horton General ED are compounded by higher admission rates for older patients with ambulatory care sensitive conditions (ACSC) and high levels of Delayed Transfer to post-acute Care (DTOC) (Reference slide 19). These factors drive excessive demand for hospital beds that is detrimental to patient experience and outcomes, restricts access to hospital for those who require it and consumes healthcare resources inappropriately.

The Oxfordshire Health and Social Care System is currently working to reach a shared understanding of the optimal delivery of urgent care services, in large part to address the

\textsuperscript{31} Fearon P, Langhorne P (2012) Early Supported Discharge Services for reducing duration of hospital care for acute stroke patients. Cochrane Database of Systematic Reviews Issue 9
challenge of an ageing population, manage future demand, and drive towards greater efficiency in the provision of care. Maximising quality, value and resilience is paramount within this initiative.

Pathways of care for patients requiring urgent and emergency care often cross organisational boundaries, contributing to impaired patient experience and outcomes, delays and avoidable costs. There is a compelling case for revision of the model of delivery in north Oxfordshire, as in the rest of the country. Critical to the delivery of the revised model is the development of an improved interface with Enhanced Primary Care that supports efficient, effective care that is seamless from the perspective of the patient. Current arrangements for referral, for advice, for supporting transitions of care, and for supporting joined-up care for the most complex patients outside hospital are time-consuming, unreliable and variable in quality.

That improved interface will be delivered via the Clinical Coordination Centre (CCC) within the Horton General, hosting a multidisciplinary team of interface specialists (‘specialist generalist' clinicians with capability working in both hospital and community settings) with excellent access to clinical and operational data systems. For Primary Care clinicians, the CCC will provide ‘decision support' and access to in-hospital and outreaching hospital services, and it will facilitate best information sharing during care transitions and capable, responsive shared care of complex patients outside hospital. Only with such collaboration can patient experience and outcomes be improved and demand pressures managed more effectively and sustainably for all.

The changes described in the proposed model of care are both necessary and desirable for patients, carers and commissioners. They provide a means of addressing risks associated with the current service model for urgent and emergency care in north Oxfordshire, including risks associated with delay in sourcing best advice regarding care and treatment, and the delays both in patients actually being clinically assessed and in accessing specialist treatment and care. The changes also address the staffing challenges and the necessary and crucial workforce development required to underpin the delivery of all aspects of healthcare.

**Stroke Care**

The model of acute stroke care in the Horton General catchment area is currently a hybrid arrangement, with some patients admitted initially to the HASU in Oxford, and others – often those who have a stroke overnight or whose presentation is atypical or late – admitted to the Horton General where there is no access to some of the important elements of contemporary stroke care. In addition, the Horton General catchment population is not supported by an Early Supported Discharge team (a multidisciplinary team providing specialist stroke rehabilitation in the home), and so patients remain in hospital longer than is necessary.

The 2014/15 Sentinel Stroke National Audit Programme (SSNAP)\(^{32}\), reported that the Horton General performs poorly in the field of stroke care (Reference slide 23). It was in bottom quartile overall and for Domains 2 (Stroke Unit), 3 (Thrombolysis), 4 (Specialist Assessments), and 7 (Speech and Language Therapy). It was in the third quartile for Domains 1 (Scanning), 5 (Occupational Therapy), 6 (Physiotherapy) and 8 (Multidisciplinary Team Working). Where major reorganisation has occurred elsewhere in Oxfordshire and nationally, this has led to significant improvements in care and outcomes. Crucially, important quality domains within the SSNAP are

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\(^{32}\) 2014/15 Sentinel Stroke National Audit Programme
achievable only by stroke units much larger than at the Horton, with specialist stroke staffing present 24-7. The data provide cogent evidence for a reorganisation of stroke services, to deliver better patient outcomes.

**Critical Care**

The Horton General has a 6-bedded Critical Care Unit (CCU). It is designated as a Level 3 critical care facility, and is, therefore, expected to care for patients requiring advanced respiratory support alone or basic respiratory support together with support of at least two organ systems, including all complex patients requiring multi-organ failure. CCU has served a number of purposes in its history including coronary care, high-dependency care and intensive care. Over the last 3-5 years, however, the demand for critical care at the Horton General has reduced because:

- Patients with myocardial infarction are now taken directly to Oxford for Primary Percutaneous Coronary Intervention (PPCI).
- Patients with major trauma are taken directly to the Major Trauma Centre at Oxford (since 2012)
- Emergency surgery services were relocated to Oxford in 2013.

This has resulted in a reduction in the number of patients requiring Level 3 critical care at the Horton General and specifically in the numbers requiring intubation and ventilation, as can be seen in the table below.

**Table 4: Numbers of patients admitted and number of days of intubation for the Critical Care Unit, Horton General Hospital**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Patients Admitted</td>
<td>573</td>
<td>550</td>
<td>592</td>
<td>552</td>
<td>460</td>
<td>488</td>
</tr>
<tr>
<td>No. of Intubated Days</td>
<td>271 (45 pts)</td>
<td>239 (59 pts)</td>
<td>275 (63 pts)</td>
<td>247 (61 pts)</td>
<td>201 (37 pts)</td>
<td>162 (41 pts)</td>
</tr>
</tbody>
</table>

These current activity numbers are low enough to impact on the clinicians maintaining their skill set with these types of very sick patients.

The Intensive Care National Audit and Research Centre (ICNARC) data for 2013/14 demonstrates that patients remain on the Horton General CCU relatively longer in relation peer units in the Thames Valley and Wessex (Reference slide 25)\(^{33}\). Later ICNARC data demonstrates that the unit has the lowest number of ventilated patients in this region, but that its mortality for ventilated patients is the highest amongst peers (Reference slides 26 and 27).

In addition to these quality issues, staffing the Horton CCU is becoming unviable. The CQC inspection in February 2014\(^{34}\) noted that there was a clear gap in the presence of appropriately trained staff to deliver the service in a consistent manner. There is a high vacancy rate for band 6 nurses and recruitment at any band is proving virtually impossible, and results in failure to meet the Guidelines for the Provision of Intensive Care Services (GPICS). This has resulted in a current plan to transfer all intubated patients to Oxford in a planned manner.

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\(^{33}\) Intensive Care National Audit and Research Centre (ICNARC) data, 2013/14

\(^{34}\) Care Quality Commission, Horton General Hospital Report, May 2014
3.2.3. Summary: Case for Change in Urgent and Emergency Care

In summary, the key aspects identified that need to be considered and addressed in relation to Urgent and Emergency Care (as well as specifically in stroke and critical care) are:

**Urgent and emergency care**
- Provision of urgent and emergency care is currently confusing and disconnected
- There are proportionately higher ED attendances at the Horton General than for the rest of Oxfordshire
- There are regular breaches of the 4-hour delay target
- Demand is increasing currently and is projected demographically to increase further
- There are lower thresholds for admitting over-65s with ambulatory care sensitive conditions (than at the John Radcliffe Hospital)
- There are higher levels of DTOC (26%) than on Headington sites
- There is an absence of a productive interface between acute hospital care and Enhanced Primary Care
- There are resulting delays in assessing patients, sourcing advice, accessing beds and specialist care, discharging patients to the community and receiving rehabilitation and re-enablement

**Stroke Care**
- Patients are best cared for in a Hyper-acute Stroke Unit (HASU) which provides the best specialist expertise and care
- The Horton General is an outlier according to SSNAP data (2014/15)
- There is an inadequate catchment population to provide high quality and safe stroke service

**Critical Care**
- There are low volumes, which will impact on maintaining clinical skill sets and, therefore, safety
- There are higher mortality for intubated patients than peer services.

3.3. Planned Care (Elective Care, Diagnostics and Outpatients)

3.3.1. National perspective: standards, guidelines and best practice

The steady increase in day case surgery in this country from 417,000 (7%) in 1974 to 6,300,000 (35%) by 2013/14 has not only resulted in better quality care and patient experience, but an average saving of 1.4% per year in the NHS from 1998/99 to 2013/14.\(^{35}\) While it is imperative that a tertiary trust such as OUHFT provides urgent and emergency treatment for its immediate and wider catchment population, it is also important that such care that rightly has clinical priority does not interfere with the smooth planning and passage of planned or elective work. Failure to do so results in cancellations and postponements, which may lead occasionally to patient harm and usually lead to poor patient experience. The separation of urgent and emergency work from elective work, therefore, represents a clear benefit in terms of quality of clinical care. Patients can

plan their lives around procedures, preoperative assessment and preparation can be organised, discharge plans can be put in place, and recovery and rehabilitation can be designed and delivered in a seamless fashion.

A Monitor study on elective orthopaedic and ophthalmic surgery explored opportunities for improving operational performance, which result in improved care and the release of resources for the delivery of further healthcare, where needed. The study involving eight NHS trust identified 9 opportunities for operational improvement, which included preoperative assessment and risk-stratification, day-of-surgery admission, improved theatre scheduling, standardised postoperative care and enhanced recovery and an increased proportion of virtual follow-up (Reference slide 29). One centre, South West London Elective Orthopaedic Centre (SWELOC), which participated in this study, reported not only improved operational performance, but also a reduction of same-day cancellations to 1% and 0.5% for clinical and non-clinical reasons respectively, consistent delivery of 18-week targets, reductions in length of stay (LOS) and a reduction in infections to 0.02% (Reference slide 30).

Monitor also reviewed the international elective surgery experience in 5 centres. At Alfred Health in Melbourne, Australia, operational separation of elective surgery from emergency and specialist or tertiary surgery resulted in reduced hospital initiated postponements from 28% to 6%, reduced LOS from a mean of 4.8 days to 2.3 days, increased same-day discharge to 95% and 100% patient satisfaction with the pre-admission process (Reference slides 31 and 32).

3.3.2. North Oxfordshire and surrounding area

Elective activity

In 2015/16, OUHFT achieved the Referral to Treatment (RTT) target for Incomplete (92%) in eleven of twelve months and it has failed to achieve this target in the first quarter of 2016/17 (Reference slide 34). With regards to the other two RTT targets, OUHFT failed to achieve the 90% Admitted RTT target in every month of 2015/16 and the 95% Non-admitted RTT target in the last six months of the financial year. With cancer targets in 2015/16 OUHFT achieved the 62-day GP target (85%) in six of the twelve months and the 62 Day Screening target in two of twelve months. The figures for quarter 1 in 2016/17, suggest that OUHFT is continuing to feel the pressure of elective work that is being presented to it (Reference slide 33). There is a case, therefore, for identifying solutions that will improve the quality and patient experience of this elective care, and at the same time address operational issues that will allow these elective care targets to be achieved consistently.

It is reported that 18% of a provider’s annual expenditure is devoted to elective care. If the expenditure of outpatient services is added to this, this figure rises to over 30% (of annual expenditure). Elective care and outpatients together represent 23% of activity in acute teaching trusts. The income figures for OUHTFT reflect these expenditure profiles. In 2015/16, 21.6% of total income was from elective care and 16.7% was from outpatient activity, giving a total of 38.3% for both. It makes clear sense, therefore for OUHFT to focus and develop an elective centre

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Monitor (2015) Helping NHS providers improve productivity in elective care


Monitor (2015) Helping NHS providers improve productivity in elective care
at the Horton General, which is separate from its main focus of emergency and tertiary care at Headington, so that productivity opportunities can be realised and complement improved care. This approach harnessed to the improvements in quality in both emergency and elective care would have been a significant driver for Northumbria Healthcare Foundation Trust, which has built The Northumbria Specialist Emergency Care Hospital at Cramlington to separate emergency and elective activity.  

There is also a significant amount of cumulative travel to Oxford to be undertaken by the north Oxfordshire population for elective treatment. It is predicted that there will be 4309 elective day case surgical spells at the Horton General in 2016/17. There is little scope to increase this activity further and the highest estimate is that this will increase by no more than a further 215 elective day case spells in 2016/17 (Reference slide 55). It is possible that there may also be a modest increase in the number of elective inpatient undergoing surgery at the Horton General, although the need for inpatient care would be strictly medical and not surgical.

There is a larger projection of increased delivery of elective medical care. A projected 3439 elective Day Case medical spells that are currently planned to be delivered at Headington could be delivered at the Horton General. Similarly, 5533 oncology Day Case spells and 2,838 renal dialysis runs projected to be delivered at Headington can be delivered at Banbury in 2016/17 (Reference slide 56). There is, furthermore, a modest projection of 425 children from north Oxfordshire currently projected to receive Day Case care at Headington, who can receive care at the Horton General. This represents a considerable potential increase in activity at the Horton General, with a further 12,470 patients avoiding the need to travel to Oxford. There is a further projected 1783 spells of elective medical (732) and potential surgical (1051) elective inpatient activity that has not been included in the above projected numbers (Reference slides 54, 55 and 56). The figures contained in these slides require further validation and as such, need to be treated as indicative at this stage.

**Diagnostics and Outpatients**

The Horton General has many diagnostic facilities, but not all that would routinely be expected to be found in a large DGH or tertiary hospital. This is most obvious in its diagnostic imaging capacity (Reference slide 35), with no Magnetic Resonance Imaging (MRI) scanner available for use. There is an MRI scanner on the hospital estate within the Ramsay Horton Treatment Centre (HTC), but this is only suitable for outpatient imaging. Horton General inpatients have to be transported to Headington for an MRI scan. There is a single Computerised Tomography (CT) scanner, which is more than 10 years old, and is single energy, compared to the new dual energy scanners in Oxford. The CT scanning suite at the Horton is old and does not conform to modern configurations. There are no DEXA (Dual-Energy X-ray Absorptiometry) scanners to measure bone mineral density, and inadequate facilities and inadequate capacity to meet the demand for exercise stress tests, transoesophageal echocardiography, lung function tests, urodynamics, sleep studies and ophthalmic investigations.

The imaging capacity available at the Horton General is underutilised; each X-ray machine only produces 8 images each day and the single CT scanner delivers 23 scans each day, with an average of < 5 inpatients, in comparison to the more than 40 scans per scanner and > 10 inpatients on the Headington sites.

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Despite this clear capacity to deliver more diagnostic work at the Horton, it is projected that 13,148 attendances that are currently projected to be delivered at Oxford for diagnostic imaging and other investigations can be delivered at Banbury. Additionally, more than 25% of patients attending for scans in Oxford, live north of the ring road, and could be more easily scanned in Banbury if the facilities were available. The Radiology Directorate is now configured to allow remote reporting, and specialist opinions using teleradiology and Picture Archiving and Communication System (PACS). This increases the ability to scan patients at the Horton and have an expert opinion provided, and this fits into the grouping of radiologists into specialty areas such as Chest, Oncology, Gastroenterology etc.

Some of these 13,148 attendances are due to the absence of diagnostic equipment such as MRI scanners, but the majority are tied into co-location with outpatient services at Headington. It is projected that for 2016/17 there will be 97,056 outpatient attendances at the Headington sites for patients from north Oxfordshire and the surrounding geography that need not be delivered at Oxford.

The actual numbers may be even higher, as the outpatient projections include an optimistic assumption of the rate adoption of digital technology to reduce face-to-face clinical encounters. Large numbers of north Oxfordshire women (1645) also attend Headington for ante-natal and post-natal care. It is also projected that 1722 children will no longer have to travel to Headington, but can attend Outpatients at the Horton General (although this projection failed to be included in the activity analysis described in Chapter 6). These are large numbers of patients from north Oxfordshire and the surrounding area, who are currently making unnecessary journeys with a cumulative significant total travel time. This travel burden will be reduced still further by coordinating multiple different visits into a ‘one-stop clinic’ model.

This projected total of 122,664 attendances (elective day case activity, diagnostics and outpatients) transferred to the Horton General from Headington represents a strong case for developing care closer to home, which would increase care quality and deliver increased value for money and develop a vibrant, modern hospital on the Banbury site.

### 3.3.3. Summary for Case for Change in Planned Care

<table>
<thead>
<tr>
<th>In summary, the key aspects identified that need to be considered and addressed in relation to planned care (elective, diagnostics and outpatients) are:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Elective Care</strong></td>
</tr>
<tr>
<td>• Day Case surgery has consistently provided improved quality of care and patient experience and delivered average annual savings of 1.4% in the NHS from 1998/99 to 2013/14</td>
</tr>
<tr>
<td>• Dedicated elective facilities for orthopaedic and ophthalmic surgery improved outcomes and operational performance in the NHS (SWELOC) and internationally (Alfred Centre, Melbourne)</td>
</tr>
<tr>
<td>• Achieving RTT and Cancer Targets continues to pose challenges for trusts including OUHFT</td>
</tr>
<tr>
<td>• Elective care accounts for a significant proportion of acute trusts’ expenditure and activity</td>
</tr>
<tr>
<td>• Significant clinically unnecessary cumulative travel burden for patients from north Oxfordshire and surrounding area for elective care (12,470 day case and 1783 elective</td>
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</tbody>
</table>
inpatient attendances).

**Diagnostics and Outpatients**

- There is an absence of some diagnostic important equipment at the Horton General (eg: MRI)
- Diagnostic imaging capacity is underutilised at the Horton General
- There is a significant clinically unnecessary cumulative travel burden for patients from north Oxfordshire and surrounding geography for diagnostics (13,148 diagnostic attendances) and outpatients (97,056 attendances) at the Headington sites
- Multiple journeys to a hospital can be rationalised by ‘one-stop clinics’.

### 3.4. Maternity Services

#### 3.4.1. National perspective: standards, guidelines and best practice

A good quality maternity service should always be able to provide women with options of care so they can make informed choices. Whilst recognising the need to support women’s choice, however, in 2011 the Royal College of Obstetrics and Gynaecologists (RCOG) recognised that “there is a need to be mindful that choice has to be delivered in a realistic manner, balancing wants and needs with what is clinically safe and affordable and what resources can be made available without destabilising other services”. Oxfordshire currently offers women the choice of obstetric-led care, midwifery-led care (alongside and freestanding) and home birth and the options being proposed, therefore, do not affect the continued availability of this choice.

There are national standards that every Trust providing maternity services must adhere to including metrics of clinical care and staffing numbers. Based on these principles and national standards, the models for the provision of maternity services are underpinned by the following:

- Pregnancy and childbirth are a normal life stage, but pregnancy is not risk free
- Consistent quality of service and assessment of individual risk will enable women to make genuine choices and receive effective personalised care
- Women with a low risk pregnancy should be managed in a Midwifery Led Unit (MLU) where they will have better outcomes (i.e. reduced likelihood of interventions such as induction of labour and emergency caesarean section)
- Robust, evidence-based, national standards of care for women with more complex pregnancies and high-risk pregnancy such as twin pregnancies, morbid obesity and diabetes, which demonstrate that care is more effective when delivered by specialised and dedicated services
- National evidence that clinical outcomes are improved with early targeted interventions (e.g. prophylactic Fragmin to reduce the likelihood of thrombosis, low dose aspirin, assessment of cervical length in pregnancy etc). Equity of access to this specialist care must be improved for all women, to reduce morbidity and mortality

The Birthplace study, conducted by the National Perinatal Epidemiology Unit (NPEU) at the University of Oxford examined the impact of intended place of birth on maternal and perinatal

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41 Royal College of Obstetricians and Gynaecologists (2008) Standards for Maternity Care: Standards Database
outcomes for low-risk mothers. It compared four birth settings: birth in hospital obstetric units, free standing (FMU) and alongside (AMU) midwifery units and home birth. The study looked at 65,000 births which included nearly 17,000 planned home births and 28,000 planned midwifery unit births from 2008–2010. It found that for women with no complications in pregnancy, childbirth is generally very safe. The outcome for mothers was good in all birth locations. In 250 births however, the baby had a poor outcome (4.3 events per 1000 births) across the four birth locations.

Key findings from the study included that:

- For first-time mothers planning to have a home birth, there was an increased risk of poor outcomes for the baby (9.3 per 1000 births at home compared with 5.3 per 1000 births in obstetric units). There was no increased risk for babies, delivered at home in women who were in their second or subsequent pregnancy
- There was a 45% transfer rate to obstetric units for first-time mothers planning to deliver at home. The transfer rate for midwifery units was 36.3% (FMU) and 40.2% (AMU)
- The transfer rate for mothers who were in their second or subsequent pregnancy to obstetric units was 12% (home birth), 9.4% (FMU) and 12.5% (AMU)
- Lower intervention rates were reported in both types of midwifery units than in obstetric units
- There are wide differences across the country in the availability of midwifery units, and in the way maternity services are organised and staffed, with 50% of trusts having no midwifery units in 2010.

The Birthplace study provides good evidence on the risks and benefits of each birth setting, which helps women and healthcare professionals make informed choices on location for low-risk birth. It supports the concept of configuring maternity services differently and with it the expansion of midwifery units, which deliver better outcomes for low-risk births.

With high-risk births, however, the Royal College of Obstetricians & Gynaecologists (RCOG) recognises that for maternity services to improve, obstetric care needs to be concentrated to deal with the expanding numbers of complex pregnancies and with women being transferred from other birth locations. These obstetric units should provide continuous senior medical staff presence on the labour ward. This can only be achieved by expanding the numbers of consultants in Obstetrics and Gynaecology. Despite the number of women with complex pregnancies increasing both in Oxfordshire and nationally, the stillbirth and neonatal mortality rate has fallen by over 20% in the last ten years. Yet while services have improved by striving to comply with such national Guidance, staff shortages remain an acute problem to deliver the expected standard of care.

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42 National Perinatal Epidemiology Unit (2011) The Birthplace Cohort Study, University of Oxford
43 BMJ (2011) Perinatal and maternal outcomes by planned place of birth for healthy women with low risk pregnancies: the Birthplace in England national prospective cohort study
45 www.rcog.org.uk/resources/Public/pdf/future_role_consultant.pdf
In February 2016, as part of the Five Year Forward view, the maternity review team published “Better Births: Improving outcomes of Maternity services in England”\(^47\). This report called ‘for all staff to be supported to deliver care which is women centred, working in high performance teams, in organisations which are well led in cultures which promote innovation, continuous learning and break down organisational and professional boundaries’.

### 3.4.2. North Oxfordshire and surrounding area

Obstetric-led maternity services are currently provided by OUHFT both at the Horton General and the John Radcliffe Hospital in Headington. The Horton General is the ninth smallest obstetric-led units in the country\(^48\) out of a total of 160. In 2014/15 and in 2015/16, 1487 and 1466 women respectively gave birth there. The comparative figure for the Headington service for 2015/16 was 6573. A small number of mothers who give birth at the Horton General in 2015/16 were from Warwickshire (54) and Northamptonshire (214).

Of the 1487 deliveries at the Horton General in 2014/15, approximately 400 women (33%) required obstetric-led care, which was provided by 5 Whole Time Equivalent (WTE) Obstetrics and Gynaecology consultants and eight resident Trust Grade/Clinical Research Fellows based at the Horton General. In comparison, 5800 obstetric cases delivered at Headington were cared for by 10 WTE Consultants with a case mix that is very different to that at the Horton General; a case mix with a larger proportion of women who have a higher risk pregnancy, or women who have been referred for tertiary care. Despite this real difference in risk profile, the outcomes reported by both units are similar (Reference slide 41). The low number of births at the Horton General, furthermore, makes it challenging for the general obstetricians to maintain their clinical skill set and this is a potential safety issue. Apart from the approximately 400 women, who received their maternity care at the Headington site because of assessed risk, a further 200 women from north Oxfordshire chose to give birth in the alongside Spires MLU at Headington. This exercise of patient choice highlights that women do consider their need for care in different maternity units and are willing to travel to obtain it. In fact nearly a third of mothers from north Oxfordshire and the surrounding area are already travelling to Headington for their maternity care.

The maintenance, furthermore, of the two obstetric units, one high-risk and tertiary and the second lower risk, which are 23 miles apart impinges on the ability to maintain the RCOG standards for medical staffing (consultant and below) of both obstetric units.

Importantly, there have been occasions where the obstetric unit at the Horton General has had to close because of the absence of medical cover, which could not be resolved by locum cover. The intermittent closure of a unit is not safe practice. The loss of training recognition, the closure in 2015 of the middle-grade clinical research fellowships, and the reliance on short-term locums at the Horton General further endangers the delivery of a continuous obstetric service at this site. Similarly, recruitment of midwives can be challenging especially as the universities now only have one cohort of student midwives qualifying each year. Experienced midwives do not relocate and

\(^{47}\) National Maternity Review (2016) Better Births: Improving outcomes of maternity services in England A Five Year Forward View for Maternity Care

the cost of living in Oxfordshire impacts on recruitment and retention (see Section 9 on Workforce for further details).

### 3.4.3. Summary of Case for Change in Maternity Care

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Details</th>
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<tbody>
<tr>
<td>Women should be offered good quality information to make informed choice</td>
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<tr>
<td>Women should be offered choice of all types of birthing locations</td>
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<tr>
<td>Low-risk second or subsequent pregnancies are delivered safely in midwifery units with reduced rates of intervention (Birthplace Study)</td>
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</tr>
<tr>
<td>High-risk and complex pregnancies should be delivered in obstetric units (RCOG)</td>
<td></td>
</tr>
<tr>
<td>Obstetric units must be staffed with continuous senior medical staff presence (RCOG, 2011)</td>
<td></td>
</tr>
<tr>
<td>There are performance differences between obstetricians at the Horton General (5WTE deliver 400 births) and those at the Headington (10WTE deliver 5800 births) sites</td>
<td></td>
</tr>
<tr>
<td>Outcomes in both units are similar despite real difference in risk profiles (Horton General obstetric deliveries have a much lower risk profile)</td>
<td></td>
</tr>
<tr>
<td>At present, neither obstetric unit is staffed to RCOG standards at all times</td>
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</tr>
<tr>
<td>The Obstetric Unit at the Horton General has had to be closed temporarily because of no medical cover and unscheduled closures are not safe</td>
<td></td>
</tr>
<tr>
<td>Nearly one third of pregnant mothers in north Oxfordshire and the surrounding area already travel to Headington for medical reasons or out of choice.</td>
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### 3.5. Children’s Services

#### 3.5.1. National perspective: standards, guidelines and best practice

The UK continues to demonstrate poorer health outcomes than comparable nations for children and young people, with persistent healthcare inequalities across the country. Over the last 50 years the pattern of illness has been steadily changing with a decrease in acute infective illness in comparison to a rise in chronic long-term conditions, as treatment and longer-term care improve. This change has only been partially reflected in the pattern of service delivery. As chronic long-term conditions increase with an associated increase in demand for tertiary or even quaternary level care, children’s services have increasingly become consolidated in a smaller number of specialist Children’s Hospitals. This increased demand for centralisation has left DGHs with declining demand and, therefore, decreased exposure to the management of complex and chronic illnesses.

At the same time, the reduction in acute infective illness through vaccination programmes (a key reason for acute admissions in the past) has led to a reduced number of admissions overall. An unexpected consequence is an exacerbation of seasonal admission patterns with a significant difference in demand for beds in the winter and summer months, as viral respiratory infections, which cannot be vaccinated against, predominate in the winter. This reduced need for inpatient beds, however, has developed alongside an increased demand for urgent assessment of minor
illness, and increased attendances at ED, consequent upon changes in public expectation and behaviour, which do not translate automatically into a need for an increase in inpatient beds. This highlights the need to rethink the way in which acute services are provided for children in this country.

The NHS has invested centrally in the care of children with tertiary or specialist conditions and as a consequence there has been a steady increase in the number of newly built specialist Children’s Hospitals across the UK (Oxford 2007, Glasgow 2015, and both Belfast and Leicester currently in progress). This investment has not been reflected at DGH level, where the reduced demand for inpatient services has not been met with a concomitant investment in the development of community services and ambulatory care. This has resulted in a failure in most healthcare systems to address the capacity and capability within primary care to deal with child health in the community.

Across the UK, children make up 20% of the population, but approximately 40% of the GP workload. Despite this, more than 40% of GPs have had little or no formal training in paediatrics and the threshold, therefore, for seeking advice from acute or specialist Paediatricians is low. Investment in infrastructure at a community level will enable Children’s Services to address changes in health needs and more importantly, will help deliver a high quality service to all children and young people in all sectors, from primary care through to quaternary services, through a much closer integration between primary and secondary services.

The Royal College of Paediatrics and Child Health’s (RCPCH) “Facing the Future” sets out the direction of travel for healthcare in children, emphasising the role of specialist child services in supporting primary care and defines standards for acute general paediatric services. Ten standards focus on improving the quality of care provided and experience for patients by avoiding unnecessary attendances at ED, as well as unnecessary admissions to hospital through the delivery of care closer to home (Reference slide 43). Improved communication between primary and secondary care is central to this, with access to expertise at a local level or remotely, via use of technology. Where children do need to be cared for in hospital, the development of local community based services will reduce length of stay, by enabling children to return home safely and quickly.

These standards build upon two earlier RCPCH documents (Short Stay Paediatric Assessment Units, Advice for Commissioners and Providers, 2009, and Reconfiguration of Children’s Health Services, 2013) which provide guidance on the role of Short Stay Paediatric Assessment Units (SSPAUs) or Clinical Decision Units (CDUs). The RCPCH describes a model of care based on the provision of fewer larger inpatient units, supported by these networked SSPAUs delivering an ambulatory care model, which in turn is supported by strengthened community children’s nursing teams and enhanced paediatric provision in primary care.

The key standards for the delivery of an SSPAU/CDU state that all short stay paediatric assessment units should have:

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49 Royal College of Paediatrics and Child Health (2015) Facing the Future
50 Royal College of Paediatrics and Child Health (2009) Short Stay Paediatric Assessment Units, Advice for Commissioners and Providers
51 Royal College of Paediatrics and Child Health (2013) Reconfiguration of Children’s Health Services
Senior decision making staff involved in gate keeping
Senior decision makers available at times of peak demand including evenings and weekends
Bed numbers suitable for local need and variation in patterns of demand
Good access to diagnostics
An expectation of discharge not admission
Nurse-led discharges based on pre-set criteria and access to enhanced community care nursing teams 7 days per week to allow for early discharge and review at home
In 2015, the College issued further guidance that all Children and Young people admitted to hospital should be reviewed within 4 hours by a senior decision maker (middle grade doctor and above).

In 2016, the Nuffield Trust also set out the key health outcomes for Children’s services by which they can be evaluated. These include a service which:

- Focuses on the needs of children and young people, including broader health and social needs
- Enables access to high-quality paediatric/child health expertise in the community
- Links up information, data, communication and care at all levels and across agencies
- Has a focus on improving health literacy and education in the wider population to improve self-care and prevention.

The Imperial Child Health General Practice Hubs are an example of enhanced community care in practice (Reference slides 44 and 45). The Imperial model represents a collaboration of Imperial College Healthcare Trust, local CCGs, commissioning support units and Health Education North West London. This innovative project places Paediatricians and other child health care specialists to work alongside GPs from 2-3 practices in each hub. Clinicians review patients locally, attend a regular multidisciplinary team meeting, and are in contact via an email and telephone hotline to address urgent concerns. In the first full year of practice, the result has been a fall in out-patient hospital attendances of 39%, a reduction in ED attendances of 22% and a reduction of in-patient admissions by 17%. Patients and families report a high level of satisfaction with the new service.

The Friarage Hospital, in Northallerton, Yorkshire is a similar sized DGH to the Horton General, which has already implemented change for its children’s services in line with RCPCH standards, following a period of consultation in 2013. Like the Horton General, The Friarage had a small paediatric in-patient service (14 beds) with a lower average admission rate of 5 per day. It also ran a small obstetric unit, delivering approximately 1250 babies per annum with 10 Special Care Baby Unit (SCBU) cots. As in the Horton General, the predominant length of stay for children was under 24 hours. Following consultation, the Obstetric Unit became a MLU and the paediatric inpatient ward changed to a 24 hour SSPAU alongside a full ED.

52 Royal College of Paediatrics and Child Health (2013) Reconfiguration of Children’s Health Services
53 ibid
54 Nuffield Trust (2016) The future of Child Health Services: New models of care
55 King’s Fund (2014), Imperial child health general practice hubs: A Case Study
57 Hambleton, Richmondshire and Whitby Clinical Commissioning Group (2013) Children’s and Maternity Services at the Friarage Hospital: the Public Consultation document: Options for the Future
The SSPAU was staffed by Advanced Nurse Practitioners (ANPs) and Paediatricians, who were on call from home during off-peak periods. Following a re-evaluation of demand and staffing in April 2016, the SSPAU has reduced its opening hours to 9am to 7pm, Monday to Friday, alongside the retained ED. This decision meets the standards set out by the RCPCH and safe pathways were established to ensure that urgent paediatric attendances are diverted to other appropriate centres, when appropriate. In recognition of the fact that EDs will continue, however rarely, to receive very sick children out of hours, the paediatric skills of all ED staff are enhanced by a regular programme of training focused on distinguishing minor from more serious illness, life support skills, stabilisation and transfer skills, and child protection awareness.

3.5.2. North Oxfordshire and surrounding area

The children’s service at the Horton General is small in the national context. In 2014/15, the Horton General, delivered 219 spells in its SCBU, 2699 NELS, 242 day case spells and 11,062 outpatient appointments (Reference slide 11). This translates to 0.6 SCBU and 7.4 non-elective paediatric spells per day. This scale of service poses problems for a unit in sustaining high quality and safe care. This is further compounded by movement to the best practice model of ambulatory care, which promotes care for children at home and not in hospital, and which will lead to a reduction in these numbers still further.

In 2008, the IRP\(^{58}\) raised concerns about the difficulties associated with visiting children at hospitals some distance from home. For children in north Oxfordshire and the surrounding area this translates to the evolution of a high quality service, which will deliver significantly more care closer to home than in hospital and facilitate more rapid admission for sick children to a centre with appropriate expertise and facilities. As a small DGH the Horton General, admits a range of children and young people with health difficulties. The sickest children and young people, and those requiring more specialist care, however, are transferred to the Children’s Hospital, Oxford (CHOx) at Headington, where there is access to the full range of specialist expertise as well as critical and high dependency care. For instance, this means that acute surgical care or major trauma care is provided by CHOx, through direct ambulance transfer. This direct transfer of the sickest children to CHOx is now an established practice.

For children, who are currently admitted to the Horton General, and then deteriorate and require urgent transfer for expert care, there is a risk that this will not be accessed as rapidly as direct admission to CHOx, because of the inevitable delays associated with an intermediate stage in the patient pathway. Although families report high levels of satisfaction in the care they receive at the Horton General, relocation of the acutely unwell by transfer between hospitals can add a burden of additional distress on the child and family and impact negatively on their experience of the episode.

Admission (and transfer) of children to hospital should, therefore, be minimised but always available when indicated. In the majority of instances today, care can be provided out of hospital. The effect of moving to such a 21\(^{st}\) century model of care, in fact, will be a net reduction in travel by children and families from north Oxfordshire and the surrounding geography from home to hospital, as care becomes more ambulatory and more elective procedures are available closer to

\(^{58}\) Independent Reconfiguration Panel (2008) Advice on changes proposed by the Oxford Radcliffe Hospitals NHS Trust to paediatric services, obstetrics, gynaecology and the special care baby unit at the Horton General Hospital in Banbury
home, via an enhanced day care facility. Accessible rapid assessment, inherent in this model will also ensure that the much smaller numbers of sicker children are admitted in a rapid and timely fashion to the appropriate centre of expert care.

Since the outcome of the IRP in 2008, Children’s Services at the Horton General have consisted of an 8 bedded (6 special care cots and 2 transitional care cots) SCBU to support the obstetric unit, an 18 bedded inpatient ward, and a suite of outpatient rooms, primarily, though not exclusively used for assessment and follow-up of local non-specialist patients. The SCBU at the Horton General provides care for babies who are well enough to stay with their mothers, some of whom may be classified as having Transitional Care. Inpatient care is provided to a range of children and young people. In 2014/15, over 2000 children were admitted and approximately 74% stayed in hospital for less than 24 hours as demonstrated by the average length of stay, which is 0.8 days. Surgical lists for children are offered by ENT, trauma and orthopaedics and these are either and usually on a day case basis or, where admission is required, children are admitted directly onto the Children’s Ward.

The service is staffed by 8WTE consultant paediatricians plus a further 4 consultants who each spend 43% of their time at the Horton General. In 2014/15, these 10WTE acute paediatricians delivered about 2699 NELS. In contrast, 10WTE acute paediatricians delivered 16,000 NELS at Headington. The Horton General, in addition, has 1WTE specialty doctor, and 5 GP trainees and 3 Foundation year doctors at any one time. Nursing care is provided by 21WTE staff for the Children’s ward and 13WTE for SCBU.

Around 2,000 children from the north of the county travel to the Children’s Hospital Oxford (CHOx) at Headington each year for elective procedures and over 10,000 outpatient appointments per year take place at CHOx for children from the north of the county, demonstrating an already established significant flow of patients from the north of the county to the larger specialist services based on the Headington sites.

The 24-hour resident consultant service provides paediatric care to inpatients, ED and SCBU, as well as conducting regular outpatient clinics on the Horton site. The service provides regular consultant advice and support to GPs, who can access it via telephone or email to discuss their concerns with a consultant. It provides care closer to home for families with premature babies (approximately 219 with an average LOS of 5.6 days), who can be transferred safely from the neonatal unit in Headington to the SCBU at the Horton General, for the later stages of care.

There are, however, a number of challenges to the delivery of this service model currently and its sustainability in the future is in serious doubt. The most significant of these relates to workforce; both the allocation of resource and availability of staff. The total volume of work is too small to fulfil the training requirements for paediatric registrar training, which, coupled with an inability to recruit and retrain sufficient non-training middle grade doctors, is the reason why resident consultants provide this service instead. This emphasis on 24-hour bed-based consultant care means that a significant proportion of consultant clinical time (over a third) is spent in residence in hospital covering the out of hours period in the evening and at night, when there is very little activity. This results inevitably in reduced access to paediatrician time during the day, when families are likely to benefit most. The current model using an expensive and valuable clinical
resource (consultant paediatricians in residence) to staff a service with low demand does not represent high quality or best value.

In fact the converse is true. Persisting with current practices not only prevents quality improvement, but reduces the value derived by the resources for healthcare in the system. Persistence prevents the adoption of what national guidance constitutes as the ‘gold standard’ in quality care for children and young people; a responsive Children’s Service, which delivers care closer to home and at times when families most want to be seen. To achieve this, there needs to be increased availability of Paediatricians to work alongside GPs at peak times of demand to offer advice and review in a timely way, reducing the need to seek advice from the acute service and preventing lengthy and stressful waits in ED. The current configuration of Children’s Services at the Horton General prevents the delivery of such high quality care within its defined financial envelope.

In addition, it has proven difficult to staff the Consultant posts that function across sites, although for the first time these are now filled. There is one specialty doctor (non-training middle grade) post at the Horton General and while filled part-time, this has never been fully recruited to. Recruitment and retention issues have also affected the nursing workforce. In a small unit issues around staff vacancies and annual leave can have a significant impact on capacity to fully staff the service: essentially, the smaller the pool to draw from, the less likely it will be that unexpected gaps in the rota can be filled when they arise. With small staff pools, furthermore, the impact of delays in replacing staff is disproportionately greater. Reduced staffing numbers also limit the capacity to flex between the demand for acute care and surgical care, particularly in the winter months because of increased infection rates. Over the last few months this has led to frequent bed closures and the temporary cessation of paediatric surgery at the Horton, because of an inability to safely staff the required number of beds. Nursing shortages are a national problem, particularly in paediatrics and there is, therefore, insufficient workforce capacity in the healthcare system for CHOx to support the Horton General Children’s Service by moving staff from Headington, without significantly impacting on care in CHOx. Constant recruitment drives over the last year have sought to improve this situation, but have not resolved it.

The OCCG Transformation Programme is an opportunity to look at children’s services provided across the whole of Oxfordshire in the light of recent national guidance and changes in both population size and need. The OUHFT Strategic Review on the Horton General Hospital has an opportunity in alignment with the Transformation Plan to redevelop children’s services at the Horton General to develop a sustainable, high quality healthcare system for children fit for the 21st century.

3.5.3. **Summary for Case for Change in Paediatric Services**

<table>
<thead>
<tr>
<th>In summary, the key aspects identified that need to be considered and addressed in relation to paediatric services:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pattern of childhood disease has changed from acute infective illness to chronic long-term conditions</td>
</tr>
<tr>
<td>• This change in pattern has led to the consolidation of children’s services in large units</td>
</tr>
<tr>
<td>• Growing demand for urgent assessment of minor childhood illness and decreasing capacity and capability in primary care to meet this demand</td>
</tr>
<tr>
<td>• RCPCH emphasises the importance of hospital child services to support primary care</td>
</tr>
</tbody>
</table>
RCPCH describes a model of a Short Stay Paediatric Assessment Units to manage childhood illness alongside with an ambulatory model (Facing the Future 2015), which are networked to large inpatient units

- Imperial Child Health Hubs have reduced ED attendance, outpatient attendance and inpatient admission
- Inpatient children’s services at the Horton General have insufficient scale
- The threshold for paediatric admissions at the Horton General is low (and therefore numbers of admission are high) in comparison to CDU at CHOx with a higher proportion of very short stays
- The current consultant resident-based service is directed to low-volume demand and fails to respond to higher demand at other times, particularly in the community and does not make best use of the skills of consultants
- Recruitment and retention is difficult at the Horton General for medical and nursing staff.
4. Process for Developing Options for the New Models of Care

4.1. Introduction

As previously described, the OUHFT has been developing its strategic objectives and plans in close alignment with the OCCG Transformation Plan. This is particularly so for the specific OUHFT Strategic Review of the Horton General Hospital, where the focus on close alignment has been maintained because of recognition that these plans, for the Horton General, will form an important north Oxfordshire cornerstone for the wider OCCG Transformation Plan for the whole of Oxfordshire.

Clinicians are at the foundation of this OUHFT Strategic Review of the Horton General Hospital as OUHFT increasingly facilitates the participation of its clinical workforce in the development of its strategic objectives and plans. It may not be serendipitous that clinicians are also key components of the OCCG Transformation Plan. This alignment with the Transformation Plan was extended intentionally to the definition of the workstreams of the OUHFT Strategic Review of the Horton general Hospital, which are:

- Urgent and Emergency Care
- Planned Care, Diagnostics and Outpatients
- Maternity Services
- Children’s Services

With regards to the Transformation Plan’s primary care workstream, OUHFT is participating and contributing to this work. It has also held several different meetings and communications with the north Oxfordshire GPs, including the relevant Federations. As Oxford Health Foundation Trust is responsible for the delivery of mental health services in north Oxfordshire, this OUHFT Horton Strategic Review did not include a specific mental health workstream. Instead, representation from OUHFT’s innovative Psychological Medicine Service, which integrates care for physical and mental health, was woven into each of the four workstreams above.

4.2. Approach to development of new pathways: Clinical leadership

4.2.1. Role of Clinical Review Groups (CRGs)

Clinicians were the foundation of this exercise because they understand the issues from the clinical frontline and it was recognised that there had to be clinical ownership for the transformation to succeed. They worked together with managerial colleagues to identify viable clinical service models, which would improve the quality and safety of care provided for the people of north Oxfordshire and surrounding areas.

Over 50 clinicians from all OUHFT sites including the Horton General were enrolled in this exercise (see Appendix 1). They were asked to identify issues within their working arenas that required attention. These groups of clinicians were then tasked with assessing a full spectrum of new models of care for the Horton General, which would be clinically viable; clinically effective and safe, and sustainable in the medium-term (5-20 years). Each Clinical Review Group developed its
own models over several meetings, initially independently, and the Groups were then brought together to consider the interdependencies of their clinical models and their effect on clinical viability across the whole care pathway. The Groups were supported during this period by teams specifically tasked with obtaining and delivering supportive evidence.

4.2.2. Patient and Public Engagement

The vital role of the public was also appreciated from the onset, but in line with the Transformation Plan, public consultation was seen as an essential step in the exercise once clinical consensus had been achieved about the best models of care and their clinical viability. During this early phase, however, OUHFT held several meetings with the public representatives, including the North Oxfordshire Community Partnership Network to keep all parties well informed of the process, until public consultation (see Appendix 2 for details). A survey has been conducted with OUHFT members on services at the Horton General Hospital with 233 responses received. The survey was open until 22 September and findings are in the process of being collated. These will inform developments as the Review progresses.

4.2.3. Primary Care Engagement

The CRG work was also regularly discussed with both provider and commissioner primary care, particularly with north Oxfordshire primary care as it evolved. At the same time OUHFT participated in the embryonic OCCG Transformation Plan primary care workstream meetings, which was beginning to mobilise primary care opinion and strategy.

The CRGs limited themselves to assessing new ways of delivering care that has always traditionally been provided by OUHFT. In line with its theme of care closer to home, this did mean assessing models that took care out of the hospital setting, but in these instances although care was delivered in a community-based locality rather than in a hospital, it was expected that the delivery of care would still be by the OUHFT workforce. In other words, the models did not seek to place an added burden on the primary care workforce. Instead the intention was to consider models that worked collaboratively and supportively with primary care, which produced greater interface working, better access to advice and support in terms of upskilling. It was anticipated that once the primary care workstream had developed its plans that OUHFT would engage further with primary care in partnership working.

4.2.4. Long List of Options

The Clinical Review Groups first assessed a number of potential models of care for their relevant workstream (Reference slides 48, 49 and 50). From this pool they were asked to develop and propose clinical models, which delivered against clinical guidelines and standards and examples of best practice. These models were to ensure high quality and safe care, improve patient experience, and secure equity of access to specialist care’s skilled clinical expertise and sophisticated facilities, for the population of north Oxfordshire and surrounding geography. These proposed models were then modelled for activity to build a composite picture of a future hospital and a long list of 6 clinical model proposals, which included the current model of delivery acting as a baseline was created (Reference slide 51).

4.2.5. Common Themes of the Long List of Options

There were certain common themes across the initial five new proposed models:
• An urgent and emergency care front door that met the national guidance for integrating and co-ordinating services
• The delivery of an ambulatory care by default model, with some models maintaining a complementary inpatient care provision and others providing only ambulatory care for all patients, both medical and surgical patients with intermediate risk
• The transfer of stroke care and Level 3 Critical Care to a specialist centre with a catchment population large enough to ensure clinical viability
• An increased range of elective day case procedures (both medical and surgical) for adults and children delivered closer to home
• A wider range of specialist outpatient services and ‘one-stop clinics’ for both adults and children delivered closer to home
• A more comprehensive range of diagnostics, which remove the need to travel to Oxford for investigation
• The provision of a more community focus to care including beds for rehabilitation.

4.3. Evaluation of models

These models were then assessed against a set of agreed criteria. Quality of care for all was assessed by the Clinical Review Groups on the basis of clinical effectiveness (including safety), and patient and carer experience as shown in Figure 2.

![Figure 2: Evaluation criteria](image)

On the basis of these evaluations, some models were discarded. With regards to clinical effectiveness, an inpatient paediatric service was rejected because of low volumes to maintain
clinical skills and the growing need to meet demand for paediatric care in the community, rather than maintain bed-based care in a low-volume unit such as at the Horton General. For maternity services insufficient volumes to maintain clinical skills, inability to provide consultant presence according RCOG standards for Obstetric units and clear demarcation of obstetric risk into high and low risk only, rather than also including an unusual intermediate risk category led to the rejection of a functioning small obstetric unit at the Horton General.

The models were also assessed with regards to access to healthcare. Access was defined by three metrics; distance and the impact of the travel time to access services, service operating hours, and availability of patient choice (Reference slide 47). With regard to access, a proposal for two equally sized obstetric-led maternity units (at the Horton and John Radcliffe) was rejected on the basis that mothers from within Oxford would have to travel to the Horton General for it to have an adequate catchment population. Similarly, a model with a standalone GP primary care centre with no paediatric urgent or emergency care provision was rejected, because it did not provide adequate access to these services for its local population.

4.4. Short List of Options

This resulted in the emergence of two clear options, Options 2 and Option 3, in addition to the current model of care (Option 1), which acted as a baseline comparator for the proposed new care models (see Table 5 below and reference slides 52 and 52a).

Both new models are based on ambulatory care, but are different expressions of such care. Both, however, are in alignment with the overall OUHFT principles of providing care closer to home, while concentrating specialist services in locations with adequate scale that ensures high quality and safe care, and provides real value to the health economy. Both enhance access to sustainable specialist care. It is important to recognise that the changes in Options 2 and 3 are in concert with the transformation taking place across all the OUHFT sites. If such an organisational transformation is to succeed it is important that constituent members of the healthcare system adopt the concept of transformation and do not cling onto antiquated, unsustainable models of care, which impede, prevent and negate the delivery of improvements in quality and safety that are delivered by transformation and which do not deliver value for money.

All three Options, which are described in greater detail in Section 5 and 11 were then evaluated according to further criteria, described in Figure 2. Affordability and value for money projected the OUHFT’s financial position by 2020/21 with each Option and the capital cost. This required an activity analysis to project activity totals and shifts with each Option. Affordability and value also included an estates analysis on the need for estate preparation and improvement. The impact of each Option on OUHFT’s and the wider healthcare system’s workforce requirements and its sustainability were considered by the workforce team. Finally, Deliverability assessed each Option against ease of delivery and its alignment with the OCCC Transformation Plan and national strategy.
### Table 5: Short list of options

<table>
<thead>
<tr>
<th>Options</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urgent and Emergency Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Department (ED)</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>GP urgent care with Minor Injuries Unit (open out of hours)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ED and Integrated Urgent Care Centre (24/7)</td>
<td>×</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>Non-elective inpatient</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>Ambulatory care model</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Non-elective inpatient surgery – trauma and gynaecology</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Stroke Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute stroke and rehabilitation</td>
<td>✓</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Rehabilitation and early supported discharge</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Critical Care</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 3 (current)</td>
<td>✓</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Level 2</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Planned Care: Surgery</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective inpatient surgery</td>
<td>✓</td>
<td>×</td>
<td>?</td>
</tr>
<tr>
<td>Day case surgery</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Planned Care: Medicine</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective inpatient surgery</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>Elective day treatment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Diagnostics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current (limited)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>New diagnostic facility with increased capacity</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Outpatients</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current provision</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>New outpatient facility for transfer of Existing Headington clinics</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Maternity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both Obstetric and midwifery care</td>
<td>✓</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Free standing midwifery-led unit</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Special Care Baby Unit (SCBU)</td>
<td>✓</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Increase in maternity clinics (antenatal, postnatal and breast feeding etc.)</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Children’s services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paediatric inpatients</td>
<td>✓</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>Paediatric SSPAU/ Clinical Decision Unit (8am – 10pm or 24 hours)</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Paediatric elective day case care</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Increase in paediatric day case care</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Increase in provision of paediatric outpatient clinics

With regards to the workforce, a model with a high-risk obstetric–led maternity unit and an additional small intermediate-risk obstetric-led maternity unit scored poorly because of difficulties with providing adequate medical staff to cover obstetric-led maternity care for the whole of Oxfordshire. On the same grounds the clinicians found no justification for maintaining an expensive inpatient consultant-based paediatric service for a small segment of Oxfordshire’s population in north Oxfordshire, which prevented the use of this consultant resource to provide a more community-facing paediatric service and to deliver a modern, high quality and equitable consultant-based service for all of Oxfordshire.

The Clinical Review Groups’ proposals, which led to the construction of these two Options are described in greater detail in each of their individual sections in Section 5 below.

4.5. Summary: Process for the Development of Options for the New Models of Care

In summary, the process for the development of options included the following:
- Clinical Review Groups (involving 50 clinicians and managers) were established
- Their role was to evaluate current service provision and to develop a vision for future provision
- Agreed evaluation criteria were used
- Clinicians asked to assess a full spectrum of new models which would be: clinically viable, clinically effective and safe, and sustainable in the medium term (5-20 years)
- Long list of options was initially identified with common themes
- The criteria applied and three main Options identified across all 4 clinical specialities
- The Options were assessed by further criteria, which included access, affordability and value, workforce implications and deliverability
- Patients and the public were informed, including the North Oxfordshire Community Partnership Network, of this initial work
- Public Consultation was considered an essential and required next step
5. Clinical Review Groups’ Proposed Models of Care

5.1. Urgent and Emergency care and the development of Ambulatory Provision

It is possible to provide a less bed-based service than currently exists and move to an entirely ambulatory (day case) model with no inpatient facilities at the Horton. Such an approach, however, raised some concern from the Clinical Review Group because of the potentially detrimental effect on patient experience and the clinical ability of other sites (not least the Headington ED) to accommodate increased demand. It is projected in Option 2 that as many as 26,430 (66% of current attendance) could be managed at the Horton General Urgent Care Centre (UCC). This means that 13,830 will have to travel to the Headington or other neighbouring Emergency Departments (EDs). This increased attendance at the Headington ED is likely to lead to further performance deterioration against the 4-hour target, and potentially to worse clinical outcomes and poorer patient experience. The urgent and emergency care Clinical Review Group, therefore, raised important concerns with regard to a pure ambulatory care model as described in Option 2.

The Clinical Reference Group instead favoured Option 3 as a model Urgent and Emergency Care, which emphasises the importance of integration across the whole patient pathway, of care provision closer to (and in) patients’ homes, of better coordinated and supported care in both home and hospital, and of working collaboratively with other providers in the care of patients.

The proposed model is one of an Emergency Hospital Centre, comprising an ED and an integrated Urgent Care Centre (UCC), operating 24 hours a day, every day of the year, which permits urgent and emergency care to be delivered to all the projected 38,524 attendances for 2016/17. The ED and UCC services will be co-located and accessed through a single ‘Front Door’ and thereby, reducing confusion to the public. The UCC will bring together existing, but disparate, services supporting the delivery of emergency and urgent care: the primary care Out-of-Hours Service, the Primary Care Walk-In Centre and the Minor Injury Unit of ED. The resultant pathway, therefore, is simple for patients to understand and access (all come straight to ‘ED’).

This integrated ED-UCC service has greater clinical capability, improved resilience, and enhanced operational flexibility to meet peaks of demand and minimise patient delay. The ED and UCC will work very closely together and flex clinical resource to address peaks of demand, provide mutual clinical support for complex cases, share clinical governance arrangements and have clearly defined protocols for the transfer of patients within ED and outside according to clinical need.

Patients of all ages and clinical need will receive a prompt initial assessment to determine the nature of their problem, and will then be cared for by the most effective team. Patients with less serious illness or injury will be streamed to the UCC and within that, to the clinician and team most appropriate to their need (eg. a Nurse Practitioner for minor injuries, a GP for a range of acute illnesses, or a Mental Health practitioner for patients with psychological distress). This streaming will mean that crowding and delays in ED will be reduced and quality of care will improve, as it will facilitate the appropriate focus on the care of patients with more severe illness or injury.
For the very small number of patients with certain severe life-threatening conditions such as major trauma, ruptured aortic aneurysm or acute heart attack (myocardial infarction), the Headington site offers very highly specialist care that cannot be delivered at the Horton General. Patients identified by the ambulance service as having these needs will continue to be conveyed to Headington for emergency treatment by highly specialist teams as is currently the case, but with an increased focus on prompt return home or to the Horton General, once the initial highly specialist phase of the illness is over.

The proposed model has inpatient beds and wards, but recognises that best evidence is that many patients are better cared for by the Horton General clinical workforce as outpatients, day case or through its teams’ care outreaching directly into the patients' own homes. The need for inpatient beds is minimised by the deployment of rapid diagnostic tests (eg. point-of-care blood analysis), improved imaging facilities (CT, MRI), an advanced ambulatory emergency care capability (ref toolkit), improved clinical coordination of health and social care services and improved network support for specialist conditions.

Reflecting contemporary evidence, the set of pervasive, patient-centred care principles which underpins this care model include:

- Embedding pragmatic, evidence-based preventative interventions as ‘business as usual’ during all planned and unplanned patient encounters
- ‘Ambulatory by default’ (a set of patient-care principles, the most prominent of which is minimisation of overnight hospital admission)
- ‘Assess to admit’ (capable clinical assessment, often multidisciplinary, before a decision to admit to hospital is made)
- 'Enhanced recovery' (a set of enabling care principles that de-escalates care rapidly as the patient improves, minimising iatrogenic or hospital-induced illness and the 'post-hospital syndrome' of physical and mental debility)
- ‘Discharge to assess’ (an early move from hospital closer to home to deliver enabling care and determine ongoing care needs).

The model includes a High Dependency Unit (HDU) providing Level 2 critical care on-site and an e-ICU, which delivers connectivity and enhanced decision support via the Headington Level 3 Critical Care Units. Preferably, the HDU would be located within the ‘Acute Care Hub' of the Horton General, in close proximity to ED, the Emergency Assessment Unit (EAU), the acute Short Stay Ward, and key diagnostics such as CT.

As part of this transformation, the revision of clinical space in OUHFT and specifically at the Horton General will continue, achieving an optimal balance and configuration of ambulatory, short-stay and inpatient accommodation, a release of inpatient capacity and the creation of enhanced care environments for patients with frailty and/or dementia.

These systems of care will work to support seamless patient care that is closer to or in the home, rather than maintain the historical focus on inpatient bed-based care. Urgent Care flow, best outcomes and best value will be underpinned by the comprehensive provision at scale of care outside hospital, delivered by operationally integrated services:

- Acute Hospital at Home and ‘Early Transfer to Home’ service
• Rehabilitation at Home service
• County-wide generic Rehabilitation at Home and Enablement service
• County-wide Stroke Early Supported Discharge Service.

Central to this approach is that older people and those with complex needs are best cared for by experienced teams of ‘specialist generalists’ whose capability spans the active physical, social and psychological care domains. These generalists have an intrinsic high level ability to manage complex multi-morbidity, including frailty and cognitive syndromes, and are comfortable and capable when operating at the interface of traditional primary and secondary care. OUHFT will continue its current rapid progress in recruiting and developing clinicians from primary and secondary care backgrounds to fill this role and deploy them where they can deliver exceptional care, crafted to deliver the patient’s preferred outcomes.

Complementary, more focused capabilities (eg. condition specialisms such as diabetes) will be delivered through embedding that capability within the ‘specialist generalist’ team, by the recruitment of clinicians with the necessary skills, through dedicated training programmes as well as virtual support and when required by direct face-to-face assessment by condition specialists. OUHFT will further strengthen its innovative Psychological Medicine service, ensuring that patients with both mental and physical health needs receive prompt, effective, best-evidence care, wherever they are: in the hospital, in the care home or at home. The Psychological Medicine Service will provide seven day support to patients and clinical teams, either directly or via the interface of the Clinical Coordination Centre (CCC) in the hospital.

The CCC, in line with the FHC model59, will coordinate care across the hospital and community settings. OUHFT will work with Oxfordshire GP Federations to ensure that care models are developed collaboratively, and are aligned and communicated effectively across the healthcare system. This includes ongoing consideration of the most efficient, effective ways to:

• Develop contemporary clinical skillsets in complex multi-morbidity, frailty, end-of-life care, acute illness and the hospital/home interface
• Enable enhanced access to timely, complementary clinical information and opinion
• Optimise clinical assessment and treatment closer to home, with the desired triple aims of value, outcomes and enhanced patient experience
• Develop and deliver effective primary, secondary and tertiary preventative care
• Collaborate most productively around patients with the highest needs who are very heavy users of the health and social care system’s resources.

The Figure 3, from the FHC illustrates the integrated network of support that will be provided by OUHFT and its optimised interface with Enhanced Primary Care in all care settings (Reference slide 14).

59 Future Hospitals Commission (2013) Future Hospital: Caring for Medical Patients A report from the Future Hospital Commission to the Royal College of Physicians
In summary, the model of care described and proposed is clinically capable, optimises patient outcome and value for money. Crucially, it is patient-centred and emphasises working collaboratively with key partners such as Enhanced Primary Care through clinically led coordination. The aim is to equalise pressure, pace and value across the health and social care system and ensure that it is scalable, responsive and resilient during periods of exceptional clinical and operational challenge.

5.1.1. **Benefits of the proposed model**

The benefits are far reaching with the implementation of such an approach leading to better value-for-money and improved patient-centred outcomes through:

- Eliminating duplication and a Leaner management structure
- Demystifying navigation through the care pathway for patients
- Equalisation of pressure and pace
- Improved responsiveness
- Supporting care closer to home
- Uniformity of clinical and professional standards
- Workforce development
- Describing a delivery model that is scalable, resilient and flexible.
**Stroke Care**

The proposed model for stroke care is that all patients diagnosed with acute stroke are transferred to the Headington HASU for assessment and management, with pathways agreed for the return to Banbury when appropriate to complete recovery or rehabilitation in hospital or home with support from the integrated care outside hospital services. This is the model of care that is proposed in both Options 2 and 3, although Option 2 does not allow for the completion of rehabilitation for patients recovering from stroke closer to home.

**Critical Care**

With the pure ambulatory care model, Option 2, there will be no critical care facilities at the Horton General. All patients requiring such critical care (Level 2 and 3) would be transferred along agreed clinical pathways to the Headington critical care facilities. Such a model would have significant consequences on the type of care that could be delivered at the Horton General.

The model of critical care proposed in Option 3 acknowledges the current state of critical care at the Horton General. The majority of patients requiring critical care at the Horton General are medical patients requiring single organ support (non-invasive ventilation or a single inotrope, an intravenous drug to support the heart and increase its output) or a period of monitoring during their stay, following emergency admission (i.e. Level 2). As such, any development of services on the Horton site should include Level 2 critical care capacity as part of the medical pathway, perhaps located adjacent to the Emergency Assessment Unit (EAU). This would support a more flexible model of nurse staffing which would allow a variable number of HDU beds dependent on activity, with appropriately trained nursing staff being able to work across both HDU and EAU, as required.

Whilst primarily utilised for medical patients, these beds will not be ‘ring fenced’ for those patients only. Other services which may require access to Level 2 care include orthogeriatric patients, north Oxfordshire patients undergoing ‘step-down’ from Level 3 care at Headington to more local Level 2 care, and surgical patients whose clinical course unexpectedly requires a period of intensive monitoring or increased nurse-patient care ratio. Whilst these patients will be the exception, the HDU will facilitate the provision of enhanced supported care, when appropriate.

Guidance set out in the general provision of Intensive Care Services (GPICS) state that this service will need to be jointly managed by acute medicine and critical care services, with input from anaesthesia. Good links with the Headington critical care units are of paramount importance, ensuring proactive movement of patients to Level 3 facilities in Headington and support in clinical decision-making on ward rounds, as specified in GPICS.

Clearly defined clinical parameters will be agreed on the level of patient care capability at the Horton General CCU, to ensure timely transfer to appropriate intensive care facilities by a retrieval service at Headington. An e-Intensive Care Unit using telemedicine will allow the review, timely treatment and transfer of critically ill patients requiring Level 3 care to Headington.
5.1.2. Summary: Key aspects of proposed models of Care for Urgent and Emergency Care

In summary the key aspects of the proposed models are:

| Option 2: | Pure ambulatory model with no inpatient facilities (there were concerns raised by the Clinical Review Groups for this Option with regard to quality of care and patient experience) |
| Option 3: |
| - Emergency Hospital Centre with single point of entry (comprising ED and an integrated UCC) |
| - UCC comprising of: Primary Care Out of Hours Service, Primary Care Walk-In Centre and the Minor Injury Unit |
| - Patients with life threatening conditions (eg: trauma and heart attack) to be transferred to Headington sites for specialist care (small numbers). |
| - HDU providing Level 2 critical care on site and an e-ICU (enhanced decision support via the Oxford Level 3 ICUs) |
| - All patients with an acute stroke transfer to HASU at Headington |
| - Ambulatory care by default with bed based care provision. Patient flow through hospital facilitated by: |
  | - rapid diagnostic tests |
  | - improved imaging facilities, |
  | - advanced ambulatory emergency care capability and ‘generalist’ skills |
  | - Improved coordination of health and social care. |

5.2. Planned Care, Diagnostics and Outpatients

The centralisation of specialist services at Headington, offers the Horton General a unique option to enhance the quality and safety of care provided to its catchment population. Not only will the proposals outlined by the other Clinical Review Groups provide the population with care closer to home, but also improved seamless access to specialist care when needed, rather than the inevitable delay associated with processing through an intermediate stage in the pathway. The separation of emergency and elective interventional services means that the population of north Oxfordshire and its surrounding geography can benefit from receiving planned, high quality care without travelling to Headington. It also offers the opportunity to remove the need for travel for outpatient appointments and for diagnostics.

The vision of the Planned Care, Diagnostics and Outpatients Clinical Review Group is to build a new modern facility on the Horton General that will act as a showcase for 21st century healthcare. It is a vision where significantly more Headington consultants participate in the delivery of care at the Horton General site, by transferring current activity out of Headington. With the current extent of theatre utilisation, it is anticipated that the existing theatre infrastructure will be reconfigured to absorb the projected small increases in elective surgical activity as described in section 5.6. This reconfiguration will establish an elective surgical service with adjoining day case wards to create an enhanced Elective Care Centre, where proper scheduling will reduce cancellations, unacceptable delays and breaches. Where numbers allow, existing Headington surgical services will open an elective day case surgical service for patients in north Oxfordshire
and its surrounding geography, removing the need for them and their families to travel to Headington. Incorporating the advantages of focusing purely on elective activity, there will not only be benefits to patient experience of the certainty of procedure, but also of better clinical outcomes and safer care, such as reduced infections and quicker rehabilitation. Patient experience will be enhanced, therefore, not only by avoiding cancellation. Better scheduling and improved throughput will allow OUHFT to achieve its RTT and cancer targets consistently for the benefit of the population of north Oxfordshire and surrounding geography.

The same will be true for medical interventions. Some medical interventions are already delivered at the Horton General, but in line with OUHFT’s policy of reducing its footprint on the Headington sites, more interventions currently delivered at Headington will be transferred and delivered at the Horton General.

There is an ever-increasing demand for diagnostic capacity that facilitates the early assessment and management of patients and supports the preventative attributes of screening. It is not good policy for OUHFT to concentrate most of its diagnostic capacity on its Headington sites, where congestion and urgent activity impede access. The catchment population of the Horton General is of a size that offers OUHFT an opportunity to disseminate some of this diagnostic capacity in north Oxfordshire. The diagnostics estate at the Horton General is in an unacceptable state of repair. It is the vision of this Clinical Review Group to build a brand new Diagnostic Facility at the Horton General with MRI and CT scanners, ultrasound and other equipment that would allow the rapid assessment necessary for delivery of high quality ambulatory urgent care and dispel the need for the north Oxfordshire population to travel to Headington for routine diagnostic imaging.

It was noted in Section 1.5.2, as specialist services have developed over the last 30 years, more and more of the Horton General’s catchment population has had to travel to Headington for outpatient services. This Clinical Review Group proposes that a new Outpatient Facility is also built on the Horton General site with capacity to absorb the thousands of appointments for the north Oxfordshire population currently delivered at Headington. Nearly all the clinical services have committed to transfer their relevant outpatient activity to the Horton General, with the travelling undertaken by OUHFT staff rather than the patient population.

Sitting alongside the new Diagnostic Facility, this Outpatient Facility will provide the opportunity to rationalise appointments at both facilities and establish ‘one-stop clinics’, further reducing multiple journeys to hospital sites. An important component of this integration of outpatient work will be the development of an advanced Preoperative Assessment Unit, which ensures the smooth operation of the elective interventional services. Not only will this Unit address the needs of the patients undergoing elective surgery at the Horton General, but offer comprehensive preoperative assessment for those north Oxfordshire patients undergoing more complex and specialist interventions on the Headington sites. The new facilities will mean that these patients can truly expect all care apart from the specific intervention to be delivered closer to home by an interventional team that delivers different and appropriate components of care on both the Headington and the Horton General sites. The Preoperative Assessment Unit will also be able to offer fitness regimes before operation that will reduce the perioperative risk of surgical intervention.
5.2.1. Developments in Cardiology at the Horton General

Some services are already developing more detailed plans for expanding their services on the Horton General site. As an example, Cardiology is developing its outpatient and day case proposals. The service will serve the patients of north Oxfordshire and surrounding geography. Such a strategy has the potential to generate new tertiary work by serving Warwickshire and Northamptonshire populations, which will further consolidate the centralised services at Headington, allowing them to share the benefit of such centralisation with the population of north Oxfordshire.

Outpatient and day case services (clinics and diagnostics) will be provided by Cardiologists, in particular those with an imaging or heart failure background. Specialist clinics will also be transferred from Headington, including those for cardiac electrophysiology, adult congenital heart disease, cardiac surgery, heart failure and pre-procedural assessment.

This service for local people will be located within the new Diagnostics and Outpatients Facilities and be linked to the Elective Care Centre. For Cardiology it is proposed that they are:

- Increased outpatient clinic rooms: numbers to be specified
- In line with best practice guidance, Cardiac CT as a first line test for atypical and typical chest pain in outpatients. The provision of 1 or 2 CT scanner(s) at the Horton General will facilitate rapid assessment of these patients as part of the ambulatory care model
- Treadmill testing room for low risk patients requiring ischaemia testing
- Echocardiography including Transoesophageal Echocardiography, Dobutamine Stress Echocardiography (2-4 equipped rooms)
- CPET (Cardiopulmonary Exercise Testing) machine, which could be used in conjunction with the Preoperative Assessment Unit in the assessment of high risk patients for surgery
- Cardioversion (DC) room, and facilities for day case intravenous diuretics for ambulatory heart failure patients
- Floor space to introduce Implantable Loop Recorders to analyse heart rhythm disorders
- ECG rooms, which can be used to fit monitors etc.
- Telemedicine as an essential part of these developments, whereby community physician/nurses could then also have easy access to specialist opinions and therefore redirect patients away from EAU.

The cardiology service at the Horton General has already established networked care between the Horton General and Headington sites hospital sites. For the last two years all patients with emergency heart block have been ‘blue lighted’ to the Oxford Heart Centre for temporary/permanent pacemakers. No mortalities have been reported. Stable heart block patients are admitted to the Horton General CCU and then transferred for the next available daytime pacemaker slot at Headington (without major complications reported).
5.2.2. Summary of key aspects of model for Planned Care, Diagnostics and Outpatients

In summary, key aspects of the model of care for planned care is as follows:

- Separation of elective from emergency interventions
- New, 21st century Diagnostic Facility to deliver high quality diagnostic procedures (MRI, CT scanners and ultrasound etc), rapid assessment and reduced travel to Headington for routine diagnostic imaging.
- New Outpatient Facility with capacity for significant transfer of outpatient activity from Headington and making local services more accessible to North Oxfordshire’s population. This includes ‘one stop clinics’ thereby reducing multiple journeys.
- Advanced Pre-operative Assessment Unit (to enable smooth running of elective interventional services).
- Coordinated Theatre Complex to improve surgical throughput and complement an enhanced Elective Care Centre.

5.3. Maternity Services: Model of Care

The Maternity Clinical Review Group produced this vision for maternity services at the Horton General:

- To provide a high quality, safe, maternity service that achieves the optimal health outcomes for mothers and babies
- To provide a maternity service that gives all women genuine choice and effective personalised care
- To enable all women to have access to the right care in the right place.

In Options 2 and 3, there will be a free-standing MLU at the Horton General. All obstetric care for Oxfordshire’s population will be provided by the one Obstetric Unit at Headington. This was based on the Review Group’s opinion that this model provided the highest quality of care.

Compliant with National Standards of Maternity Care (2008)\(^{60}\) and the National Maternity Review: Better Births\(^{61}\), the maternity service will continue to improve outcomes for women and their babies by working with primary care and other allied health services to provide a more seamless booking assessment, and care pathways, which ensure that the right women (including low risk pregnant women) are cared for by the right specialist teams. All women will have a bespoke plan for their pregnancy that includes individual choice. For women with more complex pregnancies, however, to ensure the best outcomes these choices may be different to those for women with low risk pregnancies (Reference slides 37, 38 and 39).

Preconception care: There is evidence that the health and wellbeing of a woman, pre-pregnancy, has a significant impact on pregnancy outcomes for both her and her baby. The provision of preconception advice and care will be an important component of the maternity services for north

\(^{60}\) Royal College of Obstetricians and Gynaecologists (2008) Standards for Maternity Care: Standards Database

\(^{61}\) National Maternity Review (2016) Better Births: Improving outcomes of maternity services in England A Five Year Forward View for Maternity Care
Oxford University Hospitals NHS FT

Oxfordshire and surrounding geography. Some women will require targeted or specialist support, but the main components of care will be focussed on smoking, maintaining a healthy weight and alcohol. Preconception and antenatal care will be provided at the Horton General regardless of the chosen site of giving birth, removing the need for travel to Headington.

**Antenatal care:** Every woman will be medically risk assessed by their GP as early as possible to ensure she receives the right care, by the right professional, in the right setting. The GP is the appropriate professional to complete the assessment as he/she is aware of the woman’s medical, family and social history. The midwife, at the booking appointment will complete the health and social assessment and refer the woman to other agencies as necessary, such as social services, health visiting and mental health.

**Labour and Birth:** The maternity service will continue to offer four choices of place of birth as suggested by NICE (Reference slide 40).

- **Home Birth:** Women living in the north Oxfordshire and the surrounding geography will be able to request to give birth at home and the community midwifery teams will support women with a low risk pregnancy in their choice.
- **Freestanding MLU:** The MLU at the Horton General will provide 24-hour access for women choosing this care option. The unit will be staffed by midwives and maternity support workers (MSWs) with facilities, which will include LDRP (Labour, Delivery, Recovery and Postnatal) rooms and a birthing pool.
  A proportion of women will be transferred in labour to an obstetric unit as occurs currently. The transfer rate from the MLUs in Oxfordshire is approximately 24% from freestanding MLUs and 28% from the Spires alongside MLU at Headington, which corresponds to data from other units. Depending on the urgency of the clinical situation the woman will be transferred by ambulance or if clinically appropriate by her partner or a family member, according to clearly defined pathways.
- **Alongside MLU:** Women from north Oxfordshire and the surrounding geography will be able to choose to give birth in the Spires MLU in Headington. Already 200 mothers from north Oxfordshire and surrounding geography choose to give birth at the Spires MLU.
- **Obstetric Unit:** The consultant-led unit at Headington will provide care for women with high-risk pregnancies or for those who choose this option. It will provide access to expert medical staff 24/7, staffed operating theatres for caesarean sections or assisted delivery and other support services such as gynaecology and interventional radiology. The co-location of other tertiary services such as cardiac surgery means that women with heart conditions, such as aortic stenosis, can deliver with ready access to specialist support services.

It is projected that an additional 700 to 1000 women will give birth in the maternity services at Headington. This range is large, because about 500 mothers who gave birth in the alongside MLU at the Horton General may choose to give birth in the standalone MLU. The 300 mothers from Northamptonshire and Warwickshire who chose the Horton General in 2015/16, furthermore, may choose alternative maternity services in their county.
National evidence shows that women with complex pregnancies have better outcomes if they are looked after and/or deliver in specialist (obstetric-led) units. Changing demographic factors including women giving birth later in life, obesity, multiple pregnancies and existing co-morbidities have resulted in an increase in case complexity nationally and this picture is reflected in Oxfordshire. A number of women from north Oxfordshire and the surrounding geography, therefore, already have obstetric deliveries at Headington.

The proposed model, which centralises specialist services at one site in Headington is a robust model to sustain the high standards of safety and quality, within the context of current national and local workforce pressures. It makes a clear and customary division between low-risk and high-risk obstetrics, removing the wasteful and potentially confusing category of intermediate-risk unique to Oxfordshire. The Headington site provides tertiary and complex care to the highest risk women across a much wider region and to the sickest neonates through a tertiary neonatal intensive care unit. The proposed model ensures sustainability for both local women and for those women at highest risk within the region.

**Postnatal care:** The quality of postnatal care women and their families receive in the initial hours, days and weeks after the birth of their baby is arguably as important to the outcomes of mothers and their babies as at any other stage in the maternity pathway. Initial postnatal care will be provided in the MLU by the midwives and MSWs, and once the woman is transferred home, ongoing care will be provided by the community midwifery team. Women will be reviewed at home or in community based clinics depending on the woman’s clinical and social needs. Other clinics such as breastfeeding support, NIPE (Neonatal Initial Physical Examination) and vaccination clinics will support the mother and baby in this early postnatal period and links with the Health Visitor and voluntary organisations are important to ensure ongoing care after transfer from the midwifery team.

**Perinatal mental health pathway:** The emotional wellbeing of pregnant women is as important as their physical wellbeing. Additional support for new mothers will be available through the innovative Psychological Medicine Service based at Headington. This consultant-based service in perinatal mental health will ensure that women receive continuity of care from the appropriate mental health teams and services provided by Oxford Health NHS Foundation Trust in the community.

**5.3.1. Benefits of the new model of care**

**Quality**

- Enhanced clinical assessment will lead to more women having earlier appropriate interventions in pregnancy, which are known to improve outcomes.
- Promotion of midwife led care for low risk women.
- Referral of all women with increased clinical risk to specialist teams with appropriate experience and skills to receive care in accordance with national guidance.
- Use of agreed clinical pathways to ensure women are assessed throughout pregnancy and labour and are referred if necessary to the specialist team.
- Obstetric unit staffed according to RCOG recommendations
- Reduction of dependency on locum medical staff.
Patient experience

- Antenatal and postnatal care will be provided closer to home.
- Women will be able to choose options of care depending on their individual clinical needs.
- There will be more opportunities for women to access midwife led care.
- Women will be supported to go home quickly after giving birth.
- Support services such as breastfeeding clinics will be provided closer to home.

Value for money

- Improved quality and clinical outcomes and patient experience within the financial envelope
- Reduced dependency and cost of locum staff.
- Reduced the cost of maintaining two 24/7 medical cover rotas and scale of one unit providing savings to complement the improvements in quality of care.

5.3.2. Summary of key aspects of the Models of Care for Maternity Services

In summary, key aspects of the model of care for Maternity Services are the same for Options 2 and 3:

- Standalone MLU at Horton General providing 24/7 care
- Comprehensive pre-birth risk assessment and ante-natal care
- Choice of location of birth:
  - Home birth
  - Freestanding Midwifery Led Unit at the Horton General.
  - Alongside Spires MLU in Headington
  - Obstetric Unit at Headington for women with high risk pregnancies and those who choose this option
- Post-natal care delivered in hospital and the community.

5.4. Children’s Services: Model of Care

The Clinical Review Group’s vision is to deliver excellent quality care for all children and young people across Oxfordshire: delivered in or as close to home as possible; at the time that it is needed; and by the most suitable clinicians. It is as described within the broader Oxfordshire Transformation Plan: care for ‘the right person in the right place at the right time’.

We see the role of the Horton General as integral to achieving this aim with the development of closer working relationships with GPs through the creation of community-based ‘hubs’ with Paediatricians, Community Nurses and Therapists working together as part of an integrated multidisciplinary team. This will require a transformation in the way children’s services are delivered; redistributing resources to become more locally based and community focused, and improving access to specialist clinical advice through the use of improved technology, thereby facilitating best care delivery to greater numbers of children.

To support this, a robust ambulatory care model will be developed at the Horton General, in line with the existing ambulatory service within Headington, so that children needing urgent advice and care can be assessed quickly and safely by skilled decision makers: Paediatricians, Assistant
Nurse Practitioners (ANPs) and ED specialists working together as part of a new integrated ED. This will be delivered through a SSPAU or CDU, which will keep the majority of children out of hospital. The minority, who require admission will be transferred safely to Oxford to access a wide range of specialist expertise and a full range of critical care facilities and surgical specialists. Broadly, this model will result in:

- More appointments for children, at more convenient times and closer to home, preventing unnecessary referrals through teaching, training and co-working
- Increased numbers and range of day case procedures, both medical and surgical, offered to children at the Horton General, so that fewer children will need to travel to Oxford for such procedures
- Easy access to paediatric assessment at the Horton General during an extended day or 24 hours each day, 7 days a week, with a model of care that minimises admission and allows the child to remain in the community
- The sickest children having equity of access to care at the specialist centre that is best equipped to deal with the acutely unwell and deteriorating child.

There is no model or national example for the provision of a SCBU alongside a free-standing MLU and there are inherent clinical risks in maintaining this service in the absence of an obstetric unit. These risks focus primarily around clinician behaviour in the event of an emerging difficulty. Desire to intervene, particularly in a unit where intervention has been previously possible, could lead to delays in transfer, risking both the mother and the baby. It is imperative that in the absence of an obstetric presence, all complex deliveries and all sick babies are transferred without delay to the centre best equipped to meet their needs. This is consistent with RCPCH guidance on the delivery of complex or specialist care in a limited number of centres, where clinicians are familiar with the difficulties and skilled in the management of the sick children. It is also the view of the Thames Valley and Wessex Neonatal Operational Delivery Network, who have raised concerns of proper governance. The Clinical Review Group does not support a SCBU alongside a standalone MLU at the Horton General, although this is not unanimous.

The absence of a SCBU removes the most immediate need for on-site 24-hour consultant paediatric care. Transforming to an ambulatory care model at the Horton General removes this need completely. Instead, this valuable clinical resource will be more usefully and appropriately deployed, in keeping with RCPCH guidance and the prevailing expert opinion, to drive quality by establishing a community based preventative and ambulatory model of care: redirecting Paediatrician time and efforts to areas which need it most, so that more children can receive expert acute and preventative care earlier and closer to home. This consultant paediatric workforce, working alongside GPs within the community will be supported by their colleagues in a CDU at the Horton General, which will be run according to RCPCH standards.

There are two models for the hours of opening of the CDU, 8 am – 10 pm, or 24 hours, either of which can be delivered in both Option 2 and Option 3. In the first model, the CDU will be open during peak hours for paediatric assessments (8 am – 10 pm), 7 days a week, and enable the rapid assessment and decision-making for all children presenting to ED or referred by their GP for an urgent opinion.
This model allows the majority of children who are seen currently for urgent care at the Horton General to continue to be managed there. It replicates the highly successful ambulatory care model of the Children’s CDU at Headington, which manages on average 500 attendances/month, with only 4.5% of these attendees requiring admission to hospital. The ambulatory care model of CDU in turn will be supported by the development of community services with direct links to GP surgeries alongside multidisciplinary expertise, which will support even more children than currently is the case, to be cared for in the community. Enhanced community nursing support will enable those who need treatments such as completing a course of intravenous antibiotics, to be treated in their own home, thereby further reducing the duration of, or even avoiding, admission.

The minority of children assessed as requiring inpatient care will be transferred to CHOx at Headington along safe agreed clinical pathways. All medical emergencies after 10 pm will be automatically directed to CHOx, as will all GP referrals. Children from north Oxfordshire and the surrounding geography, who require emergency surgery due to major injury or illness at any time of day are already immediately transferred in this way.

This model is in keeping with the nationally reported changes in health conditions in children and will enable the Horton General to offer a contemporary, local high quality and safe service to more children and families than currently. Overall it is a more robust service model, which addresses sustainability with opportunity for better recruitment and retention particularly in nursing because of the increased volume of day work, and represents better value for money.

There will be challenges in delivering this model, not least of which is the process of change. During the initial stages there may be a lack of certainty about where to take children and young people. This will be addressed by the provision of clear information for parents and families; by establishing clear safe pathways for the ambulance service as are currently defined for trauma and medical emergencies; and by the introduction of a robust rolling training package for all ED doctors and nurses to ensure paediatric skills are maintained, supplemented by support from an on-call Paediatrician after 10 pm. Children’s Services will also work closely with colleagues in social care and Child and Adolescent Mental Health Services (CAMHS) to develop clear pathways for the management of safeguarding and mental health concerns.

This proposed change in pattern of admission will lead to increased inpatient activity in CHOx, which will need to be addressed. In part, capacity will be created by the anticipated reduction in cases presenting to the Horton General ED through improved links with GPs and Paediatricians within the community, and also by the transfer from Headington to the Horton General of diagnostic and elective day case procedures and surgery for children in the north Oxfordshire and surrounding geography.

The second model of CDU opening hours proposes a CDU that is open for 24 hours a day. This model will have an admission duration limit of 12 hours, after which children requiring longer bed-based care will be transferred to CHOx. As with the CDU model with shorter opening hours, all children managed within the unit will require a review within 4 hours by a senior paediatric decision maker, either a middle grade doctor or above. This CDU model, which is open 24-hours each day means that all children currently managed at the Horton will be assessed as they are today, and a decision made as to whether they require observation, or discharge home with
advice, or admission. Children requiring admission will be transferred to CHOx according to safe, agreed clinical pathways. The modelling work proposed that of 2699 projected NEL spells for 2016/17 at the Horton General, 2024 children will be managed through ambulation in the community and 675 will be transferred to CHOx at Headington for expert bed-based care. The projected number of children transferred to CHOx with the 8 am – 10 pm CDU opening hours model is 810 for 2016/17.

Delivery of a 24-hour model has some inherent challenges for Children’s Services not least of which is staffing. Increasing the CDU opening hours means that staff, both nursing and medical, need to be available throughout the night in order to care for children who are being observed (as opposed to the acutely unwell) after 10 pm, as well as to be available for a smaller number of children who may present after 10 pm for assessment. Local data show that the vast majority of children who present to the Horton General ED arrive between 8 am and 10 pm and that the number of attendances overnight is low (an average of 2.7 attendees per night in the busiest month of the year, January, which translates into an average admission to the ward of 6.4 per month).

Recruitment and retention of nursing has been problematic at the Horton General and is likely to continue to be so. While ANPs might offer a suitable option for this nocturnal role, there is a shortage of paediatric nurses nationally making it likely that posts would remain unfilled and result in unsustainable rotas. In other children’s services where consideration has been given to the development of SSPAUs or CDUs, the trend has been to limit opening times to peak hours because of the low out of hours workload, the pattern of children’s attending and national shortages in paediatric staff. This in part has contributed to the decision to reduce the opening hours of the SSPAU at the Friargate Hospital in Northallerton.

Maintaining an out of hours CDU at the Horton General is likely to rely on the current Consultant team. If adopted, this would remove this resource from the opportunity to develop the community consultant-based paediatric service during the day and the consultant clinics within GP surgeries and the quality of care advantages it would bring with it. The persistence instead of a model of low volume workload overnight will inevitably lead to the risk of deskilling the Consultant Paediatricians and significantly reduce the value derived by the local healthcare system. The Clinical Review Group believes that the model with a CDU open during peak hours supported by a consultant on call after 10 pm and supported by a community consultant-based paediatric service represents the best quality, safety and value for money for children throughout north Oxfordshire, by providing the best possible fit of ‘right person, right place, right time’ for the largest proportion of the population.

The introduction of both these CDU models of care are closely integrated with other OUHFT plans, which impact on children’s healthcare. The concurrent proposal to transfer to the Horton General a significant workload of elective day case care, diagnostics and outpatient activity for children of north Oxfordshire and its surrounding geography currently undertaken at Headington, will result in a significant net reduction of travel by children and families.

The Clinical Review Group recognised that there has been some debate over the relative merits of both CDU models. In view of this OUHFT has invited the RCPCH to visit the Horton General Hospital and provide an independent opinion on these two CDU options for paediatrics. This
will be undertaken in September 2016 and there will be an opportunity for the stakeholders to contribute to the RCPCH review.

5.4.1. Benefits of new model of care

Quality
- CDU co-located with ED; the majority of current attenders will continue to be managed at the Horton General by skilled clinicians close to home
- Those requiring emergency surgical procedures or requiring admission would be directed or transferred to the specialist facilities at CHOx where a wide range of expertise is collocated on one site along agreed pathways
- The redeployment of consultant clinical time to the community provides opportunities for faster access for children to services in their local area
- Enhanced out-patient facilities would enable more specialist appointments to be delivered at the Horton, reducing journeys to the Headington site
- Opportunities to deliver ‘one-stop shop’ clinics will further reduce the number of multiple journeys to hospital for families

Patient experience
- More specialist care will be provided closer to home such as parenteral antibiotic clinics
- Rapid access to assessment and to specialist care if needed
- Increased diagnostics and day case procedures at the Horton with reduced waiting times and reduced travel time

Value for money
- Redeployment of Paediatricians to local child health hubs where their expertise will inform the management of a wide range of children through direct clinical contact and through consultation and training, rather than utilising this clinical workforce as an on-call service
- The cost of on call cover will be reduce with the 8 am – 10 pm model as there will only be a requirement for one consultant to be on-call as opposed to the current 2.

5.4.2. Summary for key aspects of the Models of Care for Children’s Services

In summary, key aspects of the models of care for Paediatric Services is as follows:
- CDU within the UCC/ED (either open 8 am – 10 pm or 24 hours) for children needing urgent advice and care assessed quickly by skilled decision makers
- Ambulatory provision via the creation of multidisciplinary community based hubs with close working relationships with GPs (More appointments closer to home with easier access to paediatric assessment)
- Children requiring admission transferred to CHOx for specialist expertise and access to a full range of critical care facilities and surgical specialists
- Significant net increase in care episodes delivered to children at the Horton General.
6. Activity Analysis

6.1. Activity Profile of the Horton General

The activity profile at the Horton General for 2014/15 has already been described (Reference slide 11). It is a profile of a hospital trying to stay abreast of the challenges of today and attempting to avoid the development of a gradual, but inevitable, gap between what is best practice and what it provides for its catchment population. During the last decade for instance, emergency surgery, the care of acute myoccardial infarction and the management of major trauma are no longer offered as services at the Horton General, and instead, have been transferred to Headington.

A comparison of the projected activity profiles of the current Horton General service (Option 1) and of the proposed two new Options for 2016/17 offer a vision of activity of a very different hospital, a vision that will provide sustainable hospital care in the 21st century, built on the foundation of strong partnerships with OUHFT sister hospital sites that ensures the delivery of safe, high quality, high value care to north Oxfordshire and surrounding geography and to the rest of Oxfordshire.

6.2. Assumptions underpinning activity profiles

These activity profiles were derived from an activity analysis that included the following broad assumptions:

- The introduction of greater integrated care between the primary and secondary sectors, with more care delivered in the community because of changes in care delivery that will result in reduced attendances in ED, particularly of the frail and elderly, patients with long-term conditions and children. This makes no assumption about the number of contacts delivered by the GP Out of Hours Centre (OOHC) sited within Horton General ED, but it is likely that more integrated care will increase the capacity of the system to deliver more care in the community, which will also be reflected in a reduction of contacts at the OOHC.

- The reduced ED attendances will not be translated into NELS.

- The introduction at the Horton General of an ‘ambulatory care by default’ model which has already been successfully established at Headington with the development of the Adams Ambulatory Unit and expanded Emergency Assessment Unit (EAU), both of which take direct referrals from GPs and from ED. It is assumed that this will reduce hospital NELS by 20%

- 5% of follow-up appointments will be delivered using mobile technology

- A paediatric Clinical Decision Unit (CDU) will reduce NEL activity by 70-75%, depending on opening hours; there will also be safe clinical pathways for the transfer of the remaining 30% of Horton General NEL activity to Headington.

- An annualised growth rate in births of 0.5%

- Up to one third (33%) of births will be delivered at the standalone MLU at the Horton General. This is a best projection, having considered the demand for obstetric-cared births, local demand for birth at the alongside MLU at Headington and the exercise of choice with
regards to delivery at home or at non-OUHFT maternity units such as at Warwick and Northampton.

The approach to projecting the elective surgical activity that could be transferred from the Headington sites to the Horton General was taken in conjunction with advice from clinicians. By using several stages to filter patients, who would not fit into the model of an elective Day Case or Short Stay Surgical Facility (as illustrated in Reference slide 57), the total elective surgical activity was modelled using a funnel technique.

These numbers do not include the activity undertaken at the Ramsay Horton Treatment Centre (HTC). The Ramsay HTC is an independent provider with a contract to deliver elective orthopaedic activity until July 2017 in a facility located on the Horton General site. The HTC also offers access to NHS patients to its MRI scanner, but this can only be used for outpatients because of design factors. This analysis has not included the activity undertaken at the Ramsay HTC, but this will have to be addressed by July 2017.

A similar funnel methodology was used, with clinician input, to model the projected medical activity that could be transferred from the Headington sites to the Horton General (Reference slide 58). A similar approach was used to model the projected transfer of outpatient activity from the Headington sites to the Horton General (Reference slide 59).

These assumptions resulted in the following annual projected activities for each Clinical Review Group for Option 2 and 3 and the differences from the activity of the baseline Option 1, which are recorded on Reference slides 54, 55 and 56. Broadly, they project the following:

6.3. **Urgent, emergency care, stroke and critical care activity profile**

The following activity profiles for Urgent and Emergency are shown below as follows:

- As shown in Table 6, with Option 3 there is no difference with baseline (Option 1) in ED attendance, but 13,830 patients attending the integrated Urgent Care Centre, Minor Injuries Unit and GP OOHC, will need to attend an alternative Emergency Centre (Oxford, Northampton or Warwick) with Option 2.

<table>
<thead>
<tr>
<th>Urgent &amp; Emergency Care</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED Attendance</td>
<td>40,260</td>
<td>26,430 (-13,830)</td>
<td>40,260</td>
</tr>
<tr>
<td>Critical Care</td>
<td>681</td>
<td>0 (-681)</td>
<td>641 (-40)</td>
</tr>
<tr>
<td>Medicine NEL AMB</td>
<td>0</td>
<td>2596 (+2596)</td>
<td>2596 (+2596)</td>
</tr>
<tr>
<td>Medicine NELIP</td>
<td>12,979</td>
<td>0 (-10,383)</td>
<td>10,383 (-2596)</td>
</tr>
<tr>
<td>Surgery NELIP</td>
<td>2165</td>
<td>0 (-2165)</td>
<td>2165</td>
</tr>
</tbody>
</table>

(Key: Red = activity that is modelled to transfer to Headington and blue= activity is additional Horton General Hospital activity)

- 2596 patients will receive ambulatory care rather than hospitalisation for NEL medical presentations, with both Options 2 and 3. With Option 2 there is a projected transfer of 10,383 patients to Headington for inpatient medical care.
The transfer from the Horton General of 2165 patients who present as NEL surgical spells to Headington in Option 2.

The evolution of the Critical Care Unit to a Level 2 facility, with clear pathways for the transfer of the small number of patients (40) requiring Level 3 care to Headington with Option 3. Workforce exigencies have already required this pathway to be instituted, with patients receiving better access to high quality care. With Option 2 all patients (681) needing critical care will be transferred to Headington.

6.4. Planned Care, Diagnostics and Outpatients activity profile

The following activity profiles for planned care, diagnostics and outpatient appointments for each option are outlined in Table 7 and highlight the following:

- A significant increase in medical (3439) and a smaller increase in surgical (215) Day Case activity, transferred from Headington to the Horton General with both Options 2 and 3.
- An increase (732) in elective medical inpatient activity with Option 3 and (the possibility of a significant increase (up to 1051) in elective surgical inpatient activity for those surgical patients who require medical, rather than surgical, short-stay bed-based care with Option 3.
- There will be significant increases in medical (31,999) and surgical (63,412) outpatient appointments transferred from Headington to the Horton General for delivery of this service locally in both Options 2 and 3
- There will be a further actual reduction of these outpatient appointments, because of the introduction of ‘one-stop’ clinics, which will reduce the need for patients to travel repeatedly to receive fragmented care
- Significant increase in imaging (8894) and other (4254) diagnostic procedures will be delivered at the Horton General and no longer at Headington, with both Options 2 and 3
- Significant increase in oncology Day Case care such as chemotherapy (5553) and renal dialysis spells (2838) will be delivered at the Horton General and no longer at Headington, with both Options 2 and 3.

Table 7: Planned Care, Diagnostics and Outpatients Activity by Option

<table>
<thead>
<tr>
<th>Planned Care, Diagnostics &amp; Outpatients</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine ELDC</td>
<td>4711</td>
<td>8150 (+3439)</td>
<td>8150 (+3439)</td>
</tr>
<tr>
<td>Surgery ELDC</td>
<td>4309</td>
<td>4524 (+215)</td>
<td>4524 (+215)</td>
</tr>
<tr>
<td>Medicine ELIP</td>
<td>73</td>
<td>0 (-73)</td>
<td>806 (+732)</td>
</tr>
<tr>
<td>Surgery ELIP</td>
<td>503</td>
<td>0 (-503)</td>
<td>1554 (+1051)</td>
</tr>
<tr>
<td>X-ray</td>
<td>12,378</td>
<td>12,378</td>
<td>12,378</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>11,254</td>
<td>12942 (+1688)</td>
<td>12942 (+1688)</td>
</tr>
<tr>
<td>CT</td>
<td>3928</td>
<td>5892 (+1964)</td>
<td>5892 (+1964)</td>
</tr>
<tr>
<td>MRI</td>
<td>953</td>
<td>6195 (+5242)</td>
<td>6195 (+5242)</td>
</tr>
<tr>
<td>Other</td>
<td>1850</td>
<td>6104 (+4254)</td>
<td>6104 (+4254)</td>
</tr>
<tr>
<td>Medicine OPD</td>
<td>49,230</td>
<td>81,229 (+31999)</td>
<td>81,229 (+31999)</td>
</tr>
<tr>
<td>Surgery OPD</td>
<td>34,463</td>
<td>97,875 (+63,412)</td>
<td>97,875 (+63,412)</td>
</tr>
</tbody>
</table>
Maternity OPD | 1371 | 3017 (+1645) | 3017 (+1645)  
Paediatrics OPD* | 9562 | 9562 | 9562  
Oncology Day Case | 3550 | 9103 (+5553) | 9103 (+5553)  
Renal Dialysis | 2838 | 5676 (+2838) | 5676 (+2838)  

(Key: Red = activity that is modelled to transfer to Headington and blue= activity is additional Horton General Hospital activity)

Later analysis suggests an increase of paediatric OPD spells of 1722 to make a total of 11,284 which has not been included in this analysis.

6.5. Maternity Services activity profile

The following profiles for maternity services for each option are outlined below in Table 8 and show the following:

- A continued significant demand for births (498) at a standalone MLU at the Horton General with both Options 2 and 3
- The transfer of 1011 mothers to give birth at the maternity unit at Headington
- A significant increase in antenatal and postnatal care (1645) will be delivered at the Horton General and no longer Headington for the local population with both Options 2 and 3.

<table>
<thead>
<tr>
<th>Maternity</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Births</td>
<td>1508</td>
<td>498 (-1011)</td>
<td>498 (-1011)</td>
</tr>
<tr>
<td>Ante/postnatal pathways</td>
<td>1371</td>
<td>3017 (+1645)</td>
<td>3017(+1645)</td>
</tr>
</tbody>
</table>

(Key: Red = activity that is modelled to transfer to Headington)

6.6. Children’s Services activity profile

The following profiles for paediatric services for each option are outlined below in Table 9 and show the following:

- The closure of SCBU activity at the Horton General with both Options 2 and 3 and this activity will be transferred to Headington
- Ambulatory care that avoids hospitalisation for 2024 children and requires the transfer of 675 children by safe clinical pathways to Headington, with a CDU facility at the Horton General open 24 hours a day or avoids hospitalisation for 1889 children and requires the transfer of 810 children to Headington with a CDU facility that is open between 8 am and 10 pm
- Transfer of 425 episodes of paediatric Day Care from Headington more locally to the Horton General, with both Options 2 and 3

<table>
<thead>
<tr>
<th>Children’s</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>NELIP</td>
<td>2699</td>
<td>0 (-675/810)</td>
<td>0 (-675/810)</td>
</tr>
<tr>
<td>NEL AMB</td>
<td>0</td>
<td>1889 (+1889)</td>
<td>2024 (+2024)</td>
</tr>
<tr>
<td>ELDC</td>
<td>196</td>
<td>620 (+425)</td>
<td>620 (+425)</td>
</tr>
<tr>
<td>ELIP</td>
<td>12</td>
<td>0 (-12)</td>
<td>0 (-12)</td>
</tr>
</tbody>
</table>
6.7. Summary of Activity Analysis

The models described in Options 2 and 3, summarised in Table 5, result in large changes in the site of delivery of services for the population of north Oxfordshire and surrounding geography, which are summarised as follows:

- Adults and children treated without hospitalisation by ambulatory care: Option 2: 4485 and Option 3: 4620
- Adults and children transferred from the Horton General to Headington or other centres for treatment: Option 2: 29,468 and Option 3: 4,334
- Adults and children clinical spells transferred from Headington to the Horton General for elective care, diagnostics and outpatients: Option 2: 122,664 and Option 3: 122,664
- The net flow of patient activity to the Horton General from Headington: Option 2: 93,196 and Option 3: 118,330

<table>
<thead>
<tr>
<th>Table 10: Summary of Changes in Activity by Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options 2</td>
</tr>
<tr>
<td>Adults and children treated by ambulatory care</td>
</tr>
<tr>
<td>(without hospitalisation)</td>
</tr>
<tr>
<td>Adults and children transferred from the</td>
</tr>
<tr>
<td>Horton General to Headington or other centres for</td>
</tr>
<tr>
<td>treatment</td>
</tr>
<tr>
<td>Adults and children clinical spells transferred</td>
</tr>
<tr>
<td>from Headington to the Horton General for elective</td>
</tr>
<tr>
<td>care, diagnostics and outpatients</td>
</tr>
<tr>
<td>The net flow of patient activity to the</td>
</tr>
<tr>
<td>Horton General from Headington</td>
</tr>
</tbody>
</table>

These are very large changes in terms of bringing care closer to home and cumulatively will result in substantial savings in terms of travel time and cost to the Banbury population, in particular avoiding the considerable difficulties in parking at Headington.

They are, however, are not the only significant benefits with these two Options. These are very large changes demonstrate OUHFT’s vote of confidence in the future of the Horton General and its commitment to it. Both Options come with significant investment in estate and workforce infrastructure at the Horton General to realise a sustainable 21st century hospital and a 21st century model of healthcare, which will deliver high quality, safe care to its catchment population and increase the value derived from the healthcare system’s budget.
7. Access Analysis

7.1. Methodology
Access to the Horton General and to the Headington sites were assessed for different locations in north Oxfordshire and beyond. Travel times were calculated for three scenarios: by blue light, by private car at peak time, by public transport at inter-peak time using detailed modelling. An assumption was made that activity would shift between sites depending on travel time. On this basis no longer providing a service at the Horton General would result in approximately half this activity shifting to non-Headington sites such as Northampton General Hospital or Warwick Hospital.

7.2. Blue light or private car at night
When blue light or private car at night transport is modelled, 75% and 99% of the north Oxfordshire population is within 20 or 30 minutes respectively of the Horton General, the Headington centres, Northampton General Hospital or Warwick Hospital. If ED services are not delivered at the Horton General (Options 2), this will result in longer travel times, with 14% and 85% of patients taking 20 or 30 minutes respectively to reach a hospital with suitable emergency care (Reference slide 61). The maximum time for all the population to reach a suitable hospital by blue light is 31 minutes with Option 1 and 3, and 37 minutes if the Horton General ED department becomes an Urgent Care Centre (Option 2).

7.3. Peak time with private car
In peak time when using a private car, currently 55% and 97% of the population are within 20 and 30 minutes respectively of a hospital (either the Horton General or the Headington sites) with Option 1 (Reference slide 62). If only the Headington sites provide services (in some cases of Options 2 and 3) then 0% and 39% of north Oxfordshire population will be within 20 and 30 minutes respectively of the Headington sites. In peak time using a private car the maximum time for a person in north Oxfordshire to reach a suitable hospital facility is 40 minutes with the current configuration (Option 1) and 48 minutes, if there are no services at the Horton General (instances of Options 2 and 3).

7.4. Inter-peak time with public transport
When using public transport in inter-peak time, 44% and 70% of north Oxfordshire population are within 30 and 60 minutes respectively of a hospital (either the Horton General or the Headington sites) in the current scenario (Option 1), but 0% and 39% of the north Oxfordshire population are 30 and 60 minutes respectively from a hospital for services in Option 2 and 3 that are only provided at Headington (Reference slide 63). The maximum time for all the north Oxfordshire population to reach a hospital is 99 minutes for Option 1 and 113 minutes for Options 2 and 3 for services only provided at Headington.
7.5. Alternative forms of transport

Because of sensitivities about travel times, the feasibility of helicopter transfer for maternity patients between the Horton General and the John Radcliffe sites has been discussed with South Central Ambulance Service (SCAS). The following initial broad concerns have been raised:

- Potential difficulty with obtaining Civil Aviation Authority approval to build a helipad on the Horton General site
- Transfer times by helicopter, which probably would not shorten, and may even lengthen, journey times between the two hospitals
- The suitability of helicopter transport for a woman in labour

Such concerns suggest that there are no real alternatives to blue-light transfer, but it is intention of this Review to explore this option further.

7.6. Summary

Relocating services will impact on individual travel time. Broadly, the weighted average travel time increases from 13 to 25 minutes for blue light transport, 17 to 33 minutes for private car travel at peak time and from 40 to 61 minutes for public transport at inter-peak time for the population of north Oxfordshire and surrounding geography, if services are not available at the Horton General (Reference slides 61, 62 and 63). These longer travel times for the above services are reversed for journeys for elective services that have been transferred from the Headington sites to the Horton General (Reference slide 64). In Option 1 using non-blue light transport, 0% and 39% of the north Oxfordshire population are within 20 and 30 minutes respectively of the Headington sites for these services. But if these elective services are transferred to the Horton General (Options 2 and 3), 55% and 97% of the population will be within 20 and 30 minutes respectively of the Horton General. The maximum time for all the north Oxfordshire population to reach the Headington sites for these services is 46 minutes (Option 1) and 40 minutes if these services are transferred to the Horton General (Options 2 and 3).

A similar travel time analysis performed by the Advisory Committee on Resource Allocation (ACRA) in 2015 reported that for the Horton General Hospital, 33.1% of its catchment population was within 30 minutes of the next nearest hospital by private transport, 94.5% were within 45 minutes and 0% within 60 minutes. The definition of remoteness used by ACRA was a population who were more than 60 minutes from the next nearest hospital. If all the population could travel to the next nearest hospital within 60 minutes, the population and in this case according to ACRA the population of north Oxfordshire and surrounding geography is not remote.

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62 ACRA (2015) Unavoidable smallness due to remoteness – identifying remote hospitals
8. Estates Analysis

8.1. Current Horton General estate

As part of one of its strategic themes, “the Master Plan”, OUHFT aims to establish a framework to shape and guide the future development and improvement of its estate. The Horton General is part of this Master Planning project and the approach will draw on detailed clinical planning work being undertaken in parallel to it.

Today the Horton General Hospital occupies over 27,500m² set in 27 Hectares. There has been very little development in the last 30 years. Hospital services are located in buildings far apart from one another, and key services such as diagnostics, imaging, theatres, emergency department and maternity are not connected.

These services, furthermore, are set in a multitude of inappropriate and dilapidated buildings that are unsuitable for the provision of high quality healthcare (Reference slide 66). Nearly 20 % of the hospital buildings are over 50 years old and 64% were constructed over 30 years ago. Many of these buildings were designed only for short term use post war. Those buildings that are over 30 years old also have an additional challenge of having extensively used asbestos. Asbestos removal makes remodelling and refurbishment of these existing buildings costly and unsuitable.

The presence of asbestos, however, is not the only issue. Some of the hospital buildings are now in an unacceptable physical condition with, high statutory compliance risks, fire safety issues and lack of Disability Discrimination Act provision. Further moderate risks attributed to the estate condition include old and failing mechanical and electrical engineering infrastructure. The lifts regularly break down, water services are old and lighting and environmental controls are out of date and not up to the standards needed to deliver modern healthcare. Estate refurbishment and new build options need to be developed in line with clinical plans for the Horton General.

8.2. Initial evaluation of estate condition for options

The current estate supports the activity discharged by the Horton today. With Option 1, therefore, there would be no need to change the ED estate, whose condition is excellent according to independent assessment and capacity sufficient (Reference slides 66 and 68). The Maternity and SCBU estate was considered acceptable. The Paediatrics estate was considered excellent. The medical wards are in excellent condition, but in Option 1, the projected growth in demand will require new beds at both the Horton General and the Headington sites. The existing theatres are in acceptable condition and if theatre utilisation, which is the lowest across all the OUHFT sites is addressed, then capacity is more than sufficient. The outpatient facility is acceptable. If there is a projected increase in virtual outpatient appointments then outpatient capacity is sufficient. The condition of the radiology estate, however, is unacceptable according to an independent assessment in January 2016 and will require improvement. There is no requirement to increase the rehabilitation capacity as existing medical bed stock will be available. The Ramsey HTC is also in excellent condition.
In the ambulatory care model of Option 2, the ED estate is in excellent condition and with adequate capacity and requires no change (Reference slides 66 and 69). The conversion to a standalone MLU or Birth Centre requires 5 delivery suites for an estimated 500 births. The integrated paediatric front door will require a new build (CDU) to bring it adjacent to the ED. There will be a need for additional adult and paediatric beds on the Headington sites. There will be no requirement for estate work in theatres, as in Option 1. There is a requirement for a new Outpatient Facility to increase the capacity for the outpatient work transferred from Headington to the Horton General. Option 2 also requires a new Diagnostic Facility to handle the extra imaging work. As in Option 1, there is no need for new rehabilitation capacity because of the available existing medical bed stock.

Option 3 will require the greatest estate investment at the Horton General (Reference slide 70). An integrated front door will need some extra new building. The MLU will require the same 5 delivery suites as in Option 2. Similarly, the integrated front door for children will require a new build, adjacent to the ED. There will need to be an increased theatre capacity to absorb the added transferred work, even with the potential re-acquisition of the Ramsey HTC theatres. As with Option 2, there will be new Outpatients and Diagnostics Facilities. There will need to be some additional rehabilitation beds.

8.3. Early analysis of estates costings

The cost of this estate refurbishment for each Option is given in Reference slide 70. In Option 3 the extra theatres to absorb the additional surgical work will cost £3.8m. The new Outpatients and Diagnostics Facilities in Options 2 and 3 will cost £9.5m and £7.7m respectively. The new integrated ED front door will cost £10.9m.

The capital cost for estate work is £100m for Option 1, £125m for Option 2 and £115m for Option 3. The main contributor to this capital cost is the cost of new beds for the projected extra activity by 2020/21. This new bed cost is £93.3m for Option 1, £105m for Option 2 and £81.5m for Option 3.

This is an early analysis of estates costings. As the Options are developed greater detail will allow a much tighter computation of the projected cost of building a 21st century hospital on the site of the Horton General.
9. Workforce Analysis

9.1. Introduction

The NHS has a large and dedicated workforce and it is apparent that to successfully create new models and approaches to patient care locally, a sufficient, well integrated workforce that has the right skillset and aptitude is vital.

As stated in the Five Year Forward View (FYFV), ‘we can design innovative new care models, but they simply won’t become a reality unless we have a workforce with the right numbers, skills, values and behaviours to deliver it’\(^ {63}\). The right workforce is essential not only to deliver the quality improvements related to these new models, but also to make the productivity and efficiency gains that are needed to transform services and meet financial challenges.

Nationally, there are current clinical staff shortages across a range of areas. NHS Improvement have outlined that since the end of 2012, there has been a large increase in demand for hospital nurses across the NHS due partly to increasing activity, but also as a result of safe staffing initiatives following the Francis Enquiry. In 2012, providers had reported to Health Education England that they needed 165,000 adult nurses (acute) in total. In 2014, this figure has risen to 189,000. Despite an increase in the numbers of nurses being employed, demand still exceeds supply. A recent national survey of 147 NHS providers found that 93% of Trusts reported that they are experiencing registered nurse supply shortages\(^ {64}\).

Hospital consultant numbers have increased around three times faster than GPs and there has been an increasing trend towards a more specialised workforce, even though patients with multiple conditions would benefit from a more holistic clinical approach\(^ {65}\). There are however, some areas where despite expansion of the consultant workforce, shortages are apparent in some individual specialties. These include emergency medicine, acute general medicine, diagnostic services and psychiatry. According to a review of NHS agency staff spending in 2014/15, 73% of providers’ total spend on locum staff is concentrated on general medicine and emergency departments.

There is a need for expanding new health and care roles and a more flexible workforce that can provide high quality care wherever and whenever the patient needs it. The FYFV also acknowledges that there are challenges around how working patterns and pay and terms and conditions can best evolve to fully reward high performance, support job and service redesign, and encourage recruitment and retention in parts of the country and in occupations where vacancies are high\(^ {66}\).

This chapter provides an overview of the Oxfordshire context in relation to these workforce issues and an initial analysis of the current workforce challenges faced by OUHFT in order to deliver the service changes relevant to the specialities that are part of this Strategic Review: Urgent and

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\(^{63}\) NHS England (2014) Five Year Forward View pg 29 and 30

\(^{64}\) NHS Employers (2015) NHS registered nurse supply and demand survey findings Report to inform the Migration Advisory Committee (MAC) on the partial review of the shortage occupation list.

\(^{65}\) NHS Improvement (2016) Evidence from NHS Improvement on clinical staff shortages: a workforce analysis

\(^{66}\) NHS England (2014) Five Year Forward View
emergency care (which includes stroke services and critical care), planned care, diagnostics and outpatients, maternity services and children’s services. It highlights the key workforce challenges that will need to be addressed in delivering the options. As this is only a preliminary analysis, details of future work required (including more detailed analysis and workforce planning) are also outlined.

9.2. OUHFT workforce challenges

The challenges associated with the OUHFT’s ability to attract, recruit and retain skilled and motivated staff in sufficient numbers is recognised as a significant strategic risk to the organisation, which is likely to prevail for the foreseeable future. In articulating this risk, a number of national influences and drivers have been highlighted, including the following:

- unremitting increases in the demand for services
- rising patient expectations
- sustained focus on quality, safety (particularly safe staffing levels) and the delivery of a six/seven day service
- increasing pressure on finite resources (financial and human)
- an aging population (and therefore an ageing workforce)
- increasing competition between providers for staff and the delivery of services
- inadequate commissioning of clinical training placements to match demand
- low growth in pay for public sector staff and an increase in the cost of living and reduced disposable income, through increases in NHS pension contributions; the removal of temporary reduction in VAT; and increases in costs associated with transport, utilities, and child care.

Notwithstanding these national influences, difficulties in NHS staff recruitment and retention remain most challenging in inner city areas and within larger teaching trusts. The areas where vacancies are high, that relate specifically to this review (and are outlined in greater detail below) are:

- recruiting medical staff to ED, and middle grade medical staff to the Horton General Obstetric Unit and Children’s services
- recruiting nurses and midwives to the Horton General Obstetric Unit and nurses within Children’s Services
- recruiting and retaining Band 5 nurses
- recruiting and retaining radiographers, radiologists, sonographers and other clinical scientists
- changing historical and traditional work practices that do not embrace multi-professional working across sectors. This is essential in the move to implementing ambulatory models of care with more integrated working along patient pathways of care.

Retaining staff is also a key challenge for the Trust. Across the main staff groups, turnover remains highest amongst Clinical Support and Allied Health Professional roles (17.7% and 16.6% respectively). Within the Nursing and Midwifery workforce (which represents one third of the total substantive workforce) turnover is 13.3% (and is 16.6% for band 5 staff). When considering turnover against length of service, over 40% of staff occupying Clinical Support roles leave within
their first year of employment, whilst the overall Nursing and Midwifery workforce loses around one quarter of all new starters within the same period (35% at band 5).

It is well-documented and widely recognised that, outside of central London, Oxford is the least affordable city in which to live. Recruitment and retention of staff is affected by the extremely high costs associated with renting and/or buying a property in Oxford or the surrounding areas. As shown in Figures 4 and 5, Oxford and Cambridge have the most expensive housing market relative to income. The average rent in Oxford in 2013-14 was £1,110 per calendar month. This is more expensive than some London Boroughs such as Greenwich and Lewisham according to the National Housing Federation.

**Figure 4: Multiple of local earning needed to buy average home, 2015/16**

**Figure 5: Mean house price compared to median gross weekly earnings**
These issues are compounded by the very low unemployment in Oxfordshire and by the Trust’s relative proximity to the London NHS ‘market’, where staff movement within the sector is high and where salaries attract a premium (‘weighting’), equating to as much as 20% of basic pay. In spite of this, no additional funding is included in the Trust’s overall income to assist with the recruitment and retention of staff, though there are some specialties where pay premia have been offered.

Over the past 18 months and following wide consultation and continued engagement with staff, the Trust has pursued a range of initiatives to address these challenges, with some success. These focus on six strategic themes, namely:

- increasing substantive workforce capacity
- mitigating the high cost of living
- applying targeted recruitment and retention incentives
- widening participation
- improving professional development opportunities and career advancement
- creating and sustaining the right environment.

The implementation of these initiatives has had some impact. There has been an increase the substantive workforce of 6%, or 602 whole time equivalents (WTE) between March 2015 and March 2016. Within the same period, overall Nursing and Midwifery capacity increased by 11% (349WTE), and band 5 Nursing and Midwifery capacity by 14% (247 WTE), largely as a consequence of the recruitment of qualified nursing staff from other EU countries. The uncertainty created by the outcome of the recent EU Referendum, however, combined with the introduction of more stringent English language proficiency requirements, is likely to impact on future supply.

Despite having made good progress with recruitment, staff turnover rates have shown no real improvement. In fact, the 2015/16 overall out-turn of 13.9% represents an increase of 0.3% when compared with the previous year, and is 3.4% above the Trust target level. The turnover rate in September 2016 was 14.6%. It remains particularly high amongst qualified clinical staff at pay band 5 level.

Analysis of staff reasons for leaving is conducted by the Trust to establish and address the main causes. In the Children’s and Women’s Division in 2015/16, this data has shown that the majority of leavers are staff aged under 30 years who are within the first two years of employment. One of the highest reasons for leaving is relocation, and anecdotally this is believed to be staff moving back to their family roots or relocating to live with a partner. Work/life balance was also given as a key reason. As described above, initiatives to address these issues remains a key priority for the Trust.

The sections below outline the main challenges for workforce for each of the four main clinical areas relevant to the changes within the Horton General Hospital Strategic Review. Section 9.7 outlines the further work required to plan for and ensure workforce developments and well planned and implemented.

9.3. Urgent and Emergency Care (including critical care and stroke services)
As shown in Chapter Table 6, with Option 3 there is no difference with baseline (Option 1) in ED attendance. In option 2, 13,830 patients attending the integrated Urgent Care Centre, Minor Injuries Unit and GP OOHC, will need to attend an alternative Emergency Centre (Oxford, Northampton or Warwick).

The Royal College of Emergency Medicine reports that, while recruitment into emergency medicine is now high with most first-year emergency medical training posts being occupied, problems with retention mean emergency medicine has the greatest attrition rate of any medical specialty, with almost 50 per cent of year three/four registrars resigning. Monitor’s recent analysis (2015) concluded that this did not contribute to the longer waits experienced last winter, but most A&E departments are working at a very high level of activity, and there is a limit to the workload staff can undertake in the absence of additional staff without it having negative consequences on morale, recruitment and retention, performance and/or patient safety.

The Trust has a high vacancy rates for ED consultants and an overall high turnover rate of staff across the department (currently 20.9%). The directorate has been implementing a range of initiatives to address this. A full review of the feasibility of safely meeting additional ED and UCC patient activity at the Headington sites (for option 2) and for surrounding counties will be required. For option 3, ongoing consideration of how best to continue to attract and retain high quality staff across two Emergency Departments is required.

9.3.1. Increasing ambulatory provision

Central to the ambulatory approach outlined in Option 3 is that older people and those with complex needs are best cared for by experienced teams of ‘specialist generalists’ whose capability spans the active physical, social and psychological care domains. These generalists have an intrinsic high-level ability to manage complex multi-morbidity, including frailty and cognitive syndromes, and are comfortable and capable when operating at the interface of traditional primary and secondary care. OUHFT will continue its current rapid progress in recruiting and developing clinicians from primary and secondary care backgrounds to fill this role and deploy them where they can deliver exceptional care, crafted to deliver the patient’s preferred outcomes. In relation to Option 2 and 3, 2596 patients will receive ambulatory care rather than hospitalisation for NEL medical presentations.

Complementary, more focused capabilities (eg. condition specialisms such as diabetes) will be delivered through embedding that capability within the ‘specialist generalist’ team, by the recruitment of clinicians with the necessary skills, through dedicated training programmes as well as virtual support and when required by direct face-to-face assessment by condition specialists. OUHFT will further strengthen its innovative Psychological Medicine service, ensuring that patients with both mental and physical health needs receive prompt, effective, best-evidence care, wherever they are: in the hospital, in the care home or at home. The Psychological Medicine Service will provide seven-day support to patients and clinical teams, either directly or via the interface of the Clinical Coordination Centre (CCC) in the hospital.

A medical workforce comprised of Acute General Medicine physicians, intensivists, ED doctors and primary care physicians have the potential in Option 3 to take responsibility for all inpatients in the hospital, during the day and at night. ‘Admission rights’ could be limited to this group of doctors, with specialist doctors responding to referrals from the generalists to deliver specific spells of care or interventions. By growing a smaller group of colleagues it will be easier to create
bonds of common identity that help develop a shared institutional culture and ethos that supports a drive for improvement through continuous learning.

Meeting the care needs of this patient population requires skills across the multidisciplinary team, integrating knowledge and skillsets from nursing, therapists and social care professionals as well as interface medicine. In so doing it challenges the prevailing cultures of medical, nursing and therapist training and care delivery. This care model, at the interface of traditional general practice and hospitals, meets the care needs of older patients living with frailty (cognitive, physical and social) when they present in crisis.

Training programmes will need to be developed to upskill the existing workforce so that with the support of these specialist skills they can treat complex, acutely unwell patients safely and enable them to be supported in the community.

As outlined in Chapter 6, there are some concerns by the Clinical Review Group for this work stream as to the quality aspects of Option 2. There are also significant workforce challenges in delivering care for the large number of patients for inpatient medical care outlined in relation to Option 2 (with Option 2 there is a projected transfer of 10,383 patients to Headington for inpatient medical care). While staff on the acute medical wards could theoretically be redeployed to address some of this increase, this will detailed review and staff consultation.

The changes to the stroke unit for options 2 and 3, whereby stroke patients will be transferred to a HASU at Headington will require a review of staffing numbers for nursing and allied health care professional. Job plans for some medical staff will also need to be reviewed to ensure full cover for the unit. Key to the delivery of effective patient pathways, however is the further development of an early supported discharge stroke service to support patients to rehabilitate at home.

9.3.2. Critical Care

The evolution of the Critical Care Unit to a Level 2 facility, with clear pathways for the transfer of the small number of patients (40) requiring Level 3 care to Headington is the model proposed in Option 3. As described in Chapter 3, workforce exigencies have already required this pathway to be instituted, with patients receiving better access to high quality care. With Option 2 all patients (681) needing critical care will be transferred to Headington.

9.4. Planned Care, Diagnostics and Outpatients

The model for planned and elective care at the Horton General involves the development of a 21st Century Diagnostic Facility and an Outpatient Facility to house significant increases in the number of outpatient clinics provided across many specialties. Much of the current activity related to the population of north Oxfordshire and surrounding area will transfer from Headington to the Horton General. This is a transfer of workload from one locality to another within OUHFT, and not the creation of a significant new demand and with it the commensurate need for an expanded workforce. As outlined in Chapter 6, the activity profiles for planned care, diagnostics and outpatient appointments for each option are outlined in Table 7 (on page 62) and detailed below.
9.4.1. Diagnostics

With both Options 2 and 3, there will be a significant increase in the amount of imaging (8894) and other diagnostic procedures (4254) that will be delivered at the Horton General and no longer at Headington. This has clear implications for the need for staff to work differently, and to increase the number of (existing) staff who work across sites. There will, however, be workforce challenges to be met in operating an expanded Diagnostic Centre. The Trust currently experiences difficulties in the recruitment of radiographers, stenographers and other clinical scientists.

It is recognised that there is a national shortage of radiographers and radiologists in the UK. There are currently 71 Diagnostic Radiographer advertisements active on NHS Jobs. Consequently, Medical Radiographers are on the Tier 2 Shortage Occupation List where applicants from overseas can be sponsored to live and work in the UK. Trusts within London have implemented a 10% pay premium for Diagnostic Radiographers. This is in addition to the high cost of living supplement that London Trust’s provide to cover the high cost of living in the capital. The pressure is further compounded by competition from the private sector for staff, who are offered higher salaries than the agenda for change pay rates.

Within OUHFT, the Radiology and Imaging Directorate is especially struggling to recruit and retain Band 5 and 6 radiographers across the specialist modalities of PET/CT, CT, MRI, Ultrasound, Nuclear Medicine, Interventional Radiology and Mammography. The Neuroradiology department currently has 9 WTE Band 6 vacancies, which has impacted on its ability to operate the on-call rota for out of hours, placing additional pressure on the John Radcliffe radiology department by the movement of patients from the West Wing to the John Radcliffe for investigation.

The Division (and directorates within it) has developed a number of approaches and initiatives to address these shortages. This has included an agreed introduction of a 5% pay supplement to Radiographers and Radiology Nurses. This scheme was introduced for Band 6 posts and for Sonographers as of 1 October 2015. Rates were uplifted to 15% for Sonographers effective from 1 June. Radiographers & nurses at Band 6 will be uplifted by a 5-10% premium in October 2016. These proposals are short term to support reduced turnover and increase retention of specialist Radiographers and Radiology nurses. This supplement goes some way to recognising the costs of living and working at OUH.

Retention improvements have included swift progression for Radiographers from Band 5 to Band 6 following completion of competencies as agreed by TME in Q3 2015/16. Radiology held a successful recruitment open day in February 2016, 24 new members of staff were appointed within Bands 5 & 6, but a further open day during August did not attract much interest. Two Consultant Radiographers have been selected to take up posts. Monitoring of reduced turnover was implemented and reported in Q1, a further review will take place at the end of Q2.

Despite this continued and accelerated efforts to recruit staff into the directorate, there has only been a small improvement against the workforce KPIs, which continues demonstrate the challenges encountered in meeting operational demands. At the end of M4, the Directorate’s performance against workforce KPIs is as follows:

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## 9.4.2. Surgery and day case

As detailed in section 5.2, it is a vision of both Options 2 and 3 that significantly more Headington consultants will participate in the delivery of care at the Horton General site, by transferring activity out of Headington. The existing theatre infrastructure will be reconfigured to establish an elective surgical service with adjoining day case wards to create an enhanced Elective Care Centre, where proper scheduling will reduce cancellations, unacceptable delays and breaches.

Where numbers allow, existing Headington surgical services will open an elective day case surgical service for patients in north Oxfordshire and its surrounding geography, removing the need for them and their families to travel to Headington. Incorporating the advantages of focusing purely on elective activity, there will not only be benefits to patient experience of the certainty of procedure, but also of better clinical outcomes, such as reduced infections and quicker rehabilitation.

Both Options 2 and 3 would see a significant increase in medical Day Case activity (3439) and a smaller increase in surgical (215) Day Case activity, transferred from Headington to the Horton General. There will also be an increase in elective medical inpatient activity with Option 3 and (the possibility of a significant increase) in elective surgical inpatient activity for those surgical patients who require medical, rather than surgical, short-stay bed-based care with Option 3.

Significant increase in oncology Day Case care such as chemotherapy (5553) and renal dialysis spells (2838) will be delivered at the Horton General and no longer at Headington, with both Options 2 and 3. Both these areas are experiencing difficulty with recruitment. These shifts in patient flows do not represent increased activity within the Trust. Although some members of the workforce may be relatively immobile, others will look for employment opportunities on other Trust sites.

## 9.4.3. Outpatient provision

As outlined in Chapter 6, there will be significant increases in medical and surgical outpatient appointments transferred from Headington to the Horton General for delivery of this service locally in both Options 2 and 3. There will be a further actual reduction of these outpatient appointments, because of the introduction of ‘one-stop’ clinics, which will reduce the need for patients to travel repeatedly to receive fragmented care.

This is another transfer of workload from one locality to another within OUHFT, and not the creation of a significant new demand and with it the commensurate need for an expanded workforce. There are however clear implications for ensuring that staff are able and prepared to work across sites and to conduct relevant consultation. A full and detailed workplan in relation to the various outpatient clinics will need to be developed.
There are, therefore, challenging workforce implications for the significant expansion in planned, diagnostic and outpatient activity at the Horton General as detailed in both Options 2 and 3. Further work is required to detail specific staffing requirements based on anticipated activity. As part of this, there is an opportunity to review whether staff who work and, therefore, potentially live in less costly north Oxfordshire and the surrounding area will improve recruitment and retention in relevant areas.

9.5. Maternity Services

The OUH currently has workforce challenges in the provision of maternity services, which relate primarily to the recruitment of middle grade doctors. The division does not have midwifery vacancies at present, but continues to closely monitor and review these, as previous experience has shown that fluctuations in staffing can be unpredictable.

In relation to medical staff, while national data are difficult to obtain, the Head of School for Health Education Thames Valley (HETV) has confirmed that there are vacancies across all middle grade training rotas in the Thames Valley. All HETV Trusts have an eight to ten doctors and of the middle grade training rota (ST3 to ST7) and of the 40 posts (across five Trusts), 9.5 are vacant. This position is reflected nationally meaning doctors wanting to take on these roles have plenty of choice and will focus on posts, which provide the optimum training opportunities.

As described in section 3.4, the Maternity Service based at the HGH lost recognition as a Royal College of Obstetrics and Gynaecology training centre in 2013, predominantly due to the low number of deliveries, which currently average four per day, as this minimised the obstetric training experience. This decision was communicated by the Deanery to the OUHFT in September 2012.

OUHFT has 13 (ST3 to ST7) accredited posts and these posts are all at the John Radcliffe Obstetric Unit. As the posts at the Horton General Hospital are not accredited for training due to the low number of births (1,466 in 2015/16) these doctors cannot be redeployed to the Horton General. Notwithstanding the training accreditation issue, they are required to maintain the resident rota at the John Radcliffe Hospital and so cannot be utilised to support the resident Trust Grade rota at the Horton General.

In 2015/16, although the budget for obstetricians and gynaecology medical staff was 20WTE across the year, the actual staff in post level was between 12 and 14WTE. There were 8WTE specialist registrar unfilled University-funded posts and 3.4WTE unfilled Trust-funded posts. In 2016/17, there are 14 staff in post (against a designated complement of 26WTE). Unlike other areas of medical staffing there are few, or no, Deanery trainees for obstetrics, so posts are required to be filled by middle grade doctors.

The Trust has undertaken a focused recruitment campaign, but has had limited success in recruiting sufficient Obstetricians with the necessary experience to deliver a safe obstetric service. In the previous 12 months, only four doctors were successfully appointed, where a minimum of six were required. As a consequence, only two out of the eight middle-grade posts will be covered from October 2016 onwards. Additional attempts are being made to recruit long-term Trust-grade locum medical staff from national agencies.
The service at the Horton General at night is provided by a single resident middle-grade obstetrician. The doctors who provide the resident cover require a high degree of operative skill and clinical knowledge. Such clinicians are in short supply throughout the NHS largely because there is a national shortfall in recruitment and retention of obstetric trainees in the UK.

The Horton General can usually appoint to any emergent midwifery vacancies at both the Headington and Banbury sites. There has been a recent highly successful campaign has led to the recruitment of 24 midwives who will take up post in September/October 2016. All these are rotational posts meaning the midwives can work in any area.

Finally, obstetric anaesthesia is an essential component of an obstetric unit. The transfer of all obstetric activity to Headington, will allow a rationalisation of obstetric anaesthesia at the John Radcliffe. The current Headington obstetric anaesthetists will be offered redeployment to Headington, which is already initiated as an interim measure. It is possible that not all anaesthetists will transfer from the Horton General to Headington. If this occurs recruitment will be required to address this potential vacancy, although there are no concerns about the Trust’s ability to successfully recruit to these posts.

9.5.1. Options 2 and 3: New model of care for maternity

Of the different options for maternity services at the Horton General, workforce considerations would favour a free-standing Midwifery-Led Unit (MLU). As described in section 5.4, this service would provide an improved system of care for both low-risk and high-risk pregnancies aligned with best practice and will deliver high quality and safe care, while maintaining choice options for women.

The following profiles for maternity services for each Option are outlined in Chapter 6 and includes a continued significant demand for births (498) at a free-standing MLU at the Horton General with both Options 2 and 3 and the transfer of 1011 mothers to give birth at the maternity unit at Headington. If these projected numbers do not materialise at the proposed Horton General MLU, the future of the unit will not be at threat. There are smaller MLUs already functional in other parts of Oxfordshire. A significant increase in antenatal and postnatal care (1645) will be delivered at the Horton General and no longer Headington for the north Oxfordshire population with both Options 2 and 3.

The temporary emergency suspension of services at the Horton has necessitated a further detailed review of the workforce requirement and its sustainability and the changes that would need to be put in place if the temporary changes become permanent.

There are adequate midwives and MSWs to provide 24/7 staffing of an MLU at the Horton General. The activity would be monitored closely to evaluate the appropriate safe staffing levels. The establishment of an MLU would necessitate the current Horton General Obstetricians to relocate their work activity to Headington. The proposal is that consultant medical staff currently working at the Horton General will be redeployed to clinical duties at the Headington site, providing consultant presence on the inpatient wards and undertaking elective obstetric work, in
addition to covering antenatal and postnatal clinics at the Horton General. The two middle grade doctors would similarly be redeployed elsewhere in Headington.

A resident consultant rota was established at the HGH specifically to cover Obstetric services, in addition to maintaining an on-call consultant at home rota for other problems. This rota was established through the willingness of a number of dedicated existing HGH consultant anaesthetists to accept the personal inconvenience of resident status, for which they are recompensed through their job plans. If an MLU is established at the Horton General this resident consultant rota for Obstetric cover will no longer be required during this period.

In relation to the Special Care Baby Unit, all nursing staff currently working in the SCBU would be offered posts on the John Radcliffe SCBU in the first instance. No additional staff would be required at Headington if the existing staff agree to relocate.

In appraising the establishment of an MLU as outlined in Options 2 and 3, there are clearly significant consequences for the workforce and much of this has been given detailed consideration due to the need for a temporary, emergency suspension of Obstetric services. In summary, the current Horton General Obstetricians will have to relocate their activity to Headington and the existing cohort of midwives would be sufficient to deliver these services.

9.6. Children’s Services

The Horton General Children’s Service currently has 11 consultant posts and a complement of eight junior doctors (three Foundation Year 2, five Specialist Training 1, and three GP trainees). Two doctors work in the SCBU, covering it from 9 am to 5 pm, Monday to Friday. Out of hours, one junior doctor covers all areas of the paediatric service. There has been great difficulty in recruiting middle-grade doctors for the paediatric service at the Horton General, due in part to the limited work to support medical training.

The recruitment and retention of paediatric nursing staff at the Horton General is also currently challenging. There is a well-documented national shortage in paediatric nurses, which impacts an OUHFT’s ability to recruit adequate numbers of nurses. Although the children’s ward is almost fully established across OUHFT, vacancy rates are high (24%) in the Neonatal Unit at Headington and turnover within the Headington Paediatric ITU is at the same level. The staff shortage in Neonatology has necessitated a reduction in the number of cots. In 2016/17, the vacancies in the children’s ward at the Horton have stabilised, but the department is still below establishment in its nursing posts. The appointment of assistant nurse practitioners (ANPs) in part, aims to increase staffing capacity.

9.6.1. New models of care for children’s services: Options 2 and 3

The following profiles for children’s services for each Option were outlined in Chapter 6 with the key changes being:

- The closure of SCBU activity at the Horton General with both Options 2 and 3. This activity will be transferred to Headington
- Ambulatory care that avoids hospitalisation for 2024 children and requires the transfer of 675 children by safe clinical pathways to Headington.
A Clinical Decision Unit (CDU) facility at the Horton General open 24 hours a day or a CDU facility that is open between 8 am and 10 pm and avoids hospitalisation for 1889 children, but requires the transfer of 810 children to Headington

Transfer of 425 episodes of paediatric Day Care from Headington more locally to the Horton General, with both Options 2 and 3.

The absence of a SCBU removes the most immediate need for on-site 24-hour consultant paediatric care. Transforming to an ambulatory care model at the Horton General removes this need completely.

**Development of an ambulatory model for paediatric care**

To support this, a robust ambulatory care model will be developed at the Horton General, in line with the existing ambulatory service within Headington, so that children needing urgent advice and care can be assessed quickly and safely by skilled decision makers: Paediatricians, Assistant Nurse Practitioners and ED specialists working together as part of a new integrated ED. This will be delivered through a CDU, which will keep the majority of children out of hospital and involves:

- More appointments for children, at more convenient times and closer to home, preventing unnecessary referrals through teaching, training and co-working
- Increased numbers and range of day case procedures, both medical and surgical, offered to children at the Horton General, so that fewer children will need to travel to Oxford for such procedures
- Easy access to paediatric assessment at the Horton General during an extended day or 24 hours each day, 7 days a week, with a model of care that minimises admission and allows the child to remain in the community
- The sickest children having equity of access to care at the specialist centre that is best equipped to deal with the acutely unwell and deteriorating child.

The staffing implications for such a model include developing new ways of working and redistributing resources to become more locally based and community focused. There are adequate numbers of paediatricians to deliver such a model, but this will require closer working relationships with local GPs and the creation of community-based ‘hubs’ with paediatricians, community nurses and therapists working together as part of an integrated multidisciplinary team.

There will be challenges in delivering this model of care, not least of which is the process of change and the continued challenge of ensuring there are adequate numbers of nurses. Workforce issues related to this change will be addressed in a number of ways including through increased training and development of roles and more integrated ways of working with primary and community care colleagues. A rolling training package for all ED doctors and nurses to ensure paediatric skills are maintained, which will be supported by an on-call Paediatrician after 10 pm. Children’s Services will also work closely with colleagues in social care and Child and Adolescent Mental Health Services (CAMHS) to develop clear pathways for the management of safeguarding and mental health concerns.
The model described identifies that valuable clinical resource will be more usefully and appropriately deployed, by establishing a community based preventative and ambulatory model of care. As described above, the implementation of this model will necessitate changes to how paediatricians spend their time, redirecting their efforts to areas which need it most, so that more children can receive expert acute and preventative care earlier and closer to home.

**Model for staffing the Clinical Decision Unit**

Delivery of a 24-hour model has some inherent challenges for Children’s Services not least of which is staffing. Increasing the CDU opening hours means that staff, both nursing and medical, need to be available throughout the night in order to care for children who are being observed (as opposed to the acutely unwell) after 10 pm, as well as to be available for a smaller number of children who may present after 10 pm for assessment. Local data show that the vast majority of children who present to the Horton General ED arrive between 8 am and 10 pm and that the number of attendances overnight is low (an average of 2.7 attendees per night in the busiest month of the year, January, which translates into an average admission to the ward of 6.4 per month).

Maintaining an out of hours CDU at the Horton General is likely to rely on the current Consultant team. If adopted, this would remove this resource from the opportunity to develop the community consultant-based paediatric service during the day and the consultant clinics within GP surgeries and the quality of care advantages it would bring with it. The persistence instead of a model of low volume workload overnight will lead to the risk of deskilling the Consultant Paediatricians and significantly reduce the value derived by the local healthcare system. For this reason, the 8 am – 10 pm CDU model offers greater advantages to the local population in terms of access to services and higher volumes of care closer to home.

In terms of staff retention and maintenance of skills of all the workforce, the CDU open from 8 am to 10 pm model would offer greater advantages in deploying the valuable workforce resource. It would also provide better value to the local population in with respect to timely access to services, which will be much closer to home. Overall, it is considered to be a more robust service model, which addresses sustainability with opportunity for better recruitment and retention particularly in nursing because of the increased volume of day work.

**Addressing increased activity at Children’s Hospital (CHOx), Headington**

Recruitment and retention of nursing has been problematic at the Horton General and is likely to continue to be so. The proposed changes outlined for paediatrics inpatients (Options 2 and 3) will lead to increased inpatient activity in CHOx, which will need to be addressed. In part, staffing capacity will be created by the anticipated reduction in cases presenting to the Horton General ED through improved links with GPs and Paediatricians within the community, and also by the transfer from Headington to the Horton General of diagnostic and elective day case procedures and surgery for children in the north Oxfordshire and surrounding area.

The Clinical Review Group recognised that there has been some debate over the relative merits of both CDU models. In view of this OUHFT has invited the RCPCH to visit the Horton General Hospital and provide an independent opinion on these two CDU options of for paediatrics. This will be undertaken in Septembers 2016 and there will be an opportunity for the stakeholders to contribute to the RCPCH review.
Further work to develop an ambulatory model with the involvement of commissioners and community and primary care colleagues is underway and will include greater and more detailed consideration of workforce requirements.

9.7. Outline of broad challenges and required next steps

In developing new models at the Horton General a key challenge will be developing new skills to enable safe and efficient delivery that focuses on more integrated and ambulatory ways of working. For staff, this will require changes to current thinking and ways of working. There will be a requirement for the redistribution of resources between the Horton General and other locations, and a need for greater numbers of staff working across sites.

The different OUHFT hospital sites developed as discrete institutions during the last century. More recently, geographical relocation (the Radcliffe Infirmary move to the John Radcliffe West Wing) and organisational changes (merger with the Horton General Hospital Trust and the Nuffield Orthopaedic Centre Foundation Trust) have resulted in these hospitals becoming sibling sites, but a common identity between workforces on each site is yet to fully develop.

The medical workforce is the most suitable group for adopting a mobile work location, but most OUHFT doctors still consider it their right to be able to work on specific hospital sites within the Trust. Nearly all job descriptions when advertised now, however, specify a requirement to work on any Trust site. It is important that job plans for established OUHFT consultants follow suite, when appropriate, and that OUHFT invests in all its locations to make them attractive sites of work. The direction of travel should be that the doctors and the rest of the clinical workforce belong to one common group and where appropriate, work across all four hospital sites.

As OUHFT explores strategies that drive quality and through this, productivity and value the 21st century Horton General provides an opportunity to change some traditional work practices. Most routine elective work is delivered by OUHFT between Monday and Friday. Weekend work traditionally has been reserved for urgent and emergency work or additional elective work aimed at achieving NHS targets. By moving initially to working routinely across 6 days (and later across 7 days), the Horton General can pioneer a drive to clinical effectiveness and improvement of patient experience, while at the same time reducing the time its plant remains idle, thereby delivering better value. As outlined in section 9.2, as there is no emergency surgery and as the elective surgery is day case surgery in the first instance, there is an opportunity to introduce a generalist model of care at the Horton General.

Thus, a 21st century Horton General will not only pose some workforce challenges, but also provide some opportunities to pioneer certain models of new ways of working for its clinical workforce. In the first instance, however, a full workforce needs analysis will be conducted to underpin the proposed new models of care. This analysis will include consideration of the numbers and grades specifically required for all clinical specialties and the supporting training programmes required across all disciplines, including wider implementation of rotational posts.

In creating a more detailed workforce plan, consideration needs to be given to the following:
• Development of a detailed implementation plan that describe options for service delivery in ways that enable the required staffing capacity to be identified in terms of skills, training, seniority, etc.
• Consideration of the scope for services to re-train and transfer staff from hospital to non-hospital settings (e.g. is enough capacity being released over the five years of the STP to allow this)
• Consideration of the scope for the development of new roles in delivering new services
• Identification of further and more detailed plans to mitigate anticipated recruitment/retention risks.
10. Financial Assumptions and Analysis

10.1. Summary
This chapter describes the financial implications of the identified options for change. It provides a relative comparison of the financial impact of the proposed options. This includes the headline assumptions around year-on-year efficiency delivery, to be made through cost improvement plans, designed to respond to the planned increase in costs, i.e. inflation, over the next five years.

This chapter sets out:

- The scale of financial challenge to OUHFT from national planning assumptions
- The approach to modelling
- The impact of changes in new models of care
- The impact of changes to flows of patient activity to the Horton General from Headington.

All additional information supporting the financial analysis and modelling carried out during pre-consultation can be found in Section 6.2 and Reference slides 79-81.

10.2. Impact of national planning assumptions
The Government announced in the NHS Spending Review settlement in 2015 that it had pledged to provide a real terms increase in funding to the NHS over the five year period to 2020/21, with an overall increase in funding of £8.4bn. In order to meet the growing demands on the NHS, in terms of a growing and aging population, increased costs of new drugs technologies and expected cost inflation, an estimated cost to the NHS is £30bn. This committed the NHS finding £22bn in productivity improvements, either through ‘managing demand’ or improving ‘efficiency’, in order to match resources to expected patient needs.

10.3. Approach to modelling
A major part of future configuration to health services in Oxfordshire is the degree to which it can help support the provision of care closer to home as much as possible, whilst addressing the financial challenge and create sustainable health economy. In order to assess any proposal for the configuration of services, we need to assess it against a base case or ‘do nothing’ scenario, by carrying out financial modelling.

Financial NHS planning assumptions have been published for 2016/17 to 2020/21, which the modelling is consistent with.

The key underlying assumption is that OUHFT delivers the financial plan, agreed with NHS Improvement (NHSI), for 2016/17, which is an underlying income and expenditure position of a

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68 NHS Five Year Forward View: Recap briefing for the Health Select Committee on technical modelling and Scenarios (May, 2016)
69 https://improvement.nhs.uk/resources/economic-assumptions-1617-to-2021/
zero-retained surplus, or ‘break even’, in 2016/17. This means that after one-off and exceptional items the Trust’s income will equal expenditure.

The objective of the analysis is to provide an assessment of the relative value of the potential reconfiguration options compared against each other. The focus of the modelling is on those factors which differentiate between the options rather than to attempt to account for all potential drivers of the future financial position of the Trust. The latter would be required to accurately forecast future income and expenditure at a level required to produce a Long Term Financial Model (LTFM) that would meet NHSI’s requirements for any investment in capital. Subsequent business cases will be required to support investments both with the Trust and as part of wider sector transformation and reconfiguration.

The approach to the financial analysis includes:

- **Scope of analysis**
  - The analysis covers OUHFT only and differentiates between its four major sites as being Headington (John Radcliffe Hospital, Churchill Hospital, Nuffield Orthopaedic Centre) and Banbury (Horton General Hospital)

- **The initial phase of modelling developed an I&E (Income and Expenditure) forecast pre-reconfiguration, the ‘do nothing’ scenario. This is based on:**
  - OUHFTs 2016/17 operational, activity and financial plan as agreed with NHSI, adjusted for known and agreed non-recurrent items
  - Activity and income changes due to local and national planning assumptions, and assumptions on tariff changes
  - Cost changes due to changes in activity, cost inflation and Trust productivity (informed by national planning efficiency requirements)
  - The forecast are based on explicit assumptions on each variable
  - Key supporting datasets used are:
    - Activity baseline – 2016/17 OUH Service Level Agreement contracts
    - Income and Expenditure – 2016/17 Financial Plan, as submitted to NHSI
    - Cost structure and marginal rate assumptions – 2014/15 Patient Level Costing data, adjusted for inflation to 2016/17

- **The second phase modelled the changes due to reconfiguration options:**
  - Activity movements in line with the assumptions for how patient flows will change, developed and agreed by Clinical Review Groups
  - Capacity changes due to activity and bed movements
  - Capital requirements to build new capacity based on the proposed clinical models and activity flows between sites
Cost changes due to changes in activity, consolidation savings and changes in fixed costs.

- Each reconfiguration option is presented in terms of a comparative financial assessment of the options and its relative ‘value for money’, with criteria being:
  - ‘End state’ financial impact on I&E as at 2020/21
  - Total required capital investment
  - Net present value (NPV).

Key elements of what is not included in the financial modelling are:

- Financial impact of changes not noted in the assumptions, i.e. other costs or developments not linked to this case
- Transitional or implementation costs, other than an allowance for £4m year-on-year cost of meeting service standards
- Impact of wider activity changes under development in the STP within Oxfordshire and across the Buckinghamshire, Oxfordshire and Berkshire West (BOB) STP footprint
- Detailed capital estimates on actual build costs
- Detailed staffing costs, e.g. staffing rotas
- Sensitivity tests to stress test the main variables
- Further work required to complete a ‘Generic Economic Model’ (GEM)

10.4. Savings assumptions

OUHFT will need to deliver recurrent savings (CIP) of £82.9m by 2020/21, which equates to a year-on-year efficiency delivery of 2% on the OUHFT cost base, in order to meet the costs of planned inflation. This is consistent with national planning assumptions.

To check the ‘reasonableness’ of the 2% efficiency assumption in context, the OUHFT Integrated Business Plan assumed an average saving requirement of 5.2% each year over a similar planning timeline. Part of this difference is due to the Trust planning assumptions included delivering a 1%, or £10m, I&E surplus efficiencies and to address reductions in national tariff. This modelling does not assume delivery of a 1% surplus and national tariff planning assumptions have changed to including tariff increases of between 0% and 1.1%.

Development of deliverable CIP plans to meet this ask is on-going. The assumption here is that efficiency can be delivered through ‘business as usual’ and will not require ‘transformational’, system wide change or investment. No other investments have been included.
To support the delivery of change programmes, including this case, and the cost of moving to new, as yet unknown, service standards a total of £11.1m has been included.

---

70 Oxford University Hospital (April 2015) Integrated Business Plan
The financial modelling assumes that any impact of wider health sector changes (e.g. commissioner QIPP) does not impact on the Trusts financial position, and that any changes in income are matched by an equal change in cost.

10.5. Base case assumptions

Figure 4 (Reference Slide 73) shows that the forecasts indicate that OUHFT would face an overall deficit of £11.7m in 2020/21. This is driven by on-going efficiency of 2% being sufficient to cover the planned impact of income and cost price changes, but not the additional costs of moving to new service standards.

This provides a central case that efficiencies in excess of 2% are required in order for the Trust to invest in the cost of moving to new service standards. The key financial inflation assumptions are:

Table 11: Economic Assumptions and National Tariff Price Change

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tariff change</td>
<td>1.1%</td>
<td>0.3%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.9%</td>
</tr>
<tr>
<td><strong>Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay and pensions</td>
<td>3.3%</td>
<td>2.0%</td>
<td>1.6%</td>
<td>1.6%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Drugs</td>
<td>4.5%</td>
<td>4.6%</td>
<td>3.6%</td>
<td>4.1%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Capital costs</td>
<td>3.1%</td>
<td>3.2%</td>
<td>3.2%</td>
<td>3.1%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Other operating costs</td>
<td>1.7%</td>
<td>1.8%</td>
<td>2.1%</td>
<td>1.9%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>
### Overall Efficiency requirement

<table>
<thead>
<tr>
<th></th>
<th>3.1%</th>
<th>2.3%</th>
<th>2.0%</th>
<th>2.0%</th>
<th>2.9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariff efficiency factor</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

Source: NHS Improvement (2016)

10.6. Activity shifts between sites

As set out in the activity analysis section (Section 6), there will be varying shifts of activity between Headington and Banbury sites, dependant on the reconfiguration option. Figure 5 (Reference slide 74) details the approach used to cost these activity shifts.

*Figure 5: Approach to costing activity shifts between sites*

#### Approach to costing activity shifts between sites

- **Activity and income**
  - When a service line is changed at a site, activity will move to the next site able to receive the activity, based on nearest travel time for the patient
  - Non-clinical income does not move
  - Sites included in the analysis are Horton, Headington, Northampton and Warwick

- **Variable costs**
  - Comprises drug costs, supplies, services and other operating costs
  - 100% of variable costs associated with the service is transferred from the divesting (i.e., site that no longer provides service) to the receiving site

- **Semi-variable costs**
  - Comprises employee benefit expenses
  - Where service lines at sites are reduced in size, but not removed, 20% of moving semi-variable costs are retained effectively negating consolidation savings for these services
  - Where the receiving site service line is larger, only 80% (75% for the elective centre) of these costs are transferred to receiving site (otherwise 100%)
  - 20% difference represents savings from consolidating services (e.g., removing duplication, economies of scale), with the 25% for the elective centre due to greater control of activity

- **Capacity**
  - Beds, theatres, diagnostics and OP rooms required will be used as a proxy for overall capacity requirements and availability
  - Future capacity requirements in ‘do nothing’ based on activity forecasts, length of stay reduction and theatre utilisation improvement

- **Capital investment**
  - Facilities assumed cost (rebuild): £460k per bed, £3.8m per theatre (including prep, anaesthetic, scrub space etc.), diagnostic facility: £1.6m per MRI, : £1.75m per CT, £900k per X-ray, OP consultation / minor procedure room: £600K per room

- **Fixed costs**
  - For sites with increasing capacity, fixed cost impact estimated at 15%pa of capital investment (3.5% PDC, 8.5% operating costs, 5% depreciation (20yr average life))
  - For sites with decreasing capacity, fixed cost reduced in line with beds (with 80% scaling factor)

---

1 Capital investment based on floor space and £ per m² estimates provided by AECOM
2 Procurement options may influence borrowing costs but will use 3.5% until more detailed work has been completed
3 Hybrid average life taken as 40 years for buildings, 7-10 years for fittings and equipment

SOURCE: Trust Business Review meeting discussions AECOM

10.7. Capital cost of proposed options

Each of the options was assessed for how much capital costs would be incurred as a result of their implementation.

The components of potential capital cost included:
- Adding new capacity for beds, theatres, diagnostics and outpatient rooms

They do not include:
- An assessment of the backlog maintenance costs, either due to be incurred from ‘business as usual’ or changing as a result of the investment in each option, with the exception of £5m at
the Horton General in option 1 due to the additional activity requirements and reduced capital investment compared to options 2 and 3

- Any costs or receipts relating to land

Capital costs have been calculated on a modular basis, with an estimated cost per unit of capacity (e.g. a bed or a theatre), derived from estimated activity per unit of capacity (e.g. elective cases per theatre). They have not been estimated on the cost of a specified building or set of buildings, or changes to existing estates infrastructure to support overall volumes of activity and capacity movements.

Capital costs have been calculated to ensure a valid comparison can be made between options. The overall quantum of capital costs ensures that the overall financial impact of options can be appraised. In any business case completed after consultation, however, it will be necessary to go into considerably more detail on estates configuration.

The capital expenditure estimates used to evaluate the different options can be summarised as:

- The capital expenditure estimates used in the option evaluations are focused on those investments that would be directly related to the reconfiguration options, and that will differentiate the options from each other
- These estimates include capital required to:
  - Add capacity to accommodate the changes in activity due to the reconfiguration
  - Move services between the Headington and Banbury sites due to the reconfiguration options
- The estimates exclude capital that does not directly relate to the reconfiguration options and so does not differentiate the options from each other, e.g. capital required to:
  - Continue making ongoing replacement of assets
  - Make changes to the estate to support or enable the delivery of the Trust CIP programmes
  - Make other changes to improve the quality of estate in line with the Trust’s visions for the future of the sites
  - Changes to the estate that are independent to this reconfiguration programme (e.g. any proposed movement of service due to wider sector reconfiguration of services)
- It is recognised that in any reconfiguration option OUHFT will need to source and spend capital for schemes that are not included in this comparative analysis (see above). These may be funded through a combination of:
  - Business cases for capital funding. Any application would be over-and-above the option-specific capital funding estimated here
  - Land and asset disposal not included in the reconfiguration proposal
Depreciation

- Income and expenditure forecasts for each option include the current annual depreciation charge and the additional impact of the capital spend shown for each of the reconfiguration options over 20 years (total charge estimated as 15% pa, comprising of 3.5% Public Dividend Capital (PDC), 6.5% operating costs, 5% depreciation)
- All estimates are subject to review and changes as site strategies are developed, and the post-consultation business is worked up in more detail

10.8. Adding new capacity

In order to support the reconfiguration options, including shifts of activity between sites, there will be a requirement to add new capacity. Figure 6 (Reference slide 70) sets out the additional capital costs required by each site for each of the options.

Figure 6: Estimated capital costs for additional new capacity

<table>
<thead>
<tr>
<th>Capital investment required, £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beds</td>
</tr>
<tr>
<td>Horten</td>
</tr>
<tr>
<td>Headington</td>
</tr>
<tr>
<td>Theatres</td>
</tr>
<tr>
<td>Horten</td>
</tr>
<tr>
<td>Headington</td>
</tr>
<tr>
<td>Outpatient consultation rooms</td>
</tr>
<tr>
<td>Horten</td>
</tr>
<tr>
<td>Headington</td>
</tr>
<tr>
<td>Diagnostics</td>
</tr>
<tr>
<td>Horten</td>
</tr>
<tr>
<td>Headington</td>
</tr>
<tr>
<td>ED</td>
</tr>
<tr>
<td>Horten</td>
</tr>
<tr>
<td>Headington</td>
</tr>
<tr>
<td>Other items</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

All options require additional capital investment of £100m or greater, with Option 2 being the highest at £125m due to the cost of re-providing all inpatient beds in Headington from activity transferred from Banbury. Option 3, however, utilises existing bed capacity at the Horton General, which Option 2 does not, as well as having a reduced overall bed requirement due to the impact of new models of care, as does Option 2. The cost of additional beds is the largest impact on the level of investment required overall. The further differentiator is the capital costs of providing additional outpatient consultation rooms in Banbury required in Options 2 and 3, driven by the
shift in outpatient activity from Headington to Banbury, and the cost of investing in new diagnostic capacity in Banbury for each of these two options.

Although Option 3 includes the cost of re-building the A&E, at £10.9m, creating additional outpatient consultation room capacity, at £9.5m, increasing diagnostics capacity, at £7.7m, and increasing theatre capacity, at £3.8m, it remains a lower cost than Option 2 due to the reduced cost of required additional bed capacity as it utilises existing capacity in Banbury.

As stated in the capital cost assumptions, there are no assumed costs or receipts relating to land in the estimated capital costs for additional new capacity.

10.9. Income and expenditure impact

Several factors are important in calculating the relative income and expenditure position of the different options, including the financial benefits of proposed new models of care, the impact of activity shifts and changes in fixed costs. Figure 7 (Reference slide 75) sets out the assumptions and impact from this area of modelling.

Figure 7: Income and expenditure position of reconfiguration options relative to ‘do nothing’ scenario

Reconfiguration of services and productivity improvement under option 2 and 3 will help cover the cost of change but not completely

Net financial position for OUH, £m

<table>
<thead>
<tr>
<th>Starting position FY 20/21</th>
<th>New models of care1</th>
<th>Activity shifts2</th>
<th>Productivity improvement3</th>
<th>Change in fixed costs</th>
<th>Projected end position FY20/21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>-11.7</td>
<td>-1.4</td>
<td>-</td>
<td>-14.3</td>
<td>-27.3</td>
</tr>
<tr>
<td>Option 2</td>
<td>-11.7</td>
<td>+0.8</td>
<td>-0.8</td>
<td>-0.5</td>
<td>-12.2</td>
</tr>
<tr>
<td>Option 3</td>
<td>-11.7</td>
<td>+0.8</td>
<td>+0.3</td>
<td>-3.0</td>
<td>-13.7</td>
</tr>
</tbody>
</table>

1 New care models includes reduction in non-elective medical admissions due to ambulatory care model at front door and 31% length of stay reduction for non-elective patients in Horton catchment through use of rehab beds and rapid access to diagnostics in option 2 and 3, and replacement of 3% of outpatient follow up appointments with video / app at reduced tariff (£29 with cost to deliver £20 per unit) across OUH for all options
2 Benefits of I&E of consolidating overnight services at Headington offset by lost income North of Oxfordshire under option 2
3 N/A
4 Large increase in bed base required across both sites under option 1, due to demographic and non-demographic growth
5 Reduction in capacity at Horton under option 2 is not offset fully by large corresponding increase in beds required at Headington under option 2
6 Rebuild of many facilities, using large high quality estate of current medical wards results in lowest overall fixed cost impact under option 3. Existing Ramsay site not modelled but will also provide high quality estate
7 Rehab bed day tariff assumed to be £290 and associated cost £263 per bed day estimated at £150k surplus per 20 beds
8 Ramsay Treatment Centre activity not included in modelling due to lack of available data

Please note: neither net impact of rehab beds nor Ramsay Treatment Centre activity on I&E included.
Figure 8 (Reference slide 76) sets out the comparative impact of changes in new models of care.

**Figure 8: Income and expenditure impact of new models of care**

### Changes to the model of care will significantly impact I&E before any activity is shifted between sites

<table>
<thead>
<tr>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact on I&amp;E</td>
<td>Impact on I&amp;E</td>
<td>Impact on I&amp;E</td>
</tr>
<tr>
<td>Prevented A&amp;E activity</td>
<td>-1.12</td>
<td>0</td>
</tr>
<tr>
<td>Prevented NEL admissions</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Stopped face-to-face OP consultations</td>
<td>1.5</td>
<td>0</td>
</tr>
<tr>
<td>Reduced NEL admisions through ambulatory care</td>
<td>-12.1</td>
<td>-3.3</td>
</tr>
<tr>
<td>Reduced NEL length of stay</td>
<td>1.2</td>
<td>0</td>
</tr>
<tr>
<td>Further admissions</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Further prevented NEL admissions</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Income, £m</th>
<th>Expenditure, £m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1:</td>
<td>-1.12</td>
</tr>
<tr>
<td>Option 2:</td>
<td>-3.8</td>
</tr>
<tr>
<td>Option 3:</td>
<td>-11.9</td>
</tr>
</tbody>
</table>

1. No change assumed
2. No change assumed
3. 5% follow up appointments delivered through video / app
4. Reduced NEL admissions due to treatment in ambulatory setting in new care model at Horton
5. Reduced ITIC at Horton enabled through availability of rehab beds
6. Mere ambulatory paediatric activity possible under Option 3 with extended opening hours

### Option 2 has the lowest financial deficit of the three reconfiguration options, being lower than Option 3 by £1.5m. Both options 2 and 3 have a deficit which is half that of Option 1 due to the change in fixed costs for that option.

The relative financial benefit from new models of care Options 2 and 3 compared to Option 1 is £2.2m. The financial benefit of consolidating overnight services at Headington in Options 2 and 3 is offset by the impact of lost income from north of Oxfordshire in Option 2.

Changes in fixed costs in Option 1 are driven by it having the largest increase in net bed requirement of all of the options. This is due to Option 1 not implementing the same new models of care as in Options 2 and 3, which reduce the overall bed requirement in those options.

Further analysis of income and expenditure, including detailed timings of cashflows, will be required in the post-consultation business case and to complete a ‘Generic Economic Model’ (GEM).

### 10.10. Net present value

As with the income and expenditure implications of proposed reconfiguration options, several factors are important in calculating the economic impact of these options through a net present value (NPV) figure. This allows the consideration of different payment profiles over time, and in particular the relative impact of upfront capital costs and on-going income and expenditure...
Figure 9 (Reference slide 77) sets out the relative NPV position of the reconfiguration options.

**Figure 9: Net present value of reconfiguration options**

The net present value (NPV) brings together the I&E and capital investment impacts together through a discounted payment profile, calculated over 20 years (2017/18 to 2036/37), with year 0 assumed to be the year in which all capital investment is made (2017/18), at 3.5% discount rate with no terminal value. Values are reported relative to each option.

Options 2 and 3 provide the highest NPVs (lowest negative value), and so the most favourable options financially, with the difference between them being negligible in comparison to Option 1. Option 1 does not include the financial benefits of new models of care on operating costs and capacity required, so has the lowest NPV (highest negative value) and is the least favourable option financially.

None of the options repay the costs of the initial investment over the evaluated timeframe due to the deficit position of the ‘do nothing’ scenario start point, impacted by the cost of moving to new service standards, and the fixed costs of additional capacity being greater than the modelled impact of activity shifts and new models of care.

Further development will be required in the post-consultation business case to increase efficiencies to make the preferred option affordable. This does not impact on the relative position of the options.
10.11. Transition costs

It will not be possible for the reconfiguration of services to happen across OUHFT sites at a single point in time. Services will need to be moved in a staged approach to ensure safe working and to minimise disruption for patients.

Cost estimates for the transition between the current configuration and future states have not yet been calculated due to the further work required for detailed plans on implementation and phasing. It is assumed that due the relative scale of change in each of the options being similar, as evidenced by the comparison in capital investment requirements, that it would not be a differentiator when evaluating each of the options.

10.12. Summary of the financial evaluation

The evaluation of the three options using a comparison of an ‘end state’ financial impact on I&E as at 2020/21, total required capital investment and net present value (NPV), to provide a comparative financial assessment of the options, shows that despite Option 1 having lowest overall capital investment requirement, due to siting most activity in existing facilities, it has the highest overall bed requirement and operating costs, due to not implementing new models of care means as part of reconfiguration. Option 1 has the greatest overall cost of all options to OUH.

A ranking of options by their comparable ‘Value for Money’ measures has been summarised in Figure 10 (Reference slide 78).

*Figure 10: Summary of evaluation against ‘Value for Money’ measures*

**Comparative performance against ‘Value for Money’ measures**

<table>
<thead>
<tr>
<th>Financial position of reconfiguration options for OUH, £m</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital investment</strong></td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>Option 1</td>
</tr>
<tr>
<td>Option 2</td>
</tr>
<tr>
<td>Option 3</td>
</tr>
</tbody>
</table>

Options 2 and 3 are broadly comparable in financial terms, with Option 2 having a higher capital cost, by £10m, but lower I&E deficit, by £1.5m. In NPV terms both options have a negligible difference when compared to option 1, and are the lowest overall cost options for OUH.
11. The Proposed Models for Consultation

The evaluation of the Clinical Review Groups’ short list described in the preceding chapters, which contained 3 Options of hospital care for the Horton General outline the weaknesses of the current model, particularly in terms of sustainability and value. The Clinical Review Groups have proposed and described the potential of more modern models of care, which will transform the Horton General into a 21st century hospital and an institution that the population of north Oxfordshire and the surrounding geography can rightly continue to cherish.

The primary characteristics of each Options is described below.

11.1. Option 1: The baseline

- 24 hour ED with separate UCC and separately located Walk-In Centre
- Inpatient beds for medical patients (elective and non-elective) and minor ambulatory care model
- Level 3 Critical Care (ICU) facility
- Acute stroke care
- Historic Diagnostics (not full complement) and Outpatients
- Elective Day Case Surgery and non-elective gynaecology and minor trauma (NOF)
- Obstetric Maternity Unit
- Inpatient paediatric service, including SCBU with little community activity.

11.1.1. Evaluation: Quality of care:

Care is delivered along traditional lines and is heavily biased towards a bed-based practice, preventing patients from returning to the community as quickly as possible. It is a model with a static mindset that is focused on ‘business as usual’ and ‘keeping things running’ rather than looking at innovative changes that will benefit patients and the public of north Oxfordshire and surrounding geography. Examples of this static outlook are the slowness to adopt clinical innovations as with the AHSN project described earlier in Section 1.5.2.

The ED is disconnected with the rest of the urgent care services and although choice is available there is no guidance to patients to the most appropriate choice. This results in many instances with duplication of assessments with consequential delays, manifested by the 4-hour track record of the Horton General ED. The absence of integration across traditional sectors of health and social care reduces the opportunity to develop and support an Enhanced Primary Care to address the capacity and capability issues, which are appearing in primary care.

A mindset that does not embrace a model of ambulatory care by default will result in increased hospitalisation with greater risk of decompensation associated with admission in the elderly. This will be compounded by weaker pathways for the rapid discharge of the patient to the community and their support in that location.

The SSNAP data demonstrate the relative poorer performance of stroke care in relation to the Hyper-acute Service at Headington. The ICNARC data confirm the case for transferring patients requiring Level 3 critical care to the better-resourced facilities at Headington.
With diagnostics the current facilities are not equipped to provide support for the rapid assessment of patients. Inpatients continue to have to travel to Headington for MRI scans, which are increasingly utilised in diagnosis and management. When combined with planned care and outpatients, several thousand attendances (122,664) can be converted into a significant burden of travel to Headington, which will impact significantly on patient experience.

The persistence with an intermediate-risk obstetric unit not only increases the chance of unnecessary intervention in low-risk births to the detriment of mother and baby, but such an unit is of such low volume that it makes the importance maintenance of clinical skill-set extremely difficult. The relative similarities of outcomes despite the significant differences in risk profiles of the Horton General and Headington obstetric units are important in this context. It is probably no coincidence that over 600 mothers from north Oxfordshire and surrounding geography currently travel to Headington to give birth.

The model of paediatric care reflects the mind-set that leads to stagnation of clinical care rather than evolution for the benefit of the patients. Large numbers of children are projected to continue to be admitted to hospital, predominantly for around 24 hours rather than being managed at home with the current model of care (Option 1) and the huge demand for paediatric expertise in the community will continue to be ignored. The admission rates for NELS for the Horton General Children’s Services and for the CDU at CHOx reveal the stark difference in quality of care for many children in north Oxfordshire and surrounding geography. This rates Amber as illustrated in Reference slide 83.

11.1.2. Access

The current configuration of services described in Option 1 is associated with lowest weighted average travel time for blue light or at night transport (13 minutes), for peak time travel by private care (17 minutes) and for travel by public transport at inter-peak times (40 minutes). The equivalent weighted average travel times for Options 2 and 3 are 25, 33 and 61 minutes, which represent much longer journey times.

With regards to blue light or private transport at night, 75% and 99% of the population of north Oxfordshire and surrounding geography is within 20 and 30 minutes of a hospital services and the maximum travel time to reach a hospital service is 31 minutes. These times are the same for Option 3, but shorter than for Option 2.

The actual number of journeys undertaken is a second important component of an assessment of access. Here activity analysis for 2016/17 projects that with Option 1 there are 98,038 unnecessary attendances at Headington for Day Case planned care, diagnostics and outpatients. Using any travel time metric this is a huge cumulative travel time burden for the population of north Oxfordshire and surrounding geography.

Although, ED is open 24 hours each day, this is not always the case for the primary care OOH Centre and the Darzi Walk-In Centre. The diagnostics, services outpatients and theatres at the Horton General currently also function primarily on a 5-day model and work to office hours. Taken in the whole, therefore, the access evaluation for Option 1 was poor. It therefore rates Amber (Reference slide 83).
11.1.3. Affordability and value for money (Finance)

The baseline starting point is a projected deficit of £11.7m by 1st April 2021 for OUHFT as a whole. From an assumption of breakeven, this is the result of the inclusion of a nominal allowance for in-year developments and cost of quality, set aside each year for the next 5 years. Due to the inability to implement and realise financial benefits of all possible new models of care in Option 1, there is a projected additional cost of £1.4m pa. The fixed costs to support the projected increase in demand for OUHFT is estimated as being £14.3m pa. The major contributor to this fixed cost is the cost of new beds at both the Horton General and Headington sites (£14.0m). This gives a total projected deficit by 1st April 2021 of £27.3m. There is also a projected capital cost of £100m over this period of time.

These are significant costs. Despite this, there is no real change in a movement towards improving quality. The only financial impact of new models of care being seen in reducing face to face outpatient consultations (-£1.5m) and replaced digital outpatient consultations (£0.1m).

The new ambulatory care models for adults are projected to reduce attendance, NEL admission (by 20%) and length of stay (by 21%), but there is a persistence with obstetric service, whose performance does not compare with that at Headington, a SCBU and an low volume inpatient Children’s Service that fails to meet demand in the community. There is also persistence with a pattern of practice that requires large numbers of attendances at Oxford for the population of north Oxfordshire and surrounding geography for care that could be delivered on the Horton
General site with a consequential reduction in the expensive footprint at Headington. It is hard to justify that this Option represents value for money. This rates Amber.

11.1.4. Workforce

Remaining with the current model of care will have a harmful impact on the Horton General workforce. This is because of an inherent uncertainty about the future of the hospital and fear about its closure of major services that would have a significant detrimental effect on its profile and reduce opportunities and prospects of employment. This, however, needs to be challenged. Option 1 is (as described before), of a stagnant mindset. If the workforce are reassured of the vision to build a 21st century hospital on the Horton General site with significant financial investment, the workforce’s call for change is likely to be very different and persistence with Option 1 is much less attractive, particularly with the increased concerns around its sustainability.

In addition to the Oxfordshire-wide workforce issues, the current model is plagued by specific workforce issues difficulties:

- Recruiting medical staff in particular to ED, and the Horton General obstetric unit and Children’s services
- Recruiting nurses and midwives to the Horton General obstetric unit and Children’s Services
- Recruiting radiographers and other clinical scientists
- Historic and traditional work practices that do not embrace multi-professional work across sectors

The impact on the workforce rates Green, but sustainability rates Amber.

11.1.5. Deliverability

It is reasonable to assume that maintaining current practice will be easiest to deliver given the extent of organised and spontaneous protest about making changes to clinical services and working practices at the Horton General. It is disappointing that this reflects the prevailing view of many, who are resistant to change that will lead to improvements in quality of healthcare for the population of north Oxfordshire and surrounding geography. This therefore rates Green.

Option 1, however, is poorly aligned with the Oxfordshire Transformation Plan and the direction of travel of NHSE and its new models of care programme. It is persistence with old practices that prevent quality improvement and progressing the crucial task of delivering better value for money in these times of significant financial accountability. This, therefore rates Amber.

11.2. Option 2: Ambulatory Care Hospital

- UCC and Minor Injury Unit open 24-hours daily and separately located Walk-In Centre
- Pure ambulatory care model with Emergency Assessment Unit (EAU) and no inpatient beds
- Transfer of all acute stroke patients to Headington
- No Critical Care facility and transfer all patients to Headington
- Elective Day Case Surgery (more limited than Option 1) and no non-elective gynaecology and minor trauma (NOF)
- New Diagnostics and Outpatients Facility (open extended hours and 6 days each week)
Free-standing MLU
• CDU with no inpatient beds (open either 24-hours or 8 am – 10 pm daily).

11.2.1. Quality of Care

It is projected that for 2016/17 a change to an UCC at the front door will result in the majority of the patients (26,430) still being seen there. It is projected, however, that 13,830 (34%) will need to present at alternative neighbouring EDs. The majority are likely to present at Headington, but for others the EDs at Northampton and Warwick may be more appropriate. The introduction of ambulatory care should improve the patient experience and the difficult task of achieving the 4-hour target will be removed. If resourced properly, patients should experience less delay in accessing assessment and treatment.

The most significant change from current practice is the absence of inpatient beds, which results in a projected transfer of 14,615 patients to beds in Headington for bed-based care. Of these 681 patients will be transferred for Level 2 and 3 care and 810 children for inpatient care. This projects a net flow, however, from Headington to the Horton General of 93,196 patients. This is a significant number of transfers in an older patient population, which is likely to be less mobile than normal. It is likely to lead to higher levels of patient satisfaction.

The transfer of all stroke patients and all Level 3 critical care patients to Headington, will lead to more clinically effective care for them in line with the better SSNAP data for the Headington site and better critical care outcomes data.

Transfer of large amounts of diagnostics, elective care and outpatient activity will improve patient experience. Rationalising diagnostics and outpatient activity allows for the creation of a “one-stop clinic’ service, which reduces multiple journeys to hospital.

The free-standing MLU will result in more journeys to Headington to give birth, but outcomes for low-risk births should improve because of less obstetric interference and more of the remainder of the maternity pathway will be delivered at the Horton General for mothers from north Oxfordshire.

Finally, care for children will improve with the introduction of an ambulatory model that does not admit them unnecessarily, accesses them for specialist care seamlessly and more quickly, and provides much greater paediatric expertise in the community. This rates Green.

11.2.2. Access

Changing to an UCC in Option 2 results in those patients requiring ED having to travel by blue light for a longer period of time. The weighted average projected travel time increase from 13 to 25 minutes for blue light transport, although the projected maximum time for the whole population to reach ED increases from 31 minutes to only 37 minutes. The majority of the medical admission (13,567) will not require blue light transfer. The weighted average travel time for private car at peak times will increase from 17 to 33 minutes. Although with the baseline (Option 1) 55% and 97% of the population using private car are projected to arrive at their hospital destination in 20 and 30 minutes respectively, in the pure ambulatory model (Option 2), only 0% and 39% of the north Oxfordshire population are projected to reach their hospital destination by 20 and 30 minutes respectively.
These projected increased travel times for private car at peak times and public transport at inter-
peak time are reversed for those attendances that are transferred from Headington to Banbury,
which amounts to 98,038 attendances, which is a sizeable travel burden. Overall, therefore, this
scores Amber for access times and distance.

In Option 2 the hospital is open 24-hours a day for urgent care and 6 days a week for an extended
day. This is an improvement on the existing model and, therefore scores green. The influence of
two opening hours for the paediatric CDU is not very important because of the low volume of
work during the night when the limited access model is closed. This rates Yellow.

11.2.3. Affordability and value for money

Option 2, depending on assumptions, is projected to give a total projected deficit by 1st April 2021
of £12.2m. The projection assumes some tariff loss for activity shifts of £0.8m by year 5, offset by
productivity gains from new models of care of £0.8m. The annual impact of fixed costs associated
with Option 2 is an increase of £0.5m, which are lower than Option 1 due to the efficiencies from
releasing surgical inpatient bed and theatre capacity at the Horton due to the new models of care.
The total capital costs of Option 2 are £125m.

In contrast to Option 1, however, this smaller deficit is accompanied by some real improvement in
quality for adults (ambulatory care, acute stroke care and critical care), mothers (less intervention
in low-risk births and higher quality care for high-risk births) and children (ambulatory model with
more care in the community). This, therefore, rates Green.

11.2.4. Workforce

Apart from the generic workforce issues, the impact of Option 2 on the OUHFT workforce is
mixed. ED staff will need to be deployed differently although many will be absorbed into the UCC,
where the clinical challenge will be less stimulating. Critical Care could be reconfigured in to a
more functional Level 2 facility specialising in short bouts of supportive care, which will be
rewarding to the staff. The expansion in diagnostic and outpatient activity will offer the
opportunity for the workforce to live out of Oxford in less costly north Oxfordshire and the
surrounding geography. In maternity, the current Horton General obstetricians will have to
relocate their activity to Headington and the existing cohort of midwives would be sufficient to
deliver these services. Finally, with Children’s Services, Paediatricians will no longer need to be
resident, but be able to participate in more rewarding community paediatrics and CDU activity.
This rates Yellow.

This model will have a greater degree of sustainability as it will also eliminate the need to recruit
into two difficult, but key medical rotas. The Option offers the opportunity for greater cross-sector
work, which will make the Option more resilient with the workforce increasingly taking up more
interchangeable roles. This rates Green.

11.2.5. Deliverability

Changing the current model of activity is not any easy task. There are several important building
blocks that are required. The public and numerous groups have to be convinced that OUHFT is
committed to “keeping the Horton General”. There has to be local leadership that can embrace
and communicate the benefits of change and the potential harm from the status quo. All need to
appreciate the value arguments. The clear commitment to a future for the Horton General with a commitment of financial investment of around £18m is a valuable tool that must be used effectively in explaining and convincing the doubters.

In practical terms the ED at Headington will not be able to cope with 13,500 extra attendances. This is why the Horton General is an important component of OUHT. Option 2, therefore, rates Amber.

Option 2 is well aligned to the Oxfordshire Transformation Plan and NHSE’s plans, although centralisation of all inpatient beds on facilities in Headington is not explicit in the Transformation Plan. Option 2 convincingly delivers care closer to home and also centralises specialist services. This rates Green.

11.3. Option 3 Modern Hospital

- Emergency Hospital Centre open 24-hours daily with an integrated front door
- Inpatient medical beds, with an integral EAU working on the principle of ambulatory care by default
- Transfer of all acute strokes to Headington
- Level 2 Critical Care (HDU) facility
- Elective Day Case Surgery (more limited than Option 1) and non-elective gynaecology and minor trauma (NOF)
- New Diagnostics and Outpatients Facility (open extended hours and 6 days each week)
- Standalone MLU
- CDU with no inpatient beds (open either 24-hours or 08.00-22.00 daily)
- Quality of Care

Option 3 addresses the quality agenda in the most comprehensive manner. It integrates all aspects of urgent and emergency care inside one door with experienced clinicians sign-posting the patient to the most appropriate care provider. It introduces the EAU model, successfully introduced at Headington to avoid hospital admission by default and instead, manage as many patients as possible in the community. It supports and contributes to Enhanced Primary Care, which proactively reduced ED attendance and in turn facilitates discharge from hospital, by providing support in the community. Acute stroke care and Level 3 critical care is transferred to better-equipped facilities at Headington with resultant improvement in quality and outcomes.

Availability and rapid access to full spectrum of diagnostics allows rapid assessment and management of patients, while at the same time offering all other advantages described with Option 2.

The standalone MLU reduces unnecessary obstetric intervention and the transfer of all obstetric care to Headington ensures high quality service and outcomes for the population of north Oxfordshire and surrounding geography.

The quality benefits from the Children’s Service are the same as in Option 2. Clinical effectiveness rates Green.
With patient experience, confusion is removed at ED and care fragmentation avoided. Patients are managed in an ambulatory fashion. The new Diagnostics and Outpatients Facility improves patient experience by reducing travel burden both in terms of distance and number of journeys. In maternity choice is maintained and with Children’s more paediatric expertise is available when and where it is needed in the community.

With Option 3 while 122664 patients are projected to have attendances at the Horton general rather than Headington, only 3311 are transferred to Headington from the Horton General for bed-based care. There is, furthermore, a projected transfer of 732 elective medical inpatients to the Horton general and potentially 1051 elective surgical inpatients. Excluding this inpatient transfer of patients from Headington to the Horton General, there is a projected net flow from Headington to the Horton General of 118,330 patients. This rates Green.

11.3.1. Access

Distance and time to access services are the same for Option 3 as for Option 1 for Urgent and Emergency Care. Planned Care, Diagnostics and Outpatient access is significantly improved. Access to obstetric care is impacted with the average weighted time for private car at peak time increased from 17 to 33 minutes, although the maximum time to an obstetric unit by private car at peak time is increased from 40 to 48 minutes only. This difference in maximum time is even smaller for private car by night (31 and 37 minutes). It is projected that this will impact on 1011 mothers in 2016/17. For children access is improved significantly with more children managed at the Horton General and in the community. This rates Green.

The service operating hours scoring is the same as for Option 2 and rates Green.

11.3.2. Affordability

Option 3, depending on assumptions, is projected to give a total projected deficit by 1st April 2021 of £13.7m. The projection assumes some tariff gain for activity shifts of £0.3m by year 5, in addition to productivity gains from new models of care of £0.8m. The annual impact of fixed costs associated with Option 3 is an increase of £3.0m, which are lower than Option 1 due to the efficiencies from releasing inpatient bed and theatre capacity at the Horton due to the new models of care, but higher than Option 2 due to the retaining of surgical inpatient activity at the Horton. The total capital costs of Option 3 are £115m.

The quality improvement with Option 3 is even greater than with Option 2 and probably represents better value for money. This rates Yellow.

11.3.3. Workforce

The impact on workforce at OUHFT is not as negative as with Option 2. Services are maintained and enhanced and in some instances transferred. The main need is for change of working practices, particularly in Children’s and to a lesser extent with maternity. All services, however, offer opportunities to the workforce for professional improvement. This rates Yellow.

The workforce sustainability for Option 3 is the same as Option 2. This rates Green.

11.3.4. Deliverability

This Option will face the same opposition to start with as Option 2 and it is OUHTFT’s role to articulate the potential of this Option in terms of high quality, safe care, having first convinced all
that OUHFT is committed to the future of the Horton General. Option 3 does increase the burden of work on neighbouring EDs as with Option 2. It rates Yellow.

Option 3 is properly aligned to the OCCG Transformation Plan and to NHSE developments. It rates Green.

The benefits and disadvantages of each of the three options are summarised in table 12 below.

**Table 12: Summary of benefits and disadvantages for each option**

<table>
<thead>
<tr>
<th>Clinical Review Group</th>
<th>Benefits</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urgent and Emergency Care</strong></td>
<td>• Maintenance of status quo:</td>
<td>• Confusing, dis-integrated, poorly aligned system</td>
</tr>
<tr>
<td></td>
<td>• Maintenance of local ED (38,524), supported by Out of Hours GP Centre (10,529) and Darzi Walk-In Centre,</td>
<td>• Confusion of choice to patients</td>
</tr>
<tr>
<td></td>
<td>• Maintenance of local Acute Stroke Service</td>
<td>• Insufficient combined capacity to meet demand</td>
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<tr>
<td></td>
<td>• Maintenance of local Critical Care Facility (641)</td>
<td>• Poor ED 4 hour standard of care</td>
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<td></td>
<td>• Capacity to provide care for non-elective medical spells locally (12,200)</td>
<td>• High rate of admission for ACSC</td>
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<td>• SSNAP data for 2014/15 demonstrates poor outcomes for Horton General</td>
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<td></td>
<td></td>
<td>• Very low volume Critical Care Unit to maintain clinical skills</td>
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<td>• ICNARC data for 2013/14 show increased length of stay and increased mortality of ventilated patients</td>
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<td></td>
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<td>• Difficulties in maintaining safe staffing</td>
</tr>
<tr>
<td><strong>Planned Care, Diagnostics &amp; Outpatients</strong></td>
<td>• Elective surgical capacity for local day-case surgery (4309)</td>
<td>• Underutilised surgical theatre capacity</td>
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<td></td>
<td>• Provision of local elective medical spells (4784)</td>
<td>• Ageing CT scanner</td>
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<td></td>
<td>• Provision of diagnostic investigations locally (30,363)</td>
<td>• No access to inpatient MRI scans</td>
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<tr>
<td></td>
<td>• Provision to deliver local outpatient care (92,669)</td>
<td>• Limited general diagnostic capability</td>
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<tr>
<td></td>
<td></td>
<td>• Failure to provide 13,148 diagnostic spells locally, which are provided at Headington</td>
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<tr>
<td></td>
<td></td>
<td>• Failure to provide 68,853 outpatient spells locally</td>
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<td></td>
<td></td>
<td>• Failure to provide 8391 medical outpatient care spells</td>
</tr>
</tbody>
</table>
### Maternity
- Local delivery of 1508 births (midwife and obstetric)
- Provision of local antenatal/postnatal pathways (1371)
- Obstetric activity volume in unit too low to maintain clinical skills
- Failure to deliver high-risk obstetric care at the Horton General (RCOG recognises low-risk and high-risk pregnancies)
- Maternity outcomes similar to high-risk obstetric unit
- Chance of unnecessary obstetric intervention in low-risk births
- Vulnerability to intermittent closure due to staffing difficulties
- Dispersion of Obstetrician on two sites hinders proper staffing (RCOG) of high-risk obstetric unit

### Children’s
- Local provision of 250 SCBU spells
- Local provision of inpatient care (2711)
- Local provision of day-case care (196)
- Local provision of outpatients (9562)
- Activity too low to maintain clinical skills
- 74% of children are admitted to hospital for less than 24 hours
- Up to 2000 children unnecessarily admitted to hospital
- Ambulatory care model poorly established
- Failure to meet demand for paediatric care in the community
- Intermediate steps in pathway to access complex and specialist paediatric care
<table>
<thead>
<tr>
<th>Clinical Review Group</th>
<th>Benefits</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urgent &amp; Emergency Care</td>
<td>• Provision of majority of care locally (26,430)</td>
<td>• Failure to provide ED facilities locally (13,567)</td>
</tr>
<tr>
<td></td>
<td>• Introduction of Ambulatory Care Model with reduced admission to hospital</td>
<td>• Failure to provide non-elective medical care locally (9604)</td>
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<tr>
<td></td>
<td>• Access to central HASU for all acute stroke patients</td>
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<tr>
<td></td>
<td>• Access through safe pathways to excellent critical care</td>
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<tr>
<td>Planned Care, Diagnostics &amp; Outpatients</td>
<td>• Provision of increased elective medical day case care locally (3439)</td>
<td>• Failure to provide inpatient medical care (73)</td>
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<tr>
<td></td>
<td>• Provision of increased elective day case surgery locally (215)</td>
<td>• Failure to provide inpatient surgical care (503)</td>
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<td>• Provision of increased outpatient medical care locally (8391)</td>
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<td></td>
<td>• New Diagnostic Facility including MRI with increased provision of diagnostic investigations (13,148)</td>
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<td></td>
<td>• Provision of increased outpatient care in new facility (68,853) with significant reduction in travelling</td>
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<tr>
<td>Maternity</td>
<td>• Continued choice of place of birth to pregnant mothers</td>
<td>• Loss of local obstetric unit for intermediate risk</td>
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<td></td>
<td>• Free-standing MLU locally (498)</td>
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<tr>
<td></td>
<td>• Reduced risk of unnecessary intervention in low-risk births</td>
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<tr>
<td></td>
<td>• Strict continual risk stratification of pregnancy with access to high quality high-risk obstetric unit</td>
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<td></td>
<td>• Correctly staffed obstetric unit for high-risk pregnancies</td>
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<tr>
<td></td>
<td>• Provision of increased antenatal/postnatal pathways locally (1645)</td>
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<tr>
<td>Children’s</td>
<td>• Establishment of new SSPAU/CDU</td>
<td>• Loss of inpatient paediatric facility and need to transfer to CHOx (675/810)</td>
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<td></td>
<td>• Introduction of ambulatory care model with reduced admission to hospital (1889/2024)</td>
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<tr>
<td></td>
<td>• Well-designed pathways of access for complex and specialist care at CHOx</td>
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<td></td>
<td>• Increased provision of paediatric expertise in the community to meet</td>
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<tr>
<td>Clinical Review Group</td>
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<td>Disadvantages</td>
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<tr>
<td>Urgent &amp; Emergency Care</td>
<td>- New Emergency Hospital Centre with ‘one front door’ (49,053)</td>
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<td></td>
<td>- Establishment of new local Clinical Coordination Centre</td>
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<td>- Care co-ordinated to reduce delay, duplication and focus appropriate</td>
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<td></td>
<td>clinicians for each patient</td>
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<td></td>
<td>- Introduction of Ambulatory Care Model with reduced admission to hospital</td>
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<td>- Provision locally of Level 2 (HDU) critical care</td>
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<td></td>
<td>- Reduced risk of unnecessary</td>
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11.4. Conclusion

This Horton Strategic Review has evaluated three clinically viable Options, each of which paint a different picture of the Horton General in the 21st century. The evaluation was performed using agreed criteria. Clinical engagement was crucial in describing care models that were viable and sustainable. The output of this review is now ready to be included in the Oxfordshire Transformation Programme documents and to be prepared for public consultation.
## Appendix 1: Clinical Review Group Attendees

### Maternity and Paediatrics

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veronica Miller</td>
<td>Consultant Obstetrician and Clinical Director Women’s</td>
</tr>
<tr>
<td>Jonathan Nicholls</td>
<td>Consultant Obstetrician and Gynaecologist</td>
</tr>
<tr>
<td>Jane Herve</td>
<td>Head of Midwifery</td>
</tr>
<tr>
<td>Bea Culligan</td>
<td>Ward Manager Maternity HGH</td>
</tr>
<tr>
<td>Rachel Chakravarti</td>
<td>Delivery Suite Manager HGH</td>
</tr>
<tr>
<td>Paul Byrne</td>
<td>General Manager, Children’s &amp; Women’s Division</td>
</tr>
<tr>
<td>Karen Steinhardt</td>
<td>Children’s Psychological Medicine and Clinical Director Children’s</td>
</tr>
<tr>
<td>Sharon Buchanan</td>
<td>Matron Children’s</td>
</tr>
<tr>
<td>Rudy Ridwan</td>
<td>Consultant Paediatrics HGH</td>
</tr>
<tr>
<td>Shelley Segal</td>
<td>Consultant Paediatrics</td>
</tr>
<tr>
<td>Paul Gale</td>
<td>Operational Services Manager Children's</td>
</tr>
<tr>
<td>Nettie Dearmun</td>
<td>Head of Governance &amp; Nursing, Children’s &amp; Women’s Division</td>
</tr>
<tr>
<td>Zoe Butler</td>
<td>Senior Staff Nurse Children’s Ward HGH</td>
</tr>
<tr>
<td>Karen Clarke</td>
<td>Consultant Obstetric Anaesthetian HGH</td>
</tr>
<tr>
<td>Michael Yousif</td>
<td>Consultant Psychological Medicine</td>
</tr>
</tbody>
</table>

### Urgent and Emergency Care

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Price</td>
<td>Consultant Geratology and Divisional Director Medicine, Rehabilitation &amp; Cardiac Division</td>
</tr>
<tr>
<td>Sudhir Singh</td>
<td>Consultant Geratology and Clinical Director Acute Medicine &amp; Rehabilitation</td>
</tr>
<tr>
<td>Michael Sharpe</td>
<td>Professor of Psychological Medicine</td>
</tr>
<tr>
<td>Graham Walker</td>
<td>Consultant Anaesthesia</td>
</tr>
<tr>
<td>Andrew Carter</td>
<td>Divisional Nurse Neurosciences, Orthopaedics, Trauma &amp; Specialist Surgery Division</td>
</tr>
<tr>
<td>Kathleen Simcock</td>
<td>General Manager Medicine Rehabilitation &amp; Cardiac Division</td>
</tr>
<tr>
<td>James Ray</td>
<td>Consultant Emergency Medicine</td>
</tr>
<tr>
<td>Michelle Brock</td>
<td>Deputy Matron ED and EAU HGH</td>
</tr>
<tr>
<td>Matt Holdaway</td>
<td>Matron and Clinical Director Critical Care, Pre-operative Assessment, Pain Service and Resuscitation</td>
</tr>
<tr>
<td>Claire Smith</td>
<td>Matron Medicine HGH</td>
</tr>
<tr>
<td>Lily O’Connor</td>
<td>Head of Nursing &amp; Governance Medicine, Rehabilitation &amp; Cardiac Division</td>
</tr>
<tr>
<td>Luisa Goddard</td>
<td>Matron Acute Medicine</td>
</tr>
<tr>
<td>Louise Garrett</td>
<td>Ward Manager, F Ward Trauma, HGH</td>
</tr>
<tr>
<td>Neil Stewart</td>
<td>Consultant Physician</td>
</tr>
<tr>
<td>Mike Ward</td>
<td>Consultant Physician and Clinical Lead for AGM HGH (<a href="mailto:simon.ward@ouh.nhs.uk">simon.ward@ouh.nhs.uk</a>)</td>
</tr>
<tr>
<td>Jonathan Marshall</td>
<td>Consultant Physician</td>
</tr>
<tr>
<td>Tony Ellis</td>
<td>Consultant Physician</td>
</tr>
<tr>
<td>Paul Campbell</td>
<td>Principal Scientist Genetics</td>
</tr>
<tr>
<td>Bart Sheehan</td>
<td>Consultant Psychological Medicine</td>
</tr>
<tr>
<td>Geza Kordas</td>
<td>Locum Consultant Trauma Surgery HGH</td>
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</tbody>
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### Planned and Diagnostic
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Suzie Anthony</td>
<td>Consultant Radiology and Clinical Director Radiology &amp; Imaging</td>
</tr>
<tr>
<td>Fiona MacLeod</td>
<td>Consultant Radiology HGH</td>
</tr>
<tr>
<td>Derek Roskell</td>
<td>Clinical Director Pathology &amp; Laboratories</td>
</tr>
<tr>
<td>David Coleman</td>
<td>Consultant Plastic &amp; Reconstructive Surgery and Clinical Director Specialist Surgery</td>
</tr>
<tr>
<td>Greg Sadler</td>
<td>Consultant Endocrine and General Surgery and Clinical Director Surgery</td>
</tr>
<tr>
<td>Toni Mackay</td>
<td>Operational Service Manager Radiology, Pathology &amp; Laboratories</td>
</tr>
<tr>
<td>Sara Randall</td>
<td>Deputy Director of Clinical Services</td>
</tr>
<tr>
<td>Jon Westbrook</td>
<td>Consultant Anaesthetist and Divisional Director Neurosciences, Orthopaedics, Trauma and Specialist Surgery Division</td>
</tr>
<tr>
<td>Anita MacQueen</td>
<td>Matron Surgery</td>
</tr>
<tr>
<td>James Owen</td>
<td>Consultant Trauma &amp; Orthopaedics</td>
</tr>
<tr>
<td>Simon Chamberlain</td>
<td>Consultant Anaesthetist</td>
</tr>
<tr>
<td>Ben Wright</td>
<td>Operational Service Manager Gastroenterology, Endoscopy &amp; Churchill Theatres</td>
</tr>
<tr>
<td>James East</td>
<td>Consultant Gastroenterologist</td>
</tr>
<tr>
<td>Rainer Buhler</td>
<td>General Manager Surgery &amp; Oncology Division</td>
</tr>
<tr>
<td>Mark Sullivan</td>
<td>Consultant Urology and Clinical Director Renal, Transplant &amp; Urology</td>
</tr>
<tr>
<td>Julia Wood</td>
<td>Matron Gastroenterology, Endoscopy &amp; Churchill Theatres</td>
</tr>
<tr>
<td>Zehanah Izmeth</td>
<td>Consultant Psychological Medicine</td>
</tr>
<tr>
<td><strong>Oversight Group</strong></td>
<td></td>
</tr>
<tr>
<td>Andrew Stevens *</td>
<td>Director of Planning &amp; Information</td>
</tr>
<tr>
<td>Chandi Ratnatunga *</td>
<td>Associate Director of Partnerships &amp; Networks</td>
</tr>
<tr>
<td>Paul Brennan *</td>
<td>Director of Clinical Services</td>
</tr>
<tr>
<td>Bruno Holthof</td>
<td>Chief Executive</td>
</tr>
<tr>
<td>Clara Chen *</td>
<td>McKinsey</td>
</tr>
<tr>
<td>Kristin-Anne Rutter*</td>
<td>McKinsey</td>
</tr>
</tbody>
</table>
## Appendix 2: Oxfordshire Transformation - OUH Communications and Engagement log (20.09.16)

<table>
<thead>
<tr>
<th>Channels</th>
<th>Internal comms</th>
<th>External comms</th>
<th>Internal comms</th>
<th>External/ stakeholder comms</th>
<th>Informal engagement</th>
</tr>
</thead>
</table>
**OUH Trust Board** (C/Ex report) - 9 March, 11 May, 13 July, Sept 2016  
**GP Bulletin** - April, June 2016  
**Stakeholder e-news** - April, July 2016.  
**Membership news** - April, June, July, August 2016                                                                 | Intranet blog  
**Staff e-news** - April, July, Sept 2016  
**Stakeholder e-news** - April, July 2016  
**Membership news** – April, June, July, August 2016  
**Website** – regular news updates  
**Survey Monkey** – sent directly to membership in Banbury area; and available on Trust website.                                                                 | **Staff e-news** - Jan, April, July, Sept, 2016  
**OUH Trust board** (C/Ex report) - 13 Jan, 11 May, 13 July, Sept 2016  
**GP bulletin** - Feb, June, Aug 2016  
**Stakeholder e-news** - Feb, April, July, 2016  
**Membership news** – April, June, July, August 2016  
**Website** – regular news updates                                                                 |
| **Engagement events/activities** | **OUH clinical workshops** – 11 February and 24 February.  
All staff briefing at JR/ Churchill/ NOC – 8 June  
Various OUH clinical reference group meetings.  
10 Aug – senior manager briefing  
23 February – North Oxfordshire Locality Group (GPs)  
8 March – CPN  
22 March – North Oxfordshire Locality Forum Public Meeting  
12 May - CPN workshop  
27 May – Director update at South Warwicks NHS FT.  
9 June – CPN workshop  
14 June – CPN meeting, and NOLG Steering Group.  
16 June – meeting with Victoria Prentis MP  
21 June – NOLG meeting  
7 July – Director update at Northampton General Hospital NHS Trust.                                                                 | **All Staff meeting at Horton** – 3 March 2016  
Staff meeting with Midwives – 3 June.  
All staff meeting at Horton – 28 June.  
Horton staff drop-in session – 11 July  
Staff meeting re maternity – 18 July.  
Horton staff drop- in session 18 August                                                                 | **20 July** – stakeholder/PPI event at Kassam stadium.  
**28 July** – stakeholder/PPI event at Kassam stadium.  
**6 June** - Stakeholder / PPI engagement event at Kassam Stadium.  
**30 June** – HOSC  
**12 July to 4 Aug** – community engagement events x6.  
28 July – OUH Governors’ seminar on transformation and Horton.  
28 July – stakeholder/PPI event at Kassam stadium.                                                                 |
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 September</td>
<td>OUH update on Strategic Review.</td>
</tr>
<tr>
<td>28 September</td>
<td>All staff update on strategic review.</td>
</tr>
<tr>
<td>11 July</td>
<td>CPN workshop</td>
</tr>
<tr>
<td>18 July</td>
<td>Cherwell District Council meeting re Horton emerging options</td>
</tr>
<tr>
<td>20 July</td>
<td>CPN/workshop on maternity</td>
</tr>
<tr>
<td>26 July</td>
<td>Dr Holthof telephone conversation with Victoria Prentis MP</td>
</tr>
<tr>
<td>16 August</td>
<td>Nox locality GPs workshop at Horton.</td>
</tr>
<tr>
<td>24 August</td>
<td>CPN workshop re maternity</td>
</tr>
<tr>
<td>25 August</td>
<td>Public Meeting, St Mary’s Church.</td>
</tr>
<tr>
<td>23 June</td>
<td>HSJ interview with Bruno Holthof. Article appeared 13 July re DToC and ambulatory care.</td>
</tr>
<tr>
<td>23 July</td>
<td>Interview Paul Brennan on success of DToC initiative (BBC Radio Oxford and Oxford Mail)</td>
</tr>
<tr>
<td>10 March</td>
<td>Horton revamp (Banbury G)</td>
</tr>
<tr>
<td>17 March</td>
<td>Share your views (BG)</td>
</tr>
<tr>
<td>24 March</td>
<td>New vision for Horton (BG)</td>
</tr>
<tr>
<td>9 June</td>
<td>Horton services threat (BG – focus on maternity)</td>
</tr>
<tr>
<td>16 June</td>
<td>New threat to A&amp;E (BG)</td>
</tr>
<tr>
<td>30 June</td>
<td>GPs in dark over plans (BG)</td>
</tr>
<tr>
<td>14 July</td>
<td>Oak Ward changes (BG, Oxfordshire Guardian, BBC, Ox Mail, Banbury sound)</td>
</tr>
<tr>
<td>19 July</td>
<td>Oak Ward closures (BBC)</td>
</tr>
<tr>
<td>6 June</td>
<td>Launch of the Big Health and Care conversation - interviews with Stuart Bell Joe McManners, Bruno Holthof (BBC TV South, Radio Oxford, Oxford Mail)</td>
</tr>
<tr>
<td></td>
<td>‘Health shake-up and £200m gap’ (Oxford Mail)</td>
</tr>
<tr>
<td>13 July</td>
<td>Transformation roadshow in Banbury (BBC Radio Oxford, BG)</td>
</tr>
<tr>
<td>19 July</td>
<td>General info on transformation programme following Wantage roadshow (BBC South TV, That’s Oxford TV)</td>
</tr>
<tr>
<td>23 July</td>
<td>Oxfordshire engagement roadshows (Ox Mail)</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
</tr>
<tr>
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<tr>
<td>21 July</td>
<td>beds close at Horton, more out of hospital care (BG)</td>
</tr>
<tr>
<td>22 July</td>
<td>maternity downgrade (BG)</td>
</tr>
<tr>
<td>25 July</td>
<td>maternity and staff shortages (Ox Mail, BBC Radio Oxford)</td>
</tr>
<tr>
<td>4 Aug</td>
<td>coverage of 30 July protest outside Horton (Banbury Guardian, Oxfordshire Guardian)</td>
</tr>
<tr>
<td>10 Aug</td>
<td>KTHG survey of patients (BG)</td>
</tr>
<tr>
<td>13 Aug</td>
<td>OUH CEO interview re maternity contingency plan (Ox Mail, BBC, BG)</td>
</tr>
<tr>
<td>15 Sept</td>
<td>OUH CEO open letter to Banbury Guardian.</td>
</tr>
</tbody>
</table>