

# Proposals for the future location of very specialist cancer treatment services for children

## Pre-consultation Business Case





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## Glossary of Terms

AHP	Allied Health Professional
Ambulatory Care	Ambulatory care means services provided as an outpatient, where you do not need to stay in hospital.
BAME	Black, Asian and Minority Ethnic
BMT	Bone Marrow Transplant
Brachytherapy	Brachytherapy is a form of radiotherapy where a sealed radioactive source is placed inside or next to the area requiring treatment. The radioactive source is inserted and transported inside the body using a computer controlled wire driven through small flexible tubes. The proximity of the radioactive source to the treatment site means a high dose of radiation can be delivered whilst limiting the dose to the surrounding tissue.
CAP	Clinical Advisory Panel
CAR-T	Chimeric Antigen Receptor T-cell
CCODN	Children's Cancer Operational Delivery Network
CDEL	Capital Departmental Expenditure Limit
CEO	Chief Executive Officer
CIA	Comprehensive Investment Appraisal
CNS	Central Nervous System
COSoP	Cabinet Office Statement of Practice
CPD	Continuous Professional Development
CQC	Care Quality Commission
CRG	Clinical Reference Group
CRUK	Cancer Research UK

CTIMPS	Clinical Trials of Investigational Medicinal Products
CYP	Children and Young People
Day Case	A patient admitted electively during the course of a day with the intention of receiving care who does not require the use of a Hospital Bed overnight and who returns home as scheduled
ICD (Diagnosis Code)	ICD-10 CODE is the International Classification of Diseases (ICD) 10th Revision code which is used to identify the diagnosis, care and treatment of a patient
DMBC	Decision-Making Business Case
ECMC	Experimental Cancer Medicine Centre
EHIA	Equalities and Health Inequalities Impact Assessment
ELCH	Evelina London Children's Hospital
Elective Admission	A patient admitted electively with the expectation that they will remain in hospital for at least one night, including a patient admitted with this intention who leaves hospital for any reason without staying overnight
EoL	End of Life
FBC	Full Business Case
GOSH	Great Ormond Street Hospital for Children NHS Foundation Trust
GSTT	Guy's and St Thomas' NHS Foundation Trust
HDU	High Dependency Unit
HIAs	Health Inequalities Impact Assessments
HMDS	Haematological Malignancy Diagnostic Service
HRG	Healthcare Resource Groups (HRGs) are the 'currency' of Payment by Results (PbR) for admitted patient care, outpatient procedures and A&E attendances
ICB	Integrated Care Board

ICR	The Institute for Cancer Research
ICS	Integrated Care System
JACIE	Joint Accreditation Committee ISCT-Europe & EBMT
JOSC	Joint Overview and Scrutiny Committee
KCH or 'King's'	King's College Hospital
KCL	King's College London
LA	Local Authority
Mean	The sum of a collection of numbers divided by the number of numbers in the collection.
Median	The "middle" value of a data set, which separates lower and higher values into two groups. For example, in the data set {1, 3, 3, 6, 7, 8, 9}, the median is 6, the fourth number in the sample.
MEP	Mechanical, electrical and plumbing
MDT	Multidisciplinary Team
Molecular Radiotherapy	Molecular radiotherapy may also sometimes be referred to as radionuclide or radioisotope therapy. MRT is a form of radiotherapy which utilises a radioactive medication. This can be administered orally (through the mouth) or intravenously (through the veins), directly targeting tumour tissue, wherever it is in the body
MRI	Magnetic Resonance Imaging
MMC	Modern Methods of Construction
Neuro-Oncology	Inpatient care for Brain, Spinal and Central Nervous System cancers
NHSBT	NHS Blood and Transplant
NHSE	NHS England
NIHR	National Institute for Health and Care Research



Non-Elective	Non-elective admissions are unplanned, emergency admissions
OBC	Outline Business Case
OPCS	The OPCS Classification of Interventions and Procedures (OPCS-4) is a statistical classification of interventions and procedures undertaken in the National Health Service (NHS) reflecting current clinical practice
OPD	Operating Department Practitioner
OSC	Overview and Scrutiny Committee
OAWG	Options Appraisal Working Group
PA-DDU	Paediatric and Adolescent Oncology Drug Development Unit
PCBC	Pre-Consultation Business Case
PDC	Public Dividend Capital
PFI	Private Finance Initiative
PICCs	Peripherally Inserted Central Catheters
PICU	Paediatric Intensive Care Unit
POEM	Paediatric Oncology Experimental Medicine
POSCUs	Paediatric Oncology Shared Care Units
PSED	Public Sector Equality Duty
PTC	Principal Treatment Centre
REF	Research Excellence Framework
RIBA	Royal Institute of British Architects
RMH or 'The Royal Marsden'	The Royal Marsden NHS Foundation Trust

RNOH	Royal National Orthopaedic Hospital
SE London	South East London
SLA	Service Level Agreement
SOC	Strategic Outline Case
SOCNI	Statement of Comprehensive Net Income
Spell (admitted patient care)	A stay in hospital from admission to discharge is called a 'spell' and can be made up of one or more episodes of care.
Specialty Code	Specialties are divisions of clinical work which may be defined by body systems.  Each consultant should be assigned a specialty by the organisation which the consultant is contracted
St George's	St George's University Hospitals NHS Foundation Trust
St George's Hospital	St George's University Hospitals NHS Foundation Trust
SRS/SRT	Stereotatic Radiosurgery and Stereotactic Radation Therapy – forms of radiation that can precisely target high-dose radiation.
STPN	South Thames Paediatric Network
StR	Specialty Registrar
STRS	South Thames Retrieval Service
Surgery case load	Inpatient activity which has required the use of theatre time.
SUS	The Secondary Uses Service (SUS) is the single, comprehensive repository for healthcare data in England
SW London	South West London
TACRI	Translational and Clinical Research Institute
TFC	The Treatment Function Code (TFC) is the service under which the patient will be or is treated.

TYA	Teenage and Young Adults
UCLH	University College London Hospitals NHS Foundation Trust
UKONS	UK Oncology Nursing Society
ULEZ	Ultra-Low Emission Zone
VfM	Value for Money
WTE	Whole Time Equivalent

## Foreword

When a child is ill with cancer it is hugely stressful for them, their parents and families. As the NHS England leaders for London and South East regions, we want children to get the best care in the best way.

This is why we are working together to make changes to where very specialist cancer treatment services are provided for children living in Brighton and Hove, East Sussex, Kent, Medway, south London and much of Surrey.

The current Principal Treatment Centre is provided by a partnership between The Royal Marsden NHS Foundation Trust and St George's University Hospitals NHS Foundation Trust. It is a safe, high-quality service but, as a specialist cancer hospital, The Royal Marsden does not have a Level 3 children's intensive care unit that can give life support or other specialist children's services on site. These are always on sites with lots of other specialist services for children. A small number of very sick children with cancer are safely transferred between The Royal Marsden and St George's Hospital every year.

The [national service specification for Principal Treatment Centres](#) which was approved by NHS England in 2021 after being developed and tested with patients, families, staff and charities, requires very specialist cancer treatment services for children – such as those provided by The Royal Marsden – to be on the same site as a level 3 intensive care unit.

Reasons for this requirement – which is mandatory – include to eliminate the added underlying risks created by the current split site arrangement and reduce the stress on patients, parents and the staff involved of transferring very sick children with cancer for intensive care. Under current arrangements, some children undergo the risk and disruption of hospital transfer as a precaution but do not go on to need intensive care. There is a need to improve children and families' experience when patients require intensive care and other specialist services. Furthermore, although it offers a wide range of innovative treatments, the current Principal Treatment Centre is excluded from giving a specific type of new treatment, and others expected in the future.

It is not possible to introduce a children's intensive care service at The Royal Marsden, given the specialist workforce, minimum volume of patients that would need to be seen, and support services that would be needed. We are therefore planning to move the very specialist cancer treatment services for children currently provided by The Royal Marsden to a hospital in south London which already has a children's intensive care unit and would have all other required specialist children's services on site once the move is complete. Conventional radiotherapy services would be provided at University College Hospital.

This document has been prepared in the context of there being two NHS Trusts that want to provide the future Principal Treatment Centre for children with cancer who live in Brighton and Hove, East Sussex, Kent, Medway, south London and most of Surrey. Both options meet the programme's hurdle criteria, meaning both are viable. This reflects the fact that a future Principal Treatment Centre at either Evelina London Children's Hospital or St

George's Hospital, with conventional radiotherapy services at University College Hospital, would comply fully with the national service specification once The Royal Marsden service moved across and all other aspects of the relevant proposal were implemented.

Wherever the proposed future centre is, our aim is to keep all the strengths of the current service and build on them. We are very aware of the ground-breaking research, high quality care and good access to clinical trials offered at The Royal Marsden's family-friendly centre for children and young people, alongside the Institute of Cancer Research. All are very important to children with cancer, their families, and the staff who work in the service.

With the experience and expertise of specialist children's cancer teams on the same site as children's intensive care specialists, surgical teams and other children's specialties, the proposed future Principal Treatment Centre would meet the national service specification with all the benefits that brings, minimise risk to children, and be capable of giving a full range of innovative treatments.

Our vision for the proposed future centre is that it will:

- build on all the strengths of the existing service
- give best quality care and achieve world-class outcomes for children with cancer for decades to come.

We recognise that, as with any proposed service reconfiguration, there are risks associated with making changes to the Principal Treatment Centre that we need to manage, and planning for that is already underway. We plan to make sure that at least as much focus is given to implementing the proposed changes as we have given to developing the proposals in this current phase of work. The implementation phase will be critical to ensuring that our vision is realised.

**NHS England – London Region**

**NHS England – South East Region**

## Note about this document

This pre-consultation business case is a technical and analytical document that sets out the information necessary for the governing body NHS England to make a decision as to whether to proceed to consultation and on which options. However, NHS England also appreciates that members of the joint overview and scrutiny committees formally being consulted with, in accordance with Section 244 of the National Health Service Act 2006 (as amended by the Health and Social Care Act 2012 and Health and Care Act 2022) and The Local Authority (Public Health, Health and Wellbeing Boards and Health Scrutiny) Regulations 2013, as well as members of the public, including families of patients, partners and professionals, and other stakeholders may read this document to expand their understanding of the background to the public consultation.

To make this document easier to follow, we have used an alphabetical approach to the presentation of both the list of places in the catchment area of the Principal Treatment Centre, and to information about the two options. However, we do not refer to the current service in alphabetical order. There is a glossary to assist with complex terminology.

When we talk about cancer surgery in this document, unless specified otherwise, we are not referring to bone, eye or liver cancer surgery or cancer-related neurosurgery which will continue to be provided at specific hospitals, as happens now.

This pre-consultation business case is about the location of the proposed future Principal Treatment Centre for children's cancer services. This move is required by the national service specification for Principal Treatment Centres, which has been approved and must now be enacted.

## Executive Summary

This pre-consultation business case sets out in detail the proposals for ensuring the children's cancer Principal Treatment Centre for Brighton and Hove, East Sussex, Kent, Medway, south London and most of Surrey complies with national requirements as set out in the 2021 specification for children's cancer services<sup>1</sup>.

It shows how and why NHS England (London and South East regions) have arrived at the decision to move very specialist cancer treatment services for children, which are at The Royal Marsden NHS Foundation Trust as part of the current Principal Treatment Centre, to be on the same site as specialist children's services, including intensive care. This will create what we refer to throughout this document as the proposed future Principal Treatment Centre. It also shows how we have arrived at the potential options for the future centre.

It sets out how the proposed changes are expected to benefit the children, almost all aged one to 15, who use the Principal Treatment Centre, their families and carers, and what they mean for the staff who provide the service, as well as risks that will be considered during the implementation phase.

It outlines the detailed proposals provided by the two Trusts which are putting forward their case to provide the proposed future Principal Treatment Centre. It also outlines how the options were evaluated using evaluation criteria and an assessment and scoring process that involved significant amounts of expert independent input; and how, on this basis, we have identified a preferred option.

It sets out how we plan to carry out the Public Consultation, how children, families, clinicians, and other key stakeholders have shaped the process so far and will have the opportunity to share their views during the consultation. It outlines the findings of our equality and health inequalities impact assessment process which is looking at the differential impacts of the proposed move on different groups of children in the Principal Treatment Centre catchment area. It also sets out our governance processes.

### Background to this proposed reconfiguration

NHS England has undertaken several national service reviews, working and consulting with professionals, patients, families and the public, to ensure children can get best quality care. As part of this work, in January 2020 the national NHS England Board received a report by Professor Sir Mike Richards (a consultant medical oncologist and former National Cancer Director) which stated that in future all Principal Treatment Centres must be co-located with a paediatric intensive care unit and other specialist children's services. The reasons for this are set out in Section 2 Case for change in this pre-consultation business case.

Following the Richards report, a new service specification for Principal Treatment Centres was developed with professionals, patients, families and the public, setting out all the

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<sup>1</sup> [NHS England » Children's cancer services: Principal treatment centres service specification](#)

different elements that every Principal Treatment Centre must provide. It was approved by NHS England and published in November 2021<sup>2</sup>. The new service specification includes a requirement for Principal Treatment Centres to be on the same site as paediatric intensive care and specific types of paediatric surgery, along with radiology, haematology, paediatric anaesthetics and other specialist services, with a range of further specialist children's services which must be readily available too, if they are not on the same site.

Given that The Royal Marsden is a specialist cancer hospital, not a children's hospital, although the services which the current Principal Treatment Centre provides are safe and high quality, they do not and cannot comply with this specification. NHS England London was tasked by the NHS England Board with identifying and commissioning a compliant option for the proposed future Principal Treatment Centre for south London and much of the south east.

The Principal Treatment Centre services provided at The Royal Marsden in partnership with St George's Hospital are commissioned by NHS England London's specialised commissioning team. This team alongside NHS England South East's specialised commissioning team has led on this programme to develop this pre-consultation business case. More than 60% of children who use the services live in the south east.

### **Aims of this proposed reconfiguration**

The aims of this proposed reconfiguration are to:

- achieve full compliance with the national service specification for Principal Treatment Centres, ensuring that children who use this service are treated by a compliant Principal Treatment Centre that is on the same site as the specialist children's services that must be delivered on site at every Principal Treatment Centre
- build on all the strengths of the current service – high quality care by expert staff, good access to clinical trials, a family-friendly centre for children and young people and ground-breaking research working very closely with the Institute of Cancer Research. These things are very important to children with cancer, their families, and the staff who work in the service
- create a centre that gives best quality care and achieves world-class outcomes for children with cancer for decades to come

### **Identifying the shortlist**

As set out in this pre-consultation business case, the team first drew up a long list of all possible solutions to deliver the new model of care required by the service specification. Through a process of applying fixed points and hurdle criteria (see section 4.2 Long list and

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<sup>2</sup> [NHS England » Children's cancer services: Principal treatment centres service specification](#)



appraisal against fixed points and hurdle criteria) we identified one viable solution and two ways of delivering it. Under both options, conventional radiotherapy services for the future children's cancer centre (instead of some, as now) would be provided by University College London Hospitals NHS Foundation Trust.

The appraisal identified one viable solution for our new model of care from the long list of all possible solutions - a Principal Treatment Centre at an existing specialist paediatric provider in south London, with an on-site paediatric intensive care unit and which will have all the specialist children's services required by the national service specification once the reconfiguration is complete. It must also want to provide the Principal Treatment Centre.

Further analysis showed there are two possible ways to provide this in south London which are both set out in this pre-consultation business case. These are what we are describing as our two options.

Engagement with Trusts which could provide the Principal Treatment Centre established that two of them wanted to be considered to provide the proposed future Principal Treatment Centre. They are:

- Guy's and St Thomas' NHS Foundation Trust (Guy's and St Thomas') which runs Evelina London Children's Hospital (Evelina London); and,
- St George's University Hospitals NHS Foundation Trust (St George's) which is part of St George's, Epsom and St Helier Hospital Group and which runs St George's Hospital.

If Evelina London became the proposed future Principal Treatment Centre, it would have all the specialist children's cancer services currently at The Royal Marsden (except conventional radiotherapy) and the specialist children's cancer services currently provided for the Principal Treatment Centre at St George's Hospital alongside its well-established children's intensive care unit and other specialist children's services.

If St George's Hospital became the proposed future Principal Treatment Centre, it would have all the specialist children's cancer services currently at The Royal Marsden (except conventional radiotherapy) alongside its well-established children's intensive care unit and other specialist children's services, including the services it already provides for the Principal Treatment Centre.

Under both options, St George's Hospital would continue to provide a children's cancer shared unit for local children, and its neurosurgery services. We propose that, under both options, all radiotherapy services for the future children's cancer centre (instead of some, as now) would be provided by University College London Hospitals NHS Foundation Trust.

Regardless of which becomes the future Principal Treatment Centre, there are a number of other services which are not part of this consultation and which will continue to be provided

by different hospitals because they have specialist expertise (see section 3.3 Essential clinical co-dependencies – Aligned Clinical Services).

The clinical model for the new service, the Trusts' proposals, how they were evaluated by expert panels, and other aspects of the proposed reconfiguration, including potential impacts on other services, are explored in this pre-consultation business case.

Both options described in this business case met the hurdle criteria (access, supplier capability, achievability, timeline to delivery, and capital and revenue affordability and deliverability) meaning both are viable. This reflects the fact that a Principal Treatment Centre at either Evelina London Children's Hospital or St George's Hospital would comply fully with the national service specification once The Royal Marsden service moved across and all other aspects of the relevant proposal were implemented.

### **Assessment and scoring process**

To appraise the options, we undertook an evaluation and scoring process, drawing on the expert knowledge and experience of clinicians, parents, charities, staff, managers and research leads, including independent experts in children's cancer care and research.

Our advisory working groups and other experts supported us to develop evaluation criteria which identified:

- the domains (key areas) that are most important for the future service
- the specific aspects of those domains we should focus on as sub-criteria to help us assess the two options in detail.

Through a robust process involving a wide range of stakeholders, the scores were weighted to reflect the relative importance to children's cancer care of the different domains and sub-criteria.

All this information was shared with the Trusts before they wrote their proposals. Once the proposals were received, the four different domains – clinical services, patient and carer experience, enabling factors and research – were each assessed by a different expert panel with in-depth knowledge and experience in that area. (Some of the elements, such as staff and patient travel times, were rated using measurable data, not scored by panel members). This was a careful and rigorous assessment as part of our pre-consultation process, to enable us to have a clear understanding of the options we were taking forward for consultation and be able to present information about them for this pre-consultation business case.

In this pre-consultation assessment, although both options scored highly, the evaluation panels scored Evelina London's proposal higher overall (80.51% as compared to 75.27% for St George's) and for three of the four domains: clinical services, research and enabling factors.

- Evelina scored higher on three of the four sub-criteria for the clinical services domain and on all three sub-criteria for the research domain. St George's scored higher on two of the five sub-criteria for patient and carer experience. Other scores were the same or very similar.
- Specific areas where Evelina's proposal scored higher included its experience in running complex paediatric clinical networks across the Principal Treatment Centre catchment area (which would help it provide leadership to the children's cancer network and paediatric oncology shared care units); for the number of services that must be 'readily available' that it would have on site; its arrangements for children transitioning to teenage and young adult services; its organisational support for staff; and its wide-ranging expertise and experience in children's research and adult cancer research, along with the opportunities it offers for the continuation and further development of children's cancer research in partnership with the Institute of Cancer Research.
- Specific areas where St George's proposal scored higher included the privacy and dignity for patients afforded by its planned facilities; patient travel times, particularly by road, where fewer people would see an increase in travel time of 15 minutes or more than if the proposed future Principal Treatment Centre were to be at Evelina London; and the move having a smaller impact on staff, specifically staff travel times (by public transport) and training.

### **Preferred option**

NHS England (London and South East regions) are seeking to ensure that the proposed future Principal Treatment Centre gives best quality care and achieves world-class outcomes for children with cancer for decades to come.

Based on the evidence provided by the evaluation of the proposals (submitted to NHS England in November 2022) in which the Guy's and St Thomas's proposal on behalf of Evelina London Children's Hospital scored higher, Evelina London is our preferred option at this stage in the process. In presenting a preferred option, we are making it clear what we, as commissioners, think about the options based on the evidence we currently have.

Having said this, we want to make it very clear that we are undertaking consultation with an open mind. Both options scored highly, and we will consult on both options for the proposed centre and only make our decision on the location of the proposed future Principal Treatment Centre (including the proposed move of conventional radiotherapy services) after considering views and additional information that come forward during the public consultation. There may also be other solutions that meet our case for change that we haven't identified and should consider. We will do so if viable alternatives are suggested.

We will take account of all relevant factors, including the evaluation criteria. The evaluation scoring will form one part of the information that shapes the final decision on the future location of the proposed Principal Treatment Centre in which the key question to be answered will be which option, Evelina London or St George's Hospital, will offer the best children's cancer care service once implemented and for the future. Under both options, all radiotherapy services for the future children's cancer centre (instead of some, as now) would be provided at University College Hospital, part of University College London Hospitals NHS Foundation Trust.

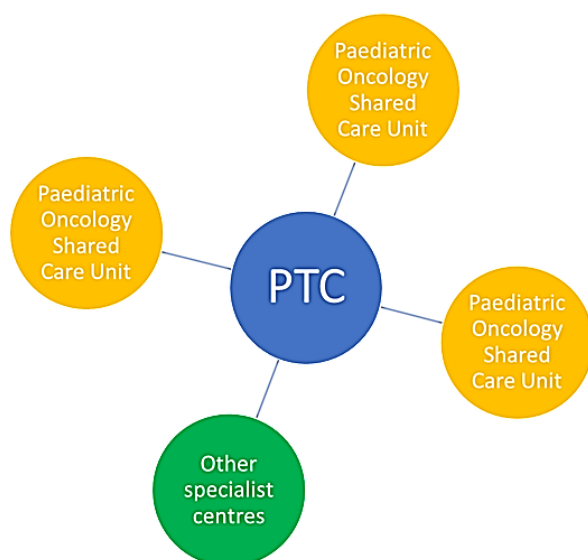
## 1. Introduction and background

NHS England is responsible for specifying the requirements for prescribed specialised services, like those provided by Principal Treatment Centres, to ensure they meet the required national and international clinical and other standards.

NHS England regions commission all specialised cancer services for children at 13 Principal Treatment Centres in England. The services undertake the diagnosis, management and follow-up of children with cancer aged 15 and under<sup>3</sup> and are based on the principle that care must be age-appropriate, safe, effective and delivered as locally as possible<sup>4</sup>.

Principal Treatment Centres are responsible for ensuring the provision of high-quality care through the effective coordination of integrated, disease specific pathways across different providers, known collectively as the Children's Cancer Operational Delivery Network. The Principal Treatment Centre typically hosts the Children's Cancer Operational Delivery Network. They work in partnership with paediatric oncology shared care units at specified hospitals across their catchment areas, as well as with cancer services that are provided at other specialist centres (if not provided by the Principal Treatment Centre), and with national services, to ensure children receive the right care at the right time and in the right place. Many children with cancer also receive care in their homes. This can be from staff or 'outreach' services from the Principal Treatment Centre, paediatric oncology shared care unit or staff from children's community nursing teams.

**Figure 1: Children's cancer services are provided by a number of different organisations**



<sup>3</sup> The care for young people aged 16 to 24 inclusive with cancer is provided by teenage and young adult cancer services, although the Children's Cancer Network – Principal Treatment Centres service specification recognises and accepts that age criteria may vary in different Children's Cancer Networks. All babies under one year old with cancer in England are treated at Great Ormond Street Hospital.

<sup>4</sup> <https://www.england.nhs.uk/wp-content/uploads/2021/11/1746-principal-treatment-centres-service-specification-.pdf>

This pre-consultation business case relates to the joint Principal Treatment Centre covering the formal catchment area of Brighton and Hove, East Sussex, Kent, Medway, south London, and most of Surrey<sup>5</sup>. We refer to this as “the catchment area” and “south London and much of the south east”. It brings together in one place the evidence amassed as part of planning service change. It sets out the context for what we are proposing, the case for change, the clinical model and benefits, a summary of how we reached the potential options and evaluated them, and the results of that process. It also outlines the part engagement has played in shaping the process to date, how we plan to carry out public consultation on the options, the financial assessment and approval processes we are following, and next steps after this consultation concludes, including decision-making, implementation, and risk management.

This introduction sets out the origins of our proposal, the aims of this pre-consultation business case, the geography and demography served by the Principal Treatment Centre, our strategic priorities, and an overview of children’s cancer services in England, and used by children with cancer living in south London and much of the south east.

## **1.1. Origins of our proposal**

Over the past 15 years, several national guidance documents and reports, and two reviews of services within London and the South East with relevance to the configuration of services for children with cancer<sup>6</sup>, have been published. These culminated in the review by Professor Sir Mike Richards which was commissioned by the Chief Executive of NHS England to assist its Board in the evaluation of responses to a consultation undertaken in summer 2019 relating to a new draft service specification for children’s cancers. Sir Mike was asked to consider whether or not co-location of a Principal Treatment Centre for children’s cancer with a Level 3 paediatric intensive care unit on the same site should be a mandatory requirement for an NHS England commissioned Principal Treatment Centre. His conclusion, set out in his report<sup>7</sup> which was discussed, considered and approved at the January 2020 NHS England Board meeting, was that it should be a mandatory requirement.

Following the January 2020 meeting, NHS England London, which commissions the Principal Treatment Centre for south London and much of the south east of England, was tasked by the NHS England Board with identifying and commissioning a compliant option for the future Principal Treatment Centre.

NHS England London region (in partnership with NHS England South East region) established a Programme Board, supported by clinical, managerial, finance and patient voice advisory groups, to set out a clinically viable, deliverable and affordable option for delivering a compliant service. The Programme Board commenced work in July 2020. The work of the programme has paused at points due to COVID-19; waiting for the publication of the national

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<sup>5</sup> Full definition in section 1.3 Geography and demography

<sup>6</sup> Improving Outcomes in Children and Young People with Cancer (NICE 2005); Commissioning Safe and Sustainable Specialised Paediatric Services (Department of Health 2008); South London Paediatric Oncology: NCAT review (2011); London Paediatric Oncology Review (2015); On the Right Course? (2018)

<sup>7</sup> [board-meeting-item-9-update-on-specialised-services-c-appendix-2.pdf \(england.nhs.uk\)](#)

service specification; and confirmation of capital to support the estates move required for compliance with the service specification. We are now ready to go to consultation on options for the future location of the Principal Treatment Centre for children with cancer who live in south London and much of south east England.

A formal reconfiguration process is required when proposing to move a significant service from one site to another to ensure all stakeholders have the opportunity to review, comment on and help shape the case for change, clinical model and proposals<sup>8</sup>.

## **1.2. Aims of this pre-consultation business case**

The aims of this pre-consultation business case are to:

- make the case for change to the current Principal Treatment Centre provided by the Royal Marsden NHS Foundation Trust and St George's University Hospitals NHS Foundation Trust
- set out the clinical model that will underpin the proposed future Principal Treatment Centre, showing how it aligns with national strategies and will deliver the NHS England service specification and other crucial aspects of delivery
- demonstrate how options to deliver the clinical model have been developed from a long list to a shortlist, with sufficient information to support a decision to consult on the short list of viable options
- show how stakeholders have been involved in informing, developing and evaluating the proposed change
- support meaningful consultation with local authorities including through the joint health overview and scrutiny committees
- facilitate public consultation with patients, families, staff, and other stakeholders
- give sufficient details on both the shortlisted options and the initial appraisal of them, undertaken by expert panels, to facilitate public consultation with patients, families, staff, and other stakeholders
- describe the expected impacts, risks and benefits of the proposed reconfiguration for service users
- demonstrate an effective approach to local public consultation, ensuring that Joint Health Overview and Scrutiny Committee members, patients, families, staff and other stakeholders have the opportunity to express their views and inform next steps

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<sup>8</sup> [NHS England » Planning, assuring and delivering service change for patients](#)



- demonstrate compliance with the Department of Health and Social Care's tests for service change, NHS England's bed closures test and the mayoral six tests for change in London.

### 1.3. Geography and demography

#### Geography

The Principal Treatment Centre which is the subject of this pre-consultation business case is commissioned to provide cancer care for children aged one to 15 who live in Brighton and Hove, East Sussex, Kent, Medway, south London, and most of Surrey, which is the area covered by the South Thames Children's Cancer Operational Delivery Network. There is flexibility about the age at which children with cancer move on to teenage and young adult services, depending on their needs.

The table below shows the areas included in the formal catchment area which accounts for approximately 85% of children who were inpatients at the Principal Treatment Centre in 2019/2020.

**Table 1: Local authorities whose patients use the Principal Treatment Centre based in South London**

Integrated Care Board (ICB)	Upper tier local authorities
Kent and Medway	Kent (county), Medway (unitary authority)
South East London	Boroughs: Bexley, Bromley, Greenwich, Lambeth, Lewisham, Southwark
South West London	Boroughs: Croydon, Kingston, Merton, Richmond, Sutton, Wandsworth
Surrey Heartlands	Surrey (county) – specifically the boroughs of Elmbridge, Epsom & Ewell, Guildford, Mole Valley, Reigate & Banstead, Runnymede, Spelthorne, Tandridge, Waverley, Woking
Sussex	Brighton and Hove (unitary authority), East Sussex (county).

The remaining 15% who come from outside the formal catchment area include children from the border areas. It should be noted that for any Principal Treatment Centre, children who live outside its defined catchment area can be treated there, and not all children with cancer who live in the catchment area will choose to attend it for their treatment.

For example, West Sussex is part of the formal catchment area for the Principal Treatment Centre at Southampton. The two children's cancer shared care units in West Sussex (in



Worthing and Chichester) come under the Southampton centre. For this reason, West Sussex is not included in the definition of the catchment area.

However, children in the boroughs of Crawley, Horsham and Mid Sussex (which are in West Sussex), live close to a shared care unit in Redhill, Surrey which comes under the Principal Treatment Centre for south London and much of the south east. Care for children with cancer who go to Redhill for their treatment is led and coordinated by The Royal Marsden NHS Foundation Trust and St George's NHS Foundation Trust.

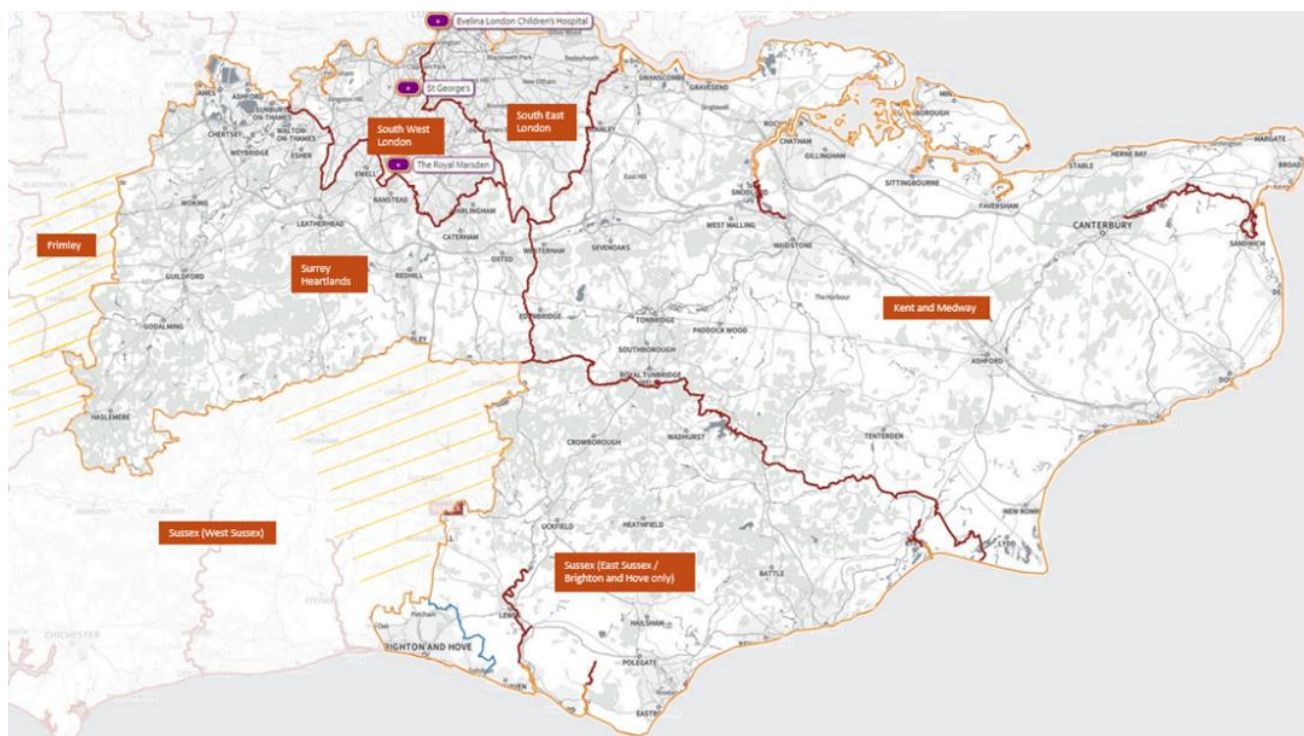
Meanwhile, the shared care unit at Frimley Park Hospital in Surrey Heath comes under the Principal Treatment Centre at Southampton (and has done since 2019/20). This means care for children with cancer who go to Frimley Park, including children from Surrey Heath and Farnham, is led and coordinated by the Principal Treatment Centre at Southampton. However, some children with cancer who live in these areas choose to go to the Principal Treatment Centre currently provided by The Royal Marsden and St George's. Some children from further afield also choose to use the Principal Treatment Centre in south London.

All the children who were patients of the current Principal Treatment Centre for south London and much of the south east in 2019/20 were included in the analysis for this consultation which was assessed and scored as part of the options appraisal. It looked at use of services and modelled travel times for actual patients from 2019/20.

Additionally, travel times from Crawley, Horsham and Mid Sussex as well as from the formal catchment area were modelled as part of the Integrated Impact Assessment, to understand the impact of the proposed reconfiguration on children and families living in this part of West Sussex.

In the map below, the formal catchment area for the current and proposed future Principal Treatment Centre is outlined in orange. The hatched section represents the border areas of West Sussex, Surrey and Hampshire.

**Figure 2: Catchment area of the Principal Treatment Centre**



## **Epidemiology**

Appendix 2– Equalities Profile Report for the Principal Treatment Centre catchment area provides information on the epidemiology of children’s cancer, evidence relating to the risk of cancer within different groups and describes the population living within the Principal Treatment Centre’s catchment area in terms of those with protected characteristics or other vulnerabilities.

Childhood cancer is relatively rare. In England, on average, 1,400 children aged 15 and under are diagnosed with cancer every year. This is a rate of 140 new cases per million children per year<sup>9</sup>.

There is a slightly higher incidence of cancer in boys than girls: the cumulative risk of being diagnosed with cancer in the first 15 years of life was calculated by the 2021 Public Health England report referenced below as one in 422 for males and one in 488 for females.

For both boys and girls, incidence is highest in the first five years, falling between the ages of five and nine before rising again between 10 and 14.

The latest data on five-year survival rates shows that survival was 84% for those diagnosed in 2012 to 2016 but survival rates differ by cancer type. The latest data on incidence (new diagnoses) for 2015 to 2019 shows that leukaemia is the most common type of cancer

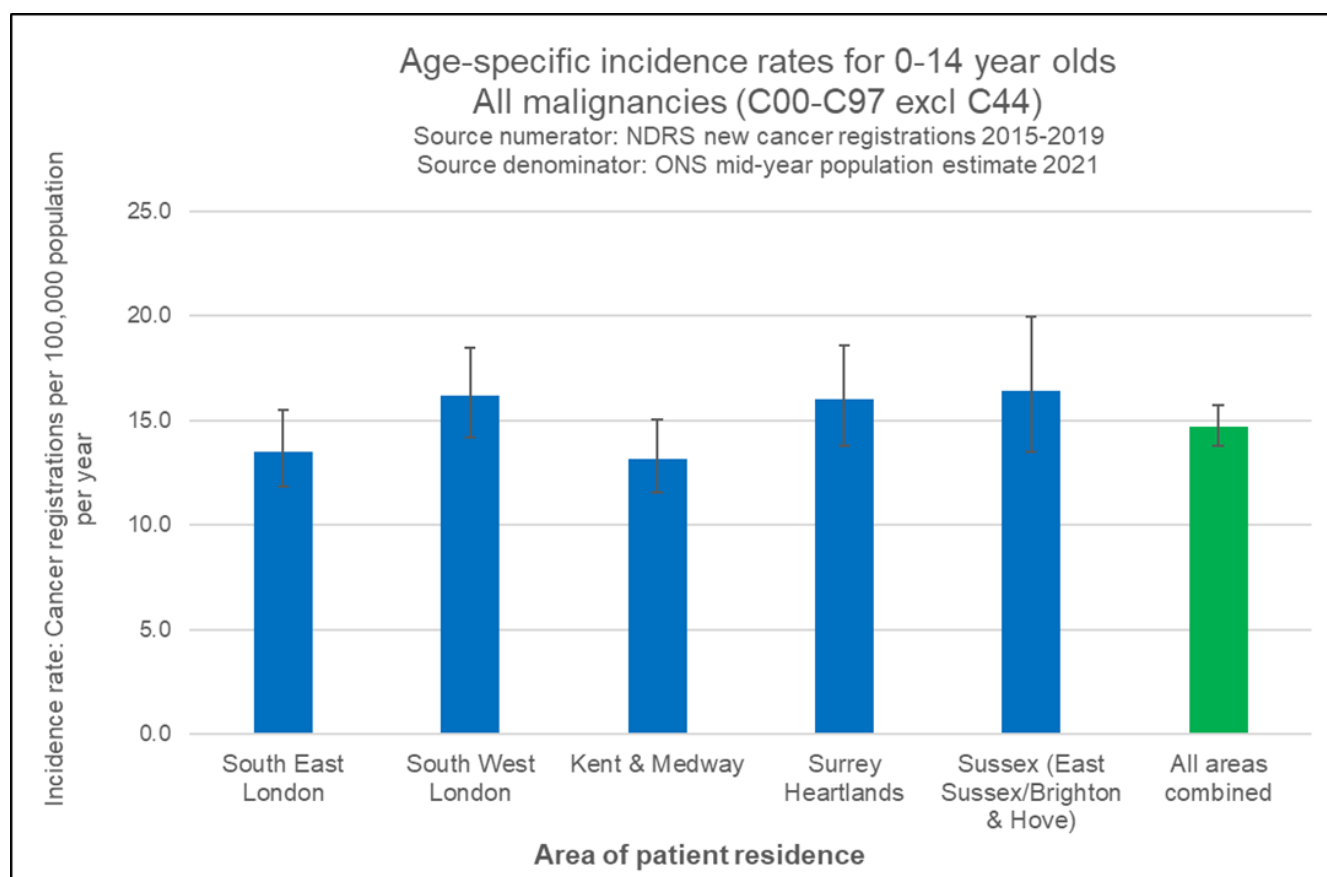
<sup>9</sup> [Children, teenagers and young adults UK cancer statistics report 2021](#). Public Health England

accounting for 31% of registrations, central nervous system (and miscellaneous intracranial and intraspinal) neoplasms for 25%, and lymphomas for 10%.

Evidence of whether the risk of cancer in childhood varies between children of different ethnicity, socio-economic background or disability status is mixed and it is difficult to draw conclusions.

The chart below shows the incidence (new diagnosis) rates for children aged 0-14<sup>10</sup> living in the Principal Treatment Centre's catchment area. The incidence rates do not vary significantly between the different geographies and the overall incidence rate for the area is similar to that for England as a whole. This means that on average, around 190 children per year, who live in the Principal Treatment Centre's catchment area, are diagnosed with cancer.

**Figure 3: Cancer incidence rates for children aged 0 to 14 in the Principal Treatment Centre's catchment area**



<sup>10</sup> The UK registries record incidence, survival and mortality from cancer by five-year age band in children, 0-4, 5-9, 10-14

### **Socio-demography of the population living in the Principal Treatment Centre catchment area**

The population aged one to 15 in the Principal Treatment Centre's catchment area is approximately 1.3 million<sup>11</sup>.

South London (in particular, south east London) tends to have a higher proportion of:

- people from ethnic groups other than white
- areas categorised as being among the most deprived in the country
- asylum seekers
- homelessness
- alcohol admission rates.

Deprivation and homelessness also affect parts of the catchment area outside London, in particular Swale, Medway, Hastings and Thanet. Rates of adult disability are also high in Hastings and Thanet. Rates of learning disability among children are higher in Surrey.

Only 14% of children in the Principal Treatment Centre's catchment area live in relatively low-income families<sup>12</sup>. In England as a whole it is 19%. The map below represents income deprivation among children<sup>13</sup>. Darker shading denotes areas that are more deprived. However, there are pockets of deprivation across the catchment area.

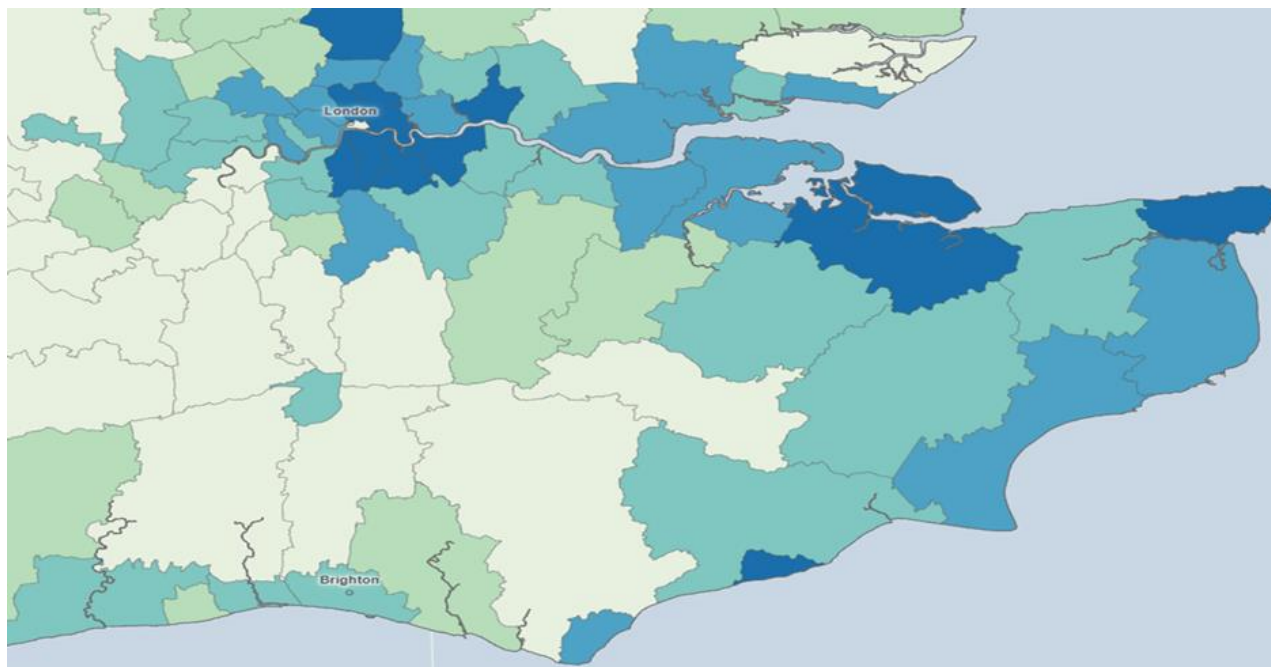
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<sup>11</sup> ONS 2021 mid-year population estimates

<sup>12</sup> Percentage of children (<16 years) in relative low income families, 2020/21, OHID Fingertips Child and Maternal Health profiles [Child and Maternal Health - OHID \(phe.org.uk\)](https://www.phe.org.uk/publications/child-and-maternal-health)

<sup>13</sup> [English indices of deprivation 2019 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019)

**Figure 4: Map showing income deprivation affecting children in the Principal Treatment Centre catchment area by lower tier local authority<sup>14</sup>**



Please see Appendix 2 – Equalities Profile Report for the Principal Treatment Centre catchment area for further information on the socio-demographics of the population living in the Principal Treatment Centre catchment area.

## 1.4. Strategic Priorities

The national strategic priority for NHS England, which commissions specialised services, is to ensure that children's cancer services provide the best outcomes for those who use them, taking into account changes to pathways based on innovations in technology, latest therapies and treatments. The regional priority to deliver the above is to commission services that draw effectively on the breadth and depth of specialist children's services available in south London which serve children from much of south east England and south London.

St George's University Hospitals NHS Foundation Trust and The Royal Marsden NHS Foundation Trust provide the current joint Principal Treatment Centre against a backdrop of excellent tertiary<sup>15</sup> provision in south London. Three providers each have a paediatric intensive care unit and a wide range of other specialist children's services. These are:

- Evelina London Children's Hospital (part of Guy's and St Thomas' NHS Foundation Trust)
- King's College Hospital (part of King's College NHS Foundation Trust)
- George's Hospital (part of St George's University Hospitals NHS Foundation Trust and also part of St George's, Epsom and St Helier Hospitals and Health Group). They provide

<sup>14</sup> Source: Income Deprivation Affecting Children Index (IDACI) 2019

<sup>15</sup> Tertiary care is highly specialist treatment.

an excellent specialist resource against which to secure the future model for children's cancer care.

Children from across Kent and Medway, south London, Surrey, Sussex and further afield already attend these hospitals.

Figure 5 shows the range and depth of provision at the tertiary providers in south London, highlighting those services which either must be on site or must be readily available if they are not on site, set out in the 2021 specification for Principal Treatment Centres. Great Ormond Street Hospital for Children NHS Foundation Trust and University College London Hospitals NHS Foundation Trust are shown in the chart for completeness as the other Principal Treatment Centre in London<sup>16</sup>. Great Ormond Street also provides care for children under one with cancer from across the country and University College London Hospitals also provides proton beam therapy for the south of England.

The Royal Marsden is also the provider of the Teenage and Young Adults Principal Treatment Centre for south London (the one for north London is provided by University College London Hospitals). In this role it works with a network of 'designated' providers, including Guy's Hospital, St George's Hospital, and King's College Hospital. A new service specification was published in May 2023 for this element of young people's care<sup>17</sup>. Transition from children and young people to teenage and young adult services is highly important. In the future, this will need to be even more closely managed as services for children and young people will no longer be provided at The Royal Marsden. Excellence in transition is a key priority and is given specific focus within this pre-consultation business case, including as part of the evaluation criteria used to evaluate the options (set out in Section 4 Developing the options).

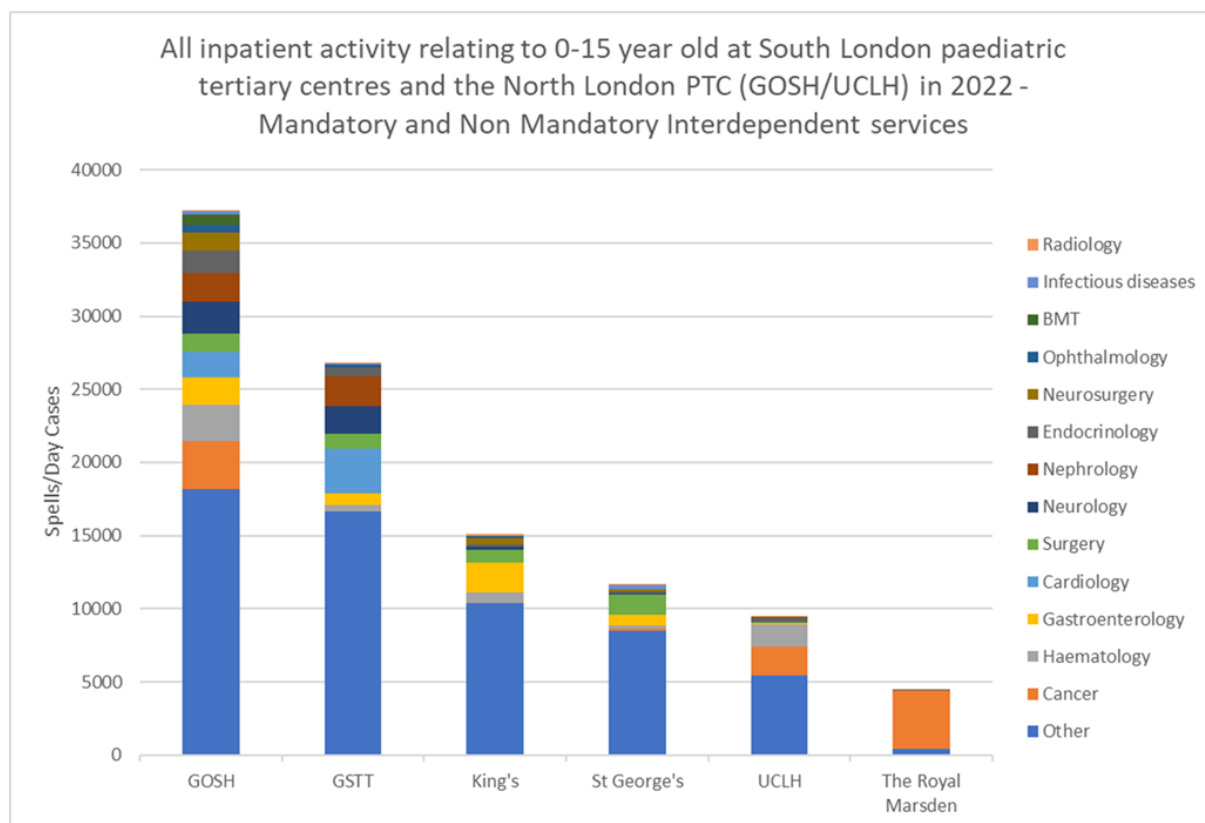
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<sup>16</sup> The other Principal Treatment Centre for children aged 15 and under in London is delivered between Great Ormond Street Hospital for Children NHS Foundation Trust (GOSH) and University College London Hospitals NHS Foundation Trust (UCLH). The new service specification has required a refresh of their designation. Work is underway to address this and once completed, GOSH will solely provide the Principal Treatment Centre for children under 13 and will provide the Principal Treatment Centre for children aged 13 to 15 jointly with UCLH. UCLH will provide enhanced Paediatric Oncology Shared Care Unit level B care for children under 13.

<sup>17</sup> Service Specification for Principal Treatment Centre for Teenagers and Young Adults [service-specification-tya-principal-treatment-centres-and-networks.pdf](https://www.england.nhs.uk/service-specification-tya-principal-treatment-centres-and-networks.pdf) (england.nhs.uk)



**Figure 5: All inpatient activity delivered by south London paediatric tertiary centres and the north London Principal Treatment Centre for children aged 0 to 15, for both mandatory and non-mandatory services<sup>18</sup>**



## 1.5. Current service provision

The Principal Treatment Centre which is the subject of this pre-consultation business case is provided by St George's Hospitals University NHS Foundation Trust and the Royal Marsden NHS Foundation Trust, working in partnership. It was designated as a joint Principal Treatment Centre for children's cancer in 2006.

The two sites where the joint Principal Treatment Centre is currently based are St George's Hospital, Tooting, and The Royal Marsden's site in Sutton, approximately eight miles apart.

The Royal Marsden has a Good rating for children's services from the Care Quality Commission (from 2017), St George's is rated Outstanding for paediatrics (from 2019).

The teams leading and coordinating specialist care for children with cancer, including chemotherapy, conventional radiotherapy and bone marrow transplants, are based at The Royal Marsden's site in Sutton. Life-saving intensive care, most children's cancer surgery,

<sup>18</sup> Extracted from SUS 2022 data. 'Other' services are not required within the service specification. These are included for completeness to reflect other activity that is being developed by each of the centres. SUS data comes from the Secondary Uses Service (SUS) - the single, comprehensive repository for healthcare data in England which enables a range of reporting and analyses to support the NHS in the delivery of healthcare services.

and other specialist services needed by children with cancer are led and coordinated by the teams at St George's Hospital eight miles away in Tooting. Further information on The Royal Marsden and St George's is provided in turn below.

### **The Royal Marsden**

The Royal Marsden is exclusively a specialist cancer hospital and has two sites (Chelsea and Sutton). Children's cancer services are provided on the Sutton site. The Royal Marsden has very good facilities for the elective care of children with cancer including the 31-bedded Oak Centre for Children and Young People, which was opened in 2011. The teenage and young adult service is currently provided from the same unit. There are eight dedicated car parking spaces for paediatric patients attending day care appointments available free of charge at the Oak Centre for Children and Young People.

The Royal Marsden provides oncology care including diagnosis, bone marrow transplants, chemotherapy, conventional (photon) radiotherapy, ongoing monitoring, and late-effects clinics. Its oncology consultants lead the care for children with cancer who are receiving treatment from the Principal Treatment Centre, even when they are on another site, such as at St George's Hospital or a shared care unit.

The Sutton hospital site is next to the Paediatric Oncology Experimental Medicine Centre of the Institute of Cancer Research. Although a separate organisation, the Institute of Cancer Research is The Royal Marsden's research partner and located very close to its sites in both Chelsea and Sutton.

The Institute of Cancer Research is a major site of pre-clinical drug development, guiding the rapid implementation of early-phase clinical trials for children with cancer at The Royal Marsden. The Institute of Cancer Research is at the forefront of cancer diagnostics and assay development, producing biomarker assays ready for integration into clinical trials at The Royal Marsden. The Institute of Cancer Research is also one of the leading sites for development of imaging technology that can benefit children with cancer.

The joint Royal Marsden/Institute of Cancer Research comprehensive Paediatric and Adolescent Oncology Targeted Drug Development Programme comprises drug discovery, pre-clinical evaluation, early clinical trials and the Oak Foundation clinical facility. There are adjacent on-site laboratories for sample processing and radioisotope therapy to help facilitate novel studies involving radioisotope components such as Metaiodobenzylguanidine (MIBG) therapy.

The Royal Marsden attracted £38 million of funding for research in 2019/20.

In 2019/2020, 456 children received paediatric oncology care as an inpatient at The Royal Marsden. These children received admitted patient care as 4,137 day (or regular day) cases, 412 elective and 50 non-elective cases. 41 children received photon radiotherapy. There were also almost 8,000 outpatient appointments for 1,354 children. Further detail is set out in slide 11 and 28 of Appendix 3 – Activity Data Pack.



### ***Why The Royal Marsden is not an option for the proposed future Principal Treatment Centre:***

It is now a requirement for very specialist cancer treatment services for children to be on the same site as a children's intensive care unit and other specialist children's services. As a specialist cancer hospital, The Royal Marsden does not have a level 3 children's intensive care unit (which can give life support) on site. Children's intensive care units are always on sites used by tens of thousands of children every year because intensive care teams need to see high volumes of very sick children to maintain their specialist skills and expertise. This wouldn't be supported by the number of children treated at The Royal Marsden.

The Royal Marsden has deemed it would not be clinically or financially sustainable for it to establish a paediatric intensive care unit, in the absence of the other specialist children's services which support the viability of a paediatric intensive care unit. The South Thames Paediatric Network in assessing future demand for paediatric intensive care across the region concurred with the Trust's position.

### ***Radiotherapy Services***

Many children diagnosed with cancer receive external beam radiation therapy - radiotherapy - as part of their treatment. There are two main types of radiotherapy:

- conventional radiotherapy, which uses high-energy x-rays (photon beams),
- proton beam therapy, an advanced form of radiotherapy that uses beams of high-energy protons.

Most children with cancer under the care of the current Principal Treatment Centre for south London and much of the south east England who need conventional radiotherapy have it at The Royal Marsden, where it is delivered by a highly specialist and integrated multidisciplinary team. Children travel to University College Hospital for all other types of radiotherapy such as proton beam therapy.

In 2019/20, our data shows that 41 children had conventional radiotherapy treatment at The Royal Marsden, delivered in 700 sessions – see Appendix 3 – Activity Data Pack for more details.

Seven of these children had a particular type of radiotherapy called total body irradiation which is given in preparation for a bone marrow transplant. These patients usually need to have this delivered over up to four days as part of a hospital inpatient stay.

The Royal Marsden service is provided by a highly specialist and integrated multidisciplinary team including specialist radiographers, physicists, a clinical nurse specialist, anaesthetists, allied health professionals (including physiotherapists and speech and language therapists), social workers and play specialists, all based at The Royal Marsden and supporting the care of children with cancer.

In 2019/20, 20 children from The Royal Marsden were referred for proton beam therapy. England has two proton beam centres: the first opened at The Christie NHS Foundation Trust in Manchester in 2019, and the second at University College Hospital (part of University College London Hospitals NHS Foundation Trust) near Euston, in central London in 2021. Proton beam therapy limits the dose of radiation to the surrounding normal tissues, which means there is the potential for less damage to normal tissue. This is particularly advantageous in children who are still growing as it can potentially reduce long-term side effects. As the very specialist proton beam therapy service continues to be developed, it is anticipated that more children with cancer who require radiotherapy treatment will, in future, receive proton beam therapy instead of conventional radiotherapy. It is not suitable for treating all types of cancer.

The radiotherapy services at The Royal Marsden and University College Hospital work very closely together. A small number of patients from The Royal Marsden have their conventional radiotherapy at University College Hospital - for example, patients with more complex airway issues who would benefit from the specialist infrastructure University College Hospital has on-site.

### **St George's Hospital**

St George's Hospital is a large teaching hospital and provides many tertiary/specialist services for adults and children. It is the largest healthcare provider in south west London as well as a large provider of services to Surrey, Sussex and beyond.

It is one of six major providers of children's care in London and one of three providers of paediatric intensive care in south London.

St George's Hospital delivers all the paediatric oncology intensive care for the Principal Treatment Centre, approximately three quarters of all surgical procedures and provides input from other paediatric specialist services.

In 2019/20, 208 children received Principal Treatment Centre level paediatric oncology care as an inpatient at St George's Hospital. These children received Principal Treatment Centre care as 108 day cases, 90 elective spells and 115 non-elective spells. In addition, St George's Hospital provided 275 outpatient appointments as part of the Principal Treatment Centre. (This data excludes neurosurgery and paediatric oncology shared care unit activity for reasons given below.)

St George's Hospital also provides paediatric intensive care for Principal Treatment Centre patients. In 2019/2020, 84 Principal Treatment Centre patients in the scope of these proposals received care for 1,451 critical care bed days, of which 632 were in the paediatric intensive care unit and the remaining 819 in ward beds classified as high dependency (approximately two beds worth of care in each setting).

In addition to these services, St George's Hospital also provides neurosurgery for children with cancer and children's cancer care as a paediatric oncology shared care unit. These

services are not part of the proposed reconfiguration and so are out of scope for this pre-consultation business case and consultation. Data on them is therefore excluded from the table below to give a clear picture of the activity at St George's Hospital that relates to services that would be affected by the proposed reconfiguration.

Further detail on activity is set out in Appendix 3 - Activity Data Pack slide 10.

**Table 2: Summary of activity and income relating to The Royal Marsden / St George's Principal Treatment Centre**

19/20 PTC Summary	St George's			Royal Marsden			Total		
	Patients*	Activity	Income	Patients*	Activity	Income	Patients*	Activity	Income
<b>Inpatient</b>	208	313	£1,018,422	456	4,599	£7,958,503	536	4,912	£8,976,925
<i>Elective</i>	72	90		147	412		191	502	
<i>Day case</i>	96	108		398	1,774		454	1,882	
<i>Regular Day</i>	-	-		283	2,363		283	2,363	
<i>Non-Elective</i>	93	115		44	50		136	165	
<b>Outpatient</b>	72	275	£40,439	1,354	7,943	£1,984,896	1,367	8,218	£2,025,335
<b>Critical Care</b>	84	1,451	£2,019,106				84	1,451	£2,019,106
<b>Radiotherapy</b>				41	700	£195,300	41	700	£195,300
<b>Drugs</b>				398		£2,298,700	398		£2,298,700
<b>Total</b>	<b>210</b>		<b>£3,077,967</b>	<b>1,356</b>		<b>£12,437,399</b>	<b>1,373</b>		<b>£15,515,366</b>

- Outpatient care includes attendances for imaging, ward attenders and other non-admitted ambulatory activity as well as outpatient appointments.
- \*The total number of patients is likely to be lower than the total you would get from adding up rows as an individual patient can be in more than one row
- The income column will not include all the income related to paediatric oncology at The Royal Marsden
- Of the 1,451 critical care days 819 were undertaken in an HDU bed rather than within the PICU

## **How the Principal Treatment Centre sites work together to provide Children's Cancer Services**

The Royal Marsden provides the majority of inpatient and outpatient care for children with cancer in the Principal Treatment Centre catchment area. Care is provided at its Sutton site. It undertakes outstanding research into children's cancer in collaboration with the Institute of Cancer Research<sup>19</sup> and its Experimental Cancer Medicine Centre<sup>20</sup> and is one of the largest centres in Europe for the delivery of new innovative therapies to children, and teenagers and young adults aged 16 to 25<sup>21</sup>.

If children require surgery, critical care, or other specialist children's services, they are treated at St George's Hospital in Tooting except for some placements of central venous access devices carried out by surgeons from St George's Hospital on the Sutton site. As the Sutton site has no paediatric intensive care unit, a robust early warning system is in place to identify patients at increased risk of needing critical care to enable a safe transfer to St George's Hospital via the South Thames Retrieval Service which is provided by Evelina London. The treatment transfers that occur between these units are set out in Section 2, the case for change.

Teams on the two sites work very hard to make sure children get safe, joined-up care. For instance, a paediatric oncology cancer consultant and middle grade doctor from The Royal Marsden are at St George's Hospital seven days a week. The Royal Marsden's children's cancer consultants provide 24/7 cover for both sites and will attend at any time, if needed in an emergency.

Surgeons from St George's Hospital carry out surgical procedures at The Royal Marsden. These are to put in central lines for children for whom it is safe to do so. More complex surgery is always carried out at St George's Hospital. A consultant endocrinologist from St George's Hospital runs a clinic twice a week at The Royal Marsden.

Many other specialists contribute to the care of children with cancer under the care of the Principal Treatment Centre. Evelina London Children's Hospital staff run a fortnightly clinic at The Royal Marsden for children with cancer who need heart checks. Children with cancer may also require tertiary (specialist) heart and kidney services which are provided at Evelina London.

Children's neurosurgery for cancers of the brain, nervous system and spine, and for complications of cancer treatment, is provided by King's College Hospital and St George's Hospital. They work closely together and with The Royal Marsden to care for these patients.

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<sup>19</sup> [The Institute of Cancer Research, London \(icr.ac.uk\)](https://www.icr.ac.uk)

<sup>20</sup> Experimental Cancer Medicine Centre Network for paediatrics. 10 participating centres in England, GOSH is 2nd one in London. In the adult network there are 15 centres, with those in London being Barts, Imperial, Institute of Cancer Research, King's Health Partners and UCLH

<sup>21</sup> The Royal Marsden is one of the few centres in the country that can cover the whole age range (adults and paediatrics) on one site for research purposes, with trials crossing age ranges. Both proposals would change this and care will be needed to work with research sponsors to open (at least) two sites to cover the age ranges.

In addition, a consultant who specialises in treatment for these cancers is jointly employed by King's and The Royal Marsden and works at both hospitals.

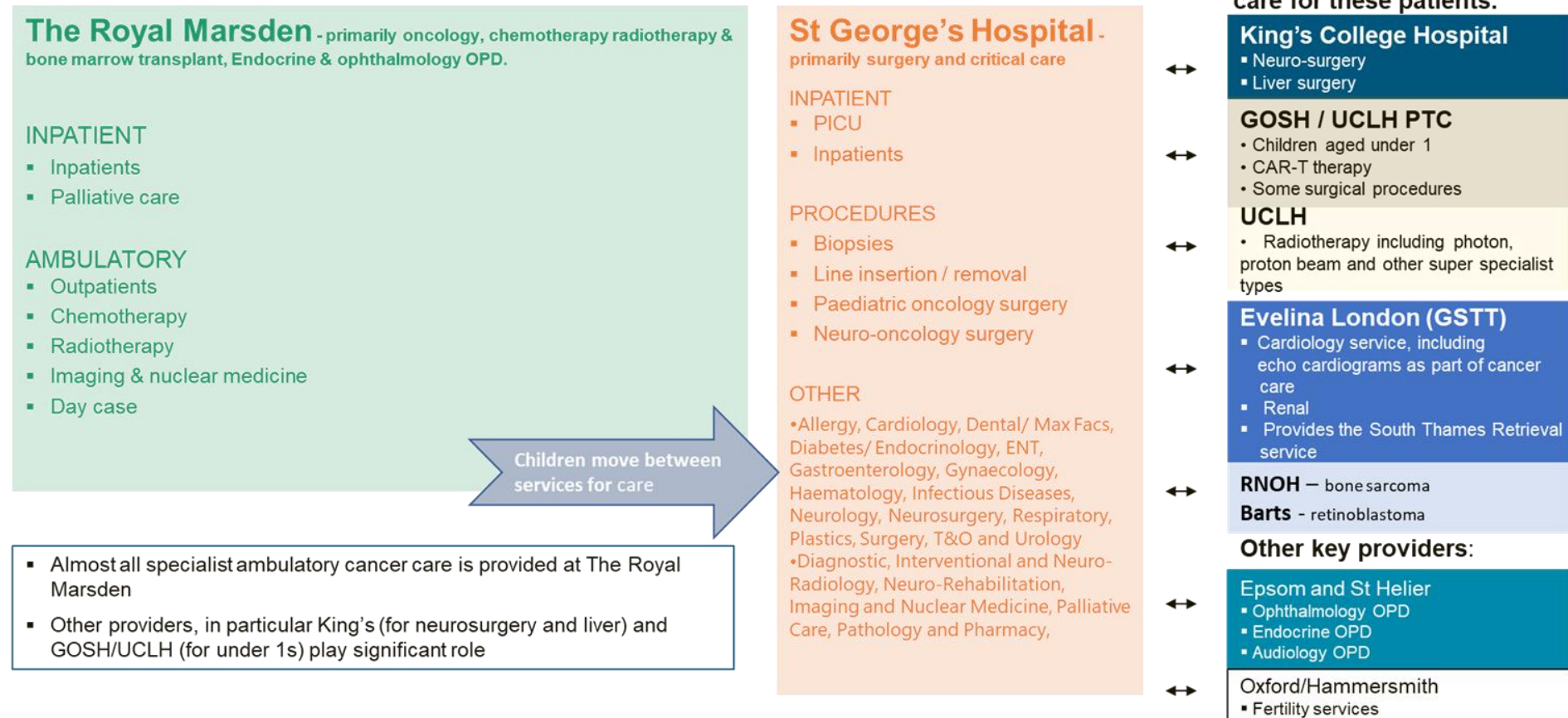
The relationship between The Royal Marsden and St George's Hospital as the joint Principal Treatment Centre is set out below pictorially. On the right of the diagram are the other hospitals also contributing to the delivery of cancer care for those in the Principal Treatment Centre catchment area.

For more details about the current Principal Treatment Centre please see slides 10-12 of Appendix 3 – Activity Data Pack.

**Figure 6: The current Principal Treatment Centre service**

## The current principal treatment service in south London

**South Thames Joint PTC** (Children aged 1-15 years)





A total of 248 staff work across the Principal Treatment Centre clinical service for children's cancer in some capacity. Not all of these staff work 50% of their time on children's cancer services which is what would be required for staff to be eligible to transfer to the future Principal Treatment Centre, if they so wished. Around 170 staff from The Royal Marsden are estimated to fall into this category.

St George's has indicated that 50 of its staff contribute to the Principal Treatment Centre services provided by the Trust alongside delivery of a range of other services. Four staff spend more than 50% of their time working on children's cancer services.

Other organisations across London work closely in partnership with the current Principal Treatment Centre to provide services to patients. Children's neurosurgery for cancers of the brain, nervous system and spine, and for complications of cancer treatment, is provided by King's College Hospital and St George's Hospital. They work closely together and with The Royal Marsden to care for these patients. For instance, a consultant who specialises in treatment for these cancers is jointly employed by King's and The Royal Marsden and works at both hospitals.

Other providers include Evelina London Children's Hospital which provides specialist cardiac and nephrology services and runs a fortnightly clinic at The Royal Marsden for children who need heart checks; and University College London Hospitals NHS Foundation Trust which provides proton radiotherapy to patients.

## **1.6. Who uses the current service**

The map in Figure 7 shows the actual numbers of children from the Principal Treatment Centre catchment area who received inpatient care at the joint Principal Treatment Centre in 2019/20. The overall number was 459 (out of a total of 536). The number of patients from other areas was 83, which represents 15% of patients and 16% of activity. They included some patients who used Frimley Park Hospital in Surrey Heath, which was in the formal catchment area for the Principal Treatment Centre until 2019/20<sup>22</sup>. The total is slightly lower than the number you would get by adding the rows due to a small number of patients recording more than one (then) clinical commissioning group of residence during the year (potentially due to moving house.)

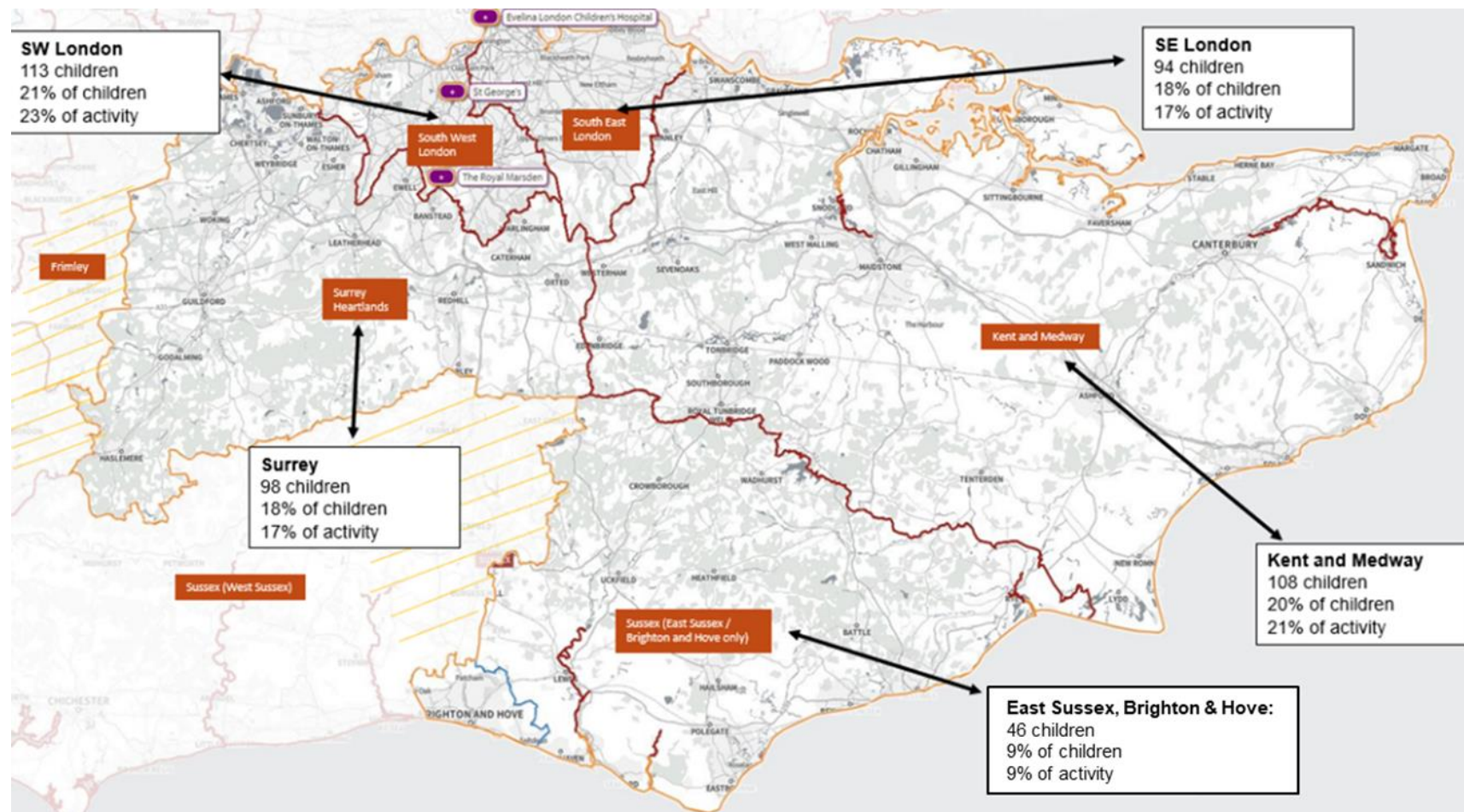
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<sup>22</sup> In January 2019, members of the South Thames Children's Cancer Network were informed that from April 2020, all referrals from the Paediatric Cancer Shared Care Unit at Frimley Park Hospital would be directed to the Southampton Principal Treatment Centre (part of University Hospital Southampton NHS Foundation Trust). This was a Frimley Health NHS Foundation Trust decision, to align paediatric cancer referrals with all other tertiary paediatric links to Southampton. The network assessed the likely impact in reduction of referrals to the South Thames PTC as approximately 10 referrals per year. The network includes representatives from The Royal Marsden and St George's Hospital.



Proposals for the future location of very specialist cancer treatment services for children

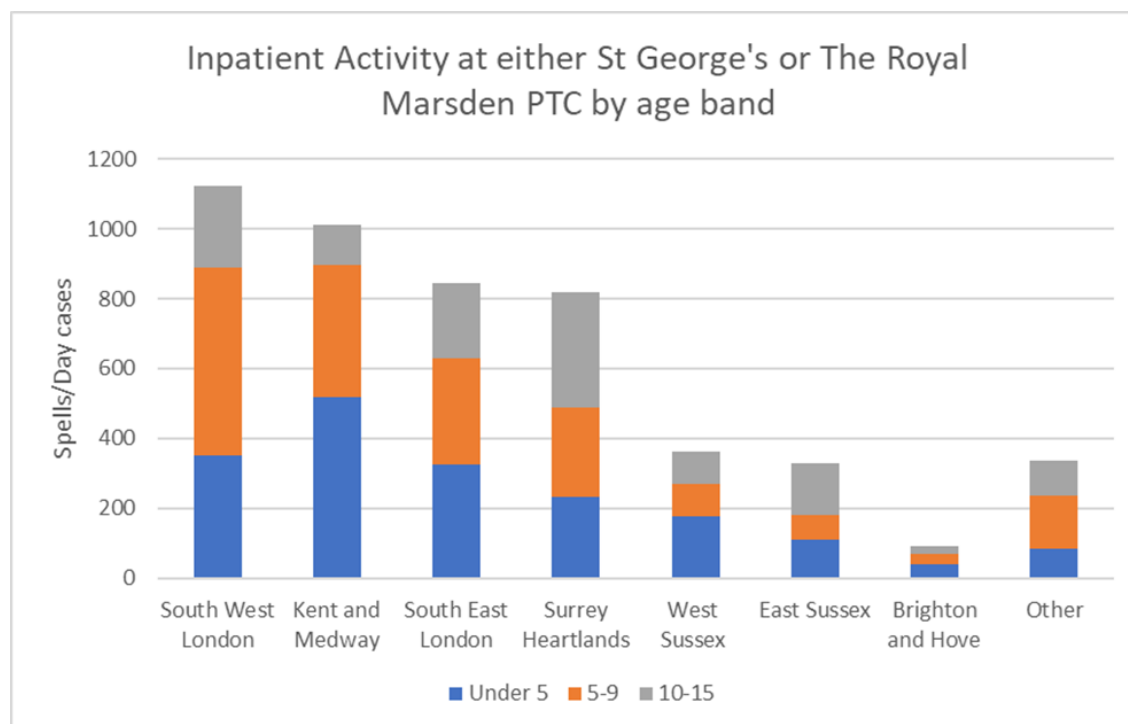
**Figure 7: Children accessing inpatient Principal Treatment Centre cancer care – activity at St George’s and The Royal Marsden (2019/20) for those aged one to 15 by geography**



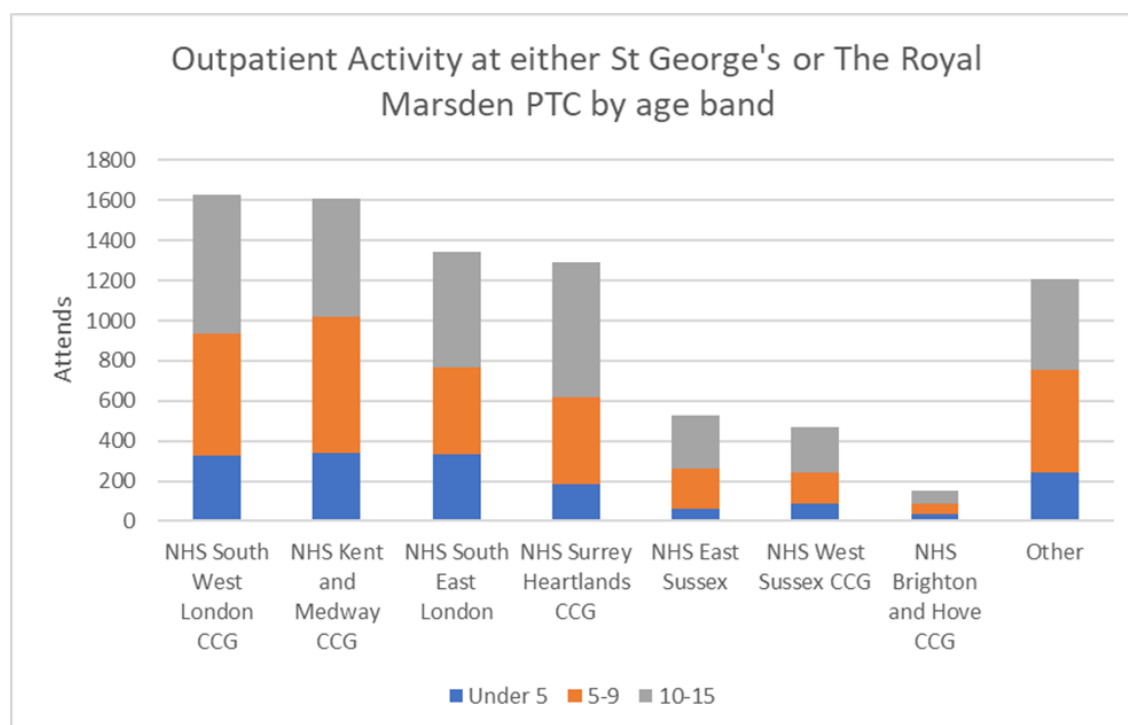
The charts below show the proportion of children treated at the Principal Treatment Centre in 2019/20 by age band and geography within the catchment area, as inpatients (both day case and overnight stays) and outpatients respectively.

Data is also reflected within Appendix 3 – Activity Data Pack (slides 17-21).

**Figure 8: Inpatient activity at the joint Principal Treatment Centre in 2019/20 by age band and geography**



**Figure 9: Outpatient activity at the joint Principal Treatment Centre in 2019/20 by age band and geography**



### **The wider context for children's cancer services in London**

Each Principal Treatment Centre leads the Children's Cancer Network for its catchment area.

There are already well-established network relationships across London, Kent and Medway, Surrey and Sussex. The South Thames Children's Cancer Operational Delivery Network, hosted by Royal Marsden Partners, includes all paediatric oncology shared care units. The map below shows their locations, along with the Sutton site of The Royal Marsden NHS Foundation Trust, and Evelina London Children's Hospital's site. St George's has a paediatric oncology shared care unit as well as being part of the current Principal Treatment Centre.

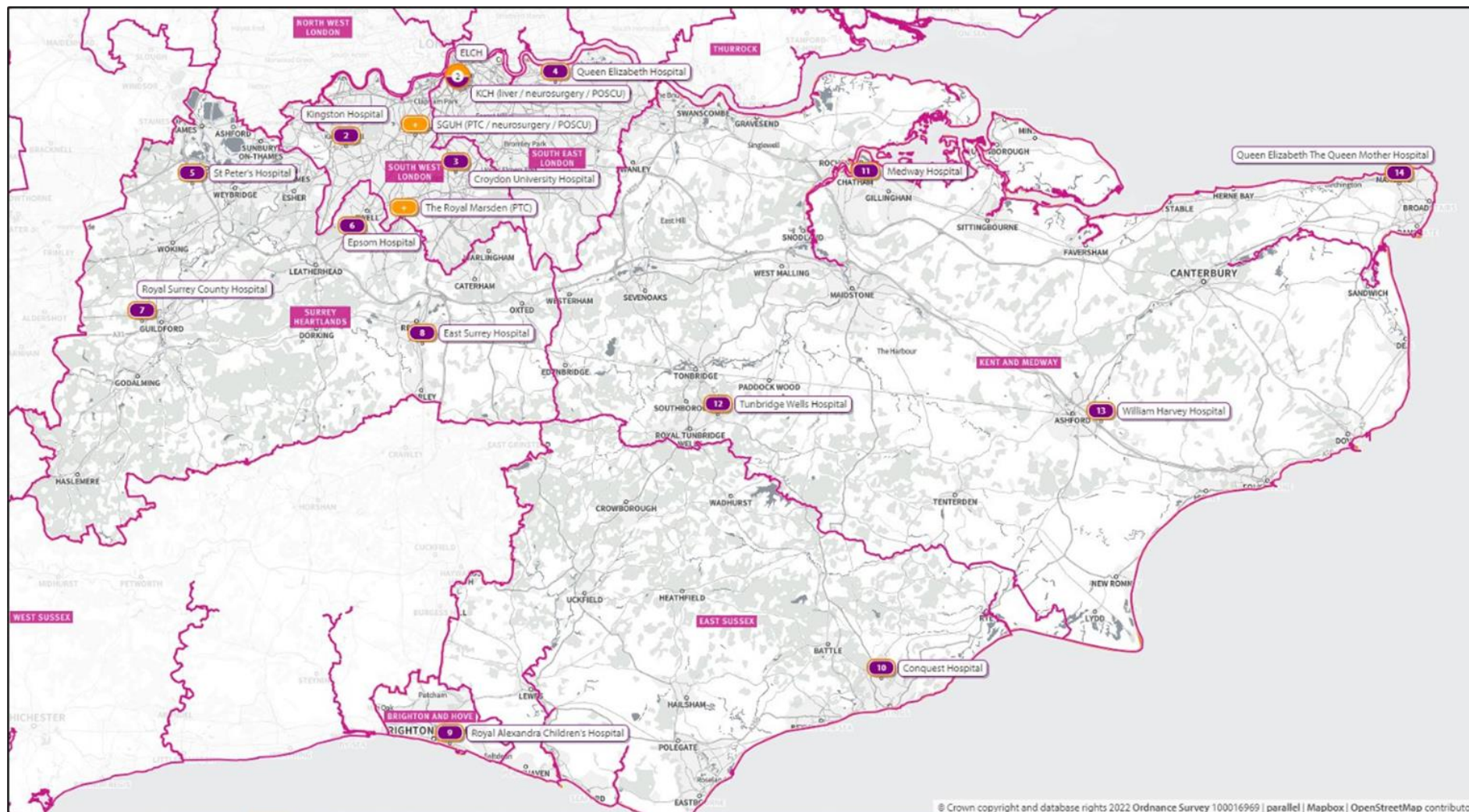
Shared care enables children with cancer to receive assessment, outpatient supportive care, emergency management and inpatient supportive care as close to home as possible and importantly, facilitates appropriate access to local community support services. Enhanced shared care units additionally provide specified chemotherapy treatments.

There is a new service specification for shared care units which will help make sure all children in the catchment area have access to high quality care close to home as well as at the specialist centre.



Proposals for the future location of very specialist cancer treatment services for children

**Figure 10: Locations of Paediatric Oncology Shared Care Units in the Principal Treatment Centre catchment area, as well as The Royal Marsden and Evelina London Children's Hospital**



The South Thames Children's Cancer Operational Delivery Network already works in an integrated way under the umbrella of the wider South Thames Paediatric Network, which is hosted by Evelina London Children's Hospital, part of Guy's and St Thomas' NHS Foundation Trust. The South Thames Paediatric Network and the Children's Cancer Operational Delivery Network are developing a shared vision to ensure quality, safety and learning across the network to further improve care for children with cancer.

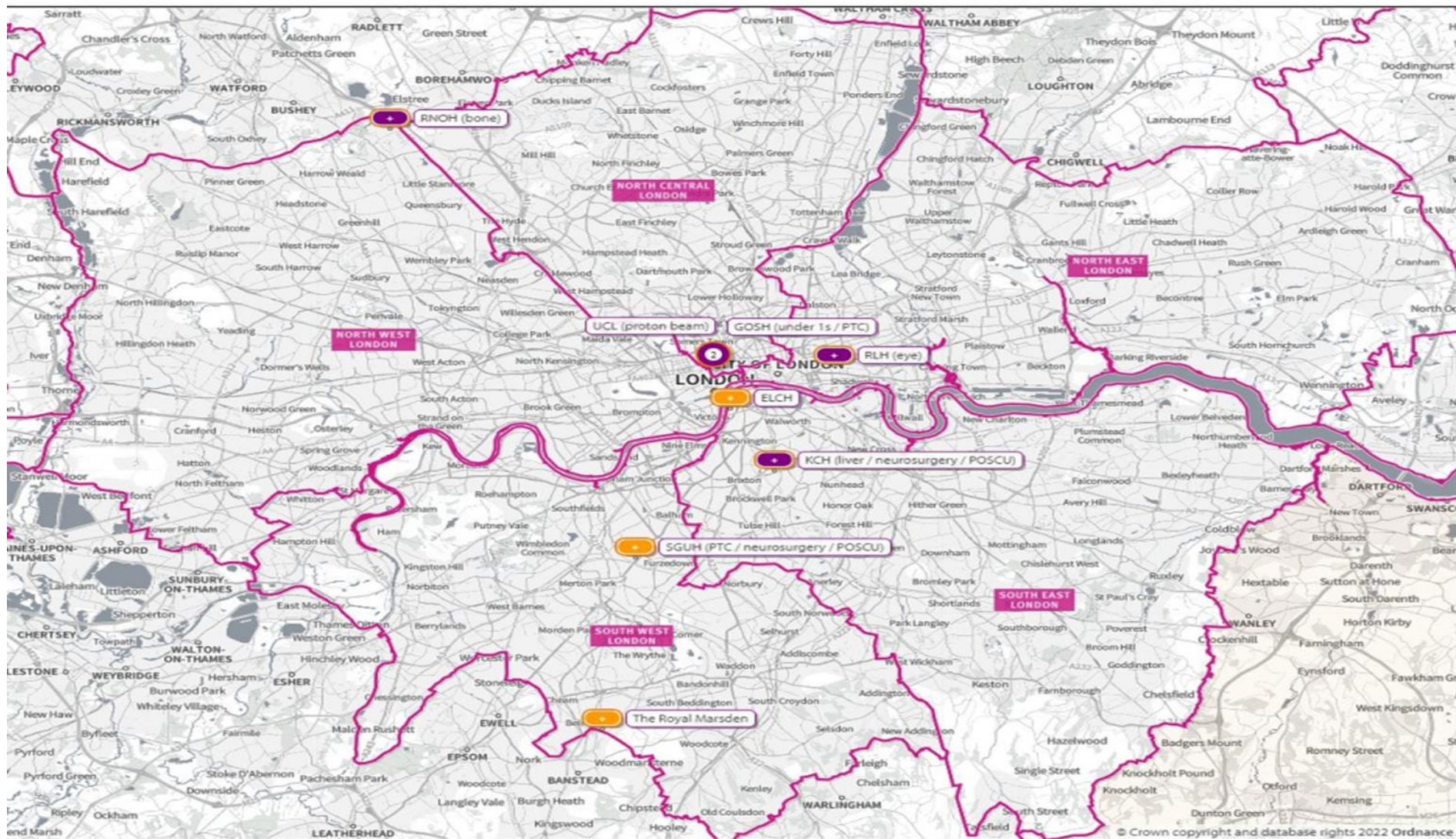
Evelina London provides the South Thames Retrieval Service, bringing seriously ill children to intensive care facilities from across the Principal Treatment Centre catchment area. Evelina London also provides education and training in the management of critical illness in children to The Royal Marsden and the paediatric oncology shared care units in the Principal Treatment Centre catchment area.

A number of other hospitals across London provide specialist services for children with cancer which are not part of this proposed reconfiguration.



Proposals for the future location of very specialist cancer treatment services for children

**Figure 11: Centres providing specialist treatments for children with cancer in the Principal Treatment Centre catchment area**



## 2. Case for Change

This chapter of the pre-consultation business case provides a fuller explanation of why the location of very specialist cancer treatment services for children provided at The Royal Marsden needs to change.

The five main reasons are set out below.

### 2.1. The current Principal Treatment Centre does not meet national service specification requirements

The NHS England Board has made it a requirement that the populations served by the current Principal Treatment Centre have a compliant Principal Treatment Centre that delivers expert cancer care for children on the same site as a level 3 children's intensive care unit and the other mandatory service requirements. This is non-negotiable. The clinical requirements for Principal Treatment Centres are set out in the national service specification for Principal Treatment Centres which was approved by NHS England in 2021 after being developed with patients, parents and professionals. The current joint Principal Treatment Centre does not and cannot meet this mandatory requirement. It is the only children's cancer centre in the country that doesn't have very specialist cancer treatment services for children on the same site as a children's intensive care unit.

### 2.2. Hospital Transfers of very sick children with cancer for intensive care add risks and stress

Treatments for cancer in children can be complex and draining. Children can become very seriously ill during treatment. A small number require life-saving services provided by intensive care specialists.

Every year, a small number of very sick children with cancer who need intensive care are transferred eight miles from The Royal Marsden at Sutton to St George's children's intensive care unit at Tooting.

This is done safely. But urgent transfers of very sick children to another hospital for level 3 intensive care services that can give life support, even in a special children's ambulance with an expert team onboard, add risks to what is already a very difficult situation. These risks can only ever be managed. Transfers of very sick children also put added stress on patients, parents and the staff involved who have to take the decisions.

*Patient transfers from shared care units in local hospitals to the specialist children's cancer centre, including emergency patient transfers, would not be affected by our proposals. By their nature, most shared care units are a long way from the specialist centre. They are all on sites which have beds where children can be closely monitored and given support. Children are only transferred for care at a level 3 children's intensive care unit when it is unavoidable.*

### **Hospital transfers of children who need or might need intensive care**

Between 1 April 2019 and 31 March 2020, an audit drawing on data from the South Thames Retrieval Service and St George's annual paediatric intensive care unit data collection found it transferred 18 children from The Royal Marsden to St George's paediatric intensive care unit. There were 20 transfers in total (some children went more than once).

Data from the shared data lake (a single data set established between Guy's and St Thomas', St George's and The Royal Marsden with NHS England London – see section 3.5 for more details) shows that in 2019/20 35 children, including those being transferred as a precaution, were transferred from The Royal Marsden to St George's Hospital for critical care. Fifteen of these children were treated on the paediatric intensive care unit and 23 on the ward (some had different kinds of care on different occasions). There were 50 transfers in total.

### **2.3. The intensive care team is not currently able to provide face to face advice on the care of children on the ward**

Currently, the Principal Treatment Centre's intensive care specialists are at St George's Hospital, while most specialist care for children with cancer is at The Royal Marsden. Some children every year have to be transferred by ambulance from The Royal Marsden to the children's ward at St George's Hospital as a precaution, in case they suddenly get worse and need intensive care. It can be disruptive and stressful for them.

Intensive care specialists can't work closely with specialist cancer teams to help children stay well enough to avoid intensive care if they are not all on the same site.

### **2.4. There is a need to improve children and families' experience when patients require intensive care and other specialist children's services**

The diagnosis of cancer in a child causes extreme anxiety for both the child and the parents. Treatment often requires many hospital visits and admissions, including for treatment by other specialties for issues related to the child's cancer or for other conditions they have.

These specialties include cardiology, endocrinology, gastroenterology, infectious disease services, oncology surgery, neurology, neurosurgery, nephrology, radiology, renal and respiratory.

Many of these services are not on site at The Royal Marsden in Sutton. Staff at The Royal Marsden arrange for children to attend or be safely transferred to other hospitals as needed.

Parents say having to get to know new members of staff at different locations, especially at a time of crisis, can also increase families' anxiety and distress.



*Children's cancer care is complex. Our proposals would not eliminate the need for children to get specific kinds of expert care at different hospitals (listed in section 3.3 Essential clinical co-dependencies). Conventional radiotherapy services would also move to University College Hospital as part of our proposals (see section 3.3 Essential Clinical co-dependencies and 5.2.1 Interdependent Services for more on this). Instead of some (as now), all children who needed radiotherapy would go to University College Hospital. This would mean travelling to a new site for some children, almost always on a planned basis.*

Analysis of data from 2019/20 shows that children seen as either a day case or inpatient at The Royal Marsden had the following transfers to other hospitals for care within 24 hours (either before or after) of their treatment at The Royal Marsden:

**Table 3: Activity which took place within one day of a spell at The Royal Marsden in 2019/20 (excluding paediatric oncology shared care unit activity)<sup>2324</sup>**

Hospitals	Number of children	Number of appointments	Number of transfers
Great Ormond Street	8	12	12
Evelina London	15	19	21
King's College	37	81	113
St George's	60	80	99
<b>TOTAL</b>	<b>106</b>	<b>192</b>	<b>245</b>

## **2.5. Although it offers a wide range of innovative treatments, the current Principal Treatment Centre is excluded from giving a specific type of new treatment, and others expected in the future**

Innovative cancer treatments are bringing new hope for children and families. Some have a greater risk of complications – such as a severe immune response - that could require urgent support from an on-site intensive care team. As a result, they can only be given at children's cancer centres on the same site as intensive care.

This is the case for ground-breaking CAR-T treatment, which uses a child's own, treated, cells to fight their cancer. Many more of these treatments are expected to become available in the next few years.

The Principal Treatment Centre for south London and much of the south east is currently excluded from giving this life-saving treatment. There is a compelling case to reconfigure the centre so it has the same opportunity to provide innovative treatments which require an intensive care onsite as other major centres worldwide.

<sup>23</sup> A more detailed version of this table is available in Appendix 3, Data

<sup>24</sup> If a child started at The Royal Marsden, went to St George's and returned to The Royal Marsden, this would be one spell at St George's but two transfers.

## **Conclusion**

The need to deliver the national service specification for Principal Treatment Centres that has been adopted by the NHS England Board provides a clear and compelling case for change. It is driven by the need to prevent hospital transfers of very sick children with cancer who need intensive care being transferred from the specialist children's unit at The Royal Marsden to St George's intensive care unit. While this is done safely, urgent transfers of very sick children add risk to what is already a very difficult situation. It is also the case that the intensive-care team is unable to provide face-to-face advice on the care of children on the ward at The Royal Marsden. As a result, some children are transferred to the children's ward at St George's as a precaution, in case they suddenly get worse and need intensive care. This can be disruptive and stressful for them. There is a need to improve children and families' experience when patients require intensive care and other specialist children's services. Alongside, the current Principal Treatment Centre is also excluded from giving a specific type of new treatment. Reconfiguring the centre will give it the same opportunity to provide innovative treatments (which require intensive care onsite) as other major centres worldwide.

## 3. Developing the clinical model

### 3.1. Delivering the national service

Principal Treatment Centres for children with cancer are responsible for making sure each child gets the specific expert care they need. Their clinical teams diagnose illness, draw up treatment plans, give specialist care, and coordinate treatment for all children aged 15 and under with cancer in their catchment area (and occasionally, older children, depending on their needs). They work with other cancer services including shared care units in more local hospitals (which are not part of the proposals in this pre-consultation business case).

Our clinical model is one that provides children's cancer services that are fully compliant with the national service specification published in November 2021<sup>25</sup>. Service specifications for specialised services are produced nationally through a national clinical reference group and after significant stakeholder engagement. They provide the evidence base for commissioning a specific clinical service. The specification includes a mandatory requirement for Principal Treatment Centres to be delivered on a site which has paediatric oncology, paediatric cancer pharmacy, paediatric haematology, paediatric radiology, a Level 3 paediatric intensive care unit, paediatric surgery, paediatric anaesthetics and pain management, and therapy services. A range of other specialist children's services do not necessarily have to be delivered on the same site but must be readily accessible at all times if they are not on site.

Principal Treatment Centres must also have the diagnostic capability to guide treatment choices and deliver the treatment plan for each child. This requires access to appropriate imaging and pathology services and the ability to develop whole gene sequencing in partnership with a genomic laboratory. Imaging and diagnostics provision is a key part of the clinical model.

Bone marrow transplant is a complex procedure. The clinical model includes capacity to deliver the BMT service which is covered by an independent service specification and must be provided by an accredited provider.

The national service specification sets out the age range of children to be cared for at a Principal Treatment Centre, recognising that children's needs change as they grow. There is flexibility around the upper age limit at which children are expected to transfer to teenage and young adult services, to meet the needs of individual patients.

The facilities in which care for Principal Treatment Centres is delivered are important; they must have age-appropriate décor and facilities, including the play and education resources needed to normalise the experience of inpatient hospital care for children, as far as possible. Good support for transition to teenage and young adult services is also vital. Both are key requirements set out in the national service specification. The service specification requires a defined transition pathway for each tumour type. This should include access to services for

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<sup>25</sup> [NHS England » Children's cancer services: Principal treatment centres service specification](#)

those children and young people whose treatment may affect their fertility, to preserve their ability to make choices later in life.

Each Principal Treatment Centre is also required to run a network of care which covers its catchment area, overseeing shared care which is provided at paediatric oncology shared care units in more local hospitals, and providing clinical leadership to the network. Shared care enables children with cancer to receive supportive care and, where agreed, specified chemotherapy treatments as close to home as possible. It also facilitates appropriate access to local community support services.

The treatments provided for children may be delivered entirely within the Principal Treatment Centre or in partnership, but under the direction of the Principal Treatment Centre, with a paediatric oncology shared care unit located closer to where a child lives. The scope of practice and service requirements for paediatric oncology shared care units are set out in the children's cancer paediatric oncology shared care unit specification<sup>26</sup> which was also published in November 2021. Together the two specifications set out a vision for coordinated children's cancer care of the highest standard, balancing the creation of Principal Treatment Centres as centres of excellence with enhanced levels of care closer to where children live through effective, well supported paediatric oncology shared care units.

The two service specifications aim to:

- improve integration between different children's cancer services
- improve the experience of care
- increase participation in clinical trials
- increase tumour banking rates
- improve the transition between children's and teenage and young adult services, in particular ensuring there is no age gap between different services
- embed genomic medicine within children's cancer services.

Parallel work is underway by the South Thames Children's Cancer Operational Delivery Network and the wider South Thames Paediatric Network, with their counterparts in north London, working with the paediatric oncology shared care units across the geography, to see the paediatric oncology shared care unit service specification implemented (post the necessary governance agreements). This will lead to an enhancement of paediatric oncology shared care unit provision, with an improved balance between the 'centre of excellence' (the Principal Treatment Centre) and care closer to home.

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<sup>26</sup> [NHS England » Children's cancer services: Paediatric oncology shared care unit service specification](#)

A service specification for teenage and young adult services<sup>27</sup>, published in May 2023, will also be implemented by the cancer networks as part of the clinical model. This is a separate piece of work that will be undertaken in the future and is out of scope of this programme.

The national service specification for Principal Treatment Centres for children's cancer set the clinical model; we therefore have a responsibility to see that it is implemented for the Principal Treatment Centre serving children who live in south London and much of the south east. This means there needs to be a reconfiguration of services, hence the establishment of the Programme Board and governance model set out at section 4. Developing the options and 9.1 Programme governance and decision making.

### **3.2. Local application – scope and vision**

In implementing the new Principal Treatment Centre service specification, there is a significant opportunity to build on the current very good services to create a children's cancer centre in south London that can deliver best quality care and deliver world class outcomes for children with cancer for decades to come, while supporting a vibrant network of shared care units based in district general hospitals, increasing the support for children to be cared for locally.

NHS England London produced a report describing different models of children's cancer Principal Treatment Centres to help inform its response to the national service specification, including a review of international models of service delivery<sup>28</sup>. This contributed to the development of fixed points and hurdle criteria, with input from stakeholders, which were subsequently applied to our long list of potential models of care, summarised in Section 4.2 Long list and appraisal against fixed points and hurdle criteria. This process led the Programme Board to reject, among other models of care, the development of a single Principal Treatment Centre for the whole of London and surrounding areas. Reasons for this included a desire to avoid creating unreasonable geographic inequalities. Hence it was considered imperative to continue providing a service based in south London for children living in south London and much of the south east.

The focus is on making the most of existing expertise in south London. This will maintain the current pattern of Principal Treatment Centres across the country.

Much more detail on this is set out in Section 4 developing the options.

### **3.3. Essential clinical co-dependencies**

Paragraph 2.4 of the national service specification sets out the requirement for the services listed in the table below to be readily available at all times if not on the same site as the Principal Treatment Centre. However, none of them is mandated.

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<sup>27</sup> <https://www.england.nhs.uk/publication/specialist-cancer-services-for-children-and-young-people-teenage-and-young-adults-principal-treatment-centre-services/>

<sup>28</sup> Context report – available on request

There was some discussion about this during development of the evaluation criteria. For more information please see section 4.5 developing the evaluation criteria.

**Table 4: The specialist children's services that, if not on site, must be readily accessible at all times**

Non-mandatory interdependent clinical services in the Principal Treatment Centre service specification		
Radiotherapy	Nephrology (renal care)	Cardiology
Endocrinology	Ophthalmology	Paediatric oncology surgery (other than the management of emergencies, central lines and biopsies) and other specialist paediatric surgery
Neurosurgery	Gastro-enterology	Paediatric pathology
Paediatric infectious disease	Palliative care	Genomic testing

### **Aligned clinical services**

Not all tumour pathways for children living in south London and much of the south east are delivered at the Principal Treatment Centre. The clinical model for this reconfiguration, while representing a considerable improvement in the delivery of integrated care, retains the following centres of excellence:

**Table 5: Aligned clinical services and hospitals where they are provided**

Cancer services for children which are not part of this consultation	Specialist centres
Bone cancer surgery	Royal National Orthopaedic Hospital, Stanmore, north London and University College London Hospitals, Euston, central London
Care for babies aged 0 to 12 months with cancer of any type	Great Ormond Street Hospital for Children, Bloomsbury, central London
Eye cancer surgery	Royal London Hospital, Whitechapel, east London
Liver cancer surgery	King's College Hospital, Camberwell, south London
Neurosurgery: surgery on the brain, nervous system and spine. It is usually for children with cancers of the brain,	Neurosurgery is provided by King's College Hospital, Camberwell, south London and St George's Hospital, Tooting, south London. The neurosurgery service each of them provides is a key part of services for children in

nervous system or spine but can sometimes be for complications in children with other kinds of cancer	<p>south London and much of the south east, including as part of the trauma services at both hospitals for children who have been badly injured. They both work closely together and will continue to do so.</p> <p>In 2019/20, 86 children had cancer-related neurosurgery. Around 20% of children had their neurosurgery at St George's. Although numbers do vary year on year, the proportion of neurosurgery that both sites do is expected to remain similar</p> <p>Details on the delivery of paediatric Neurosurgery at both Trusts can be seen below in Tables 6.</p>
Proton beam radiotherapy and other superspecialist types of radiotherapy	University College Hospital, near Euston, central London
Throat cancer surgery	Guy's and St Thomas' NHS Foundation Trust's Royal Brompton service, Chelsea
	<b>Hospitals where these services are provided</b>
Children's cancer shared care units in Kent, Medway, south London, Surrey and Sussex which provide supportive care and, where agreed, specific chemotherapy treatments, as close to home as possible, liaising closely with the specialist children's cancer centre	<p>Conquest Hospital, Hastings, East Sussex  Croydon University Hospital, Croydon, south London  East Surrey Hospital, Redhill, Surrey  Epsom Hospital, Epsom, Surrey  King's College Hospital, Camberwell, south London  Kingston Hospital, Richmond, south London  Medway Maritime Hospital, Gillingham, Medway  Queen Elizabeth Hospital, Woolwich, south London  Queen Elizabeth the Queen Mother Hospital, Margate, Kent  Royal Alexandra Children's Hospital, Brighton  Royal Surrey County Hospital, Guildford, Surrey  St George's Hospital, Tooting, south London  St Peter's Hospital, Chertsey, Surrey  Tunbridge Wells Hospital, Pembury, Kent  William Harvey Hospital, Ashford, Kent</p>
Teenage and young adult services	The Royal Marsden Hospital in Chelsea and Sutton



**Table 6: Delivery of paediatric neurosurgery at selected London Trusts**

In 2019/20, 73 (80%) unique patients at Kings and 18 (20%) unique patients at St Georges had inpatient neurosurgery activity.								
Neurosurgery activity in 19/20	Day Case		Elective		Non-Elective		Total	
	Patients	Activity	Patients	Activity	Patients	Activity	Patients*	Activity
King's	6	6	40	79	42	85	73	170
St George's	3	4	9	16	9	18	18	38
Grand Total	9	10	49	95	51	103	90	208
In 2019/20, 69 patients at Kings and St George's 17 patients had cancer related activity recorded neurosurgery.								
Neurosurgery activity in 19/20	Cancer Type	Patients*				Grand Total		
		Day Case	Elective	Non-Elective				
King's	Benign/Uncertain/In situ		14	5	17			
	Haematological			1	1			
	Neurological	2	24	29	48			
	Solid Tumours	1	1	1	3			
	Not Cancer	3	2	8	12			
King's Total		6	40	42	73			
St George's	Benign/Uncertain/In situ	1	1	1	2			
	Ill Defined, Secondary And Unspecified Sites			1	1			
	Neurological	1	5	5	9			
	Solid Tumours	1	2	2	5			
	Not Cancer		1	2	3			
St George's Total		3	9	9	18			
Grand Total		9	49	51	90			
*The total number of patients is likely to be lower than the total you would get from adding up rows as an individual patient can be in more than one row								

## Paediatric Radiotherapy

Many children diagnosed with cancer receive external beam radiation therapy - radiotherapy - as part of their treatment. There are two main types of radiotherapy:

- conventional radiotherapy, which uses high-energy x-rays (photon beams)
- proton beam therapy, an advanced form of radiotherapy that uses beams of high-energy protons.

There are other superspecialist radiotherapy services for children too:

- brachytherapy (a form of internal radiation therapy providing localised treatment using sealed radioactive sources)
- stereotactic radiosurgery and stereotactic radiation therapy (forms of radiation therapy that can precisely target high-dose radiation)
- molecular radiotherapy treatments (a form of radiotherapy which involves the use of radioactive medication to target specific conditions within the body).

Clinical requirements for children's conventional radiotherapy services are set by the national service specification for Paediatric Photon Radiotherapy Services. This was published by NHS England in June 2023.

It specifies that each conventional radiotherapy service for children must serve a large enough population to support a big enough team with the knowledge, skills and equipment to deliver care to children with complex needs, and maintain sub-specialist experience, given how wide-ranging cancer diagnoses can be in children.



Among other things, the service specification details:

- how children must be referred to the service
- the membership and skills of the multidisciplinary team that must provide the service
- how the service will ensure children get the best form of radiotherapy for them, referring to proton beam and other specialist types of radiotherapy where appropriate.

The service specification also requires conventional radiotherapy services to be open 24 hours a day, 365 days a year.

The service specification has been developed with input from patients, parents, clinicians and others, in the context of changing expectations of demand for conventional radiotherapy services. Currently, most children receive conventional radiotherapy but this is expected to change in favour of proton beam therapy.

England has two proton beam centres: the first opened at The Christie NHS Foundation Trust in Manchester in 2019, and the second at University College Hospitals (part of University College London Hospitals NHS Foundation Trust) near Euston, in central London in 2021.

Proton beam therapy limits the dose of radiation to the surrounding normal tissues, which means there is the potential for less damage to normal tissue. This is particularly advantageous in children who are still growing as it can potentially reduce long-term side effects.

As the very specialist proton beam therapy service continue to be developed, it is anticipated that more children with cancer who require radiotherapy treatment will, in future, receive proton beam therapy instead of conventional radiotherapy. It is not suitable for treating all types of cancer.

As a result, there has been movement towards providing these services in a different way, including the consolidation of paediatric radiotherapy services. This increases the resilience of services, helping ensure these can be adequately staffed, and offering wider expertise in sub-specialties and opportunities for further research. A recent example of such consolidation is the transfer of paediatric radiotherapy from the Clatterbridge Cancer Centre NHS Foundation Trust in Liverpool to The Christie NHS Foundation Trust in Manchester, which is one of the largest paediatric radiotherapy providers in England.

Conventional radiotherapy, as well as all other radiotherapy services, are already provided at University College Hospital for children using the Principal Treatment Centres for north London and the surrounding areas, Southampton, and some children from the Principal Treatment Centre in Oxford.

### **Current service**

As set out in Section 1.5 Current service provision above, most children with cancer under the care of the current Principal Treatment Centre for south London and much of the south east who need conventional radiotherapy have it at The Royal Marsden, where it is delivered by a highly specialist and integrated multidisciplinary team. Children travel to University College Hospital for all other types of radiotherapy such as proton beam therapy.

In 2019/20, our data shows that 41 children had conventional radiotherapy treatment at The Royal Marsden, delivered in 700 sessions – see slide 28 of Appendix 3 – Activity Data Pack.

Seven of these children had a particular type of radiotherapy called total body irradiation which is given in preparation for a bone marrow transplant. These patients usually need to have this delivered over up to four days as part of a hospital inpatient stay.

In 2019/20, 20 children from The Royal Marsden were referred for proton beam therapy. Modelling undertaken by NHS England with clinical teams at The Royal Marsden expects that in the future the proportion of children who have proton beam therapy could increase to about 60% (equivalent to about 35 children). Fewer children are expected to have conventional radiotherapy in comparison. Demand will vary from year to year. There will also be changes in clinical practice.

### **Reasons for change**

While The Royal Marsden service currently provides high quality conventional radiotherapy treatment for children as part of their care, the proposed move of the specialist children's cancer services to either Evelina London or St George's Hospital, alongside advances in radiotherapy treatment, means it is proposed this service is provided differently in the future. This is because:

1. It would be difficult to sustain the conventional radiotherapy service for children at The Royal Marsden without the staff and facilities of the Principal Treatment on site:
2. staff who currently play an important role in providing care would no longer be at The Royal Marsden, as most members of the multidisciplinary team are part of the Principal Treatment Centre and would move when it moves
3. the facilities needed to treat children would no longer be available, as some children who need radiotherapy require an inpatient bed. Funding and specialist workforce for current inpatient beds would transfer to the future provider of the Principal Treatment Centre
4. it could be harder to recruit and retain staff for a standalone service – specialist staff needed to provide paediatric radiotherapy might not want to work at a centre that undertakes no other paediatric work. Given the reduced number of children requiring conventional radiotherapy, it could also be more challenging for staff to maintain their skills and experience to a sufficient degree.

2) With the proportion of children expected to receive proton beam therapy expected to increase, we expect the number of children requiring conventional radiotherapy services in the future to fall. This would make it even harder to sustain a high-quality service.

Alongside the reasons above, providing conventional radiotherapy at two different sites, neither of them on the same site as the future Principal Treatment Centre, would create the need for additional journeys and add complexity. Under this scenario, clinical (radiation) oncologists at the future Principal Treatment Centre would need to work with both University College Hospital and The Royal Marsden to coordinate, make decisions, and provide care to children, as well as spending time at the future centre. Patients could need to find their way to both University College Hospital and The Royal Marsden, depending on their radiotherapy needs. This complexity would impact patient experience and without careful coordination and planning, potentially their care.

Neither Evelina London nor St George's Hospital have a paediatric conventional radiotherapy service. This is a highly specialist service that is only provided in around 10 sites across the country.

### **How would radiotherapy be delivered in the future**

In both options, we propose that, as part of the change for specialist children's cancer services, conventional radiotherapy for children moves from The Royal Marsden to University College Hospital, located on Euston Road in central London. This would mean that all radiotherapy (conventional radiotherapy as well as proton beam and other types) rather than some, as now, would then be provided at University College Hospital<sup>29</sup>.

University College Hospital is the largest centre for conventional paediatric radiotherapy in the UK. As well as being one of two centres in the UK to provide proton beam therapy, University College Hospital is the only centre in the UK providing brachytherapy for children. It provides the stereotactic radiosurgery and stereotactic radiation therapy service for the south of England and is one of two UK centres providing molecular radiotherapy treatments for children. Its specialist multidisciplinary staff support treatment of these patients while they are receiving their care on-site.

The full range of radiotherapy commissioned treatments for both adults and children and young people can be found on the NHS England Cancer Radiotherapy Clinical Reference Group [here](#).

The service is supported by a paediatric radiotherapy multidisciplinary team and has an established role in all paediatric cancer multidisciplinary teams in the north Thames and Southampton Principal Treatment Centres, and links to paediatric cancer multidisciplinary teams for the Oxford Principal Treatment Centre. Most children with cancer travel from home for their radiotherapy. Children with cancer who are inpatients at those Principal

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<sup>29</sup> Our proposals do not affect radiotherapy services for young adults, or adult services provided at The Royal Marsden.

Treatment Centres are transferred to University College Hospital for their radiotherapy. The radiotherapy service works in partnership with these centres, as it would plan to do with the future Principal Treatment Centre for children with cancer who live in south London and much of the south east.

### **Benefits of the proposed change**

There would be significant potential benefits for patients of the proposed future Principal Treatment Centre if conventional radiotherapy services were to be at University College Hospital. This service would be provided as part of a larger paediatric radiotherapy service which offered the full range of radiotherapy treatments and supported a larger number of patients. Potential opportunities to improve future care for children with cancer include:

- more opportunities for doctors and other professionals delivering radiotherapy for children to work together in one place, allowing them to develop **greater expertise and specialist knowledge** in treating children's cancers by sharing and growing their knowledge and skills. This would offer the potential to improve the treatments provided and, with that, achieve even better patient outcomes
- more opportunities to develop **clinical and lab-based research** (including opportunities for collection of real-world data) that could help to improve care for children in years to come
- the provision of all radiation treatment types to children by a specialist team could be highly attractive to staff, supporting **recruitment and retention of very skilled staff**, giving stability and resilience within the service, and ensuring the service could be provided to children when they need it, even when some staff required time away from work.

These benefits are consistent with the national service specification for radiotherapy. They would allow for increased uptake of proton beam therapy while ensuring that children who need it continue to receive high quality conventional (photon) radiotherapy.

More detail is provided on radiotherapy in section 6.2 Impact on other services which covers the impact of our proposals on other services and further detail on how the change would be enabled.

### ***Networks***

The new clinical model described for the Principal Treatment Centre will draw on existing expertise and relationships in the South Thames Children's Cancer Operational Delivery Network and the wider South Thames Paediatric Network.

A move of the Principal Treatment Centre from one tertiary centre to another should not disrupt these relationships. Indeed, as described above, the South Thames Children's

Cancer Operational Delivery Network and the South Thames Paediatric Network with their counterparts in north London are already working with the paediatric oncology shared care units from across the geography to plan implementation of the new paediatric oncology shared care unit specification.

### ***Electronic Patient Records***

The new care model will require excellent IT provision for the transfer of records and, ideally, images across the network; secure access to detailed clinical records will be vital.

Patient and parent/carer access to digital information via an app or an online portal is also key to the joined-up experience of care and well-supported navigation of services we want for children and families.

## **3.4. Research**

Research is deemed a crucial aspect of the clinical model for the future Principal Treatment Centre by all those involved: children and families, children's cancer charities, Guy's and St Thomas', St George's, The Royal Marsden, the Institute of Cancer Research, NHS England commissioners and partner Trusts. Even though NHS England does not commission research (it is primarily commissioned by the National Institute for Health and Care Research and research grant funders), the integrated nature of research and clinical care in very specialist cancer treatment services for children means that research capacity and capability are central to the clinical model.

The Royal Marsden provides world renowned research into children's cancer and is home to the Oak Paediatric and Adolescent Oncology Drug Development Unit, a highly specialist unit with an expert, dedicated, early phase trials team embedded within the wider Paediatric and Adolescent Oncology Clinical Research Team. A high proportion of children currently access clinical trials of new, innovative, cancer medicines as part of their care. These may be at first diagnosis or at cancer recurrence.

The paediatric research team works closely with the Institute of Cancer Research, as well as St George's as part of its shared role within the current Principal Treatment Centre. This partnership is crucial for translational research, turning discoveries into treatments.

The clinical research team at The Royal Marsden currently comprises over 25 individuals focused on running clinical trials to the highest standards of excellence, as part of holistic patient care. It includes consultants, drug development clinical fellows, research nurses, (including a new post for Research Nurse Specialist for Paediatric Oncology, employed by St George's, who works cross-site with The Royal Marsden to support joint trials and tissue studies), trial coordinators, data managers, a tissue collector, an assistant practitioner, and a research administrator for the team. Employment costs for some team members are funded by The Royal Marsden's charity.

The Institute of Cancer Research has five research teams focused on paediatric cancer research. Four of these teams research solid tumours, including brain tumours, with the other engaged in research into blood cancers.

Where there is a suspicion of an underlying genetic predisposition to cancer, patients may be seen in genetics clinics run jointly by clinical genetics teams from St George's and The Royal Marsden, and surveillance/screening for earlier diagnosis of future cancers in patients and/or relevant family members facilitated.

The ethos at The Royal Marsden is that every patient at every stage of their cancer journey is considered for their eligibility for inclusion into relevant available phase I, II or III clinical trials wherever possible, with a view to improving outcomes by introducing novel therapeutic strategies. This includes at first diagnosis and thereafter, if resistant to frontline treatment and/or at every relapse. In addition to the specialist PA-DDU phase I/II clinical trials team, The Royal Marsden also runs phase III trials. All consultants at The Royal Marsden are research- active and have the opportunity to act as principal or chief investigators on trials in their subspecialty disease area of expertise.

The Royal Marsden is the UK centre with the greatest number of 'first in child' clinical trials open. It is consistently among the top three in Europe (in terms of numbers of trials available and numbers of patients recruited) in the Innovative Therapies for Children with Cancer European early phase trials consortium. It ascribes its participation and leading role in a high number of clinical trials (both academic and commercially sponsored) to The Royal Marsden consultants' leading position within national and international cancer networks and tumour groups (e.g. National Cancer Research Institute, Experimental Cancer Medicine Centre, Innovative Therapies for Children with Cancer and disease specific tumour groups) and its very close relationship with the Institute of Cancer Research and with The Royal Marsden adult cancer units, including tumour-specific cancer units and for the adult Oak Drug Development Unit where phase I 'first-in-man' trials of new drugs are run.

NHS England (London and South East regions) are committed to securing this vital asset and, if possible, using the reconfiguration to further enhance and broaden the research undertaken into children's cancer. Integration and excellence in research are a core part of the current and future clinical model. The intention in the future model is for the 'wet lab' scientific elements of research into children's cancers to remain at the Institute of Cancer Research in Sutton, while the clinical research team - clinicians who are active in both research and clinical care - is based at the future Principal Treatment Centre.

Risks associated with the development of a new model for research will need to be managed closely by the future Principal Treatment Centre provider, with assistance and guidance over the course of the transition from The Royal Marsden and the Institute of Cancer Research. NHS England will also play an important role facilitating this. Risks and potential mitigations include:



- the need for cross-site collaboration between clinical oncology teams at the Principal Treatment Centre and scientists at the Institute of Cancer Research, especially for Phase I and II translational and tissue-based studies, and drug discovery. Joint appointments, mutual honorary contracts, flexible working across sites, and review and development of new funding solutions for posts (as required), will all support this
- the need to retain academic links and honorary positions with the Institute of Cancer Research to provide research, training and interactions that include engagement to support bench to bedside research. The future provider will need to build strong relationships to maintain academic links and honorary positions
- the need to facilitate access to innovative therapies in collaboration with pharmaceutical partners where no clinical trial is open or available to a patient. The Royal Marsden has a clearly defined, efficient, operating procedure for this, including governance and ethics review by The Royal Marsden Drug and Therapeutics Committee. The future centre will need to build relationships and work closely with pharmaceutical companies as well as establishing relevant governance (and appropriate safeguards) to support continued access in a timely way, in line with clinical urgency
- the need to take account of a potential risk to the continuation of radiotherapy research under our proposals, which would see conventional radiotherapy for children with cancer moving to University College London Hospitals. With all radiotherapy services, rather than some, as now, on a separate site from the Principal Treatment Centre, it could be more challenging to maintain radiotherapy research, which is crucial for improving outcomes and reducing late effects of radiotherapy for children and young people. It is also the case that creating a larger combined radiotherapy service at University College London Hospitals could open up new opportunities for radiotherapy research, including in different areas. This risk will be reviewed and assessed in the implementation phase
- the need to ensure teenagers and young adults being treated by The Royal Marsden continue to be able to access clinical trials for paediatric cancers as well as clinical trials for more adult cancers, given the former may be impacted by the relocation of the services for children with cancer. Careful planning work would be needed to support this
- the need to ensure children and young people can be consented and recruited to trials at the future Principal Treatment Centre. This will be greatly aided by the support of dedicated cancer research nurses who have developed expertise as part of the current service based in Sutton. Working closely with the future Principal Treatment Centre and advance planning to build the expertise of staff will support this capability

- the need to reassure funders of grants, trials and PhD students that research will remain a significant priority for the future Principal Treatment Centre and they will have access to one of the largest centres for children with cancer in Europe. Mitigations will need to include arrangements to ensure research and recruitment to trials can be achieved on time, and on budget. Considerations will need to be given to both academic studies and commercially sponsored studies
- the commitment to support sample collection, processing, biobanking and the transport of fresh samples from the future Principal Treatment Centre to laboratories, as part of a wider commitment to support and fund translational research. This may require careful planning and potential investment in infrastructure
- the need to ensure rapid access to tissue analysis providing molecular information for directing patient treatment. Turnaround times for results need to be written in clinically meaningful time frames
- the need for clinicians to have programmed time to facilitate research that will progress to trials, maintaining the excellent track record of the existing partnership between the Institute of Cancer Research and The Royal Marsden in establishing early phase trials and enrolling high numbers of young people into these.

It is essential for the success of the proposals in this pre-consultation business case that stakeholders work closely together to maintain current levels of excellence and seek opportunities to build on this work into the future. This will be particularly key during the implementation phase when further work will be required on mitigations to reduce the potential impact of identified risks and issues.

There are wider risks and issues for this programme that may impact the continuity of research and research staff. These risks and mitigations are reflected in section 10.3 Management of Risks and Issues.

### **3.5. Activity analysis**

Activity analysis was undertaken to provide an indication of the scale of service to transfer under these proposals and the facilities this would require. Currently the Principal Treatment Centre provides paediatric oncology care through 18 dedicated beds at The Royal Marsden and four at St George's Hospital.

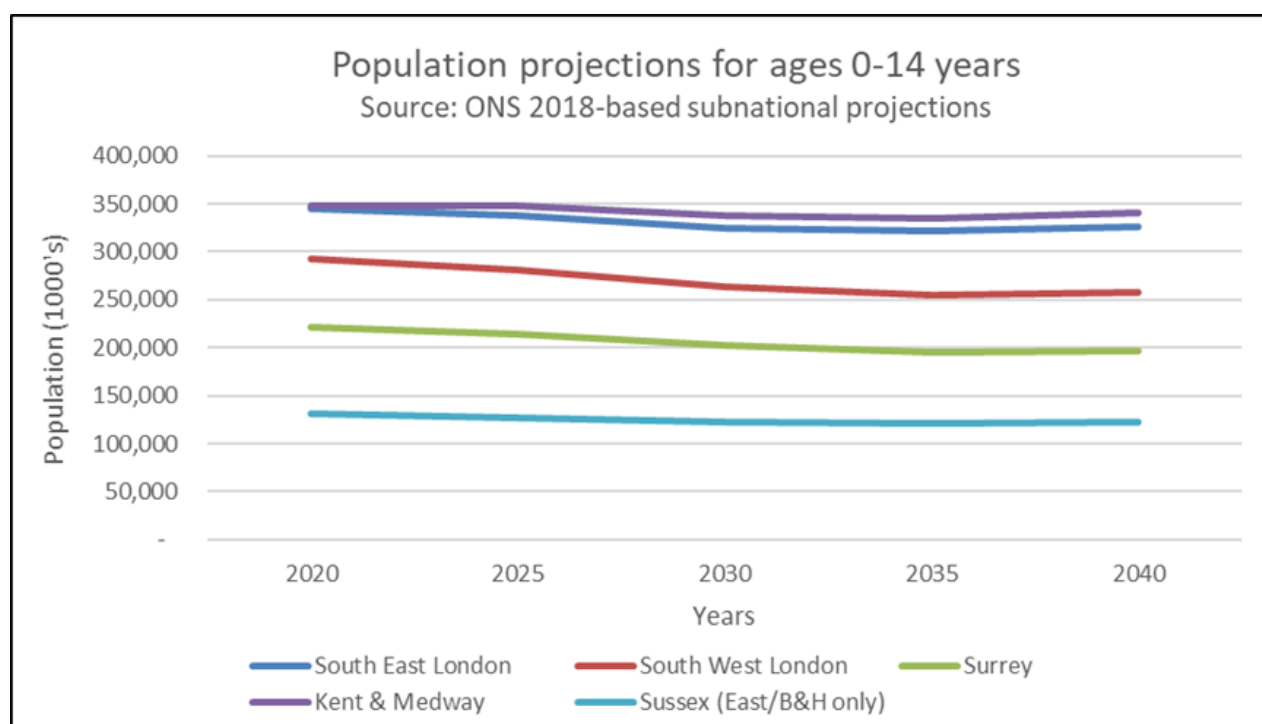
The data analysis used data from 2019/20 (i.e., the year before the full impact of the COVID-19 pandemic was felt). A 'data lake' was established between Guy's and St Thomas', St George's and The Royal Marsden with NHS England London, to ensure that a single set of data is used to plan for this service. To ensure the 2019/20 data can be relied upon by this process, 2019/20 patient numbers were compared to those for 2021/22 in SUS (Secondary Uses Service – the NHS England view of activity data). See Appendix 3 – Activity Data Pack,



slide 4. There was not a significant change in patient numbers across the two years. In 2019, 456 patients had 4,599 episodes of inpatient care (day case and overnight stays) at The Royal Marsden compared to 476 patients in 2022 who had 4,415 episodes of inpatient care. This shows the data lake numbers are still relevant, which is what we would expect.

We don't expect any growth in demand for children's cancer services over the next 20 years. Although the proportion of children with cancer is unfortunately increasing, it is doing so very slowly. The overall number of children aged 15 and under is forecast to fall in the next 20 years, offsetting any increase in the proportion of children with cancer.

**Figure 12: Population projections for ages 0-14 years**



Activity growth is therefore assumed to be zero.

The tables below set out the activity carried out under the auspices of the Principal Treatment Centre at both St George's and The Royal Marsden for children aged one-to-15<sup>3031</sup>. NB some patients are included in both St George's and Royal Marsden activity. What would otherwise be a 'double count' is removed in the totals.

<sup>30</sup> Although the Principal Treatment Centre only treats patients aged 1+ there were three patients aged 0 who received care at St George's during this time. This care was primarily for critical care. It is assumed these patients would be transferred were the Principal Treatment Centre to move and therefore they have been included in the activity/capacity modelling

<sup>31</sup> St George's activity only includes the activity that is part of the proposals described in this pre-consultation business case and not paediatric neurosurgery or paediatric oncology shared care unit activity at St George's that are both out of scope of the reconfiguration.

**Table 7: Overview of current Principal Treatment Centre activity at St George's and The Royal Marsden in 2019/20 which would move under this reconfiguration proposal (NB this does not include neurosurgery or paediatric oncology shared care unit activity carried out by St George's as this activity is out of scope of the reconfiguration)**

19/20 PTC Summary	St George's			Royal Marsden			Total		
	Patients*	Activity	Income	Patients*	Activity	Income	Patients*	Activity	Income
<b>Inpatient</b>	208	313	£1,018,422	456	4,599	£7,958,503	536	4,912	£8,976,925
Elective	72	90		147	412		191	502	
Day case	96	108		398	1,774		454	1,882	
Regular Day	-	-		283	2,363		283	2,363	
Non-Elective	93	115		44	50		136	165	
<b>Outpatient</b>	72	275	£40,439	1,354	7,943	£1,984,896	1,367	8,218	£2,025,335
<b>Critical Care</b>	84	1,451	£2,019,106				84	1,451	£2,019,106
<b>Radiotherapy</b>				41	700	£195,300	41	700	£195,300
<b>Drugs</b>				398		£2,298,700	398		£2,298,700
<b>Total</b>	<b>210</b>		<b>£3,077,967</b>	<b>1,356</b>		<b>£12,437,399</b>	<b>1,373</b>		<b>£15,515,366</b>

- Outpatient care includes attendances for imaging, ward attenders and other non-admitted ambulatory activity as well as outpatient appointments.
- Activity in Table 7 is measured in different currencies, Discharged spells for Inpatients, Attendances for Outpatients, Occupied bed day for Critical Care and number of appointments for Radiotherapy.
- \*The total number of patients is likely to be lower than the total you would get from adding up rows as an individual patient can be in more than one row
- The income column does not include all of the income related to paediatric oncology at The Royal Marsden
- Of the 1,451 critical care days 819 were undertaken in a HDU bed rather than within the PICU

**Table 8: Detail of current Principal Treatment Centre inpatient activity at St George's in 2019/20 in scope for this proposal**

In 19/20 208 children aged 1-15 received paediatric oncology care as an inpatient at St George's. These children received 108 day cases, 90 elective spells, 115 non-elective spells and 399 theatre hours.

19/20 - St George's Admitted Patient Care	Day Case			Elective				Non-Elective				Total			
	Patients	Activity	Theatre Hours	Patients	Activity	Ward days	Theatre Hours	Patients	Activity	Ward days	Theatre Hours	Patients	Activity	Ward days	Theatre Hours
Benign/Uncertain/In situ	2	2	1	8	9	45	33	3	3	7	3	12	14	52	37
BMT	2	3	1	5	7	18	16	10	14	0	16	12	24	18	32
Haematological	32	33	18	18	22	28	29	53	60	57	72	86	115	85	120
III Defined, Secondary And Unspecified Sites	1	2	1	7	7	13	31	2	2	0	3	9	11	13	35
Solid Tumours	37	41	13	32	37	108	113	15	15	21	28	68	93	129	154
Other	22	27	8	6	8	10	11	14	21	19	3	34	56	29	21
<b>Grand Total</b>	<b>96</b>	<b>108</b>	<b>42</b>	<b>72</b>	<b>90</b>	<b>222</b>	<b>232</b>	<b>93</b>	<b>115</b>	<b>104</b>	<b>125</b>	<b>208</b>	<b>313</b>	<b>326</b>	<b>399</b>

19/20 St George's Critical Care	Patients	Bed days
Intensive Care Unit	48	632
Ward based Care	63	819
<b>Grand Total</b>	<b>84</b>	<b>1,451</b>

\* The total number of patients is likely to be lower than the total you would get from adding up rows as an individual patient can be in more than one row, Note: This slide includes 3 children less than 1 year's old.

**Table 9: Detail of current Principal Treatment Centre inpatient activity at The Royal Marsden in 2019/20**

In 19/20 456 children aged 1-15 received paediatric oncology care as an inpatient at The Royal Marsden. These children received 1,774-day cases, 2,363 regular day appointments, 412 elective spells, 50 non-elective spells and 738 theatre hours.

19/20 - Royal Marsden Admitted Patient Care	Day Case			Regular Day Attender			Elective				Non-Elective				Total			
	Patients	Activity	Theatre Hours	Patients	Activity	Theatre Hours	Patients	Activity	Ward days	Theatre Hours	Patients	Activity	Ward days	Theatre Hours	Patients	Activity	Ward days	Theatre Hours
Benign/Uncertain/In situ	11	14	12	3	16	-	1	2	3	0	-	-	-	-	13	32	3	12
BMT	16	169	45	15	94	-	19	56	1,510	35	3	4	19	0	19	323	1,529	80
Donor	-	-	-	-	-	-	5	6	9	5	-	-	-	-	5	6	9	5
Haematological	205	972	205	179	1,506	-	69	142	1,838	60	32	36	577	16	234	2,656	2,415	281
Ill Defined, Secondary And Unspecified Sites	15	34	17	10	84	-	3	14	53	3	1	1	0	0	21	133	53	19
Neurological	56	226	121	32	286	-	16	59	225	8	5	6	20	4	66	577	245	134
Solid Tumours	103	290	180	40	321	-	39	133	478	20	3	3	6	2	119	747	484	201
Other	54	69	6	21	56	-	-	-	-	-	-	-	-	-	67	125	0	6
<b>Grand Total</b>	<b>398</b>	<b>1,774</b>	<b>585</b>	<b>283</b>	<b>2,363</b>	<b>0</b>	<b>147</b>	<b>412</b>	<b>4,116</b>	<b>130</b>	<b>44</b>	<b>50</b>	<b>622</b>	<b>23</b>	<b>456</b>	<b>4,599</b>	<b>4,738</b>	<b>738</b>

The total number of patients is likely to be lower than the total you would get from adding up rows as an individual patient can be in more than one row

### 3.6. Overall impact of the clinical model

Wherever the proposed future centre is, our aim is to keep all the strengths of the current service and build on them. Ground-breaking research, high quality care and good access to clinical trials are offered at The Royal Marsden in its family-friendly centre for children and young people, alongside the Institute of Cancer Research. All are very important to children with cancer, their families, and the staff who work in the service.

With the experience and expertise of specialist children's cancer teams on the same site as children's intensive care specialists, surgical teams and other children's specialties, the future Principal Treatment Centre will meet the national service specification with all the benefits that brings, minimise risk to children, and be capable of giving a full range of innovative treatments.

Our vision is that it will:

- build on all the strengths of the existing service
- give best quality care and achieve world-class outcomes for children with cancer for decades to come.

Whichever location is chosen for the future Principal Treatment Centre it will:

- meet the national service specification with all the benefits that brings
- provide excellent patient and parent/carer experience, including being child-friendly and having good facilities for parents and families
- have lots of experience and expertise at supporting patients and families to deal with complex services, including at other hospitals, and through times of extreme difficulty

- look after and develop its staff who are vital to the service, providing a great place to work, good training and opportunities, and additional support such as a nursery for childcare
- have the staff, expertise, space and equipment to give children all the care that they need, 24 hours a day, 365 days a year, and have plenty of experience of listening to children, young people and families and acting on what they say, to make services better
- aim to further increase participation in cutting-edge clinical trials
- make sure there are really good, flexible, personal arrangements for children moving into teenage and young adult services and that no one falls through the gaps
- continue the current focus on increasing rates of ‘banking’ (storing) tissue from children’s tumours, enabling more research into possible new treatments
- continue the current focus on making greater use of genomic medicine allowing treatments to be tailored to children’s own individual DNA and diagnosis: this is being led by a genomics lead nurse for the children’s cancer network
- lead and support close, joined-up working between different children’s cancer services so children get access to care when and where they need it, wherever they live. This would include coordinating integrated, disease-specific pathways with the hospitals providing shared care for children with cancer, as part of the children’s cancer network.

We believe we can achieve all this through the hard work and focused efforts of all our organisations and crucial partners like the Institute of Cancer Research.

### **Benefits we expect from the proposed changes**

We expect the following benefits from the implementation of our proposed new clinical model.

Whether the future Principal Treatment Centre was at Evelina London or St George’s, with conventional radiotherapy services at University College Hospital, it would:

- end hospital transfers from the specialist centre of very sick children with cancer who need or might need intensive care, eliminating the added risks and stress these transfers bring. If children did need an intensive care bed, the intensive care unit would be very close, on the same site
- enable children with cancer to get more of their care on the specialist cancer ward, and minimise the number of children admitted to intensive care, which can be very frightening for children and families. With intensive care specialists on site:

- children would never be transferred as a precaution in case they might go on to need intensive care
- specialist input from intensive care teams would potentially help some children avoid intensive care. Cancer specialists say cancer services in children's hospitals with intensive care units on site have fewer intensive care admissions for this reason.
- have more services on the same site than now, improving experience for many children and families
- meet the national requirements and be capable of offering cutting-edge treatments that need intensive care on site
- make it easier for different specialist teams treating the same child to work closely together, improving care for children and supporting new areas and types of research too
- make it easier for cancer and non-cancer specialists to learn from each other and share learning. As well as being good for children's care, this would be likely to help the future centre keep and attract new staff
- be designed with children, families and staff. This would help tailor it to their needs.

In addition, as referenced above, the proposed new clinical model requires the continuing support of paediatric oncology shared care unit development so children with cancer receive a greater range of supportive care and specified chemotherapy treatment as close to home as possible, with appropriate access to local community support services.

This should enhance patients' and families' experience of care by:

- enabling services to take advantage of new therapies and technologies such as novel therapies and tests to reduce side effects, e.g. pharmacogenomics, as they come onstream
- having immediate access to interdependent service expertise
- supporting access and research into new trials and potential treatments
- tailoring treatment plans and personalised medicine which have the ability to improve patient outcomes.

As with all service changes, to achieve these benefits will require careful planning throughout the implementation phase, taking full account of and managing risks in the transition. Careful monitoring of metrics that capture improvements and changes in outcomes, patient experience and organisational structures and processes (including workforce) will be required. This monitoring will be aligned with that required as part of the national service specification – see Appendix 9 – Service Specification Outcome Indicators.

Under both options, changes to the way radiotherapy services are also proposed with conventional radiotherapy proposed to move to University College Hospital. Under this proposal, all paediatric radiotherapy services would be provided by University College Hospital instead of some as now. Benefits associated with this are set out in Section 3.3 Essential co-dependencies.

### **Things we will need to focus on**

Whether the future Principal Treatment Centre is at Evelina London or St George's, the challenges that inevitably come with moving any service, including children's cancer services and research, will need to be well managed. All organisations involved are committed to working closely together. We all share the same objective, to ensure the very best service is provided for children and families, and that the change that needs to be made does not interrupt care. This will be an important part of our ongoing work. Early high-level planning for how the proposed changes would be made has rightly been a part of the scoping and planning work that has been done to date in this programme. Once a decision on the location of the future Principal Treatment Centre has been made, planning will become more specific and much more detailed and will be the key focus during the two and a half years until the proposed transfer of the service and afterwards too.

Some of the things that we will focus on managing are:

1. keeping the high level of research and funding for research at The Royal Marsden going at the future Principal Treatment Centre: it is likely to be difficult to maintain the same level of grant funding, at least at first

We must be sure the Trust that runs the future centre will have the resources and do everything that is needed before, during and after the move to carry on research at the levels it is now at and develop it further. They will need to work very closely with The Royal Marsden, the Institute of Cancer Research, research funders and others to do this. We tested both Trusts' plans for this as part of our options appraisal.

2. The Royal Marsden's charity pays the salaries of some staff in the children's cancer team (for instance the team of play specialists) and most children's cancer research staff. The new centre will need to find a way to cover these costs

Both Trusts have taken account of this in their financial planning for the move. They both have large hospital charities which would work closely with the future Principal Treatment Centre if it is on their site.

3. there is a risk that experienced and expert staff who provide the service will decide not to move to the future centre

Supporting as many as possible of the experienced and expert staff who provide the service to move to the future centre, and to feel part of their new organisation is a priority for us.



Staff who spend more than half their time on children's cancer care have the right to transfer to the future centre if they want to:

- 248 staff across the two hospitals work in the service
- about 170 Royal Marsden staff and four from St George's qualify to transfer to the future centre, if they want to.

We hope that most staff who currently work in the Principal Treatment Centre will want to continue to provide care to children with cancer by moving to the future centre. Supporting them to do so is really important and we will support the future centre to do this.

Both Evelina London and St George's Hospital are highly respected hospitals with strong track records of looking after their staff. Both would provide many opportunities for children's cancer staff. These would include the chance to work with and learn from colleagues with different expertise, supporting their development. We tested both Trusts on their ability to attract and keep staff.

However, experience of previous service changes shows us not all staff will want to move and we have to be realistic about this too. Evelina London, King's College Hospital, St George's and The Royal Marsden have agreed to work together during the time leading up to the move to make sure the future centre has the staff and expertise it needs. During the two and a half years before the service transfers, plans will need to be drawn up to fill gaps and ensure that the expertise of these staff is not lost to the NHS. As Evelina London is not currently involved in providing many of these services, it could have more planning work to do.

4. The Royal Marsden will continue to provide cancer services for teenagers and young adults. This means that when children are ready to move to teenage and young adult services (usually around the time of their 16th birthday), they will be moving from the future Principal Treatment Centre to a different site, The Royal Marsden. This will need to be managed carefully to make sure children have an excellent experience of moving to the teenage service

The Royal Marsden and the future Principal Treatment Centre will work very closely together and with patients and parents to plan this before specialist children's cancer services move. By doing this, they will make sure all patients continue to get the support and care they need during their move to teenage and young adult services.

However important it is to move a service, we recognise it can be disruptive and upsetting for the people involved, not least as everyone cares so deeply about children's cancer care.

Travel to the future centre is also something parents and staff have understandably raised concerns about and our Equality and Health Inequalities Impact Assessment (part of the Appendix 1 – Integrated Impact Assessment) has a strong focus on developing mitigations to



reduce any negative impact a change in location could have. More information is available on this in Section 8. Engagement and in Section 9.2 Equality and Health Inequalities Impact Assessment .

Being aware of these things means that we can work together to manage them. The teams at the Trusts involved will make sure staff and families have the support they need through this time of change and that the service runs smoothly throughout, including for children moving on to teenage and young adult services. They will work with families on preserving memorials for children in line with families' wishes.

Further detail of risks is set out in Section 10.3 Management of risks and issues, and Appendix 6 – Risk, Issues, and Mitigation Plan of this document.

### **3.7. Impact of engagement on the clinical model**

The detail of pre-consultation engagement activity with patients, parents and professionals and how it has impacted and benefited our work is described elsewhere in the pre-consultation business case (Section 8. Engagement). Early engagement with stakeholders identified five key considerations, or principles, for successful implementation of the proposed new clinical model:

- clinical capacity and capability: access to the best treatments and to specialists who are highly knowledgeable about specific cancers is fundamental
- facilities: parents and children emphasised the importance of the environment of the Principal Treatment Centre, including age-appropriate facilities, privacy, and access for parents
- access to clinical trials: all parties emphasised the importance of maintaining and enhancing (if possible) access to research and latest interventions – both frontline trials and at cancer recurrence
- access to the Principal Treatment Centre: particularly travel times and ease of travel particularly by car. This is covered further in Section 9.2 Equality and Health Inequalities Impact Assessment
- clinical leadership in network delivery.

These have all been taken into account in development of the clinical model and of the criteria for assessing the options put forward to deliver it. Further detail is set out on this later in the document.

## 4. Developing the options

NHS England London, which plans and pays for specialised services based in London for children with cancer, was tasked by the national NHS England Board with identifying and commissioning a future Principal Treatment Centre which is compliant with the national service specification for Principal Treatment Centres for children's cancer.

This followed the national board's acceptance of the recommendations set out in the NHS England and NHS Improvement Board Meeting in Common paper<sup>32</sup> of 30 January 2020.

In response, NHS England London, working in partnership with NHS England South East, set up the South London and South East Principal Treatment Centre Programme to identify an affordable, clinically viable and deliverable option for the future Principal Treatment Centre on the same site as a Level 3 children's intensive care unit.

### **How the Programme works**

The programme is overseen by a Programme Board which is made up of leaders from the hospitals involved, senior doctors from NHS England London and NHS England South East, and external experts. It is supported by clinical, managerial, finance and patient voice advisory groups. It started work in July 2020.

The aim of the programme is to commission the best possible Principal Treatment Centre for children with cancer in Brighton and Hove, East Sussex, Kent, Medway, south London and most of Surrey – the catchment area.

The day-to-day work of the programme is led by the NHS England London specialised commissioning team in partnership with NHS England South East.

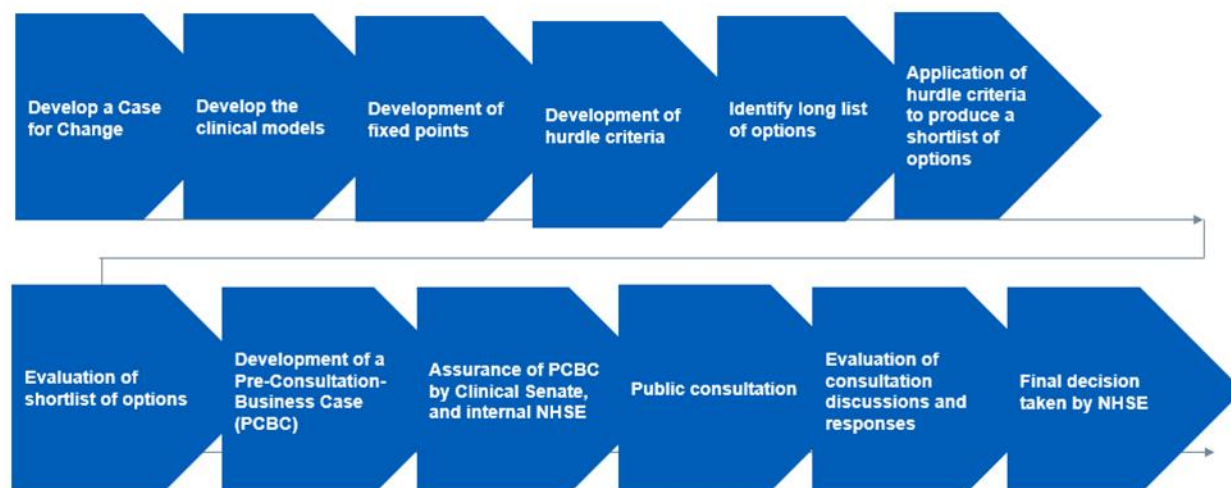
### **4.1. Developing and refining the options**

In line with NHS reconfiguration guidance, a shortlist of viable solutions to deliver our new model of care and comply with the service specification was derived from a long list of all possible solutions through a process of applying fixed points and hurdle criteria. This identified one viable solution. Further analysis showed there are two ways, or options, to provide this in south London. These two possible options were evaluated in this pre-consultation phase against a comprehensive set of evaluation criteria. The process methodology was agreed with the Programme Board in November 2020. The programme is following NHS England guidance and the standard NHS process for reconfiguring services which is summarised in the diagram below.

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<sup>32</sup> [Update on Specialised Cardiac Respiratory and Cancer Services](#)

**Figure 13: NHS reconfiguration process that this programme is following**



In line with this guidance and using a methodology which was agreed with the Programme Board in November 2020, a shortlist of viable solutions to deliver our new model of care and comply with the service specification was derived from a long list of all possible solutions through a process of applying fixed points and hurdle criteria. This identified one viable solution. Further analysis showed there are two ways, or options, to provide this in south London. These two possible options were evaluated in this pre-consultation phase against a comprehensive set of evaluation criteria.

This chapter explains how we identified the options and how the evaluation criteria were developed, with input from a wide range of experts.

## 4.2. Long list and appraisal against fixed points and hurdle criteria

The long list of possible solutions to deliver the new model of care, presented at the November 2020 Programme Board, is set out in Table 10, with fixed points and hurdle criteria applied. It is through the application of fixed points and hurdle criteria to the long list of possible solutions that a shortlist is derived.

### Fixed points

Fixed points in a reconfiguration programme are those agreed elements which will not change. The fixed points for this programme and reasoning behind them, which were agreed by the Programme Board in November 2020, were:

- a) it is a fixed point that the proposed options which go forward to consultation must deliver a Principal Treatment Centre co-located with a paediatric intensive care unit. This is the purpose of the programme. Its success must not depend on changes to other models of care.

- b) Delivery of the programme must not be dependent on changes to other models of care that are outside the scope of this process, **it is [therefore] a fixed point that activity at the following sites is not required to move as part of this reconfiguration:**
- bone tumour (sarcoma) surgery at Royal National Orthopaedic Hospital, Stanmore
  - brain, spinal and nervous system surgery (neurosurgery) at King's College Hospital (King's) and St George's Hospital
  - care of under one-year-olds with cancer of any type at Great Ormond Street Hospital
  - children's eye tumour (retinoblastoma) surgery at the Royal London Hospital
  - children's liver surgery at King's
  - existing paediatric intensive care units in south London at Evelina London Children's Hospital, King's and St George's Hospital
  - proton beam therapy at University College Hospital.
- c) it is a fixed point that the future Principal Treatment Centre for south London and much of south east England should not be wholly located in north London. The services being configured are for patients in south London and most of the south east and should not introduce unreasonable geographic inequalities.
- d) it is a fixed point that Great Ormond Street for Children NHS Foundation Trust working with University College London Hospitals NHS Foundation Trust remains the Principal Treatment Centre for north London. Great Ormond Street/University College London Hospitals currently provides the Principal Treatment Centre for children living in north London and the surrounding geography. The national service specification has required a refresh of their roles. Once this work is completed, all Principal Treatment Centre services for children under 13 will be at Great Ormond Street , complemented by an enhanced level B paediatric oncology shared care unit for children under 13 at University College London Hospitals. Great Ormond Street will provide the Principal Treatment Centre for children aged 13 to 15 jointly with University College London Hospitals.

### **Hurdle criteria**

Hurdle criteria are applied to ensure that possible solutions which are evaluated further all meet the basic objectives of the programme and are therefore viable. A possible solution on the long list either does or doesn't meet the hurdle criteria. If it doesn't, then it does not get

carried forward to the shortlist. The hurdle criteria, agreed by the Programme Board in November 2020, were:

1. **access:** the future Principal Treatment Centre must be accessible in terms of journey time for people across the catchment area and should therefore be based within Greater London
2. **supplier capability:** to deliver the future Principal Treatment Centre, the expectation is that the chosen provider Trust is capable of providing a Level 3 paediatric intensive care unit which complies with the requirements set for a Level 3 paediatric intensive care unit (<https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/01/e07-sa-paed-inten-care.pdf>), and the 'must do' requirements of the Principal Treatment Centre specification.
3. **achievability:** to be considered as a potential option for the future Principal Treatment Centre, the provider Trusts involved must be willing to participate in the process of providing the service. This was assessed by requesting providers sponsoring a solution on the long list to formally confirm an expression of interest in providing the service.

An additional hurdle criterion was included following discussion of the evaluation criteria at the December 2020 Programme Board:

4. **ability to deliver the new service within a 2.5 year implementation timeline** following the final go-ahead. This timescale was considered feasible reflecting the need to transfer the service in a timely way, yet with sufficient time for careful planning alongside relevant approvals, such as those for capital and associated estates work.

A fifth hurdle criterion was added at the March 2022 meeting of the Programme Board:

5. **capital and revenue affordability and deliverability tests are met:**
  - NHS England has laid out the process to follow for service changes in 'Planning, Assuring and Delivering Service Change for Patients 2018<sup>33</sup>'. The key financial test is that any proposal is affordable in capital and revenue terms ahead of public consultation. This is the approach NHS England London has used to evaluate the financial content of proposals.
  - The Trusts which want to provide the future centre must show that they can afford both the capital and revenue costs included in their proposals in line with existing commissioner allocations and nationally available capital.

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<sup>33</sup> [Planning, Assuring and Delivering Service Change for Patients 2018](#)

- So long as both options remain affordable, finance will not be the determining factor. Instead, we are focusing on which site can best provide what we are looking for: a future Principal Treatment Centre that gives best quality care and achieves world class outcomes for children with cancer for decades to come.

In May 2022, it was confirmed that £20 million of national capital funding would be made available as a contribution toward the capital costs of the future Principal Treatment Centre.

### ***Developing the long list***

NHS England London's public health team undertook a background review of other Principal Treatment Centres, drawing on experience in England but also looking at the service in the Netherlands where there is one large central expert centre for the country. They then drew up a list of every possible way the Principal Treatment Centre could be provided in the future. It listed eight different possible solutions (the long list). These are set out in Table 10 below.




### ***Application of fixed points and hurdle criteria to create a shortlist of options***





The fixed points and hurdle criteria were applied to the long list in early 2021, resulting in an initial short list of three possible solutions, two of which would involve The Royal Marsden. In November 2021, the national service specification for Principal Treatment Centres for children's cancer was published. The Royal Marsden confirmed it would not be able to provide a children's intensive care unit at the Sutton site because that would not be clinically or financially sustainable. Children's intensive care units are always on sites used by tens of thousands of children every year because intensive care teams need to see high volumes of very sick children to maintain their specialist skills and expertise. This wouldn't be supported by the number of children treated at The Royal Marsden.


As a result, the fixed points and hurdle criteria were applied again. This resulted in the following assessment with only possible solution – solution 5, highlighted in green in the table below – meeting all the criteria.



**Table 10: The result of applying the fixed points and hurdle criteria**

Possible solutions identified for the Principal Treatment Centre for children with cancer living in Brighton and Hove, East Sussex, Kent, Medway, south London, and most of Surrey			How each solution measures up against the fixed points and hurdle criteria	Result
1.Do nothing	The current service doesn't comply with the 'supplier capability' hurdle: to deliver a service that is compliant with the national service specification. Nor does it meet fixed point (a): the future service must be on the same site as a paediatric intensive care unit. It is therefore not possible 'to do nothing.'			
2.New site developed for a standalone Principal Treatment Centre which does not currently have a paediatric intensive care unit or significant specialist services. Greenfield or district general hospital (including the current Sutton site).	Does not comply with the 'supplier capability' hurdle or fixed point (b) in that a new paediatric intensive care unit would not be sustainable on a new site without destabilising existing paediatric intensive care units.			
3.A single Principal Treatment Centre for London based on the existing compliant Principal Treatment Centre (provided by Great Ormond Street/University College Hospital).	Doesn't comply with fixed point (c) in that the future Principal Treatment Centre for south London and much of the south east must not be wholly located in north London.			

<p>4. Single Principal Treatment Centre for London delivered through a combination of providers based on the existing compliant Principal Treatment Centre and a second site with significant specialist services.</p>	<p>Various ways of delivering this were considered:</p> <p>Great Ormond Street/University College Hospital and a north London site – this combination does not comply with fixed point (c) that the future Principal Treatment Centre for south London and much of the south east must not be wholly located in north London.</p> <p>Great Ormond Street/University College Hospital with a south London partner – this combination does not comply with the ‘service capability’ hurdle as both sites would need to have intensive care units, or with the ‘achievability’ hurdle. The Royal Marsden was the only Trust wishing to partner with Great Ormond Street to deliver a Principal Treatment Centre and The Royal Marsden does not have a paediatric intensive care unit.</p>	
<p><b>5. A Principal Treatment Centre at an existing specialist paediatric provider in south London which has a co-located paediatric intensive care unit and all the specialist children’s services that must be delivered on site at every Principal Treatment Centre</b></p>	<p>Passes all fixed points and hurdle criteria – the only potential solution to do so, with a number of ways it could be delivered (because there are three potentially compliant Trusts).</p>	
<p>6. Joint site Principal Treatment Centre in the south east and south London catchment area</p>	<p>Doesn’t comply with the ‘supplier capability’ or ‘achievability’ hurdles as there was no combination of willing providers which put forward a compliant option. A solution including The Royal Marsden would not deliver a compliant service.</p>	
<p>7. Second Principal Treatment Centre site in the area covered by the Great Ormond Street/ University College Hospital Principal Treatment Centre</p>	<p>Doesn’t comply with fixed point (c) in that the future Principal Treatment Centre for south London and much of the south east must not be wholly based in north London.</p>	

8. Second Principal Treatment Centre site, in the Principal Treatment Centre catchment area but outside London.	Doesn't comply with fixed point (a) or hurdle criteria 2 - there are no hospitals within the catchment area outside of London with a paediatric intensive care unit. Also does not comply with hurdle criteria 1: access – the site must be within London for access reasons.	
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This process identified that the only viable solution for compliance with the service specification is a Principal Treatment Centre at an existing specialist paediatric provider in south London with a co-located paediatric intensive care unit and all the specialist children's services that must be delivered onsite at every Principal Treatment Centre (as per the service specification).

There were three Trusts which could potentially deliver the future Principal Treatment Centre, because they met all the criteria:

- Guy's and St Thomas' NHS Foundation Trust which runs Evelina London Children's Hospital
- King's College Hospital NHS Foundation Trust which runs King's College Hospital
- St George's University Hospitals NHS Foundation Trust which runs St George's Hospital.

All three were written to, to ask whether they believed they still met the hurdle criteria and would be willing to continue with the process. King's indicated it did not want to be considered and was excluded based on the third hurdle criterion, 'achievability'. This left the two options which we propose consulting on:

- Guy's and St Thomas' NHS Foundation Trust which runs Evelina London Children's Hospital
- St George's University Hospitals NHS Foundation Trust which runs St George's Hospital.

As the current service provider, The Royal Marsden is working closely and constructively with NHS England, its patients and families, and its staff to contribute to the review process. The board of the Royal Marsden NHS Foundation Trust acknowledges that the decision on mandatory co-location of a Principal Treatment Centre with a paediatric intensive care unit has been taken by the NHS England Board. It has made clear that, in the context of this change in the service specification, it will contribute actively to the review process to ensure the very best outcome is achieved for children and families, including making the changes that may be required to respond to the development of new technologies and treatments. It has set out this position in a letter to NHS England (London and South East regions).

### **4.3. Available options for providing the proposed future Principal Treatment Centre**

There are two options for achieving compliance with the service specification once the fixed points and hurdle criteria have been applied to the original long list. The options available for the establishment of a compliant Principal Treatment Centre for south London and much of the south east are either:

- Evelina London Children's Hospital which is part of Guy's and St Thomas' NHS Foundation Trust (Guy's and St Thomas')

or

- St George's Hospital which is part of St George's University Hospitals NHS Foundation Trust (St George's) and also part of St George's, Epsom and St Helier Hospitals and Health Group.

If Evelina London became the future Principal Treatment Centre, it would have all the specialist children's cancer services currently at The Royal Marsden (except conventional radiotherapy) and the specialist children's cancer services currently provided for the Principal Treatment Centre at St George's alongside its well-established children's intensive care unit and other specialist children's services.

If St George's became the future Principal Treatment Centre, it would have all the specialist children's cancer services currently at The Royal Marsden (except conventional radiotherapy) alongside its well-established children's intensive care unit and other specialist children's services, including the services it already provides for the Principal Treatment Centre.

Under both options, St George's would continue to provide a children's cancer shared care unit for local children, and neurosurgery for children, including those with cancer. We propose that, under both options, conventional radiotherapy services for the future children's cancer centre (instead of some, as now) would be provided by University College Hospital (part of University College London Hospitals NHS Foundation Trust). Children would continue to travel for some specialist cancer services because of the specific expertise hospitals have in these areas.

Both options' proposals anticipate that the majority of the workforce currently providing care to children at The Royal Marsden would transfer to the future centre. Further detail on respective assumptions; risks and potential mitigations are set out further later in this business case (see section 10.3 Management of risks and issues).

The forthcoming consultation will help the senior leaders for NHS England (London and South East regions) to:

- decide which option is taken forward and consider our proposal for conventional radiotherapy services
- identify what, if any, improvements are needed to the proposed changes and/or find solutions for any concerns.

To do that, they will consider all the feedback and additional evidence that comes forward during the consultation. It will be analysed by an external organisation and written up in a report which we will put on our website.

They will also consider all other relevant information, such as the outcome of the options evaluation process, and the equality and health inequalities impact assessment.

#### **4.4. Financial appraisal as a hurdle criterion**

Both shortlisted options had to meet the final hurdle criteria that they were financially affordable from a capital and revenue perspective. Further information about this is available in in Section 7 Financial Impact Assessment.

#### **4.5. Developing the evaluation criteria**

After we identified two options for the future Principal Treatment Centre for children with cancer living in Brighton and Hove, East Sussex, Kent, Medway, south London and most of Surrey, it was vital to have a clear set of criteria for a careful and rigorous assessment of both options as part of our pre-consultation process. This was to enable us to have a clear understanding of the options we were taking forward for consultation and be able to present information about them for this pre-consultation business case.

This ensured the NHS organisations putting in proposals for the future centre - Guy's and St Thomas' NHS Foundation Trust, which runs Evelina London Children's Hospital, and St George's University Hospitals NHS Foundation Trust, which runs St George's Hospital - knew what evidence they had to provide and what specific aspects would be assessed and scored for the pre-consultation options appraisal.

The criteria also provided the basis for the assessment and scoring by expert panels of both options' proposals for the pre-consultation options appraisal. (Some criteria were assessed and scored using quantitative methods, rather than by the panels.)

The process we followed drew on the expert knowledge and experience of clinicians, managers, parents, charities, staff and research leads, and the views of children and families.

Working with the programme, they supported us to develop criteria which identified:

- the key areas (domains) that are most important for the future service. Four key areas were identified, reflecting the complex range of factors to be considered in evaluating the potential options for the future site of this service.
- the specific aspects of the domains we should focus on as 'sub-criteria' to help us assess the two options in detail.

They also played an important role in deciding how the sub-criteria should be “weighted” in the scoring depending on their importance. There is more about this in section 4.6 Weighting the domains and sub-criteria recognises that, although different factors need to be considered, some may be more important than others.

The content of the national service specification for Principal Treatment Centres underpins much of the criteria. The national service specification had already gone through public consultation and, before that, significant stakeholder engagement to identify what is important for delivering children's cancer care.

Some specific elements of the evaluation criteria were also included as the result of feedback through our pre-consultation engagement. For instance, engagement work with children and young people in London and the south east, as well as the Stakeholder Group, resulted in a fifth sub-criterion being added to the patient and carer experience domain - 'support at times of crisis'.

#### **4.5.1. Development of high level criteria and sub-criteria**

Four high level evaluation domains for the evaluation were agreed by the Programme Board, along with their sub-criteria.

- a) clinical service model
- b) patient and carer experience
- c) enabling (non-clinical factors)
- d) research.

The sub-criteria were developed, applying the following principles set out below, to ensure a robust assessment of the options for the future Principal Treatment Centre.

- **Completeness.** The criteria should cover the total spread of factors which are important in the evaluation.
- **No redundancy.** Redundancy occurs when all options will score the same against the criterion (for example, if compliance with building regulations is a must for any acceptable scheme, then all schemes will score fully on this).
- **Independence.** Each criterion should be assessable without knowing the outcome of any of the other criteria proposed.



- **Operationality.** This means that a measurable value exists for the criteria, or that an expert panel could reasonably define what different levels of attainment reflect. Binary options are allowed, as are semi qualitative measures, although these provide less discrimination.
- **Discrete counting.** Similar to redundancy, double counting occurs when a metric is excessively divided into subgroups. For example, counting travel time may be a valid metric, but counting travel time for 0-2s, 3-5s, etc. would duplicate the measure, and dominate the scoring.

The sub-criteria were developed by working groups for the programme. Each of them was responsible for developing the sub-criteria for their specific domain using a standard template.

They were:

- a clinical advisory panel – who advised on the sub-criteria for assessing and scoring clinical services
- a parent stakeholder group – who advised on engagement work to develop the criteria for assessing and scoring patient and carer experience
- an options appraisal working group – who advised on the criteria for assessing and scoring enabling factors (workforce, capacity, resilience).

A parallel process focused on proposed changes to children's cancer research. It involved lead researchers and clinicians who advised on the criteria for assessing and scoring research.

The Clinical Advisory Panel included clinical leaders from Evelina London Children's Hospital, Great Ormond Street Hospital, King's College Hospital, St George's Hospital, The Royal Marsden, NHS England London and NHS England South East. The group had an independent clinical chair, Professor Sir Terence Stephenson, who is former President of the Royal College of Paediatrics and Child Health, former chair of the Academy of Medical Royal Colleges, former chair of the General Medical Council, and chair of the Health Research Authority.

The Stakeholder Group consisted primarily of parents. It was chaired by Michelle McLoughlin, CBE, an independent consultant who was previously NHS England's national specialty advisor and former chief nurse of Birmingham Women's and Children's Hospital.

The Options Appraisal Working Group included senior managers and clinical leaders from Evelina London Children's Hospital, St George's Hospital, The Royal Marsden, NHS England London and NHS England South East; NHS England Women and Children and Cancer Programme of Care leads; and public health leads. It was chaired by the medical

director for specialised commissioning for London. It was advised by a workforce sub-group which brought together HR and operational leads from Guy's and St Thomas', St George's and The Royal Marsden. The workforce criteria are particularly important given the significant number of staff (c. 170) eligible for transfer from The Royal Marsden and who the future provider will want to encourage to transfer to the future Principal Treatment Centre.

The development of criteria to assess the research aspects of the two options' proposals was undertaken as a separate workstream involving independent experts. Sir Terence Stephenson led work with research leaders to find out what they thought were the most important aspects of research to test with the Trusts. Securing and ideally developing the research offer built between the Principal Treatment Centre and the Institute of Cancer Research, which is located at the same Sutton site as The Royal Marsden, is a key part of our clinical model and an important goal for this change process.

NHS England London drew in additional external support from people experienced in complex decision making, including additional public health support to assist in structuring the evaluation process. It was recognised that the evaluation criteria needed to be able to differentiate (identify meaningful differences) between options which met all the hurdle requirements and therefore had to be measurable.

#### **4.5.2. Review of the criteria**

Before the evaluation criteria were finalised, Guy's and St Thomas' NHS Foundation Trust, which runs Evelina London Children's Hospital, and St George's University Hospitals NHS Foundation Trust, which runs St George's Hospital, provided feedback on them.

Guys and St Thomas' Foundation Trust asked for clarification and development of several of the evaluation criteria. They suggested that the research sub-criteria were not sufficiently future looking, linking to clinical-academic service models.

St George's made representations to NHS England London that the criteria should be amended to take into account the facts that:

- St George's has 25 years experience of providing important elements of care for children with cancer (St George's and The Royal Marsden provide the current Principal Treatment Centre in partnership)
- St George's has complex, multidisciplinary teams working across a range of services including paediatric surgery, pathology and intensive care, complementing The Royal Marsden's children's cancer (oncology) services. These staff are all experienced in managing cancer complications. St George's provides children's intensive care for the current Principal Treatment Centre.
- St George's provides neurosurgery on site (brain, nervous system and spinal surgery). Although this is not on the list of services that a Principal Treatment Centre must have, in

2019/20, 86 patients treated by the Principal Treatment Centre had cancer-related neurosurgery. Around 20% of children had their neurosurgery at St George's Hospital. St George's argued that having neurosurgery on site should matter more than having other services that the national service specification requires to be 'readily available', because so many cancer patients need such surgery.

To help finalise the criteria, in July 2022 a new independent Clinical Review Group was set up. It was chaired by Professor Sir Terence Stephenson and included clinical directors from children's cancer and strategic paediatric networks, clinicians and medical directors from inside and outside London, and nursing specialists.

The group was asked for their expert view on the criteria, including on the points raised by St George's.

They gave serious consideration to these points. They amended two of the sub-criteria for the clinical services key area to reinforce the opportunity for scoring high marks by giving answers drawing on experience of delivering care for children with cancer (the sub-criteria on network effectiveness and transition to teenage and young adult services).

However, they also considered that, although St George's Hospital's experience in children's cancer care is important, it is not more important than experience in delivering very complex non-cancer children's services and the organisational and clinical skills that this requires. This was particularly so as neither St George's Hospital nor Evelina London has experience in the very specialist cancer treatment services for children that The Royal Marsden currently provides and in which the 170+ staff who are eligible to move to the future Principal Treatment Centre are expert.

The Clinical Review Group felt that the changes they made and the consideration they gave provided the right balance. It was their collective view that the most important thing is that the specialist children's cancer services currently at The Royal Marsden go to a hospital expert in children's care that can welcome and work with them to provide a Principal Treatment Centre for children with cancer that will be able to build on the strengths of the existing service and provide best quality care and achieve world class outcomes for decades to come.

They recognised the importance of neurosurgery but also that neurosurgery is one of the services that the national service specification says must be readily available if they are not on site. It is not a service that must be on site. As this was the view taken by the national service specification for the whole of England after working with patients, parents and professionals, the Clinical Review Group did not feel there was a reason to take a different view for London. Neurosurgery will stay at King's College Hospital and St George's whichever site is chosen for the future Principal Treatment Centre.

In its overall decision making, NHS England must consider the impact on other services. St George's contends the evaluation should also have taken into account the potential impact on its other services if it does not become the future Principal Treatment Centre.

St George's is specifically concerned about:

- its ability to attract and keep children's specialist surgical staff and trainee surgeons if children's cancer surgery (which St George's has advised is about 20% of its planned operations for children) moved away, and the impact that could potentially have on the non-cancer surgery it could provide for children
- the potential impact on its children's pathology services (which help to diagnose and guide treatment for cancer, as well as many other diseases). Children's cancer makes up a lot of the pathology team's work and helps to attract and keep staff
- its ability to deliver wider improvements and other benefits for non-cancer patients, including its interventional radiology service, children's research, and improvements for specific conditions such as sickle cell disease.

St George's is also concerned about ongoing costs which the Trust might continue to have to pay for a while if the future Principal Treatment Centre were to be at Evelina London and therefore cancer services that St George's provides for the Principal Treatment Centre moved to Evelina London.

Again, this was given serious thought by the Clinical Review Group. The group felt that, while the impacts would need careful consideration at implementation, they did not need to be included in the evaluation criteria. This was because analysis had found that the scale of changes would be unlikely to have a significant impact on other services such that they should be included in the evaluation criteria at this stage. Importantly, alongside this, the group also advised it would also be difficult (at that stage) to accurately measure the impact of any changes, including how to reduce them. We followed this advice.

The members of the Clinical Review Group discussed each criterion and made recommendations on revisions; the evaluation criteria were updated to reflect them. The Clinical Review Group confirmed that, with these revisions, the criteria were suitable, comprehensive and would allow us to differentiate between the options.

We have considered principles for dealing with impact on St George's services if this situation were to arise. There is much more about this in section 6.2.3 Potential impact on St George's children's services.

#### **4.5.3. The criteria**

Four domains (key areas) were agreed by the Programme Board for the evaluation, each with their own sub-criteria. This reflects the various areas stakeholders said were particularly important to consider in evaluating any option:

- clinical
- patient and carer experience
- enabling (non-clinical) factors
- research

The structure of the evaluation criteria (the key domains and sub-criteria) allowed for a review of each option against a combination of different factors which have all been identified as important in thinking about the best site for the future children's cancer Principal Treatment Centre.

The different sub-criteria required different types of evidence. Some were purely quantitative (numbers-based), such as how much bed capacity would be provided and whether it would meet the demand for the service, what scores Guy's and St Thomas' and St George's gained in various workforce surveys, or how each site would impact travel times.

Others were fully qualitative, that is, they depended on an explanation and written evidence of how each Trust would deliver specific aspects of the future Principal Treatment Centre's responsibilities, such as leadership of networks.

Some were a mix. Quantitative information was provided, but the expert panel members who undertook the assessment and scoring were also required to make a judgment, assessing the proposal against the defined criteria.

Where criteria were qualitative, a framework was drawn up to help guide the expert panels on what sort of evidence to look for in allocating different scores, and it also allowed both Trusts to know how the evidence they submitted would be considered. Even with this, panel members considered and judged the evidence in different ways. It meant that a broad range of perspectives were brought into the evaluation.

The table below has a description of the sub-criteria for each of the four domains.

**Table 11: Overview of the domains and sub-criteria developed by the working groups and panels to evaluate the two options' proposals**

<u>Domain</u>	<u>Sub-criteria</u>
<u>Clinical</u>	<p><u>Interdependencies</u>: ensuring children have access to as many other specialties as possible on the same site</p> <p><i>In addition to the mandatory services listed in the Principal Treatment Centre service specification, 13 other services are listed that are not required to be delivered on site but must be 'readily available.' With the aim of having as many of these services on site as possible, this sub-criterion therefore factored in these services to ensure that children gain from the greatest density of specialty skill through the co-location of services.</i></p>
<u>Clinical</u>	<p><u>Transfers</u>: reducing avoidable transfers of patients to other hospitals for care, particularly where a transfer would have an impact on patient experience and safety</p> <p><i>There was particular concern within Professor Sir Mike Richards' review about the 'shuttling' of children between sites. There is a small group of treatment transfers which are potentially avoidable, and where a transfer would adversely impact on patient experience.</i></p>
<u>Clinical</u>	<p><u>Network effectiveness</u>: experience of providing leadership for, and working with a network of other hospitals (to provide care as close to home as possible)</p> <p><i>The Clinical Advisory Panel felt it was important for shortlisted providers to demonstrate their experience in leading networks given the centrality of this role for the Principal Treatment Centre in the service specification, and the support this will provide to children's cancer shared care units at district general hospitals, enabling more children to have care closer to home.</i></p>
<u>Clinical</u>	<p><u>Transition</u>: supporting children to make the move to teenage and young adult cancer services when they are ready</p>



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	<i>While the scope of the service reconfiguration relates to children up to the age of 16, transition to teenage and young adult cancer services is an important consideration and is specifically referenced in the service specification.</i>
<b><u>Patient and carer experience</u></b>	<p><u>Quality of facilities</u>: patient environments are an important contributor to overall experience of care, with age-appropriate environments, play facilitation, patient privacy and dignity, space for parents/carers to remain with the child, and an education model for children and young people.<sup>34</sup></p> <p><i>Patient environments are an important contributor to the holistic experience of care. This is set out specifically in the service specification and was also a key issue reported by parents and young people in the Association for Young People's Health survey report. .</i></p>
<b><u>Patient and carer experience</u></b>	<u>Patient navigation to services, including offsite care</u> : patients and families want positive and connected experience of being guided through their treatments in a joined-up way, enabled by technology
<b><u>Patient and carer experience</u></b>	<p><u>Family support during periods of extreme difficulty</u>: the need for support and wrap around care, particularly during periods of difficulty</p> <p><i>This sub-criterion was developed by parents on the Stakeholder Group, and work with children and young people.</i></p>
<b><u>Patient and carer experience</u></b>	<p><u>Engagement</u>: organisations that successfully engage patients and carers are most likely to be successful in delivering a service that meets the needs of users</p> <p><i>We expect the future Principal Treatment Centre to work with local and national charities which support children with cancer, talk to patient groups and panels with direct experiences of services, and involve service users and parents and carers in key decisions.</i></p>

<sup>34</sup> Parents along with other members of the 'Patient and carer experience' domain panel determined the weighting of the sub-criteria. Members of the panel gave the highest weighting to 'Quality of facilities' than to other sub-criteria such as 'Service accessibility'.

<p><b><u>Patient and carer experience</u></b></p>	<p><b><u>Service accessibility:</u></b> measuring the impact of the location of the future Principal Treatment Centre on accessibility by car and public transport, with a focus on those who are less able to choose flexible arrangements</p> <p><i>The impact of the move based on travel times looking at car and public transport travel, and the impact on more socially deprived areas. The impact of travel to either Evelina London Children's Hospital or St George's Hospital was measured using a standard methodology for car and public transport by levels of deprivation. This was then converted into a 'score' for each component and a 50/50 weighting given to car travel and public transport to create a final overall score. After feedback from parents, this weighting was converted to 70/30 in favour of car travel as one of the sensitivity tests on the scores. Our Equality and Health Inequalities Assessment work to minimise the impact of the relocation on children and families, with a particular focus on those who are less able to choose flexible arrangements, continues.</i></p>
<p><b><u>Enabling</u></b></p>	<p><b><u>Capacity:</u></b> sufficient capacity to treat children from a wide geography for a condition that requires speedy access, including for bone marrow transplants</p> <p><i>Data on activity delivered by the current Principal Treatment Centre was shared with providers as a guide to the capacity required to accommodate the required level of activity.</i></p>
<p><b><u>Enabling</u></b></p>	<p><b><u>Resilience:</u></b> patients who use the services must be able to access care when required, including surgery within reasonable timescales. There must be good plans for keeping services running smoothly, including in emergencies.</p> <p><i>This was evaluated by assessing Trusts' business continuity plans against NHS England Emergency Preparedness, Resilience and Response Core Standards.</i></p>
<p><b><u>Enabling</u></b></p>	<p><b><u>Organisational support for staff:</u></b> Staff must be supported through this period of change</p>

	<i>This sub-criterion looked at current organisational performance based on published workforce statistics - staff survey results, vacancy rates, staff stability and sickness. Some of the risks involved in transition should be mitigated by moving to an organisation that staff rate highly.</i>
<b><u>Enabling</u></b>	<p><u>Impact on staff</u>: the service change must not have an unnecessary or significantly negative impact on the workforce who deliver the service</p> <p><i>This sub-criterion looked at ‘non-pay’ benefits that would be offered to staff compared to those received currently at The Royal Marsden (such as nursery provision, education benefits, staff wellbeing offer), impact on training programmes (professional programmes and continuous professional development) and changes to staff travel times. Equivalence or improvements on existing experience was deemed important for attracting and retaining current and future staff. Royal Marsden staff, as stakeholders had asked for this criteria to be included, they wanted to be confident that a future employer would create the same positive environment that exists at the Royal Marsden.</i></p>
<b><u>Research</u></b>	<p><i>All patients within the Principal Treatment Centre have the same access to clinical trials and research is supported through:</i></p> <p><u>Performance and capability</u>: assessed current research performance and capability, providers’ ambition and future vision for research and innovation</p> <p><i>Proven research capability should help mitigate against the risks involved in moving to a new delivery model during the transition period, as well as setting aspirations for the future.</i></p>
<b><u>Research</u></b>	<u>People</u> : research workforce; staff development programmes; income supporting research staffing; research networks and collaboration; previous impact on collaborating to advance international health policy
<b><u>Research</u></b>	<u>Place</u> : current capacity and excellence - physical space for research, including infrastructure to support and enhance transferring research teams, capacity for (phase I, II, and III research) trials



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	and tissue studies, ability to link with industry; plans to improve existing provision, and capacity to scale.
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The structure of the evaluation criteria (the key domains and sub-criteria) allowed for a review of each option against a combination of different factors which have all been identified as important in thinking about the best site for the future children's cancer Principal Treatment Centre.

## 4.6. Weighting the domains and sub-criteria

Reflecting the complexity of the decision, the Programme Board agreed separate processes for weighting the criteria and scoring the options' proposals. A two-level system was accepted by the Programme Board for weighting, giving weights firstly to the domains, and then weighting the sub-criteria within each domain. This meant the more important the domains (and the sub-criteria within the domains) were for the future Principal Treatment Centre, the bigger percentage of the available scores they could get. These weights were applied to scores post-panel evaluation.

### 4.6.1. Domain weights

The domain weights were determined by the Programme Board. Board members first individually assigned the weights they felt were most appropriate and shared their rationale with one another, and then assigned weights again in the light of what they had heard from other members of the Board. This two-stage process resulted in the weighting for the four high level domains (clinical services, patient and carer experience, enabling factors, and research) shown below.

**Table 12: The weights allocated to the different domains for the evaluation criteria**

Domain	Clinical services	Patient and carer Experience	Enabling factors	Research
Weight	36%	26%	19%	19%

### 4.6.2. Sub-domain weights

Four expert panels were established to weight and score the criteria within each domain. Each panel comprised 10 people, except for the research panel which had seven independent researchers for the weighting stage of the process (and two more members later).

Overall, 32 different people were involved in the panels in October and November 2022 (seven people were members of two panels, but no one was on more than two panels). The expert panels who undertook the weighting comprised:

- independent cancer specialists and other leading nurses and doctors from London, the south east and further afield with no involvement in the current Principal Treatment Centre or either of the options

- parents and representatives of children's cancer charities
- independent researchers
- senior managers and experts in specific fields including emergency preparedness and human resources
- staff from NHS England London and NHS England South East.

The panels were provided with training on the weighting process and what to consider in weighting proposals. Each panel member individually weighted the different sub-criteria for their domain. Panel members asked for a 'decision tool' to be included with their weighting materials and this was provided.

Weighting the sub-criteria was a two-stage process – first, panel members provided initial weights on each sub-criterion with justification for the weight they had chosen. NHS England London fed back the initial weights anonymously to the panel. The panel members were given an opportunity to update their weighting or confirm it, before the final score for each sub-criterion was calculated by NHS England London, using the mean (average) of all the scores. The weighting process was undertaken virtually and weights were not discussed between panel members.

Weighting determined the percentage of the total score each sub-criterion was given when calculating the overall score for the domain. For instance, the panel of parents and charities involved in developing the sub-criteria for the patient and carer experience domain gave highest weighting to the sub-criterion 'quality of facilities' for the future Principal Treatment Centre. This meant 'quality of facilities' (which contains five different aspects, each scored separately) got a bigger percentage of the score available than the other sub-criteria in the patient and carer experience domain. 'Service accessibility' (travel) was clearly seen as important but as one of a number of aspects of patient and carer experience that had to be taken into account in the evaluation of the two proposals.

The final sub-domain weights are shown below.

**Table 13: The weights allocated to the sub-criteria within each domain**

**Clinical sub-domain**

Sub-criteria	Interdependent services	Treatment transfers	Network effectiveness and system benefits	Transition to teenage and young adult services
<b>Final weight</b>	35%	27.5%	19.5%	18%

**Patient and carer experience domain**

Sub-criteria	Quality of facilities	Patient navigation	Family support during periods of extreme difficulty	Engagement and collaboration	Service accessibility
<b>Final weight</b>	25%	23%	21%	16%	15%



### Enabling domain

Sub-Criteria	Capacity	Resilience	Organisational support for staff	Impact on staff
Final weight	30.5%	25%	23.5%	21%

### Research Domain

Sub-criteria	Performance and capability	People	Place
Final weight	39%	32%	29%

The process set out above resulted in the clinical service and patient and carer experience domains being weighted the most heavily and therefore apportioned a higher percentage of the potential marks.

### Summary of evaluation criteria and scoring

As set out in section 4.5.1 Developing the evaluation criteria, our advisory and working groups and other experts advised on the development of the evaluation criteria, to help us compare and assess the two options in more detail. They chose:

- the key elements that are most important for the future service
- the parts within those elements we should focus on (our sub-criteria).

A lot of this was based on the national service specification for Principal Treatment Centres. Specific feedback from children, parents, clinical and managerial staff and researchers also shaped the sub-criteria.

This was checked by an independent Clinical Review Group in July 2022. Its members reviewed the evaluation criteria and made some suggestions for improvement which were accepted. They confirmed the criteria were suitable and comprehensive and would allow us to distinguish between the options.

The Programme Board then discussed the key elements and how they should be scored. They gave the most important elements the highest scores.

Four panels, made up of more than 30 different experts, agreed the weighting for the sub-criteria. They went on to use these to do the assessment and scoring of the two options for the initial assessment of the Trusts' proposals, which is set out in this pre-consultation business case.

After scoring of the proposals was complete, a sensitivity analysis was applied, using flat weighting where each domain had the same weighting of 25%. This produced the same outcome as when the original domain weightings were applied. The outcome of further sensitivity tests can be found in section 6.1.3 Sensitivity Analysis.

This evidences how we worked in partnership to ensure a robust process to develop the options and how we have remained open to feedback and made appropriate adjustments to our methodology as required.

The outcome of the evaluation process is one part of the information that NHS England (London and South East regions) will consider when a decision is made. Further assessment will take place post-consultation and will be described in a decision-making business case. We remain open-minded about further information which may come forward as part of our decision-making business case.

## 5. Summary of shortlisted proposals

The fixed point and hurdle criteria process produced a shortlist of two potential options for a future Principal Treatment Centre which would be compliant with the national service specification.

Both Guy's and St Thomas' NHS Foundation Trust for Evelina London Children's Hospital and St George's University Hospitals NHS Foundation Trust for St George's Hospital were asked to put forward a proposal setting out how they would meet the service specification, if they were to become the proposed future Principal Treatment Centre. In particular, they were asked for information about the four domains of clinical services, patient and carer experience, enabling (non-clinical) factors, and research which are key to delivery of a future Principal Treatment Centre that gives best quality care and achieves world-class outcomes for children with cancer for decades to come. They were also asked for outline implementation plans.

Both submitted strong proposals (predicated on the transfer to them of The Royal Marsden service) for how they would provide the future centre. The options are for the future Principal Treatment Centre to be at either:

- Evelina London Children's Hospital (which is part of Guy's and St Thomas' NHS Foundation Trust), with conventional radiotherapy services at University College Hospital; or
- St George's Hospital which is part of St George's University Hospitals NHS Foundation Trust, with conventional radiotherapy services at University College Hospital.

Both options would end hospital transfers from the specialist centre for sick children with cancer who need or might need intensive care<sup>35</sup>, eliminating the added risks and stress these transfers bring, and could help other children avoid intensive care. Both would reduce distress and improve experience for children and families. Both would create a Principal Treatment Centre which is capable of giving cutting-edge treatments that need a children's intensive care unit to be on site.

Both options offer outstanding-rated children's services and outstanding-rated education at children's bedsides and in the hospital school. Both set out proposals for good facilities for parents and children, including beds for parents to stay next to their children, close to the children's intensive care unit when needed, and in longer-stay accommodation nearby; play specialists to support children; quiet spaces, outdoor space and parents' rooms; a choice of cafes, self-catering options and a laundry for families' use. Both would offer staff rooms and

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<sup>35</sup> Patient transfers from shared care units in local hospitals to the specialist children's cancer centre, including emergency patient transfers, would not be affected by our proposals. By their nature, most shared care units are a long way from the specialist centre. They are all on sites which have beds where children can be closely monitored and given support. Children are only transferred for level 3 care when it is unavoidable.

staff benefits, including a nursery for childcare. Both hospitals care for many children moving on to teenage and young adult services every year.

Under both options, all radiotherapy services for the future children's cancer centre (instead of some, as now) would be provided at University College Hospital (part of University College London Hospitals NHS Foundation Trust). Further detail on radiotherapy services and information on how the services would be delivered in the future is included in Section 3.3 Essential clinical co-dependencies and 6.2.1 Radiotherapy.

### **Features of both options include:**

- Both have sufficient age-appropriate ward, outpatient, day case, theatre, diagnostic, and pharmacy capacity to meet the requirements of the service specification and accommodate the transferring service (the detail of which is set out below)<sup>36</sup>
- Both have formally confirmed they would have the flexibility to provide the number of beds and isolation cubicles that could be needed for the future centre. Final capacity designs would be developed and agreed with key stakeholders, after a decision had been made on the location of the future Principal Treatment Centre
- Both have given detailed consideration to supporting research following transfer of the Royal Marsden service.

### **Neither of them:**

- currently delivers the specialist cancer services that are based at The Royal Marsden. Both would rely on staff transferring from The Royal Marsden, bringing their knowledge and expertise with them.

There are some differences between the two options which are reflected in the descriptions below.

## **5.1. Overall summary of the Trusts' proposals**

The following section sets out a high-level summary of both proposals, which is then followed by further detail for each Trust's proposal.

### **Evelina London – summary**

Should Evelina London Children's Hospital become the future Principal Treatment Centre, it would be able to build on its existing scale as the largest provider of specialist children's services in south London and on its research partnership with King's College London.

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<sup>36</sup> Both Trusts submitted capacity requirements based on activity and trust assumptions around occupancy/days per year, against pre-agreed capacity requirements for the service.

- Evelina London is a purpose-built specialist children's hospital which treats almost 120,000 young patients every year living in Kent, Medway, south London, Surrey and Sussex. It was designed for, and with input from, children and teenagers.
- All the staff are experts in children's care. Evelina London has very broad expertise and experience in non-cancer care, including intensive care and surgery.
- It would be able to offer children with cancer the benefits of its experience of delivering complex care in non-cancer settings. One example is immunotherapies: Evelina London is one of only four providers nationally commissioned to deliver zolgensma gene therapy for spinal muscular atrophy.
- Evelina London provides tertiary (specialist) children's heart and kidney services.
- It treats some children who have cancer for other (sometimes related) conditions and provides the retrieval service which transfers very sick children, including children with cancer, across the catchment area. The retrieval service trains staff, including at The Royal Marsden and more local hospitals, in the care of critically ill children.
- In 2019/20, 31 out of the 456 children with cancer who were treated at The Royal Marsden (as an inpatient or outpatient) also received inpatient care (including as day cases) at Evelina London for heart and kidney care, of whom 28 were seen as day cases (mostly for diagnostic tests), one for a planned inpatient stay and three for an unplanned stay. Some children had more than one type of care. A further 30 children with cancer were treated at Evelina London by other services.
- Guy's and St Thomas' NHS Foundation Trust, which Evelina London is part of, provides cancer care for adults and Guy's is a 'designated hospital' for teenagers and young adult cancer services, which are led by The Royal Marsden. In 2019/20, Guy's treated 15,613 adult inpatients and 172 teenage and young people (aged 16 to 24).
- Guy's provides one of five Adult Experimental Cancer Medicine Centres in London and Evelina London would have this experience to draw on if it became the Principal Treatment Centre.
- It runs four clinical networks for children's services, two of which (congenital heart disease and strategic paediatric network) cover the same catchment area as the Principal Treatment Centre. They support local hospitals to provide care as close to home as possible where appropriate, and in the specialist hospital when needed – similar to the work required for the Principal Treatment Centre.

## **Research**

- Evelina London has more than 70 staff working on more than 180 national or international research projects in child health, including on intensive care, the nervous system, and heart problems.
- If the future Principal Treatment Centre were to be at Evelina London, research would be an essential part of the work by the teams treating children with cancer, on the cancer ward and in intensive care. Evelina London also has two dedicated children's research wards, and dedicated children's imaging facilities for research.
- Researchers would have access to all the existing on-site infrastructure, sample storage, services, and office space as part of the main Evelina service, as well as access to Guy's Cancer Centre for adults, and state-of-the-art biobanking.
- Guy's and St Thomas' NHS Foundation Trust which provides Evelina London Children's Hospital is part of King's Health Partners, which undertakes significant adult cancer research including in experimental cancer biology, cell and gene therapy, and immunology.
- In 2019/20, Guy's and St Thomas' attracted over £25 million of research income to fund research staff.
- Evelina London has worked jointly with the Institute of Cancer Research on a clinical trial for a rare neurological disorder (opsoclonus myoclonus syndrome). Some children with this condition require chemotherapy for an associated cancer and the two organisations are exploring a further joint research proposal.
- Evelina London would propose co-designing the future research model in partnership with the Institute of Cancer Research and The Royal Marsden if it was the future Principal Treatment Centre.
- Its vision for the future Principal Treatment Centre's research strategy is to create exceptional capabilities for immunological and advanced cellular research for children's cancer care; develop a comprehensive clinical trial programme for children with cancer focusing on early-phase molecularly-targeted anticancer drugs; use advanced imaging research to develop and bring into clinical trials new molecularly targeted drugs; and develop wider research such as how best to manage symptoms, mental health impacts of cancer, and research by nurses and allied health professionals (such as pharmacists and physios).

## ***Evelina London's proposals for accommodating the children's cancer service***

Evelina London would offer:



- a specialist children's cancer ward on the third floor of the main children's hospital. The current design features 20 beds, four of them suitable for bone marrow transplants, eight single ensuite rooms, and two bays with four beds each<sup>37</sup>.
- a children's intensive care unit with capacity for 30-beds, two of these would be expected to be needed for children with cancer.
- a dedicated children's cancer day-case unit with a procedure room in the new Children's Day Treatment Centre
- a dedicated outpatient space for children with cancer next to other facilities for children, directly connected to the children's hospital building
- imaging and theatres in dedicated space for children's services
- direct access to the two Children's Clinical Research Facility wards
- research facilities described above.

#### Extra information from Evelina London

When the two Trusts submitted their proposals for the future Principal Treatment Centre, among the additional supporting documentation they provided was included very initial information on where they thought the children's cancer service would be located on their respective sites and the layout of the accommodation.

Guy's and St Thomas' documentation on behalf of Evelina London Children's Hospital described plans for the unit to be based in one of the other buildings on St Thomas' campus.

After submitting its proposal, Guy's and St Thomas' continued to explore options for the location of the service. In agreement with NHS England, it has since shared its intention to locate the ward within the main children's hospital building, should Evelina London be the future Principal Treatment Centre. The information in this pre-consultation business case reflects the revised location.

The revision does not change any other aspect of Guy's and St Thomas' proposal on behalf of Evelina London, such as the facilities that would be available to parents and children.

The information was shared with NHS England London after the options had been evaluated and scored. Evelina London's score was not re-evaluated. Its proposal continues to meet relevant hurdle criteria.

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<sup>37</sup> Both providers have subsequently formally confirmed they have the flexibility to provide the number of beds and isolation cubicles that could be needed to meet the future service development needs, including surges in demand. Final capacity designs will be developed and agreed with key stakeholders, after a decision has been made on the future location of the Principal Treatment Centre.

Both Trusts can continue to share information with us through this process, including through their responses to the public consultation, to inform NHS England (London's and South East regions') decision-making.

### **St George's Hospital – summary**

Should St George's Hospital become the future Principal Treatment Centre, it would be able to build on its current cancer experience in critical care, complex and major paediatric surgery (including oncology, neurosurgery and tumour resections) and a range of other paediatric specialties and clinical support services, as well as its existing partnership with The Royal Marsden and the complex network of professional relationships it has with The Royal Marsden and the Institute of Cancer Research to provide a clinical service that meets the service specification.

- St George's Hospital is a large teaching hospital that provides specialist care for adults and treats almost 60,000 children every year, mainly living in south west London, Surrey and Sussex. St George's already provides the current Principal Treatment Centre in partnership with The Royal Marsden.
- It has 25 years' experience of caring for children with cancer: it provides all intensive care, most cancer surgery and many other specialist services for the current Principal Treatment Centre. All its children's service staff are experts in children's healthcare.
- It has three surgeons who operate on children with cancer, supported by surgical teams. Their time spent on cancer is 1.34 whole time equivalent. They operate on solid tumours other than bone, eye and liver tumours, and work with oncology consultants and their teams as The Royal Marsden as part of the solid tumour multidisciplinary team.
- St George's provides neurosurgery for brain, nervous system and spinal tumours and emergencies (such as for decompression for swelling after radiotherapy and bleeding on the brain). Neurosurgery, which is also provided by King's College Hospital, is a 'fixed point' and not affected by the proposals in this pre-consultation business case. In 2019/20, around 20% of children who required cancer related neurosurgery had it at St George's<sup>38</sup>.
- St George's Hospital provides cancer services for adults and is a 'designated hospital' for teenagers and young adult cancer services, which are led by The Royal Marsden.
- In 2019/20, St George's treated 9,647 adult inpatients and 130 teenagers and young adults (aged 16 to 24).

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<sup>38</sup> Numbers of children having neurosurgery will vary year on year. The proportion of neurosurgery that both sites do is expected to remain similar.

- St George's Hospital's teams have well developed relationships with The Royal Marsden staff and there are established patient pathways for children with cancer covering both liquid and solid tumours.
- St George's Hospital runs many clinical networks for adult NHS services, largely in south west London and Surrey.
- St George's Hospital is an accredited centre for adult bone marrow treatment and would draw on this expertise for delivering the Principal Treatment centre.

### **Research**

- St George's Hospital has 25 children's researchers and a good track record in national and international research, particularly in vaccines and infectious diseases.
- If the future Principal Treatment Centre was at St George's Hospital, research would be an essential part of the work by the teams treating children with cancer, including on the cancer ward and in intensive care.
- Research facilities in the children's cancer centre would include an academic research unit with laboratory and offices for staff from the Institute of Cancer Research and a clinical research unit with seven clinical/consulting rooms, sample storage, a hot laboratory, offices and a seminar room. Researchers would also benefit from and be supported by the hospital's wider research infrastructure including its National Institute for Health and Care Research Clinical Research Facility and established biobank at St George's, University of London.
- St George's University Hospitals NHS Foundation Trust, which runs St George's Hospital, attracted £8.2 million of research income in 2019/20 to fund research staff.
- A research nurse specialist for children's cancer, employed by St George's, works at both St George's Hospital and The Royal Marsden to support research.
- St George's has undertaken joint research with Institute of Cancer Research (as part of the current Principal Treatment Centre), mostly focussed in the area of supportive care trials e.g. in infectious diseases/antifungal studies. It is due to launch a clinical trial for children and adults with acute lymphoblastic leukaemia.
- St George's Hospital also undertakes research with the medical school at St George's, University of London, and other organisations. The Trust plans to build on this and its internal and national profile.
- St George's vision for the future Principal Treatment Centre's research strategy is to help deliver, promote and spread children's cancer research; boost existing work on personalised medicine and drive forward training and commitments on early phase and

other trials; further develop research in areas such as antifungal diagnostics, convection-enhanced delivery treatment for brain tumours, optimising nutrition in children with cancer; and provide national and international opportunities for antifungal research.

### ***St George's proposals for accommodating the children's cancer service***

St George's Hospital would offer:

- a specialist children's cancer centre in an existing wing of the hospital (currently used as offices) that would be converted and co-designed with children and young people
- a specialist children's cancer ward in the new centre. The current design is for 22 ensuite single beds (10 of which would be isolation rooms and one lead-lined isotope room) and six adjacent rooms that could potentially be used for family suites (each interconnects to one other bedroom)<sup>39</sup>
- a dedicated children's cancer day-care unit with a minor operations/procedures suite including chemotherapy booths
- a dedicated children's cancer outpatients unit
- a 14-bed children's intensive care unit. Two of these beds, like now, are expected to be needed for children with cancer
- research facilities described above.

The children's cancer centre would accommodate both the children's cancer service transferring from The Royal Marsden and the current four beds in St George's Pinckney ward for children with cancer.

Further detail is set out below.

## **5.2. Clinical services**

Summarised below are both Trusts' descriptions of their clinical models covering:

- **Interdependent services** - the specialist children's services which the national service specification says must be readily available for every Principal Treatment Centre if they are not on the same site. These would mean that children and young people have access to the greatest density of speciality skill through co-location of services, including bone marrow transplants, imaging and diagnostics, pathology and haematology (blood disorders)

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<sup>39</sup> Both providers have subsequently formally confirmed they have the flexibility to provide the number of beds and isolation cubicles that could be needed to meet the future service development needs, including surges in demand. Final capacity designs will be developed and agreed with key stakeholders, after a decision has been made on the future location of the Principal Treatment Centre.

- **Transfers** - the impact of proposals on reducing potentially avoidable transfers of children undergoing treatment to receive services, particularly where a transfer could negatively impact on patient experience and safety
- **Network effectiveness and system benefits** - experience of managing networks, equivalent to the role the Principal Treatment Centre will play for children's cancer across the geography of the Principal Treatment Centre supporting shared care units at district general hospitals to enable children to receive care closer to home.
- **Transition** - how they would support children as they become older and transition into teenage and young adult services.

### 5.2.1. Interdependent Services

Both proposals would provide all the services mandated by the service specification once The Royal Marsden services transferred. These include anaesthetics and pain management, haematology services; paediatric oncology services including diagnosis, chemotherapy, bone marrow transplants, ongoing monitoring and care; cancer pharmacy services; radiology services; children's surgery (including management of emergencies, central lines and biopsy services); level 3 critical care; and therapy services such as psychology and physiotherapy.

The table below summarises this, including how those services are currently provided.

**Table 14: Services mandated by the service specification; current and future provision**

<i>Children's cancer services which the national service specification says must be on site at a Principal Treatment Centre</i>	<i>On site for current service at The Royal Marsden</i>	<i>Would be on site for proposed future Principal Treatment Centre if it was at Evelina London Children's Hospital</i>	<i>Would be on site for proposed future Principal Treatment Centre if it was at St George's Hospital</i>
<b>Children's anaesthetics and pain management</b>	Yes	Yes	Yes
<b>Children's blood cancer (haematology) services, including bone marrow transplants</b>	Yes	Yes	Yes
<b>Children's cancer (paediatric oncology) services including diagnosis, chemotherapy,</b>	Yes	Yes	Yes

<i>ongoing monitoring and care</i>			
<i>Children's cancer pharmacy services</i>	Yes	Yes	Yes
<i>Children's radiology services (such as CT and MRI scans)</i>	Yes	Yes	Yes
<i>Children's surgery, including management of emergencies, central lines and biopsy services</i>	Partially – most surgery is at St George's	Yes	Yes
<i>Level 3 critical care (for children who need life support)</i>	No - patients go to St George's	Yes	Yes
<i>Therapy services such as psychology and physiotherapy</i>	Yes	Yes	Yes

In addition, they both provide a large number of interdependent services which, if not onsite, must be (as described by the service specification) 'readily available'<sup>40</sup>. The table below lists the services that the national specification says are desirable to have on the same site as a Principal Treatment Centre but which are not mandated. It shows which of these non-mandatory services is provided as a specialism by that Trust (along with how the services are currently provided).

**Table 15: Non-mandatory interdependent clinical services provided by each of the options**

Services which the national service specification says do not need to be on-site but must be readily available at all times	On site for current service at The Royal Marsden	Would be on site for proposed future Principal Treatment Centre if it was at Evelina London Children's Hospital	Would be on site for proposed future Principal Treatment Centre if it was at St George's Hospital
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<sup>40</sup> The Clinical Advisory Panel of experienced clinicians, which helped us develop the options, defined 'readily available' as available on site within 30 minutes. The panel decided that genomic testing did not need to be available on site within 30 minutes, so genomic testing was excluded from our evaluation criteria.



<b>Inpatient cardiology (for patients with defects and diseases of the heart and blood vessels)</b>	<i>No – patients go to Evelina London</i>	Yes	<i>No – patients would go to Evelina London for specialist care</i>
<b>Children's cancer surgery (to remove or reduce tumours and manage some cancer-related symptoms. Does not include management of emergencies, central lines and biopsy services which must be on site)</b>	<i>No – patients go to St George's</i>	Yes	Yes
<b>Children's infectious disease services</b>	<i>No – patients go to St George's</i>	Yes	Yes
<b>Children's pathology (investigates and identifies cancers)</b>	Yes	Yes	Yes
<b>Endocrinology (for patients with hormone-related disease)</b>	Yes	Yes	Yes
<b>Gastroenterology (for patients with diseases of the digestive system)</b>	<i>No – patients go to St George's</i>	Yes	Yes
<b>Genomic testing* (finds changes in genes causing cancer)</b>	Yes	Yes	Yes
<b>Inpatient nephrology (for patients with kidney disorders)</b>	<i>No – patients go to Evelina London</i>	Yes	<i>No – patients would go to Evelina London for specialist care</i>
<b>Neurosurgery (for cancer-related problems affecting patients' brains, nervous systems or spines)</b>	<i>No – patients go to King's or St George's</i>	<i>No – patients would go to King's or St George's</i>	<i>Yes – patients would go to King's or St George's</i>

<b>Ophthalmology (for patients with eye and visual disorders)</b>	<i>No – patients go to St George's</i>	Yes	Yes
<b>Other specialist children's surgery</b>	<i>No – patients go to St George's</i>	Yes	Yes
<b>Palliative care (aims to give a good quality of life for patients living with an illness that cannot be cured)</b>	Yes	Yes	Yes
<b>Radiotherapy (treatment using radiation to kill cancer cells)</b>	<i>Partially – patients have conventional radiotherapy on site but go to University College Hospital for proton beam and other types of specialist radiotherapy</i>	<i>No – patients would go to University College Hospital for all radiotherapy services Detail in section 3.3</i>	<i>No – patients would go to University College Hospital for all radiotherapy services Detail in section 3.3</i>

### Delivery of these services

The following tables provide a summary of the mandatory on-site services (as per the service specification) and services required to be readily available (as per the service specification), currently provided by Evelina London and St George's Hospital.

**Table 16: Mandatory On-site Services – Evelina London Children's Hospital**

<b>Clinical Service</b>	<b>Bed based provision on-Site</b>	<b>24/7 Cover</b>	<b>Evelina London Current Service Model*</b>
<b>Paediatric Oncology</b>	-	-	Service and staff to be transferred from The Royal Marsden
<b>Paediatric Cancer Pharmacy</b>	-	-	Service and staff to be transferred from The Royal Marsden
<b>Paediatric Critical Care L3</b>	Yes	Yes	Evelina London has 26 Paediatric Intensive Care Unit consultants (including 11 on Brompton site).

Clinical Service	Bed based provision on-Site	24/7 Cover	Evelina London Current Service Model*
			<p>This is a 24/7 consultant led service as per national clinical standards. Consultants cover Paediatric Intensive Care Unit and provide the South Thames Retrieval (ambulance) service, including retrieving acutely unwell children with cancer.</p> <p>There is capacity for 20 x Level-3 Paediatric Intensive Care Unit beds on the Evelina London site with the ability to flex to 23, including 3 high specification isolation rooms, (which are used as positive-pressure ventilation rooms but can be converted to negative pressure), and a further 10 Level-2 Paediatric Intensive Care Unit / High-Dependency Unit beds. 16 Paediatric Intensive Care Unit beds on Guy's and St Thomas' Brompton site, provide further resilience.</p>
<b>Paediatric Surgery (including managements of emergencies)</b>	Yes	Yes	<p>The hospital has a total of 54 surgical consultants (46 WTE) including 8 paediatric general surgery consultants.</p> <p>Consultant cover in the hospital 7 days a week.</p> <p>Non-resident on call at weekends and weeknights.</p> <p>10 operating theatres for children's surgery (including 2 day surgery theatres opened in July 2023).</p>
<b>Paediatric Anaesthetics and Pain Management</b>	Yes	Yes	<p>30 dedicated paediatric anaesthetists and an established acute pain service.</p> <p>24/7 Consultant On Call cover for emergencies (separate general anaesthetic consultant and cardiac anaesthetist rotas)</p>
<b>Paediatric Therapy</b>	Yes	Yes	<p>Evelina London's specialist paediatric therapy provision provides a range of support including inpatient physiotherapy service, rehabilitation and outpatients. A dedicated neuro-rehabilitation team already works closely with pan-London oncology pathways to provide post-operative rehab in dedicated beds for London neuro-oncology patients, neuropsychological assessment, ongoing review including for late effects of</p>

Clinical Service	Bed based provision on-Site	24/7 Cover	Evelina London Current Service Model*
			<p>all therapies, and community rehabilitation when patients are ready to return home.</p> <p>The paediatric Therapy team is a 303 WTE service delivered between hospital and community. This consists of an established multi-disciplinary team including: physiotherapy, speech and language therapy, occupational therapy, psychology, dietetics and play therapists.</p>
<b>Paediatric Haematology</b>	Yes	Yes	3 paediatric consultants (+ 3 at King's College Hospital), 24/7 Consultant cover.
<b>Paediatric Radiology</b>	Yes	Yes	<p>Dedicated paediatric consultant radiologists (8 WTE).</p> <p>24/7 cover for comprehensive children's diagnostic imaging large team of diagnostic radiology consultants with experience in paediatric oncology. Includes 24/7 neuroradiology and dedicated paediatric consultant radiologists.</p>
<b>Paediatric Interventional Radiology</b>	Yes	Yes	<p>6 paediatric consultants, 13 interventional radiology consultants covering on-call.</p> <p>24/7 children's interventional radiology, Mon-Fri 9am-5pm; out-of-hours cover is provided by a rota of on-call interventional radiology consultants covering any emergencies, with a large team able to provide all necessary interventional radiology procedures, including for children with cancer.</p>

\*Consultant workforce has been provided to give an indication of size and scale of the service. Where WTE is used, this refers to Whole Time Equivalent working.

**Table 17: Mandatory On-site Services – St George’s Hospital**

Clinical Service	Bed-based provision On-Site	24/7 Cover	St George’s Hospital Current Service Model*
<b>Paediatric Oncology</b>	-	-	<p>3.5 WTE Consultants in post supporting the Principal Treatment Centre out of hours on call rota for Paediatric Oncology specifically - in addition St George’s Hospital provides surgery to current PTC (3 Consultant Paediatric surgeons offering 1.34 WTE).</p> <p>4.0 WTE Paediatric Oncology Advanced Nurse Practitioners – these posts have been established following the completion of training 4.0 WTE Paediatric Oncology Advanced Nurse Practitioners</p> <p>1.0 WTE Surgical Oncology Clinical Nurse Specialist</p> <p>1 Part-Time (0.6 WTE) Paediatric Oncology Shared Care Unit Clinical Nurse Specialist</p> <p>1 Part Time (0.5 WTE) Paediatric Oncology Dietician</p> <p>1 Clinical Psychologist working within Paediatric Oncology</p> <p>Remaining service and staff to be transferred from The Royal Marsden</p>
<b>Paediatric Cancer Pharmacy</b>	-	-	Service to be transferred from The Royal Marsden
<b>Paediatric Critical Care L3</b>	Yes	Yes	<p>This is a 24/7 consultant led service as per national clinical standards.</p> <p>All Paediatric Intensive Care Unit activity for the current Principal Treatment Centre is already delivered at St George’s Hospital.</p> <p>No expected increase in activity</p>

Clinical Service	Bed-based provision On-Site	24/7 Cover	St George's Hospital Current Service Model*
			<p>There are 14 beds (7 Level 2 High-Dependency Unit /Paediatric Intensive Care Unit and 7 Level 3 Paediatric Intensive Care Unit), commissioned with the ability to flex to 15 when required. This includes 2 isolation rooms (flexed as negative or positive pressure rooms as needed by patients).</p> <p>6.5 WTE Consultants</p>
<b>Paediatric surgery to include management of emergencies, central lines and biopsy</b>	Yes	Yes	<p>24/7 consultant-delivered service.</p> <p>7-day on-site service for children's emergency and urgent surgery, managed by general surgery, oncology, radiology and other specialties, supported by a 24/7 emergency theatre team for children's surgery and radiology.</p> <p>The hospital has a total of 28 surgical consultants working within paediatric specialties including 9.0 WTE Consultant Paediatric General and Urological Surgeons. In addition, the service has 8 surgical clinical nurse specialists working across Urology, Trauma and Orthopaedics, Oncology, Neurosurgery and Spinal.</p> <p>St George's Hospital provides surgery to current Principal Treatment Centre (3 Paediatric surgeons providing 1.34 WTE)</p> <p>Additional surgical specialties and staffing as described in following table.</p>
<b>Paediatric Anaesthetics and Pain Management</b>	Yes	Yes	<p>Consultant Paediatric Anaesthetist on call 24/7, non-resident overnight. Overnight cover provided by a resident Senior Trainee. 24/7 anaesthetic cover for emergency paediatric cases.</p>

Clinical Service	Bed-based provision On-Site	24/7 Cover	St George's Hospital Current Service Model*
			<p>Pain management clinics and consultant ward rounds in place.</p> <p>Patients have access to local Paediatric Oncology Shared Care Unit on site 24/7 to support emergency care.</p> <p>16 Paediatric Anaesthetic Consultants supporting lists across paediatrics, pre-assessment, imaging and children's surgery, including all electives lists, a daily Paediatric CEPOD list and 24/7 on call cover for emergency paediatric cases.</p> <p>4 Paediatric Anaesthetic Consultants act as leads for Paediatric Pain (equating to 0.4 WTE).</p> <p>1.0 WTE Band 7 Pain Clinical Nurse Specialist</p>
<b>Paediatric Therapy (Psychology, Physiotherapy)</b>	Yes	No	<p>Therapies available 7 days a week, for Paediatrics specifically.</p> <p>St George's established specialist paediatric therapy provision provides wide ranging support including inpatient physiotherapy service, rehabilitation and outpatients.</p> <p>The Paediatric Therapy team is a 161.66 WTE service delivered between hospital and community. This consists of an established multi-disciplinary team including: physiotherapy, speech and language therapy, occupational therapy, psychology, dietetics and play therapists</p>
<b>Paediatric Haematology</b>	Yes	Yes	<p>Haematology services are provided at St George's Hospital as part of the South West London Pathology service.</p> <p>Consultant on site weekdays, and consultant on call rota for weeknights and weekends.</p> <p>2.5 WTE consultants.</p>



Clinical Service	Bed-based provision On-Site	24/7 Cover	St George's Hospital Current Service Model*
			2.0 WTE Clinical Nurse Specialist covering Haematology, Haemoglobinopathy and Haemophilia.
<b>Paediatric Radiology</b>	Yes	Yes	<p>Paediatric Radiology on site consultant cover is provided 24/7 by the trust radiology on call.</p> <p>Consultant referral for paediatric radiologist opinion is available out of hours.</p> <p>6 consultants provide the paediatric radiology service. In addition, St George's have 5 Paediatric Neuroradiologists.</p>
<b>Paediatric Interventional Radiology</b>	Yes	Yes	<p>6 consultants dedicated to Interventional Radiology for Paediatrics</p> <p>Interventional services available Monday to Friday including presentation at all oncology subspecialty Multi-Disciplinary Teams with emergency access via on call arrangements and weekend arrangements in place for paediatric radiology opinions for cross-sectional.</p>

\*Consultant workforce has been provided to give an indication of size and scale of the service. Where WTE is used, this refers to Whole Time Equivalent working.

**Table 18: Readily Available Services – Evelina London Children’s Hospital**

Clinical Service	Bed-based provision On-Site	24/7 cover	Evelina Hospital Current Service Model*
<b>Paediatric Radiotherapy</b>	-	-	N/A - Radiotherapy would be provided by University College Hospital working closely with the future Principal Treatment Centre
<b>Paediatric Endocrinology</b>	Yes	Yes	Consultant led service (5 Consultants)
<b>Paediatric Nephrology</b>	Yes	Yes	<p>11 Consultants (plus 5 consultant paediatric renal transplant surgeons)</p> <p>Evelina London provides the nephrology centre for a catchment area across London and South East England. This service works closely with the current PTC. There is a 7-day on-site attendance and a 24/7 on-call consultant rota at Evelina London.</p> <p>Haemodialysis unit providing maintenance and acute haemodialysis, including Paediatric Intensive Care Unit -based sessions.</p> <p>Renal transplant service with 5 additional consultants delivering 18-20 transplants per annum.</p>
<b>Paediatric Neurosurgery</b>	No	Yes	<p>1 consultant at King’s College Hospital funded by Evelina London.</p> <p>Neurosurgery for the PTC is provided by King’s College Hospital and St George’s Hospital.</p> <p>The neurology service at Evelina London currently works closely with the neurosurgical team at King’s College Hospital for non-oncological neurosurgery patients (including Evelina London providing out-of-hours neurology across both sites).</p>

Clinical Service	Bed-based provision On-Site	24/7 cover	Evelina Hospital Current Service Model*
			Pathways will be in place for Principal Treatment Centre patients who require specialist treatment and emergency surgery.
<b>Paediatric Ophthalmology</b>	Yes	Yes	Consultant led service (3 Consultants).
<b>Paediatric Gastroenterology</b>	Yes	Yes	4 consultants.  The gastroenterology service provides a 24/7 range of diagnostic procedures, a dedicated paediatric GI motility service and therapeutic interventions (e.g., upper and lower GI bleeding, Percutaneous Endoscopic Gastrostomy insertion, dilatation and foreign body removals).
<b>Paediatric Cardiology</b>	Yes	Yes	30 consultants (including 11 RBH). Combined paediatric cardiology and cardiac surgical service, able to provide urgent review within 24 hours.  Dedicated monthly, all-day consultant led clinics specifically for paediatric cardio-oncology patients as well as 3D Echocardiography, Cardiac Magnetic Resonance Imaging and expertise to interpret scans and plan specialist treatment.
<b>Paediatric Pathology</b>	Yes	Yes	4 consultants.  All core pathology services provided through the South East London pathology service (Synnovis). Diagnostic capacity in haematology/pathology delivered through the South East London pathology lab and partnership with The Royal Marsden flow lab.
<b>Paediatric Infectious</b>	Yes	Yes	8 consultants. 24/7 consultant-led cover for Evelina London and referring district hospitals

Clinical Service	Bed-based provision On-Site	24/7 cover	Evelina Hospital Current Service Model*
Diseases and Immunology			and dedicated infection prevention and control team.
Paediatric Palliative Care	Yes	Yes	<p>4 consultants, trained in both malignant and non-malignant paediatric palliative care. 24/7 service with specialist nurses, pharmacy support, bereavement counselling service, and integrated with existing 1 consultant at The Royal Marsden.</p> <p>Consultant-led 24/7 specialist acute service provided by Evelina London alongside a multi-disciplinary team, including for The Royal Brompton Hospital and King's College Hospital, for inpatient, outpatient and emergency services on site. The service also provides specialist expertise for district general hospitals across the network as well as community, including a bereavement counselling service.</p>
Genomic Testing and Clinical Genetics	Yes	Yes	<p>Genetic laboratory hub and genetics clinical service all available at Guy's and St Thomas' within South East Genomic Medicine Service Alliance.</p> <p>Currently the children's cancer genetics service maps to North London Genomic Medicine Service Alliance and paediatric Genetics Tumour Advisory Board at Great Ormond Street. Evelina London do not propose changing this pathway.</p>

\*Consultant workforce has been provided to give an indication of size and scale of the service. Where WTE is used, this refers to Whole Time Equivalent working.

**Table 19: Readily Available Services – St George’s Hospital**

Clinical Service	Bed-based provision On-Site	24/7 cover	St George’s Hospital Current Service Model*
<b>Paediatric Radiotherapy</b>	-	-	Radiotherapy would be provided by University College Hospital working closely with the future Principal Treatment Centre.
<b>Paediatric Endocrinology</b>	Yes	Yes	<p>Consultant on site Mon – Fri. Consultant on call cover for week day evenings and weekends.</p> <p>Late effects endocrinology currently provided for the Principal Treatment Centre by St George’s Hospital.</p> <p>3 consultants, providing 2.6 WTE, including a consultant with specific expertise in paediatric oncology.</p>
<b>Paediatric Nephrology</b>	No	Yes	<p>Paediatric nephrology clinics and input into late effects follow-up are in place through existing links with the regional nephrology service run by Evelina London.</p> <p>Paediatric Intensive Care Unit provides inpatient acute renal replacement.</p> <p>Specialist service provided by and at Evelina London.</p> <p>Referral pathways in place for patients who require specialist treatment.</p>
<b>Paediatric Neurosurgery</b>	Yes	Yes	<p>Provides neurosurgery for Principal Treatment Centre along with King’s. Provides specialist neuro-radiology.</p> <p>Complex Paediatric Spinal Surgery is delivered by 3 Spinal Surgeons from the wider Spinal Surgical Team.</p>

Clinical Service	Bed-based provision On-Site	24/7 cover	St George's Hospital Current Service Model*
<b>Paediatric Ophthalmology</b>	Yes	Yes	<p>Daily urgent assessment clinic at St George's Hospital, alongside outpatient clinics delivered by Moorfields Eye Hospital.</p> <p>Urgent and routine in-patient assessment and advice is available with a 24/7 consultant on call rota.</p> <p>Provided through Moorfields rota, with 1 onsite Consultant Paediatric Ophthalmologist, with further recruitment underway.</p> <p>24/7 on call Paediatric Ophthalmologist through Moorfields Cross-site cover.</p>
<b>Paediatric Gastroenterology</b>	Yes	Yes	<p>Consultant on site Mon – Fri. Consultant on call cover for week day evenings and weekends.</p> <p>6.0 WTE Consultant Paediatric Gastroenterologists.</p>
<b>Paediatric Cardiology</b>	No	Yes	<p>Urgent and routine echocardiography and diagnostic cardiology provided on site. Acute cardio assessment on acute ward/ Paediatric Intensive Care Unit available 7 days a week.</p> <p>Interventional cardiology will be provided by the Evelina London.</p> <p>4 Paediatricians with an expertise in cardiology. 3 external Paediatric Cardiologists support the service via SLA agreement. Acute cardio assessment provided by Paediatric Intensive Care Unit team.</p>
<b>Paediatric Oncology Surgery</b>	Yes	Yes	<p>St George's Hospital provides surgery to current Principal Treatment Centre. 3 surgeons offering providing 1.34 WTE.</p>
<b>Paediatric Pathology</b>	Yes	Yes	<p>St George's Hospital is co-located with the South West London Pathology service and delivers a 24/7 consultant-led.</p>

Clinical Service	Bed-based provision On-Site	24/7 cover	St George's Hospital Current Service Model*
			2 Paediatric Pathologists with specific paediatric oncology expertise.
<b>Paediatric Infectious Diseases and Immunology</b>	Yes	Yes	<p>Consultant on site Mon – Fri. Consultant on call cover for week day evenings and weekends.</p> <p>This includes paediatric immunology, the South West London immunology lab, and a home-based immunoglobulin provision service.</p> <p>3.8 WTE Paediatric Infectious Diseases and Immunology Consultants.</p>
<b>Paediatric Palliative Care</b>	Yes	Yes	<p>Referral pathways available by community palliative care team available 24/7. Additional cover is provided by a specialist telephone advice service for care at home, hospital and hospice available for patients and their families as well as healthcare professionals. Specialist oncology and bereavement psychologists interfacing with South West London regional service and The Royal Marsden's service for the Principal Treatment Centre.</p> <p>1 consultant providing cover via the PATCH team at Shooting Star.</p>
<b>Genetics Service</b>	Yes	No	<p>The South West Thames Centre for Genomics is based at St George's providing a specialist service to South West London, Surrey, Sussex and beyond.</p> <p>The service offers specialist genetic advice, diagnosis, and counselling to families and individuals who have or might be at risk of developing inherited disorders, including cancer with clinics at 11 different Hospitals across the geography.</p> <p>The multidisciplinary team comprises of consultant geneticists, genetic counsellors, specialist</p>



Clinical Service	Bed-based provision On-Site	24/7 cover	St George's Hospital Current Service Model*
			<p>registrars, specialist nurses and clinical scientists provide support to children and adults affected by or at risk of genetic disorders. The department offers a few highly specialised, disease specific clinics, including two nationally recognised services: Tuberous Sclerosis and Primary Lymphoedema and other specialised clinics in cancer genetics carrier (for individuals who carry a high risk cancer gene variants), haematology cancer, endocrine and growth disorders, paediatric conditions, neurodegenerative disease.</p> <p>In addition, the Genomics Service is a United Kingdom Accreditation Service accredited medical laboratory and provides a comprehensive diagnostic analytical and reporting service for a range of genetic disorders, and is part of the wider South East Genomics Laboratory Hub.</p>
<b>Other Specialist Paediatric Surgery</b>	Yes	Yes	<p>St George's Hospital has access to a wide range of specialist children's surgery including Ear, Nose and Throat, orthopaedics, maxillo-facial and urology, including:</p> <ul style="list-style-type: none"> <li>4 Consultant Paediatric Orthopaedic Surgeons</li> <li>6 Paediatric ENT Surgeons</li> <li>4 Paediatric Plastic Surgeons</li> <li>1 Oral and Maxillofacial Surgeons</li> <li>3 Spinal Surgeons</li> <li>1 Dental Surgeon</li> </ul>

\*Consultant workforce has been provided to give an indication of size and scale of the service. Where WTE is used, this refers to Whole Time Equivalent working.

Both Trusts provided credible and robust plans for delivery of:

- bone marrow transplants including JACIE accreditation (summarised below)
- imaging and diagnostics – detail in Section 5.4.2 Capacity
- pathology and haematology – detail in Section 5.4.2 Capacity.

### ***Bone Marrow Transplants***

Both Trusts were specifically asked how they would meet this separate service specification as part of the service move. The table below sets out their plans.

***Table 20: Plans for delivery of bone marrow transplants by each of the options***

Element of service	If the future Principal Treatment Centre was at Evelina London Children's Hospital	If the future Principal Treatment Centre was at St George's Hospital
Location of patient	On ward at future children's cancer centre	On ward at future children's cancer centre.
Existing accreditation	Would be supported by King's College Hospital which has an existing accredited adult bone marrow transplant service	St George's Hospital has an existing accredited adult bone marrow transplant service on site.
Cell processing and storage	King's College Hospital	Existing collaboration with NHS Blood and Transplant: Southampton (and transport contract).
Donor selection	The Anthony Nolan Trust	Build on current donor selection arrangements with NHS Blood and Transplant on site in Tooting.
Bone marrow harvesting	Named theatre at Guy's and St Thomas'	Theatres at St George's Hospital
Apheresis <sup>41</sup>	Would be established by existing Guy's	24/7 apheresis service (including sickle cell) – this would be delivered by existing, expert staff.

<sup>41</sup> Apheresis is the process by which the blood of a person is passed through an apparatus that separates out one particular constituent such as platelets or white blood cells and returns the remainder to circulation.

Element of service	If the future Principal Treatment Centre was at Evelina London Children's Hospital	If the future Principal Treatment Centre was at St George's Hospital
	and St Thomas' staff, skilled in this area (for sickle cell treatment, for example)	The adult apheresis service will be enhanced further with the introduction of the adult CAR-T programme which is being planned for later this year.
JACIE accreditation	Expected within implementation timeline	Expected within implementation timeline

### **How the potential options would propose to provide services which they do not have on-site**

#### ***Cancer Surgery***

St George's Hospital provides paediatric oncology surgery services for the current Principal Treatment Centre. (The following information excludes surgery for specific other conditions, including bone cancer, eye cancer, and liver cancer, and neurosurgery.)

- Three paediatric specialist consultant surgeons currently provide paediatric oncology surgery at St George's Hospital (providing 1.34 WTE resource of capacity). They undertake complex/major elective and emergency paediatric oncology surgery including tumour resections, some of the intermediate or minor operations/procedures including biopsies, central line insertions and removals and provide an outreach service at the Royal Marsden.
- These three consultants, along with another eight consultants, cover all paediatric and neonatal surgery including non-cancer surgery at St George's Hospital and regularly work with consultants with expertise in other paediatric medical and surgical specialties.
- Over 40 dedicated and general WTEs, including medics, nurses, allied health professionals (dietitians, occupational therapists, physiotherapists, psychologists, play specialists, speech and language therapists), anaesthetists, critical care intensivists, diagnostic and interventional radiologists, operating theatre staff, pathologists,

pharmacists and scientists/technicians as well as safeguarding and social services, support paediatric and neonatal surgery including paediatric oncology surgery.

St George's Hospital has a comprehensive seven-day service for children's emergency and urgent surgery, managed by general surgery, oncology, radiology and other specialties, supported by a 24/7 emergency theatre team for children's surgery and radiology. The team has an active research profile. St George's Hospital reports that the service has high-quality outcomes and low levels of litigation for its complex case mix.

If the future Principal Treatment Centre was located at St George's Hospital, its paediatric surgical and anaesthesia service would continue providing:

- all of the complex/major elective and emergency paediatric oncology surgery including complex biopsies, joint surgery with bone and sarcoma specialists from the regional centres, neurosurgery (which is a fixed point) and tumour resections
- some of the intermediate or minor operations/procedures including biopsies, central line insertions, and removals, working with its partner Paediatric Oncology Shared Care Units.

The Trust would continue to provide the following procedures:

- central vascular access via a variety of devices e.g. Broviac/Hickman lines, portacaths, PICCs, supported by IR colleagues
- biopsy of any intra-abdominal or thoracic solid tumour, peripheral tumours, and lymph nodes
- management of unexpected emergencies in immunosuppressed children
- supportive procedures e.g. gastrostomy, for children undergoing chemotherapy.

If the future Principal Treatment Centre was at Evelina London, paediatric oncology surgery would move from St George's Hospital to Evelina London. (Surgery for specific other conditions, including bone cancer, eye cancer, and liver cancer, would continue to be at other London hospitals. Neurosurgery is also a fixed point and would continue to be provided by King's and St George's. Children would therefore continue to travel for these under both options.)

Evelina London's proposal for the transferred surgical activity from St George's emphasised its existing surgical strength in paediatrics as the basis for accommodating the transfer of skills. Evelina London has illustrated this with reference to the following: 10 children's operating theatres; 54 individual paediatric surgical consultants across nine surgical specialties including a consultant-led general surgery service with eight consultants; and over 30 anaesthetists with extensive experience across paediatric surgical specialties including cancer.

If the future Principal Treatment Centre was located at Evelina London Children's Hospital, all surgical procedures (except most neurosurgery and surgery for other fixed points) would be provided on site including central vascular access, biopsies of relevant tumours, management of unexpected emergencies in immunosuppressed children, and supportive procedures e.g. gastrostomy, for children undergoing chemotherapy). There would be on site access to the largest children's interventional radiology department south of the Thames, with six children's interventional radiology consultants (13 interventional radiology consultants covering on-call) and the capacity to provide a high-quality children's cancer service including chemoembolisation and ablation, tumour biopsies, venous access lines (including ports), sclerotherapy, bronchoscopy and airway intervention.

The Principal Treatment Centre would require an additional 3.4 theatre lists per week, evenly split between day case and main theatres. If the centre was to be at the Evelina London, this activity would be accommodated within the Children's Day Treatment Centre (which includes two additional, dedicated children's theatres), and within the eight main theatres in Evelina London Children's Hospital.

The children's cancer surgeons who work at St George's Hospital all spend more than half their time on other types of surgery, so would not formally qualify to transfer to Evelina London Children's Hospital, if that should be where the future Principal Treatment Centre is, even if they wanted to.

Evelina London has experience of successfully bringing in new surgical expertise, including specialist paediatric surgery from Lewisham Hospital. It could build cancer-specific expertise in its surgical team through training, recruitment or a mixture of both. It would also explore options for support from St George's and potentially other London hospitals, such as Great Ormond Street Hospital. Surgeons from these organisations could split their time, working at more than one hospital where their expertise is needed.

The Trusts that provide specialist children's services in south London along with The Royal Marsden have agreed to work together to make best use of all the skills needed for children's cancer care, including cancer surgery.

If it became the site of the proposed future centre, Evelina London would have at least two and a half years to create a surgical team with expertise in operating on children's cancer.

### ***Cardiology (Heart services)***

Evelina London Children's Hospital is a tertiary (specialist) centre for children's heart conditions. It provides a joint heart service with The Royal Marsden to discuss, care for and monitor individual patients with cancer. As part of this, Evelina London cardiology staff run fortnightly clinics at The Royal Marsden for children who are inpatients or on long-term treatment who need heart checks. They also see children from the Principal Treatment Centre in consultant-led clinics at Evelina London.

Children need to have their heart function assessed before they can start treatments including chemotherapy, bone marrow transplants and surgery. This is particularly important because up to 70% of childhood cancers are treated with a group of drugs which are potentially cardio-toxic.

Evelina London has specialist equipment to assess heart function (including 3D echocardiography and cardiac MRI, which is only available in tertiary cardiology centres) and can provide interventions from specialist cardiologists before, during and after the cancer treatment, depending on the needs of the child.

In 2019/20 25 children with cancer who were treated at The Royal Marsden (as an inpatient or outpatient) also received inpatient care (including as day cases) at Evelina London for heart care. Each of them was seen as a day case, with 36 attendances in total (mostly for diagnostic tests). One of them also had an unplanned hospital stay.

If Evelina London were to be the site of the future Principal Treatment Centre, children with cancer would have access to the expertise and specialist equipment of Evelina London's cardiology services on site.

St George's provides paediatric diagnostic cardiology services such as echocardiograms. Where further specialist diagnostics, advice or intervention are needed, St George's Hospital draws on the advice of specialists from Evelina London. It runs clinics on site with specialist input from clinicians who are colleagues of the team at Evelina London, and part of the same Trust.

If St George's Hospital were to be the site of the proposed future Principal Treatment Centre, it could deliver some heart diagnostics that patients needed on site. Children who needed tertiary (specialist) inpatient, day case and outpatient heart care would be transferred or referred to Evelina London, as they are at present. The exact arrangements for this would be agreed following detailed conversations between clinicians after a decision was made.

### ***Nephrology (kidney services)***

Many cancer patients need long-term specialist follow-up for chronic kidney disease that develops as a direct result of their treatments. Some cancers can also directly involve the kidneys or their blood supply such as Wilms tumours or neuroblastomas. Treatments may include total removal of the affected kidney (or kidneys) and radiotherapy, resulting in a sudden decline in kidney function and, rarely, the need for long-term dialysis and kidney transplantation. This patient group all need long-term specialist kidney (nephrology) input.

Evelina London is the tertiary kidney centre for the Principal Treatment Centre catchment area.

In 2019/20 six children with cancer who were treated at The Royal Marsden (as an inpatient or outpatient) also received inpatient care (including as day cases) at Evelina London for kidney care. Three of them were seen as day cases, one had planned inpatient stays and two had unplanned inpatient stays.

If Evelina London were to be the site of the future Principal Treatment Centre, children with cancer would have access to the expertise and specialist equipment of Evelina London's nephrology services on site.

St George's Hospital delivers a range of clinics for kidney care, it also provides acute renal replacement therapy in the paediatric intensive care unit for very unwell children.

If St George's Hospital were to be the site of the proposed future Principal Treatment Centre, it could deliver some kidney care that patients needed on site. Children who needed tertiary inpatient, day case and outpatient kidney care would be transferred or referred to Evelina London, as they are at present. The exact arrangements for this would be agreed following detailed conversations between clinicians after a decision was made.

### **Neurosurgery**

Neurosurgery for children, including for children with cancer in south London and much of the south east, is provided by King's College Hospital and St George's Hospital.

In 2019/20, about one in five children under the care of the current Principal Treatment Centre had brain, nervous system or spinal cancer. Most children with those kinds of cancer, and some children experiencing side effects of other treatment (such as complications from a shunt, swelling after radiotherapy or bleeding in the brain) need neurosurgery. Usually, this surgery is planned but sometimes it is needed urgently (for example, when a child comes to A&E with symptoms that need urgent attention). As a result, neurosurgeons are available 24/7.

Typically, a child under the care of the Principal Treatment Centre for south London and much of the south east who needs neurosurgery is seen at their local hospital and referred or, where necessary, transferred to the neurosurgical centres at King's or St George's Hospital or admitted via A&E at King's or St George's.

Their surgery is carefully planned and undertaken, using expert technologies and techniques (such as neuroradiology). After surgery, they may need chemotherapy provided at The Royal Marsden and/or radiotherapy (either conventional radiotherapy at The Royal Marsden or proton beam therapy provided at University College Hospital). Their ongoing progress and treatment are carefully managed by a multidisciplinary team from King's, St George's Hospital and The Royal Marsden. They continue to be seen by the neurosurgery team at the hospital where they had their initial operation. They may go to their nearest children's cancer shared care unit for supportive care.

In 2019/20, 86 children had cancer related neurosurgery. Although numbers vary year on year, around 20% of children had their neurosurgery at St George's.

For further details, see slide '9. Paediatric Neurosurgery and Neurosurgical Procedures at selected London trusts', in Appendix 3 – Activity Data Pack.



In both cases, this included some surgery for children who did not have cancer of the brain, nervous system or spine but needed neurosurgery for other reasons.

Children with brain, nervous system and other cancers also had other kinds of admitted inpatient treatment at the two hospitals, including emergency care at A&E, neurology, and children's surgery.

Neurosurgery is not part of this consultation, it is a 'fixed point'. This means it is going to stay at King's College Hospital and St George's Hospital. Patients will continue to go to both King's and St George's in similar proportions to now for their neurosurgical care. The neurosurgery service King's and St George's provide is a key part of services for children in south London and much of the south east, including as part of the trauma services at both hospitals for children who have been badly injured.

Evelina London doesn't provide neurosurgery. It works very closely with King's College Hospital which does, and Evelina London funds one consultant paediatric neurosurgeon in the King's team. Planned neurosurgery for non-cancer patients is undertaken regularly by the King's team at Evelina London.

If the future Principal Treatment Centre were to be at Evelina London, children would continue to go to King's or St George's, as now, for planned neurosurgery. In exceptional circumstances, emergency neurosurgery for children with cancer could be carried out on site at Evelina London by a neurosurgeon from King's, if a child could not be moved. This would be assessed on a case by case basis.

King's and St George's both provide a children's cancer shared care unit as well as their neurosurgery services. The new service specification for children's cancer shared care units offers an opportunity for shared care units to work towards attaining enhanced level B status. Enhanced level B shared care units can give children inpatient chemotherapy at their hospitals. King's is working to achieve this status.

If Evelina London became the future Principal Treatment Centre, it would propose to support St George's Hospital to achieve enhanced level B status for its shared care unit. If both King's and St George's had enhanced level B status, children with brain tumours who needed inpatient chemotherapy would be able to receive it on site, reducing the number of transfers required and improving patient experience.

If St George's Hospital became the future Principal Treatment Centre, chemotherapy would be available on site for its neurosurgical patients. However, as the majority of patients would continue to have their neurosurgery at King's, there would still be transfers between King's and St George's for neurosurgical patients requiring chemotherapy, unless King's had enhanced level B status.

A consultant neuro-oncologist, who is jointly employed by King's and The Royal Marsden, is on site two and a half days a week at King's, overseeing the care of children with cancer,

including at tumour clinics, and would support the proposed development of the shared care unit there too.

*Note – the enhanced paediatric oncology shared care unit configuration in the catchment area remains subject to a separate piece of work to implement the national service specification for shared care units; further detail on the future configuration is expected to be available in autumn 2023.*

### **Radiotherapy services for the proposed future Principal Treatment Centre**

As described in section 1.5 Current service provision, radiotherapy for children with cancer under the care of the current Principal Treatment Centre is provided at two sites. Conventional radiotherapy, which uses high energy x-rays (photon beams), is delivered for children under the care of the current Principal Treatment Centre by the specialist team at The Royal Marsden. Proton beam therapy, which uses beams of high energy protons, is based at University College Hospital, near Euston. There are other superspecialist radiotherapy treatments there too.

Though it is only suitable for certain types of cancer, proton beam therapy precisely targets tumours, reducing damage to healthy tissue and potentially reducing long-term side-effects.

As the very specialist proton beam therapy service develops, more children with cancer are expected to benefit from it, with fewer children having conventional radiotherapy.

While The Royal Marsden service currently provides high quality conventional radiotherapy treatment for children as part of their care, the proposed move of specialist children's cancer services to either Evelina London or St George's alongside advances in radiotherapy treatment means we propose this service is provided differently in the future. This is because: it would be difficult to sustain the conventional radiotherapy service for children at The Royal Marsden without the staff and facilities of the Principal Treatment Centre on site; we also expect the number of children requiring conventional radiotherapy services in the future to fall meaning a high-quality service would be even harder to sustain. We therefore need to consider proposals for the future provision of conventional radiotherapy service as part of this consultation.

In both options, (as part of the overarching change for specialist children's cancer services) conventional radiotherapy for children moves from The Royal Marsden to University College Hospital, located on Euston Road in central London. All radiotherapy (conventional as well as proton beam and other types) rather than some, as now, would then be provided as part of a larger, combined service at University College Hospital.

Radiotherapy already works like this for children who go to the Principal Treatment Centres at Great Ormond Street Hospital, Southampton, and some patients from Oxford. The details of how this would work in practice to give patients the best care and experience would be agreed by clinicians and managers. NHS England would support the development of these plans.

Bringing all radiotherapy services together on the same site at University College Hospital would create opportunities to improve care for children with cancer.

Further to section 3.3 Essential clinical co-dependencies, there is more detail in section 6.2.1 Radiotherapy on the impact and enablers for implementing proposals.

### **5.2.2. Reducing avoidable treatment transfers**

Both Trusts offer a much greater range of specialist children's services than is currently available at The Royal Marsden and both would be expected to reduce the number of avoidable treatment transfers particularly for access to critical care. However, neither would eliminate them completely.

- Both organisations recognise that transfers for super-regional specialties (such as bone sarcoma surgery, retinoblastoma surgery and liver cancer surgery) would continue.
- Planned transfers for patients requiring inpatient radiotherapy treatment at University College Hospitals would also be required (see section 3.3 Essential clinical co-dependencies for more information).
- Up to 10<sup>42</sup> children a year who have radiotherapy ahead of a bone marrow transplant (total body irradiation which often needs to be provided during a hospital stay) would have a planned transfer from the proposed future Principal Treatment Centre to University College Hospital for this treatment. This would be scheduled ahead of time in line with each patient's treatment plan.
- If the future Principal Treatment Centre was at Evelina London, transfers would still be required for neurosurgery care. There are mitigations for these future transfers should Evelina London become the future Principal Treatment Centre, which are described in section 5.2.1 Interdependent Services.
- Should St George's Hospital become the future Principal Treatment Centre, some children would still need to be transferred to Evelina London for specialist cardiac and renal care. As neurosurgery remains a fixed point and the majority of neurosurgery patients would continue to have their neurosurgery at King's, some patients could also need to transfer between St George's and King's for care. This could be if they had their initial surgery at King's as they would continue to be treated by the same neurosurgical team. As noted above, if King's were to become an enhanced Level B paediatric oncology shared care unit this would have the potential to reduce the number of transfers

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<sup>42</sup> In 2019/20, 7 children from the current Principal Treatment Centre had total body irradiation as part of their treatment, as shown in 'Table 24. Royal Marsden Radiotherapy Activity' of Appendix 3 – Activity Data Pack.

for patients in the future Principal Treatment Centre for care, irrespective of where the future centre was.

### **5.2.3. Network effectiveness and system benefits**

Network effectiveness is an important part of the future Principal Treatment Centre model and is emphasised in the service specification: “The Principal Treatment Centre is responsible for ensuring the provision of high-quality care through the effective coordination of integrated, disease specific pathways across different providers, known collectively as the Children’s Cancer Network.”

Both proposals described their capability in network management.

#### **Evelina London**

Evelina London has a track record in leading network development, as host of four separately commissioned paediatric networks, two of which – congenital heart disease and strategic paediatric network – cover the same area as the Principal Treatment Centre, as does the South Thames Retrieval Service which Evelina London also provides. The children’s cancer network sits under the strategic paediatric network.

Evelina London’s work in leadership of clinical networks, which also include the neonatal and cleft networks, includes developing effective governance and leadership, clear communication, collaborative training and service planning across a wide geography. Should it become the future Principal Treatment Centre and therefore the leader of the Children’s Cancer Network, Evelina London says this would be ‘a unique opportunity to gain from the synergy across the different networks to support children’s services in hospitals across the geography’.

It adds that it would foster measurable improvements in outcomes and patient experience by supporting paediatric oncology shared care unit capacity development, based on its existing work with all hospitals in the Principal Treatment Centre catchment area and understanding of the region, and by facilitating training across the network, along with patient and public engagement.

#### **St George’s Hospital**

St George’s also has a track record in leading network development, including establishing the strategic direction of services across large geographies. Its proposal highlighted relevant experience. It has developed 16 adult clinical networks within south west London, spanning hospitals and primary care, in a programme led by the Deputy Chief Executive and under the auspices of the South West London Acute Provider Collaborative for which the St George’s Chief Executive is the lead CEO.

St George’s is also involved in leadership of larger, regional and specialist care networks including the South West London and Surrey neuroscience network and the London Kidney Network. Both these networks are hosted by St George’s.

As leading members of the National Institute for Health and Care Research Clinical Research Network, St George's and St George's University of London collaborate with other organisations to increase the opportunities for people to take part in health and social care research at children's research-active sites across south London.

St George's is already a member of the Children's Cancer Network and has the expertise and relationships that come with being a paediatric oncology shared care unit and part of the current Principal Treatment Centre.

Should it become the future Principal Treatment Centre, the Trust says it would support the development of the Children's Cancer Network through a range of mechanisms, including through access to training, governance including development of pan-network policies and pathways, support for paediatric oncology shared care units to build capacity and experience to expand research, work with other related clinical networks, delivery of quality arrangements and identification of improvement priorities.

#### **5.2.4. Transition to teenage and young adult services**

Both proposals described support for transition from children's services to services for teenagers and young adults. Management of this pathway will be particularly important as the teenage and young adult service will continue at The Royal Marsden (as the designated teenage and young adults Principal Treatment Centre).

As described in the national service specification, the Principal Treatment Centre provides services for children up to their 16th birthday. However, it is acknowledged in the specification that there some flexibility may be required in the age boundaries of services, to enable patients to access optimum disease and age appropriate services. It may, therefore, be appropriate for a Principal Treatment Centre to treat people up to their 19th birthday.

As a tertiary provider of heart and kidney care, Evelina London works with children with complex needs from across a wide geography and supports these children and young people to transfer to adult services, no matter who they choose their ongoing care provider to be (there may be an adult service nearer to their home). This experience in treating complex care over a long period and into adulthood would support work with children with cancer too.

A summary of the options' proposals is set out in Table 21 and Table 22 below relating to transition best practice, service specification requirements and NICE Quality Standards.

Following a decision on the location of the proposed future Principal Treatment Centre, it will be important for the future provider to work with stakeholders on the detail of arrangements. This may include flexibility around the age of transition to reflect the needs of the individual patient, their tumour site, location and staffing.

The Royal Marsden has identified that a review of workforce and estates would be required to identify how the teenage and young adult service is best delivered in the future. Some further detail on this is set out in Section 6.2.2 Services at the Royal Marsden.

Please see a summary of the transition arrangements set out by each proposal.



**Table 21: Guy's and St Thomas', Evelina London proposal for support to children at the Principal Treatment Centre through transition to services for teenagers and young adults**

Experience and expertise	
Cares for many young people on transition pathways to adult services every year: <ul style="list-style-type: none"> <li>• within GSTT and with other centres</li> <li>• within sub-specialties and general paediatrics service</li> <li>• for those with long-term and lifelong complex conditions</li> </ul>	✓
Three key principles: person-centred approach; continuity before, during and after transition; holistic approach addressing all needs including psychological and social	✓
Our children's doctors, specialist nurses and psychologists work with young people to build their understanding of their disease, how to self-manage their condition, and navigate the health system. Referrals are made to different professionals (e.g. play specialists, psychologists).	✓
Evelina London has clinical guidance on transition and transfer of care to support its services, which are compliant with and exceed NICE Transition Quality Standards	✓
Ovarian fertility preservation on-site (Evelina has one of the largest fertility services in Europe)	✓
Delivery proposal for PTC	
Would continue current work with the Children's Cancer Network to co-design with patients and families a transition policy and strategy for the PTC and POSCUs	✓
Would have an accountable clinical lead for transition	✓
Purposefully planned and co-developed transition with children's and adults' teams to maximise continuity, typically starting conversations at around 13 depending on needs of the person. Based on existing Ready, Steady, Go model	✓
Each young person would have a written summary, follow up care plan, and transition plan tailored to their physical, mental and social needs to optimise physical and psychological health outcomes	✓
Process to start at least six months before transfer. Support from children's services to be available for at least six months after transfer	✓
Those who have completed treatment to be moved at appropriate time to Late Effects MDT	✓



**Table 22: St George's proposal for support to children at the Principal Treatment Centre through transition to services for teenagers and young adults**

Experience and expertise	
Experience as a PTC and as a POSCU means clinicians have understanding of needs and expertise in supporting children with cancer and their families through transition	✓
Already delivers oncology services for 16 to 18 year olds: inpatient services offer this age group choice of location	✓
Fertility preserving measures are offered through cryopreservation to pre-pubertal young people who will be having gonado-toxic treatment.	✓
Is fully compliant with all NICE Transition Quality Standards, the transition process will start early (around 14 years), and is flexible depending on the patient's needs and diagnosis. The intention would be for appropriate children managed by the PTC to transfer to adults' services at a period of stability in their treatment. They will continue care under relevant teams supported by the TYA service, with a named Clinical Nurse Specialist to coordinate transition.	✓
Delivery Proposal for the PTC	
Working in partnership with the child, family and clinicians, identifies the service that best meets the clinical and emotional needs of the young person	✓
Transition into TYA and adult services involves close liaison with the Clinical Nurse Specialist who prepares the patient and their families/carers. They will undertake a "Ready Steady Go" assessment and maintain contact following transition to support young people who move to adult services to engage with their first appointments.	✓
Considers individual needs and preference, including where patients live and cancer type, when deciding when to begin the transition process	✓
Would continue to work in line with NICE guidance using the 'Ready, Steady, Go' model already in use.	✓
Supports a longer transition for young people with complex learning difficulties, including care within paediatrics beyond the age of 18 if this better meets their needs	✓

### 5.3. Patient and carer experience

Each organisation described its proposal from the perspective of patient and carer experience:

1. **Quality of facilities** – how it would provide age-appropriate facilities, including play facilities, education facilities and addressing issues of privacy and dignity
2. **Patient navigation** – how it would support parents/carers in a connected experience of being guided through a complex set of treatments as a joined-up period of care, including support for continuity of care and ease of record transfers
3. **Engagement and collaboration** – how it engaged with patients, parents and carers in development of the proposal including to provide an indication of future responsiveness as a service (criteria for what good engagement looks like was gathered from parent surveys)
4. **Family support** – how it would provide support at different phases of illness, including at times of crisis.
5. **Service accessibility** – patient travel and the impact on transport for a move of services, this being particularly significant for those impacted by inequalities, and therefore less able to choose flexible travel arrangements.

The next few pages look in more detail at these areas.

#### 5.3.1. Quality of facilities

Both trusts explained what they currently deliver and what they would propose delivering for the future Principal Treatment Centre. Both focused on creating a child friendly environment appropriate for the children, almost all aged one to 15, using the service, with play facilitation a key part of the service.

Parents would be able to stay on the ward in both centres. At St George's, accommodation is in adaptable and adjoining bedrooms that can be configured as family suites for some parents to stay as well as pull-down beds at the child's bedside. Evelina London Children's Hospital anticipates providing pulldown beds for parents to stay at the child's bedside. Both have accommodation for parents in rooms close to the paediatric intensive care unit.

Both proposals are deemed to have sufficient capacity to accommodate activity.

**Table 23: Outline proposals for care facilities for the Principal Treatment Centre at both Evelina London Children's Hospital and St George's**

Proposed provision	If the future Principal Treatment Centre was at Evelina London Children's Hospital	If the future Principal Treatment Centre was at St George's
Inpatient unit <sup>43</sup>	<p>A new children's cancer inpatient ward in Evelina London's main children's hospital building.</p> <p>The current design features 20 beds:</p> <ul style="list-style-type: none"> <li>• four cubicles suitable for bone marrow transplant patients</li> <li>• eight single ensuite rooms</li> <li>• two bays with four beds each.</li> </ul>	<p>A new children's cancer centre in a converted wing of the hospital with its own entrance.</p> <p>The current design is for:</p> <ul style="list-style-type: none"> <li>• 22 single ensuite rooms for children with cancer. A further six ensuite rooms would be available for use as family suites as needed (each would interconnect to one other bedroom).</li> <li>• 10 of the 22 would be isolation rooms, suitable for bone marrow transplant patients.</li> <li>• one would be a lead-lined room for specific types of treatment, if needed.</li> </ul>
Day case suite	<p>Facilities of the new Children's Day Treatment Centre: includes two theatres.</p> <p>10 day-case beds/chairs:</p> <ul style="list-style-type: none"> <li>• 7 for day-case chemotherapy</li> <li>• 3 for other procedures.</li> </ul>	<p>A minor operations/procedures suite with 2 minor operations/procedures rooms. Separate play/waiting area.</p> <ul style="list-style-type: none"> <li>• 10 beds (including 3 singles)</li> <li>• 8 chemotherapy booths/ chairs</li> <li>• an assessment/ treatment bay</li> <li>• clinical/ consulting rooms</li> </ul>
Paediatric intensive care (total capacity)	<p>There is capacity for 30 paediatric intensive care beds;</p> <p>PTC capacity (2 beds) would be accommodated within existing beds.</p>	<p>14 beds in paediatric intensive care. PTC capacity (2 beds) is already provided under current PTC arrangements.</p>
Proposed patient and family support space at Principal	<p>Play areas, facilities to buy and store snacks, catering facilities to meet the needs of children with cancer, bedside televisions, WiFi, Amazon lockers, a 24/7 IT helpline for patients</p>	<p>Chill-out or quiet spaces, social or gaming rooms for teenagers, creches, playrooms or TV rooms for younger children, a therapies room, quiet, relaxing rooms/ spaces for</p>

<sup>43</sup> Both providers have formally confirmed they have the flexibility to provide the number of beds and isolation cubicles that could be needed to meet the future service development needs, including surges in demand. Final capacity designs will be developed and agreed with key stakeholders, after a decision has been made on the future location of the Principal Treatment Centre.

Proposed provision	If the future Principal Treatment Centre was at Evelina London Children's Hospital	If the future Principal Treatment Centre was at St George's
Treatment Centre, on wider site and nearby	and families, parents' room, kitchen facilities, laundry. Access to all facilities within the children's hospital, which is recognised as having high-quality design that was chosen by children. Numerous cafes, outdoor spaces, chapel, nearby park, extra accommodation for parents in Gassiot House, Ronald McDonald House.	parents, etc, facilities for self-catering on the ward and storage. Choice of food outlets, laundry, lounge, dedicated garden space for children with cancer that can be closed off to other patients or members of the public, extra accommodation for parents in Pelican Hotel, Ronald McDonald House.
Food	Menus have been co-designed with children and young people.	Menus have been co-designed with children and young people.
Clinic space	4 rooms for dedicated oncology clinics: <ul style="list-style-type: none"> <li>• 5 face to face</li> <li>• 2 virtual.</li> </ul>	5 clinical/consulting rooms, 1-2 of which will be dedicated to paediatric oncology research. 1 treatment room.

## **Education**

Both hospitals already provide education facilities for children. They both have outstanding-rated Ofsted registered hospital schools and offer bedside or group classroom sessions, contact with 'home' schools and externally led interactive lessons (e.g. music). Evelina London school's classrooms are in a separate space in the atrium of the children's hospital. St George's Hospital has a classroom on site that would support the cancer service through dedicated learning space. Both describe these spaces as friendly, with a welcoming atmosphere where children's wellbeing is prioritised. Both would anticipate offering similar provision for the children transferring from The Royal Marsden service, should they become the future Principal Treatment Centre.

## **Privacy and dignity**

Both organisations set out how they would provide the Principal Treatment Centre service in a way that would protect patients and families' privacy and dignity.



**Table 24: an overview of both proposals for privacy and dignity**

Evelina London Children's Hospital	
All beds in the children's hospital include privacy screens and this will be replicated on the PTC ward	✓
Teenagers are always given the opportunity for private conversations with the clinical team	✓
With the adoption of EPIC, varying levels of access to the patient portal (MyChart) are available, and young people will have the ability to privately communicate with their clinical team.	✓
Spaces on each floor facilitate private conversations with teenagers and parents/carers – not labelled to respect parent feedback about rooms associated with bad news	✓
St George's	
Separate entrance to PTC	✓
100% ensuite single rooms, with remote monitoring from the nurses' station and space for a parent to stay by the child if required	✓
Different public zones to meet different needs of different children/young people, for example: <ul style="list-style-type: none"> <li>• chill-out or quiet spaces, social or gaming rooms for teenagers</li> <li>• creches and playrooms for young children</li> <li>• quiet relaxing rest rooms in day care and inpatient units</li> </ul>	✓
Short travel distances between diagnostic and interventional areas such as theatres to minimise crossing with the public	✓
Outdoor garden space for children with cancer that can be closed off to other patients/the public	✓
App linked to electronic patient record system increases patients' control over how they access information and support	✓

### **5.3.2. Patient navigation, family support during periods of extreme difficulty, engagement and collaboration**

Both organisations described exemplary models for these areas<sup>44</sup>.

#### **London Evelina**

Evelina London has extensive experience in engaging with parents and young people, with an embedded Patient and Public Engagement specialist dedicated to children's services, who focuses specifically on using age-appropriate methods to engage with children and young people and their families. Evelina London, Great Ormond Street, The Royal Marsden and Moorfields all scored in the 'better than expected' category for 0 to 7-year-olds in the CQC national children and young people's survey for 2020 (they were the only four London Trusts to do so).

In preparing its proposal, Evelina London did not have the opportunity to discuss it with children with cancer and their families who were under the care for the current Principal Treatment Centre.

It was agreed that there would be no interaction between the Evelina London team and current families and patients so as not to cause anxiety at a time when any service change was still a long way away. As part of the current Principal Treatment Centre, St George's Hospital teams were able to engage with Principal Treatment Centre staff and families in developing their plans.

Instead, Evelina London engaged with charities representing parents and with families who had received care at both The Royal Marsden and Evelina London; surveyed the existing Guy's Cancer Teenage and Young Adult Group on their views relevant to older children; and reviewed outputs from national and other relevant consultations.

If Evelina London became the future Principal Treatment Centre, its teams would work with children, families, staff and researchers on plans and designs for the centre. The same is true of St George's Hospital.

Evelina London has significant experience in helping families through periods of extreme difficulty including acute and rapidly evolving situations and provides:

- dedicated family support nurse in the paediatric intensive care unit to help families with medical and nursing support as well as other social support
- dedicated spaces for parents, including quiet indoor and outdoor spaces for breaks and chapel spaces
- direct access to counselling and psychological support, including out of hours

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<sup>44</sup> It was agreed that both organisations would focus on engagement with parents who used their own services at this stage, rather than wider engagement with all parents at The Royal Marsden as neither had yet been selected as the eventual provider of a future Principal Treatment Centre.

- support for children and young people in coping with illness from the 10-person play specialist team
- financial and practical advice and links with charities and support groups
- for the rare and very difficult times when a family loses a child, Evelina London has a highly experienced and supportive palliative care team and bereavement counselling. Evelina London also has an organisational Children's End of Life strategy.

Should Evelina London become the future Principal Treatment Centre, every child/family under the care of the Principal Treatment Centre would have a named care coordinator, typically a clinical nurse specialist, to provide clinical, practical and psychosocial support throughout their treatment. Families would also be supported by a lead consultant (typically a paediatric oncologist) and a 24/7 helpline for advice and emergency queries, which Evelina London has established for other services.

### ***Digital Enablers***

- Access to patient records would be facilitated by the EPIC electronic patient record system which is expected to be implemented in 2023.
- EPIC would support the sharing of clinical information with patients and families and help enable joined up and secure access to clinical records between Guy's and St Thomas, King's, University College London Hospitals, Great Ormond Street and The Royal Marsden. EPIC Beacon chemotherapy prescribing module would improve access across the network for chemotherapy regimens.
- EPIC has a direct patient record access portal (MyChart). This would enable young people and their families to access details about their care and to avoid duplication in interactions with clinicians. Parents would be the proxy managers for MyChart until the child was Gillick competent, with shared access following this. Should the future Principal Treatment Centre be at Evelina London, communication with clinical teams, full records and patient-entered data, and appointment management would all be provided through EPIC. It would flag young people approaching their 13th birthday for consideration for transition planning.
- Clinical guidelines for pathways would be stored on EPIC, which would also enable Evelina London to capture information for quality improvement and adherence to clinical governance processes.
- Two out of seven dedicated paediatric oncology clinics would be for virtual consultations.
- Evelina would aim to facilitate record sharing with paediatric oncology shared care units via the EPIC system, learning from experience of other Trusts which will also be using the same system such as Great Ormond Street.



## **St George's**

St George's said engagement with families, patients and parents/carers was key to designing its proposal and shaped the service's approach. Specifically, the Trust:

- ran a dedicated focus group with parents of patients receiving cancer care currently at St George's on the strengths and weaknesses of the current service
- engaged children with cancer and their parents on the design of the proposed children's cancer facility
- engaged with their Children and Young People's Council
- discussed the proposals with key charity partners, such as Momentum Children's Charity
- provided evidence of the impact the engagement had on their proposal.

The Trust has received praise from the CQC for the way in which the service makes it easy for children and families to give feedback, taking the feedback seriously and acting on it, and engaging with children, young people and their families about planning and managing services.

St George's also described significant experience in helping families through periods of extreme difficulty including acute and rapidly evolving situations, particularly as it provides the paediatric intensive care unit for the current Principal Treatment Centre. Examples of the support offered include:

- direct access to clinical psychology and counselling services with support within 48 hours, including support for parents needing to break bad news, and for children to communicate with care-givers
- space and activities to help them with coping/processing
- practical support and signposting
- bereavement support when needed
- support for children and families to understand, shape and agree treatment
- a named care coordinator.

## ***Digital Enablers***

- St George's Electronic Patient Record system for oncology is Cerner Millennium's Inflex, a cancer management system used for tracking cancer patients and recording patient management information taken by cancer multi-disciplinary teams. It is an effective and mature electronic patient record system which can be made available to staff working on non-Trust sites. The Trust is looking to expand this.

- Patients can access appointment information on an app. This widens digital access and gives patients more control over appointments, and how and when they access information and support. Should St George's become the future Principal Treatment Centre, all patients would have accessible clinical records supported by appropriate data governance with feeds from other clinical systems (e.g. pathology).
- The Health Information Exchange system now makes it possible for paediatric oncology shared care units to access patient records at the Principal Treatment Centre at St George's. The Trust is developing a 'patient portal' which will allow patients and families to communicate with their clinicians, and access their records, lab results, clinic letters, discharge letters and appointments through the NHS app.
- The electronic patient record helps to run and manage clinical trial delivery by making use of clinical data to increase patient recruitment, matching research to patients, and safeguarding patients by flagging to healthcare professionals when they are on a trial.

### 5.3.3. Service accessibility including travel

Both Evelina London and St George's Hospital understand the importance to children with cancer and families of issues around access to the Principal Treatment Centre.

As part of the options appraisal, the impact of the move on patient travel times (by car and public transport) was assessed. A well-established methodology was used, calculating travel times for journeys between origin points (where patients live) and different destinations: The current Joint Principal Treatment Centre (The Royal Marsden and St. George's sites) and the potential Principal Treatment Centre locations at Evelina London Children's Hospital and St George's Hospital. This method is commonly used in assessing impact of service reconfigurations and is described fully in the information sheet "How travel times were assessed and scored for this consultation".

**Public transport:** Evelina London is located near Waterloo and Waterloo East train stations as well as London Underground stations at Lambeth North (10 minutes' walk from Evelina London), Waterloo (15 minutes' walk) and Westminster (10 minutes' walk). St George's Hospital is located near London Underground station Tooting Broadway (10 minutes' walk from St George's Hospital) and Tooting train station (24 minutes' walk ). As currently, families on low income or benefits may be entitled to reclaim public transport costs under the Healthcare Travel Costs Scheme.

Both proposals improve public transport access compared to the current service at The Royal Marsden, Sutton. Travel analysis undertaken for the options appraisal found that:

- 6.7% of patients who used children's cancer services in 2019/20 would have a journey more than 15 minutes longer if they travelled by public transport to Evelina London Children's Hospital compared to the current Joint Principal Treatment Centre

- 4.6% of patients who used children's cancer services in 2019/20 would have a journey more than 15 minutes longer if they travelled by public transport to St George's Hospital compared to the current Joint Principal Treatment Centre
- Over 90% of patients who used children's cancer services in 2019/20 would have a very similar, or shorter journey by public transport to both Evelina London (93.3%) and St George's Hospital (95.4%) compared to the current Joint Principal Treatment Centre.

**Car transport (individual and hospital provided):** Due to the nature of cancer treatments, patients may be neutropenic (immunosuppressed) and concerned about using public transport. These patients and a parent may qualify for free non-emergency patient transport to and from the hospital due to medical need. Both providers have non-emergency patient transport teams. Guy's and St Thomas' has a dedicated patient transport team that operates nationally and is implementing a dedicated fleet of cars specifically for Evelina London. St George's also has a dedicated patient transport team and a fleet of cars that offers local, regional and national patients support with transport. University College Hospital also provides a dedicated patient transport team.

However, both sites would take longer to drive to for the majority of families. Travel analysis undertaken ahead of the options appraisal found that:

- 71% of patients who used children's cancer services in 2019/20 would have a journey more than 15 minutes longer by car to Evelina London, compared to The Royal Marsden's Sutton site
- 49% of patients who used children's cancer services in 2019/20 would have a journey more than 15 minutes longer by car to St George's Hospital, compared to The Royal Marsden's Sutton site.

The proportion of patients with a journey of 15 minutes or longer was converted into a score<sup>45</sup>. Further detail on the scoring is given in section 6.1.1 Scoring breakdown.

Please note that this travel time assessment, used as part of the options appraisal, relates to a specific patient cohort; patients who used children's cancer services at the current Principal Treatment Centre in 2019/20. The Equality and Health Inequalities Impact Assessment also contains an analysis for the whole child population living in the Principal Treatment Centre catchment.

This explored differences in travel times between socio-demographic groups within the Principal Treatment Centre catchment area to help us understand the impact of the change on groups with protected characteristics or other vulnerabilities.

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<sup>45</sup> <https://www.transformationpartnersinhealthandcare.nhs.uk/childrenscancercentre/background/travel-times/>

It found that:

- by public transport, children living in the most deprived areas and rural areas would, on average, have a shorter journey for both options than to The Royal Marsden compared to other children
- by road, children living outside London or in rural areas would, on average, have a longer journey for both options than to The Royal Marsden, compared to other children.

Please see Appendix 1 – Integrated Impact Assessment for further detail.

### **Parking**

Evelina London is next to the St Thomas' Hospital car park (less than a five minute walk away) and currently provides free parking for frequent attenders, parents of children in the paediatric intensive care unit within the first 24 hours, parents of children staying overnight, and staff working out of hours. Should it become the future Principal Treatment Centre, Evelina London would explore with families and staff additional opportunities to ensure equitable access for children with cancer and reduce financial burdens, including local accommodation before early morning appointments, a volunteer driver scheme, and a park-and-ride scheme. Its proposal explained that a review was underway to create more disabled spaces and increase access to free parking for parents who need it.

Should it become the future Principal Treatment Centre, St George's Hospital would provide up to 20 dedicated parking spaces for children and families accessing children's cancer care by the entrance to the children's cancer centre and a dedicated drop-off zone. St George's currently supports families with travel arrangements for appointments and to make the journey home following admission, either via taxi or hospital transport.

Evelina London, St George's Hospital, and University College Hospital would be able to reimburse parking and support parents to access reimbursement for Ultra Low Emission Zone charges for qualifying parents of children with cancer<sup>46</sup>. Evelina London and University College Hospital would also support with reimbursement for congestion zone charges.

Evelina London and St George's Hospital are committed to addressing recommendations arising from the Integrated Impact Assessment should they be successful, which includes the provision of dedicated on-site parking.

South Thames Retrieval Service which is operated by Guy's and St Thomas' NHS Foundation Trust would continue to provide a seamless retrieval service for children who need to be transferred to or from the proposed future Principal Treatment Centre, irrespective of its location. South Thames Retrieval Service trains all paediatric oncology

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<sup>46</sup> Under standard reimbursement policies, some patients may be eligible for reimbursement of the Congestion Charge and/or the ULEZ. <https://tfl.gov.uk/modes/driving/reimbursements-of-the-congestion-charge-and-ulez-charge>. Parking reimbursement and discounts are also available. Further detail on recommendations around mitigations and associated policies are set out in our EHIA and other consultation materials.

shared care units and the current Principal Treatment Centre in the care of critically ill children with cancer. The South Thames Retrieval Service paediatric intensive care ambulance service is provided by British Emergency Ambulance Response Service, which ensures there are two fully equipped paediatric intensive care ambulances 24/7 and two dedicated technicians to drive the ambulances 24/7. There is a third fully equipped ambulance to ensure the availability of two vehicles at all times. This would all continue without disruption during and beyond the service transfer.

#### 5.4. Enabling (non-clinical factors)

Proposals were submitted summarising plans in regards:

- **Resilience** – patients are able to access care when required, including when services are disrupted
- **Capacity** – sufficient capacity in place to treat children from a wide geography – this includes pathways and processes to support delivery of care, including timely access
- **Organisational support for staff** – leading and supporting staff through a period of change and sustaining the care model through this process
- **Impact on staff** – transition to the future Principal Treatment Centre must seek to minimise the impact on the workforce who deliver the service.

##### 5.4.1. Resilience

Both proposals set out a clear set of operating policies for business continuity and both were seen as capable of providing resilient provision in the face of an emergency.

##### 5.4.2. Capacity

To support the two Trusts to prepare their proposals, data was collated about the number of patients the current Principal Treatment Centre treats (19/20 activity figures), as well as different aspects of their treatment. This data was shared with the Trusts to help them prepare their bids. Both Trusts used it to develop their plans. The expert panel which evaluated enabling factors was content with both Trusts' plans for beds and other elements of the service, and that both would be able to provide a resilient service<sup>47</sup>.

Since this data was shared, The Royal Marsden has said that current demand for the service may lead to surges in activity which can mean that more beds might be needed compared to the number of beds the panel felt was sufficient. This requirement for isolation cubicles may also increase to enable care for children undergoing bone marrow transplants, who need germ-free care. Activity levels for the service were reviewed to assess requirements for

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<sup>47</sup> There is no indication that these activity levels would decrease and nor is there an intention to require reductions as part of the reconfiguration. The data makes no assumptions about potential future work with paediatric oncology shared care units to provide more care (e.g. chemotherapy) closer to children's homes which may move activity away from the Principal Treatment Centre in the future.

surges in activity using more recent activity data. This demonstrated that service requirements can be accommodated within 20 beds as per the original activity analysis by the panel, as per the data lake. However, the aim of the relocation of the Principal Treatment Centre is to ensure children's cancer services are able to provide high quality, resilient services that meets the needs of its patient population for years to come.

Therefore, both Guy's and St Thomas' NHS Foundation Trust on behalf of Evelina London Children's Hospital and St George's University Hospitals NHS Foundation Trust on behalf of St George's Hospital have looked again at their proposals, and written to us to let us know how they would meet increased demand for beds and for isolation cubicles.

On the basis of the detailed information they have shared with us, we are confident that either option would be able to meet the changing needs of the service, including any unexpected increases in demand. This also includes changes to patient pathways that may require an increase in isolation rooms.

There are benefits within both proposals that would allow them to be flexible in managing surges in activity beyond the expected bed base. The Evelina London proposal benefits from co-locating the Principal Treatment Centre in a dedicated and purpose-built specialist children's hospital, which allows for the ability to use staff, the bed base and the network flexibly, to accommodate children across wards and ambulatory facilities that are designed with complex needs in mind. The Children's Hospital is supported 24/7 by a team of dedicated specialist experts whose role is to provide clinical intervention for deteriorating patients and to manage the capacity and flow of the hospital.

The St George's proposal provides benefits within their estate's solution. The proposal submitted was for 22 staffed clinical beds to meet the identified activity requirements, with an additional 6 beds that can be used as family rooms to allow parents and carers to stay close to their children. The inclusion of 28 physical beds enables St George's to flex estates capacity across a range of scenarios, including surges in demand or changes in future service delivery, workforce planning would need to be considered to support increases in capacity.

Before the future centre opens, there could be a number of reasons why some changes need to be made. This could be if new treatments become available (increasing need for patients to be treated in the centre), changes to service delivery model that may mean more patients can be treated on the specialist cancer ward instead of going to the children's intensive care unit, or if more care is provided in shared care units in local hospitals, as is planned (reducing the number of patients who need to come to the Principal Treatment Centre). Further work will also need to be done with University College London Hospitals to design the way in which care for patients requiring radiotherapy will be provided which may impact on bed requirements.



The future Principal Treatment Centre may therefore need to make some changes to its plans to help ensure it has the right type of space to treat and care for patients. We are assured that, within reason, both offer flexibility to do this.

Both providers have committed to working with children and their families and key partners including staff and researchers to co-design the facilities during the implementation phase.

### **Summary of assumptions from proposals**

The tables below show the activity assumptions for the service transferring, the occupancy or other assumptions used, the capacity required and included in each option's proposal for how it would deliver the service, should it become the future Principal Treatment Centre.

Evelina London's activity assumptions are higher than St George's Hospital's as these include capacity for work transferring from St George's Hospital as well as from The Royal Marsden.

**Table 25: Evelina London's activity assumptions for the future Principal Treatment Centre**

Capacity Summary	Evelina			
	Activity	Capacity Required	Capacity Provided	Notes
Ward	5,883	20.15	20.3	80% occupancy
Day Case	4,267	10.6	10.6	85% occupancy based on assumed 240 days p.a. working for chemotherapy day cases (as per RMH working) and 300 days p.a. working for non-chemotherapy day cases (GSTT planned model in our clinical transformation programme).
Theatres	1,138	0.49	3.4 lists per week	80% occupancy based on 48 weeks per year. The model assumes 8-hour all day lists. The model assumes 1057 theatre hours transfer to Evelina London with 81 transferring to UCLH. 3.4 lists per week at 8 hours each for 48 weeks per year at 80% utilisation gives 1045 hours of operating per week (after rounding).
Critical care (PICU)	632	2.16	2.2	80% occupancy
Outpatients	8,192	7.11	7.1 (5.3FTF and 1.8 NTF)	60% occupancy - 8 hours per day, 5 days per week and 48 weeks per year
<b>Diagnostics</b>	<b>Activity</b>	<b>Capacity Required</b>	<b>Capacity Provided</b>	
CT	300	0.05	Within current capacity	24 procedures per day
MRI	1,079	0.73	Within current capacity	6 procedures per day. GSTT has access to 11 MRIs which can be used flexibly access services and capacity prioritised appropriately. In addition there are 2 KCL research focussed MRIs on site providing support to research activities and some additional capacity for service provision. The Trust is undertaking a full review of MRI demand and capacity across all sites which we envisage will result in investment, alongside further efficiencies, and will enable us to flex capacity across sites so that the demand from children's cancer can be accommodated on the Evelina site.
US	557	0.09	Within current capacity	24 procedures per day
X-ray	685	0.11	Within current capacity	26 procedures per day
PET	93	0.06	Within current capacity	6 procedures per day
Echo	230	0.09	Within current capacity	20 procedures per day
<b>Other</b>	<b>Activity</b>			
Additional aseptic pharmacy capacity	9,240			Purpose built aseptic pharmacy completed by January 2025

**Table 26: St George's Hospital's activity assumptions for the Principal Treatment Centre**

Capacity Summary	St George's			
	Activity	Capacity Required	Capacity Provided	Notes
Ward	4,738	15.27	22 beds 10 isolation rooms 1 isotape room	85% occupancy. 22 beds with a further 6 available for use as family suites if needed.
Day Case	4,151	13.3	18 - 10 beds and 8 chemo booths	100% occupancy. 1.2 patients per bed/chair per day, 260 days per year. However, we have allowed for additional capacity (18 in total) as feedback from our colleagues at RMH is that when there are peaks in activity their current day case unit gets very busy, and our view is that this additional capacity is affordable and helpful for infection prevention/control.
Theatres	738	0.42	0.087 of main theatre room (154 theatre hours per year) alongside 2 new minor operation/procedure rooms in daycare unit	85% occupancy - 40 hours per week and 52 weeks per year
Critical care (PICU)				Already provided with existing resources
Outpatients	7,943	2.12	7 clinical/consulting rooms and a treatment room	90% occupancy. 2 appointments per hour, 8 hours per day, 260 days per year with a 10% DNA rate, equating to 2.3 clinic rooms. However, following discussion with our partners RMH, as described in the capacity template and bid, our schedule of accommodation includes 7 rooms. This is affordable/deliverable within the space and allows for peaks in activity and additional research activity.
<b>Diagnostics</b>	<b>Activity</b>	<b>Capacity Required</b>	<b>Capacity Provided</b>	
CT	269		Within current capacity	
MRI	1,052		Within current capacity	
US	476		Within current capacity	
X-ray	503		Within current capacity	
PET	100		Within current capacity	
Echo	185		Within current capacity	
<b>Other</b>				
Additional aseptic pharmacy capacity	9,240			Absorbed into existing facilities redeveloped in 2021

St George's proposal assumes a move of four beds internally from its Pinckney ward so that all Principal Treatment Centre cancer activity would be delivered in the same ward area.

Activity analysis of the existing service (based on a shared data pool and summarised in Appendix 3 – Activity Data Pack, slide 13) identifies the need for 20.1 beds in total, operating at 80% occupancy.

**Table 27: Admitted patient bed requirements based on 2019/20 activity data from the current Principal Treatment Centre**

	Ward bed days required	Occupancy	Beds required
The Royal Marsden – ward	4,738	80%	16.2
St George's ward base activity	326	80%	1.1
St George's ward based critical care	819	80%	2.8
<b>Total</b>	<b>5,883</b>	<b>80%</b>	<b>20.1</b>

Evelina London's proposal currently offers 20 beds (with an assumption that 0.3 beds are provided by University College London Hospitals). It assumes absorbing critical care requirement (calculated as 2.2 beds) within its paediatric intensive care unit, which has a physical footprint of 30 beds. 25 of these beds are currently funded and open.

St George's has provisioned for more ward space than it calculates it would need (22 beds), offering additional capacity to create adaptable space that could be configured into family suites when needed. It already provides critical care for the current Principal Treatment Centre and therefore no further capacity is required for this. St George's Hospital has 14 beds in its paediatric intensive care unit. Further detail in Appendix 3 – Activity Data Pack, slide 13.

### **Imaging and Diagnostics**

Both organisations indicated that, should they become the future Principal Treatment Centre, the imaging and diagnostic demand would be met from within current facilities (including additional capacity created as part of Trusts' wider strategies). Evelina London emphasised that, while not a current provider of the Principal Treatment Centre, its diagnostic and imaging staff have experience in cancer care, and it also has interventional radiology provision. St George's highlighted that its diagnostic and imaging teams are currently delivering cancer care, including interventional radiology and neuroradiology and also working in collaboration with The Royal Marsden as part of multidisciplinary teams. The tables below summarise information set out in the proposals.

**Table 28: Evelina London's capacity for imaging and diagnostics for children with cancer care, including cardiac diagnosis**

## Evelina London Children's Hospital: Imaging, diagnostics

### Imaging and diagnostics

24/7 children's diagnostic imaging, with the largest team of diagnostic radiology consultants in south London, Kent, Medway, Surrey and Sussex all experienced in paediatric oncology. 6 children's IR consultants (with 13 covering on-call)

MRI machines; 2 with space and equipment for general anaesthetics (1.5T and 3T) and a rocket simulator MRI and 2 research MRIs (including 7T) plus access to further GSTT machines.

Portable ultrasound scanners (2), x-rooms (2), fluoroscopy room, CT scanners (3)

PET scans: the PET Centre provides regional children's PET scans with regular general anaesthetics lists and is a national referral centre for children's cancer and neurology

### Nuclear medicine; provides a full diagnostic service

MIBG scanning with SPECT/CT capacity, DMSA, MAG3, Lung quantification, bone scanning.

### Cardiac diagnosis

Combined paediatric cardiology and cardiac surgical service able to provide urgent review within 24 hours, with full range of diagnostic testing (cardiac MRI, CT, 2D and 3D echocardiography, exercise & tilt testing).

Cardiac surveillance to enable early diagnosis and treatment of Anthracycline induced cardiomyopathy and other cardiotoxicity

**Table 29: St George's capacity for imaging and diagnostics for children with cancer including cardiac diagnosis**

## St George's: Imaging, diagnostics

### Imaging and diagnostics

CT, Ultrasound and X-rays including out-of-hours

Urgent MRI out-of-hours pathways for onsite imaging, aligned to ST George's 7-day MRI services.

Dedicated paediatric imaging equipment close to wards and theatres

6 Consultants dedicated to Interventional Radiology for Paediatrics (1 Fellowship Trained), providing interventional services available Mon-Fri, including presentation at all oncology/subspecialty MDTs with emergency access via on-call arrangements and weekend arrangements in place for paediatric radiology opinions for cross-sectional. A dedicated paediatric neuroradiology team delivering diagnosis and other procedures, and on-call cover

PET-CT scans currently provided through a mobile PET-CT service, which will be a fixed service within the PTC implementation period

### Cardiac diagnosis

Provided onsite by accredited paediatric physiologists, a consultant dedicated to cardiology diagnostics with experience in paediatric oncology, paediatricians with expertise in cardiology, with access to joint cardiac conferences across both the Royal Brompton and Evelina cardiology networks, and adult cardiac surgery supporting teenagers and young adults

## Pathology and haematology

Both proposals indicate that pathology and haematology demand for the future Principal Treatment Centre would be met from within current facilities. The tables below show Evelina London and St George's Hospital's offer of pathology and haematology services (as set out in their proposals).



**Table 30: Evelina London's pathology and haematology services**

Pathology and Haematology Services
Access to the South East London pathology service, a partnership between GSTT, KCH and Synlab, using a networked model with automation, where appropriate, and access to expertise across Europe.
All laboratories are UK Accreditation Service accredited
Full range of molecular tests (including mass spectrometry and bone marrow cytogenetics) available onsite, with access to Comprehensive Haematological Malignancy Diagnostic Service (HMDS) hosted at King's. Flow cytometry, at Guy's Hospital and within HMDS. Urgent results within four hours.
Histopathology services provide comprehensive diagnostics across solid and haematological cancers
Pathologists and advanced practitioners in adult oncology support comprehensive bio-banking, as base to co-design appropriate paediatric bio-banking.
Labs offer full profile of tests required 24/7, including review of peripheral blood and bone marrow smears, with haematology registrar available onsite 24/7 to review any urgent smears.

**Table 31: St George's pathology and haematology services**

Pathology and Haematology Services
Co-located with the South West London pathology service, a partnership providing 24/7 consultant led pathology to St George's, Croydon, Epsom and St. Helier, and Kingston hospitals. (Appropriate transport procedures are in place, increased volume (from PTC) would create efficiencies of scale allowing for more responsive transport service of samples).
Already provides cellular pathology services for the PTC working with advanced clinical and research laboratories at The Royal Marsden and ICR. Staff have day-to-day experience and expertise in paediatric oncology.
Comprehensive South West London Pathology service includes all routine diagnostic haematology, coagulation, immunohaematology and blood transfusions to patients; links with Haematological Malignancy Diagnostic Service (HMDS) at The Royal Marsden would be maintained. Existing service could readily accommodate the additional capacity required
Five laboratories provide routine full blood counts and blood transfusion services 24 hours a day, 365 days per year, assessed by the Clinical Pathology Accreditation (UK) and overseen by a multidisciplinary hospital transfusion committee to ensure safe and effective use of blood and products
Well established pathway to enable initial review of specimens; a single site PTC would accommodate laboratory and clinical requirements for this on-site. and integrate it with well-established pathways for transferring samples to the HMDS at The Royal Marsden for more detailed analysis. Would expand its current Human Tissue Authority tissue licence in pathology to accommodate regular sample banking
Services include tests for diagnosis of leukaemia, lymphoma and immune monitoring using specialist techniques

### 5.4.3. Workforce

A total of 248 staff work across the Principal Treatment Centre clinical service for children's cancer in some capacity. Not all of these staff would be eligible to transfer to the future Principal Treatment Centre, even if they wanted to, because not all work more than 50% of their time in the service.

50 of the 248 staff work at St George's and contribute to the Principal Treatment Centre services provided by the Trust. Four of these staff spend more than 50% of their time working on children's cancer services. Should the future Principal Treatment Centre be at Evelina London, they would be eligible to transfer, if they wanted to<sup>48</sup>.

The oncology expertise that the current workforce has is very important to the future service. NHS England (London and South East regions) are aware that there are risks around staff recruitment and retention relating to the proposed movement of the service. Retaining the specialist workforce that currently provides children's cancer care across all staff groups would be a high priority, including in the implementation phase. Risks relate to retention and recruitment of staff to the current service during the period from now to the proposed transition; the fact that not all staff may choose to transfer; and workforce capacity and capability in the proposed future Principal Treatment Centre. These are set out in our Risk section (see section 10.3 Management of risks and issues) alongside some proposed approaches to managing these.

Experience from other service reconfigurations is that it is reasonable to expect some attrition when services move even when services are closely located to one another; however, experience also shows that recruitment to vacancies is possible, especially when there is a clear vision for delivery of the new service. The future Principal Treatment Centre would need to plan for this and it would be expected to be a significant feature of the provider's work during the implementation phase.

Consideration of the capability of either future provider for the proposed Principal Treatment Centre to attract and retain staff was therefore reflected in the development of the evaluation criteria and subsequent evaluation of proposals for each of the options. The two relevant criteria are:

- organisational support to staff – assessed on published workforce statistics, making the assumption that risks of transition could be mitigated by moving to an organisation that current staff rate highly
- impact on staff – benefits that would be offered to staff compared to current ones such as nursery provision, education and development benefits and staff wellbeing. This sub-criterion also looked at the impact on staff of travelling to either future option.

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<sup>48</sup> Evelina London developed its proposal on this assumption and has plans in place to meet workforce requirements.

In their proposals, Guy's and St Thomas' and St George's made different planning assumptions about the proportion of staff from The Royal Marsden that would transfer to the future centre. Guy's and St Thomas' proposal for Evelina London assumed that 80% of staff would transfer; St George's proposal for St George's Hospital assumed that 100% of staff would transfer.

Until a final decision has been made about the provider of the future Principal Treatment Centre, it is not proportionate for Evelina London, St George's Hospital or The Royal Marsden to spend significant amounts of time on workforce planning. Once a decision has been made, detailed discussions will take place between providers to help ensure that risks around staffing can be managed. Similarly, a human resources-run consultation with staff eligible to transfer to the final chosen option will not take place until a decision has been made.

To complement proposals for both options, representatives from the three Trusts have agreed to a series of principles. These include a commitment to work together with the shared aim of ensuring continued delivery of high-quality and sustainable care for patients across the Principal Treatment Centre catchment area and to support and retain clinicians with specialist skills and expertise wherever possible. It has been proposed that a joint appointment for a senior nurse between NHS England London and The Royal Marsden be made to support transition and recruitment plans once a final decision has been made on the location of the proposed future Principal Treatment Centre.

**Table 32: Current staff numbers supporting the Principal Treatment Centre service at St George's Hospital and The Royal Marsden (NB: not all staff listed below work solely on children's cancer care)**

Staff Group		Clinical Service
Oncology	Nurses	122 (includes qualified and unqualified staff)
	Play therapists	5.5
	Other allied health professionals	7.8
	Psychology	5.6
	Pharmacy	7.3
	Social worker	0.6
	Management and administrative staff	8.0
	Consultants	20.4
	Specialty doctors	6.9
	STR3s (experienced junior doctors)	13
	Pathology	16.47
	Radiology and radiotherapy	9.95
	Other	24

	<b>TOTAL</b>	<b>248</b>
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Both Evelina London and St George's Hospital have plans to address workforce requirements of the service change, should they become the future Principal Treatment Centre. As noted above, some of their assumptions currently vary around the number of staff who would transfer, recognising that detailed discussions on the formal transfer of staff will not occur until after a decision is made and will be specific to those of the staff in post at that time who would fall into the legal framework for transfer.

In some areas such as anaesthetics, critical care and diagnostics for Evelina London, and anaesthetics, critical care, diagnostics, paediatric oncology surgery for St George's Hospital, there are currently sufficient numbers of skilled staff available to deliver the service.

Should Evelina London become the future Principal Treatment Centre, it would build on its existing clinical relationships with The Royal Marsden and its wider experience of integrating other teams into its services and structure. Evelina London has specifically built transition support into its proposals.

Should St George's Hospital become the future Principal Treatment Centre, it would build on relationships that already exist with The Royal Marsden. Some staff at The Royal Marsden previously worked at St George's and vice versa. Others are familiar with the site, pathways and teams at St George's Hospital as the result of the existing current Principal Treatment Centre arrangements.

St George's would expect to realise economies of scale in services. It does not anticipate the need for additional recruitment to fill staffing gaps.

Both organisations have recognised that, if they were to become the future Principal Treatment Centre, they would need to support staff transferring from The Royal Marsden.

### **Palliative Care Provision**

#### ***Evelina London***

The Evelina London and Royal Brompton paediatric palliative care service provides a 24/7 service to both hospitals' inpatient services (including providing daily input and expertise to their paediatric, cardiac and neonatal Intensive Care Units and forming part of the regular Intensive Care Unit Multi-Disciplinary Teams, as well as support to general wards, outpatient services, emergency department and obstetric department). The service also supports district general hospitals across the regional network covering south London, Kent, Medway, Surrey and Sussex as well as parts of Essex and any patient in need of paediatric palliative care accessing Royal Brompton site services.

The Evelina London Paediatric Palliative Care CNS Team come from a variety of backgrounds and have all looked after children with palliative haem-oncology conditions. The team consists of 4 paediatric palliative care specialist consultants, a clinical fellow, 7 clinical nurse specialists (including a non-medical prescriber), pharmacists (including 1 non-medical



prescriber), and a bereavement counselling service (3 counsellors). All four consultants within this team attend Paediatric Palliative Care study days, which cover malignant and non-malignant conditions, and sit on National groups, and networks and hold non-clinical roles that all have roles in the care of children with malignant conditions.

In addition, the service has access to wider psychosocial support through the trust. The team also works together with the research team based at King's College Hospital on ongoing research and is actively involved in undergraduate and postgraduate education for the medical school.

Together with King's College Hospital, the Evelina London paediatric palliative care team is recruiting the first joint paediatric palliative care clinical nurse specialist who will be based at King's College Hospital but integrated within the Evelina London team allowing the team to provide 24/7 specialist paediatric palliative care to inpatient services at King's College Hospital (again inclusive of but not exhaustive of Intensive Care Units, neurosurgery and liver services).

The service provides a combination of 24/7 face to face, virtual, and phone support to children, their families, and their medical teams – ensuring care is delivered where and when the families need it. The service supports with complex symptom management, advanced care planning and complex decision-making support, end of life care and rapid discharge at end of life including withdrawal of life sustaining treatment beyond the hospital.

The team works in partnership with primary care, secondary care and tertiary services, and in particular with children's community services (inclusive but not exhaustive of community children's nursing, speech and language therapists, occupational therapists, physiotherapists, dietetic services, social services and education facilities as well as children's hospices).

Guy's and St Thomas' highlighted to the joint Clinical Senate that palliative and symptom care are included at all appropriate points in all pathways for children in the care of Evelina London, including for acute and persistent pain, symptom control, end of life care, and bereavement support. Bespoke psychological support is provided for staff in specific specialties including the paediatric intensive care unit and palliative care teams.

The Paediatric Palliative Care team provides support for families at home through an on call service, delivered via 24/7 phone support and video calls directly with the families (provided either by a consultant or a Clinical Nurse Specialist / clinical fellow). The Paediatric Palliative Care team also liaises with local clinical teams and Children's Community Nurses who visit the family at home. The Paediatric Palliative Care team provides complex symptom management plans, training for the families to make sure they can deliver the plans safely and to manage and anticipate any symptoms the child may develop (all of which is reviewed by our highly specialist Paediatric Palliative Care pharmacist), and prior to any child being given a symptom management plan a Clinical Nurse Specialist will go through it with the family, including carrying out risk assessments. If there are any concerns then the team

works closely with colleagues in community teams to mitigate those risks. If there are any concerns about safety, the team works with and advises the local clinicians / hospices who directly provide the service at home (note: the team provides these services at end of life and post-death, including supporting the families with advice such as considering any legalities that may arise).

### ***St George's Hospital***

The palliative care provision available for St George's patients is available via referral to The Royal Marsden paediatric palliative care service. This service works closely with clinicians at St George's paediatric intensive care to review oncology patients being treated on the unit - patients will be reviewed several times a week depending on clinical need. The Royal Marsden service also provides a pain specialist nurse ward round once a week.

Alongside acute provision The Royal Marsden paediatric palliative care service works closely with the community, continuing care, nursing teams, schools and local hospices to provide a seamless service to babies, children, young people and their families. In particular hospices require the support of specialist palliative care teams to support symptom management and end of life care (different to adults where the hospital team will discharge to a different palliative care team in the hospice). The Surrey and Southwest London specialist Paediatric Palliative Care team based within at the Shooting Star Children's Hospice provides care for all life-limited children with a non-cancer diagnosis living in south west London and Surrey.

The Surrey and Southwest London specialist Paediatric Palliative Care service delivers care to non-oncology patients at St George's within the children's wards. The service is also integrated into the foetal medicine service with prenatal planning for newborns requiring palliative care. The perinatal clinical nurse specialist is a member of the weekly foetal medicine Multi-Disciplinary Team and the weekly neonatal unit grand rounds.

The Royal Marsden paediatric palliative care provides care for all children and young people with cancer under the care of the current Principal Treatment Centre and children with cancer under the care of University College London Hospitals who live south of the Thames. The service offers 24/7 referral service as well as out of hours specialist telephone advice service (PATCH service).

PATCH is the out of hours service for the current Principal Treatment Centre and provides advice by telephone to patient in home, hospital or hospice. The PATCH service also provides support to the St George's paediatric intensive care unit to allow complex decision making, symptom management, end of life care and rapid discharge 24/7. Combined, the teams consist of two full time consultants, two clinical fellows, one nurse consultant, eight clinical nurse specialists, one perinatal clinical nurse specialist, one pharmacist, one researcher and one family support worker. The service has access to wider psychosocial support through the hospice and the current Principal Treatment Centre, as well as the paediatric psychology service at St George's, which provides a unit specific service in the paediatric and neonatal intensive care units, child death and oncology.



Both the daytime service and out of hours PATCH service support the management of end of life care at home. The Royal Marsden embedded oncology palliative care service enables effective collaborative relationships with families through review during treatment on the wards, outpatients and daycare. The service aims to support the patient and their families at key points and navigate complex discussions and decisions- this early engagement enables better palliative and end of life care support.

### **Oncology**

Neither Evelina London nor St George's Hospital currently provides a paediatric oncology service equivalent to The Royal Marsden, so the anticipation for both, should they become the future Principal Treatment Centre, is that staff would transfer from The Royal Marsden. This would provide a depth of expertise in oncology treatment and care which neither organisation has currently. As reflected elsewhere in this section, and in Section 10Next Steps, implementation, and recommendations, it is very important that the expertise and experience of these staff are safeguarded through the proposed service transfer.

### **Recruitment and retention**

As stated above, an HR-led consultation with staff in the current Principal Treatment Centre who would be eligible to transfer to the future centre on transfer of job roles and of employer for some/all (depending on the chosen option) will not take place until much closer to the time of the proposed move. It is recognised from other service changes in London (such as the move of cardiac services into the Barts Heart Centre) that there would be likely to be a dip in staff numbers at the point of transition that the future provider would need to address. It is for this reason that the evaluation of the proposals for each of the two shortlisted options focused on the support that each provider could offer to staff as an attractive base for retaining existing staff and recruiting new staff and to support transport and travel. Retaining as many as staff as possible will be important to ensuring the knowledge and skills from staff at The Royal Marsden are not lost. This is a key risk that will need to be managed carefully.

The Royal Marsden has struggled with recruitment for its paediatric ward on past occasions (notably in 2022 and 2018). Uncertainty associated with the proposed service change, and indeed the change itself, poses a risk to the recruitment and retention of staff to the current Principal Treatment Centre. Removing the uncertainty by making a firm and timely decision on the location of the future centre would help. In addition, it is hoped that basing the future Principal Treatment Centre in a larger children's specialist environment will assist in recruitment and retention in the future. The London specialised commissioning team has not been able to find models that would allow detailed assessment of what the impact of either the proposed move or the benefits of a wider paediatric environment would be on which to base detailed analysis.

Evelina London's proposal anticipated a level of attrition due to the service move. It modelled that 20% of staff eligible to transfer their employment may decide not to do so (there is potentially a greater risk to be managed by Evelina London than St George's on this issue as it does not currently provide the service). It highlighted that, should it become the future

Principal Treatment Centre, additional recruitment would be needed to the pharmacy aseptic unit that is being developed, as well as recruitment to posts which would not transfer. Transitional funding has been built into the Trust's finance model for recruitment and training in advance of transfer. Evelina London is confident in its ability to meet these requirements, given its track record in recruiting staff, staff survey scores and rates of staff turnover at September 2022 for children's hospital-based services. This is favourable compared to peers/regional/national average, alongside the size of its existing children's workforce and its organisational recruitment capabilities (see Table 33 and 34 below).

In its proposal, St George's highlighted that staff relocating from The Royal Marsden would be moving to a team of colleagues many of whom already know each other and have strong working relationships. It believes that this, combined with the distance between the two sites (less than eight miles) and the learning and career opportunities, would minimise the risk of workforce attrition. St George's has therefore made no provision for additional recruitment to fill staffing gaps. Should it become the future Principal Treatment Centre, it expects to increase the number of staff in the service to above the number required, which would be managed through staff turnover and vacancies in other St George's services.

For both options, there is a risk that fewer staff may choose to transfer than is assumed in the respective proposals. This risk is highlighted in the section 10.3 Management of risks and issues of this pre-consultation business case. Mitigations to support workforce retention and recruitment will be a key part of the implementation phase.

#### **5.4.4. Organisational support for staff**

It is recognised that staff consultation for a transfer of employment will not happen until a decision is made on the future provider and estates developments are complete. However, supporting staff to transfer with the service will, as with many reconfigurations, be a significant aspect of the transition. Therefore (as noted above), two criteria were assessed to provide an indication of the attractiveness both Trusts might hold for staff: the first using nationally published data and the second, at the request of staff from The Royal Marsden, looking at the wider education, training and staff support on offer. The impact on staff travel times was also reviewed.

Both organisations' paediatric services are rated outstanding by the CQC so either should provide an excellent wider paediatric service which should be attractive to oncology and cancer experts, clinical, nursing, pharmacy and play staff. The proposed reconfiguration therefore offers an improvement opportunity as well as risks that will need to be managed during transition.

#### **Comparison with published workforce performance statistics**

The two Trusts, Guy's and St Thomas' and St George's, shared their annual 2021/22 paediatric service specific data for staff turnover, vacancies, sickness and the 2021 staff survey score. This was compared with the data for all staff groups (paediatric comparator

data was not available) from eight other teaching hospitals in London to provide a comparative assessment.

Outcomes were as follows:

**Table 33: 2021/22 vacancy and staff turnover rates**

	Vacancy Rate (%)	Staff turnover/stability %	Sickness rates %
Highest comparator trust	13.18	86.40	5.04
GSTT	9.80	86.50	3.80
St George's	6.25	80.59	4.39
Lowest comparator trust	5.60	83.00	3.88

*Note: The lower the figures for vacancy rate and sickness rate the better. The higher the figure for staff turnover/stability the better.*

**Table 34: staff survey scores**

	Themes	GSTT Paediatric Directorates Score 2021	St Georges Children's Services 2021
Staff Survey Results (all domains)	We are compassionate and inclusive	7.6	7.3
	We are recognised and rewarded	6.1	6.0
	We each have a voice that counts	7.2	6.8
	We are safe and healthy	6.0	5.7
	We are always learning	6.0	5.4
	We work flexibly	6.2	6.0
	We are a team	6.9	6.8
	Staff engagement	7.4	7.0
	Morale	6.0	5.4

*Note: The higher the scores for staff survey results the better.*

In its proposal, Evelina London explained it has significant infrastructure to meet baseline requirements, including well-resourced organisational development; learning and development; equality, diversity and inclusion; and staff wellbeing teams. There is a dedicated Evelina Education team delivering multidisciplinary paediatric-specific training in-house and across its hosted clinical networks. It includes individuals with specific experience in paediatric oncology training and clinical care. Staff recruited would gain ward-based experience through secondment at Great Ormond Street, The Royal Marsden and teenage and young adult wards at Guy's and St Thomas' ahead of starting on the Principal Treatment Centre wards. Specific experience would be gained with transplant teams. Transferring educators would be brought into the existing training infrastructure, so excellent oncology training would continue and future Principal Treatment Centre staff would benefit from

paediatric training opportunities as well as the Guy's and St Thomas' College of Healthcare and Guy's Cancer Academy.

St George's was recently awarded General Medical Council "Training site of the year" from the London School of Paediatrics. A range of professional programmes are available including preceptorship and nurse development programmes through BBP University, City, University of London, King's College London, Kingston University London and University of Roehampton, oncology courses and accredited training programmes. There is also a range of continuous professional development opportunities and in-house training and on-the-job experience, including through the St George's Paediatric Teaching Programme.

Should St George's Hospital become the future Principal Treatment Centre, it would build on the professional training that the Principal Treatment Centre workforce already benefits from, through the opportunities of co-location with St George's, University of London (SGUL) Medical School, including in preparation for the relocation. It would develop the whole multidisciplinary team using a blended training model of on-the-job experience, exposure to wider expertise and professional programmes, continuous professional development, and in-house training, outlined above.

The integration of teams joining from different organisations will be an important building block for the success of the future Principal Treatment Centre. In its proposal, Evelina London highlighted its experience in integrating large services and developing resilient and sustainable workforce models, including through transfer of existing staff across sites and targeted recruitment. For example, women's services transferred to Evelina London (700+ staff) in 2020 and children's community services transferred from two primary care trusts (600+ staff) in 2011. It has also undertaken significant service transfers including paediatric surgery from Lewisham Hospital and the consolidation of Cleft Lip and Palate services from across Kent, Surrey, Sussex, and south London.

St George's proposal highlighted that the integration of teams would be enabled by existing working relationships between St George's Hospital and The Royal Marsden. St George's have experience of bringing corporate and clinical services together, including as part of the Acute Provider Collaborative model for South West London (which includes a range of corporate services (procurement and HR services); as well as clinical services, (pathology), and its current work with Epsom St Helier to form a group model, St George's Epsom and St Helier University Hospitals and Health Group.

It is anticipated that there will be a Nursing Lead joint appointment between The Royal Marsden and the future provider. This will help support joint working, integration between teams and early identification of risks related to patient safety. The joint post will also help

provide leadership to the nursing staff group, which is the largest of staff groups to be impacted by the proposed service change. Leadership will be fundamental to navigating the service change, including supporting staff retention during the transfer. Further detail on priorities associated with workforce and strategies to mitigate risks are set out in section 10. Next steps, implementation, and recommendations.

#### **5.4.5. Impact on staff including benefits, training, travel times**

Proposals for both the shortlisted options provided information on their provision for staff support compared to that offered by The Royal Marsden in areas such as nursery provision, education benefits, training programmes, and staff wellbeing (such as musculoskeletal support, comprehensive wellbeing programmes and facilities including outside space). Both options provided a detailed and credible comparable offer to that offered by the Royal Marsden.

##### **Staff travel time**

The final element of the staff assessment was staff travel time. NHS England London commissioned an independent travel time analysis based on Lower Super Output Areas<sup>49</sup> for staff working at The Royal Marsden who would be eligible to transfer to the future centre whichever of the two potential sites it was at; and for St George's staff who would be eligible to transfer should the future Principal Treatment Centre be at Evelina London. The staff travel time analysis was based on public transport times only and looked at the percentage of staff whose journey to the proposed future Principal Treatment Centre site would be more than 15 minutes longer than their current travel time to The Royal Marsden's Sutton site (or their current travel time to St George's for the Evelina option).

The analysis found that 39.3% of staff would travel more than 15 minutes longer than now, if they moved to Evelina London. 60.7% of journeys by public transport to Evelina London would be either more than 15 mins quicker, or within +/- 15 mins of the journey to The Royal Marsden.

The analysis found that 34.5% of staff would travel more than 15 minutes longer than now, if they moved to St George's and 65.5% of journeys by public transport to St George's would be either more than 15 minutes quicker, or within +/- 15 mins of the journey to The Royal Marsden.

It is acknowledged that many current staff based at Sutton do not take public transport to work. This may be due to range of factors including preference, convenience, and a limited range of public transport options in the vicinity. The median driving time to The Royal Marsden for current staff is 32 minutes.

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<sup>49</sup> Lower Super Output Areas (LSOAs) are a small area of geography averaging approximately 1,500 people. Each LSOA has a PWC (population weighted centroid) which represents the centre of the distribution of residents across the LSOA. These were used as the staff origin points for the analysis.

An assessment of travel costs was not undertaken. However, financial support is provided to staff if they are asked to transfer the base from which they work as a part of a reconfiguration if this incurs additional costs.

## **Training**

### ***Evelina London***

Evelina London has outlined the following training opportunities for staff should it become the future Principal Treatment Centre.

### **Professional Programmes**

Evelina London has a dedicated Evelina Education team, delivering multidisciplinary paediatric-specific training in-house and across their hosted clinical networks.

If the future centre were to be at Evelina London, the opportunities below would all be open to (or adapted for) future Principal Treatment Centre staff.

### ***Nursing***

Evelina London hosts approximately 300 student nurses, and offers an extensive preceptorship programme developing communication, escalation and mentoring skills. Its rotation programme enables breadth of experience across children's services, including:

- in-house 'gateway courses' which supports development for all career levels
- access to external organisations and in-house courses as part of accredited BSc and MSc pathways, supported by generous study budgets
- fully funded Eranda Rothschild scholarship for nurses of all grades to complete a service development project
- five substantive Advanced Clinical Practice teams, with further expansion planned for nurses and allied health professionals.
- high dependency unit nursing course (for 75 delegates from across the network)
- paediatric intensive care unit nursing course (for 40 delegates from across the network).

### ***Medical***

Evelina London has a strong infrastructure and delivery record for paediatric sub-specialty medical education, with positive results from the London School of Paediatrics and most recent General Medical Council survey.

- Approximately 90 trainees and 90 Trust fellows all have access to the same local training opportunities in paediatrics.
- Every service in Evelina London has a consultant education lead.
- There is a robust induction programme for junior doctors.



### *Support Workers*

Bands 2 and 3 are offered study days and expected to complete the care certificate, as well as specific Evelina London competencies, with the opportunity to complete a nursing assistant diploma.

### *Pharmacy*

- Postgraduate qualifications via King's College London School of Pharmacy.
- Attendance at conferences and special interest groups (e.g. Paediatric Oncology Pharmacist)

### *Oncology Courses*

Should Evelina London become the future Principal Treatment Centre, staff would gain ward-based experience through secondment at Great Ormond Street, The Royal Marsden and teenage and young adult wards at Guy's and St Thomas' ahead of the transfer.

All nursing staff would have attended the in-house foundation day and begun foundation-level competencies training prior to service transfer. Staff training would significantly exceed the 70% 'internal foundation' level requirements set out in the service specification. The training will meet national training standards, including:

- introduction to paediatric oncology
- foundation study days (required for new starters on oncology ward areas and within children's nursing team and open to nurses delivering local community and paediatric oncology shared care unit care)
- completion of competencies (e.g. management of side effects and oncological emergencies)
- cytotoxic study day and paediatric stem cell transplant study day
- chemotherapy workbook, including UK Oncology Nursing Society paediatric chemotherapy passport, and stem cell workbook – with annual assessment of competency and proof of knowledge
- oncology skills yearly update.

### *Continuing Professional Development*

Evelina London's continuous professional development offer includes:

- training on support and self-care in challenging environments, including hi-fidelity simulation, psychology-led debriefs, 'hot debriefs' after significant clinical events, Schwartz rounds, and clinical supervision on Team Away Days

- free or heavily subsidised courses including 'Conflict management', 'Communication skills', 'Escalation', 'Working in an imperfect system and coping with it', and 'Breaking bad news'
- study budgets support external opportunities, including conferences
- a personal professional mentor for nurses for the first two years in practice - Guy's and St Thomas' Coaching and Mentoring Service is used by over 500 staff, with accredited coaches, resources for coaching and skills support
- leadership development programmes, including 'Faculty Lead and College Tutor Programme' for all Training Programme Directors; 'Colour of Leadership' for nurses, midwives and paramedics from an ethnic minority background; and 'Leadership and Negotiation'. Senior paediatric nurses, allied health professionals and administrative staff are supported through a bespoke Evelina London multidisciplinary leadership and management courses
- study leave and study budgets are available for doctors and nurses.

### ***St George's Hospital***

St George's has outlined the following training opportunities for staff if the future Principal Treatment were to be relocated here.

#### **Professional Programmes**

- Preceptorship and nurse development programmes at all levels including nursing associate training, care certification and development for support workers, and student nursing programmes with BPP University, City, University of London, King's College London, Kingston University London and University of Roehampton.
- Oncology courses, accredited Supportive Care Courses, Chemotherapy Administration & BMT courses.
- Accredited training programmes (BSc, MSc, PhD, Advanced Clinical Practice).

#### ***Nursing***

- Retention and professional development plans.
- Continue training opportunities provided by The Royal Marsden.
- Broader development opportunities of staff of staff having wider exposure to multiple oncological pathways through the proposed future consolidation of the principal treatment centre at St George's Hospital.

#### ***Medical***

- Access to existing haemato-oncology and general paediatric training programmes.

- Access to a range of in-house courses for trainees.
- Trainees could fulfil all requirements of paediatric training according to the Royal College of Paediatrics and Child Health (RCPCH), as well as specialist paediatric oncology training, and would be exposed to a range of oncology pathways.

#### *Pharmacy and Allied Health Teams*

- A mixture of in-service and external teaching alongside self-directed educational opportunities.
- Training would take place in wider teams, allowing for senior and peer support, including joint working and shadowing opportunities across all oncology pathways.
- Access to academic teaching by HEE-commissioned providers to complete a clinical diploma in pharmacy.
- Independent Prescribing and Advanced Clinical Practice.

#### Continuous Professional Development (CPD)

- Resilience training is available to all staff to support work in challenging environments, including supportive modules round effective communications, coping strategies and managing emotional fatigue.
- Ability to access expertise through expert staff groups and conferences.
- Access to:
  - a range of external organisations such as charities and higher education providers to support specialist education and training opportunities
  - in-house Institute of Leadership and Management (ILM) accredited coaches, as well as support to attend in house training to become ILM accredited coaches
  - leadership and management development programmes at all levels, including access to bespoke programmes arranged via the King's Fund
  - cancer specific modules that are mandatory for B5 (foundation skills) and B6 (20 credit Degree modules)
  - intermediate life support and EPLS/APLS courses for all inpatient B6 nurses.
  - cancer specific clinical training programmes and adult academic modules and programmes to PhD level
  - coaching and mentoring programmes.

#### In-house training and on-the-job experience

All clinical and support teams would have access to the experience of The Royal Marsden and St George's staff who have delivered children's cancer services for many years. This

expertise cannot be underestimated for supporting continuous 'on-the-job' learning for new and existing staff. Furthermore:

- nursing, trainees and fellows, AHP and pharmacy staff would have exposure to inpatient haematology and stem cell transplant, in-patient solid tumours and neuro-oncology, daycare and clinics
- staff would have the opportunity to attend and present at MDT meetings across the disease spectrum.
- staff would be exposed to high-risk and low-risk patients, the teenage and young adult population, intensive care, new and follow-up patients, patients on early and late phase clinical trials and palliative and end-of-life care
- all staff could join in the established St George's Hospital Paediatric Teaching Programme to be supplemented by new additional oncology and haematology sessions.
- apprenticeships would be used to further develop staff groups.

### **Staff Benefits**

#### ***London Evelina***

Evelina London have outlined the following staff benefits in their proposal.

#### **Childcare**

- On-site nursery at St Thomas' Hospital, Ofsted rated Good, with extended opening hours 7am – 7pm.

#### **Health and Wellbeing Support**

Staff support and welfare spaces have been included in the Evelina London proposal. Support would include:

- access to musculoskeletal (MSK) support, and self-referral to occupational physiotherapy service, with free of charge services
- osteopathy is available through partnership with the University College of Osteopathy at the reduced treatment rate of £20 per appointment
- confidential 1-1 individual support
- bespoke psychological support for specific specialties including PICU and palliative care teams
- bespoke team-based support, including psychological debriefs and regular reflective practice sessions for ward doctors (routine or in response to specific incidents or circumstances)

- Bespoke support for leaders and managers, including coaching, advice on building resilience and leading your team during difficult times
- Workshops and courses under the Trust wellbeing strategy (e.g. mindful self-compassion)
- resources supporting mental health and wellbeing, including the Happier@ work programme, the Headspace app and Keeping Well in South East London
- Employee Assistance Programme – independent, free, 24/7 access to counselling and expert help (e.g. family matters, relationships, debt management, workplace issues)
- multi-faith spiritual care team (including chaplaincy), offering a confidential, 24/7 service
- Wellbeing Conversations programme supporting staff to have caring and compassionate conversations with colleagues
- purpose-built facilities for staff to rest, including massage chairs and free tea / coffee.
- recognise when and why staff should take breaks through the Trust-wide 'HALT, take a break' initiative

Facilities include: Evelina atrium – 24/7, Governors Hall, South Wing at St Thomas' – 24/7, Southwark Wing, Guy's – open 7 days a week (Mon-Fri, 9am-8pm and Sat-Sun, 9am-5pm), Shepherd Hall, St Thomas's provides a subsidised staff restaurant Mon-Fri from 7.30-15.30, Riverside Café at St Thomas' 24/7, Toms@Guys café is open Mon-Fri 9.30-15.00. All ward areas have 24/7 kitchen access for staff, including microwaves. Outdoor space includes a large outdoor balcony (outside Evelina atrium), numerous outdoor spaces at St Thomas' for rest and recharge, including the newly renovated Florence Nightingale garden, and nearby Archbishop's Park.

### ***St George's Hospital***

St George's have outlined the following staff benefits in their proposal.

#### **Childcare**

St George's have an onsite nursery, 'Blackshaw Nursery', which is accredited 'Good' by Ofsted. It has extended hours from 7am-10pm on Mondays and Thursdays, and 7am-6:30pm the remainder of the week. There is a dedicated employee in post to support parents with any issues and to make links with local statutory bodies on any matter relating to their child/children.

#### **Health and Wellbeing Support**

Staff support and welfare spaces have been included in the St George's proposal. Support would include:

- 1:1 support available to all staff, with in-house counsellors, 7 days a week. This includes individual bespoke packages of care for staff working in challenging environments

- counsellors providing ward group debriefs following a traumatic event 7 days a week
- Schwartz rounds run on a monthly basis to offer a psychological safe space for staff to share traumatic events in a supportive environment with clinical psychologists
- Occupational Health service offers staff access to bespoke services including IAPT
- staff with musculoskeletal issues have access to support through being fast-tracked to see in-house physiotherapists free of charge, and external musculoskeletal support including discounted massages at a nearby venue
- a staff benefits platform called 'Mylifestyle' in collaboration with SWL APC Trusts giving a wider selection of products/services that staff can benefit from (Mylifestyle benefits).

Staff can access two wellbeing hubs, fully furnished spaces in the hospital that offer staff a relaxing space to read or, to watch tv and 24/7 kitchen facilities as well as rest rooms in the majority of areas for staff. The restaurant is available to all staff between 7.30am-7.45pm, 7 days a week, offering a range of affordable meals. There are also several different outlets open until 9pm for food and drinks out-of-hours as well as a hot meal vending machine and microwave ovens opposite the restaurant for in- and out of- hours use. A range of award-winning gardens are available across the hospital for staff to relax in outdoor space in line with best practice on supporting staff wellbeing.

- All staff can access a staff benefits platform called 'Mylifestyle' in collaboration with SWL APC Trusts giving a wider selection of products/services that staff can benefit from (Mylifestyle benefits).

## 5.5. Research

The fundamental importance of research for children with cancer is reflected in the leading role The Royal Marsden Principal Treatment Centre team plays in research networks across the UK and Europe, and beyond.

In the Association of Young People's Health survey, run as part of the reconfiguration programme in 2021, parents ranked highly the importance of research and access to cutting edge treatment. The November 2021 service specification also emphasises the importance of access to clinical trials and tissue studies. Throughout the programme, the importance of sustaining the world class research undertaken as a collaboration between the Principal Treatment Centre and the Institute of Cancer Research based in Sutton has been a significant factor. Continuing to support research as an integrated process between dedicated 'wet' laboratories and clinical care remains crucial.

The proposed reconfiguration is driven by the need to co-locate children's cancer services with a paediatric intensive care unit; as such, the service cannot remain at the Sutton site of The Royal Marsden. The impact of this is that the way in which research is conducted will need to change in several ways, including a move away from the Sutton site (where patients and researchers are currently co-located).



It is worth noting that over the past decades, the nature of clinical research for patients has changed. Much high impact research does not now rely exclusively on patients co-located with the scientific researchers. Indeed, much of the ground-breaking research led by the Institute of Cancer Research/The Royal Marsden has recruited patients from all over the UK or in pan-European trials. Although there are challenges to overcome, it should be possible to continue to recruit children despite them being on a different hospital site (and which is only a few miles away from the laboratories and scientists based in Sutton). What will not change in the foreseeable future is the number of children and young people with cancer. The UK has the second largest population of children in Europe and south London and south-east England has the second largest population density in Europe. Access to so many children represents a valuable opportunity for researchers and industry and is unlikely to be disregarded because the Principal Treatment Centre moves.

The proposed changes create some risks to the delivery of future research and clinical trials. Stakeholders will need to work closely together during the Implementation Phase to identify the best strategies to mitigate risks. Detail on these is set out in section 10.3 Management of risks and issues.

Both Evelina London Children's Hospital and St George's are clear their vision is that the Principal Treatment Centre would seek to deliver world class care to its patients through cutting edge research including through working in collaboration with the Institute of Cancer Research, based in Sutton.

Both organisations have an existing research base (see below for summary) to support the transfer of The Royal Marsden clinical research staff and to work in partnership with the Institute of Cancer Research. In the workforce returns submitted in response to London's clinical model existing research staff were enumerated as follows:

- Evelina London Children's Hospital listed 28 nurses and 38 other AHPs and trial co-ordinators already working on paediatric research, and 19 paediatric medical posts.
- St George's listed 7.6 nurses, no AHPs currently working on paediatric research and 13 paediatric medical posts working across paediatrics and infectious diseases research.

Both organisations made a nil return in their workforce templates against the number or percentage of staff currently working on paediatric cancer research. However, St George's have indicated in their proposal that they currently employ a Research Nurse Specialist for Paediatric Oncology who works across the Royal Marsden and St George's to support joint trials.

The Institute of Cancer Research has indicated that it will work with either Trust depending upon the final decision in the reconfiguration process. This will be critical. Excellent partnership working will be required even more during the implementation phase to help ensure co-design and transition to the new model is well managed so that it as seamless as possible.



The tables below summarise the detail of the Evelina London and St George's experience and expertise in research, and their vision for research opportunities for the Principal Treatment Centre.

**Table 35: Evelina London Children's Hospital proposal for research at the Principal Treatment Centre**

Experience and expertise
GSTT operates as a single research delivery partner with King's College London. Together they have broad experimental medicine research strengths in paediatrics and adult cancer. GSTT reported £25.2m of research income to fund staff
Evelina London paediatric research team has a portfolio of 180+ paediatric studies, including particular strengths in neurology, cardiology and critical care, and including world-leading research that has directly changed children's care (including in brain imaging and allergy). Between 2019 and 2022, Evelina London recruited 3,892 children to portfolio studies (source NIHR CPMS).
GSTT has an NIHR Clinical Research Facility, led by medical oncologist Professor James Spicer, which includes two dedicated children's wards (Wolf and Seal), a research-intensive PICU and a dedicated paediatric imaging research unit with the only 7 Tesla MRI in London. GSTT also has MHRA Phase I accreditation, with phase I studies in paediatrics conducted in the dedicated children's research wards and a radiochemistry tracer laboratory.
Guy's Cancer Centre for adults has the CRUK/NIHR funded Experimental Cancer Medicine Centre (ECMC) also led by Professor Spicer which has a focus on novel cellular and molecular therapies, an advanced therapies manufacturing facility and state-of-the-art biobanking facility
Academic support includes King's Doctoral Training Centre, NIHR Integrated Academic Trainee programme and King's Clinical Academic Training Office, with full university support for highly research-active NHS staff. The Faculty of Life Sciences and medicine at Kings College has 482 researchers with 93% of research deemed either 'world leading' (4*) or 'internationally excellent' (3*) in the 2021 REF.
Wide range of partnerships in place to enhance research delivery: KCL School of Cancer & Pharmaceutical Sciences and the Francis Crick Institute (including partnerships with UCL and Barts on the £25m CRUK City of London Major Centre and £14m CRUK RadNet City of London Radiation Research Unit) and a £14m collaboration with <b>UK RadNet City of London Radiation Research Unit</b> . Stem cell transplant research led by the team at KCH, including access to the IMPACT UK-wide clinical trials partnership, <b>KCL Institute of Cancer Policy</b> , a key policy partner for many major national and international programmes including paediatric oncology, and <b>KCL School of Biomedical Engineering and Imaging Sciences</b> , which hosts the London Institute for Healthcare Engineering, a world-class centre for imaging and data analytics research and Industry partners, notably the <b>GSK-KCL Translational Oncology Research Hub</b> to accelerate development of anti-cancer drugs; and strategic collaboration with <b>UCB Biopharma</b> in immunology, oncology, neuroscience and bone health
Vision for research opportunities for PTC
Develop a comprehensive paediatric cancer clinical trial programme with ICR and KCL to deliver the RM PADDU strategy to develop early-phase clinical studies of molecularly targeted anticancer drugs drawing on the pre-clinical and clinical strengths of GSTT and KCL in developing novel cellular and molecular therapies (immunotherapies viewed as the future of cancer care) thereby recognising that this is a partnership in which both pre-clinical and clinical aspects are crucial and reflect the partners' capabilities.
Create with the ECMC, Comprehensive Cancer Centre at KCL and the CRUK City of London Cancer Major Centre exceptional capabilities for immunological and advanced cellular research relevant to paediatric oncology
Incorporate advanced imaging research within paediatric oncology precision therapy research utilising GSTT's cutting-edge imaging facilities combined with world-class expertise in image reconstruction and motion correction, to develop and bring into clinical trials molecularly targeted agents for childhood cancers
Develop wider research e.g. symptom management, mental health impacts of cancer and treatment, ovarian tissue preservation, nursing & AHP research
GSTT will integrate research staff from The Royal Marsden and the ICR into the clinical and academic research facilities at the Evelina, including in the children's cancer ward, in the dedicated research wards and across PICU, imaging etc; providing office space as part of the main Evelina service.



**Table 36: St George's proposal for research at the Principal Treatment Centre**

Experience and expertise
<p>St George's has established specialist clinical academic groups which serve as local, national and international hubs of excellence for innovative research, teaching and training; bringing researchers together in particular fields. SGUH grew its research workforce from 94.49 wte in 2019/2020 increasing to 132.44 in 2021/2022, with a comparable increase in clinical research income from £6.6m (of which £2.7m NIHR) rising to £8.2m in the same time period.</p> <p>Between 2019 and 2022, St George's recruited 1925 children to portfolio studies (source: NIHR CPMS). Between 2016 and 2022, the Trust recruited more than four times as many children to NIHR Children's Specialty Clinical Trials of Investigational Medicinal Products than any other centre in south London</p> <p>St George's Hospital and St George's University have established the Translational and Clinical Research Institute (TACRI) which convenes research-active clinicians from a range of fields to share expertise and develop collaborative research ventures. It includes seminars, mentoring, career development opportunities and statistical consultancy and is open to nurses, midwives and allied health professionals (NMAHPs)</p> <p>St George's regional clinical genetics service collaborates closely with The Royal Marsden and the ICR on research into cancer gene discovery and early detection – for example with the CanGene-CanVar programme, which aims to translate cancer genetics research into clinical practice, to improve early detection and prevention of cancer. This is part of the ongoing close collaboration between St George's and RM/ICR.</p> <p>Consultant paediatrician at St George's, Professor Paul Heath, leads the UK Paediatric Vaccine Group through which all UK paediatric vaccine trials are undertaken; a recent initiative linked the St George's VG with Southampton oncology teams in a trial of pneumococcal vaccines in children with cancer.</p> <p>The Trust is partnering with Barts Health NHS Trust and Queen Mary University of London in a new Biomedical Research Centre (BRC) focused on precision medicine, including in cancer. The Centre for Global Health in Saint George's University London's Institute for Infection and Immunity (II&amp;I, part of the joint Infection Clinical Academic Group with SGUH) provides a platform for collaborating with major international networks, with leadership in tuberculosis and fungal infection clinical trials. Several of Saint George's CNPI researchers are members of key international organisations (World Health Organisation (WHO) antimicrobial and vaccine committees; LSHTM Global Centre for Maternal, Adolescent, Reproductive, and Child Health (MARCH))</p>
Vision for research opportunities for PTC
<p>Building on their leadership of the NIHR South London Clinical Research Network (chaired by the Trust CEO) to provide resources and activities to help deliver, promote and disseminate paediatric cancer research, including patient and public involvement initiatives as well as drawing on its wider experience in collaborating with other research centres across the capital and the UK.</p> <p>Accelerate the PTC/ICR's current trajectory to support personalised medicine, drive forward the commitment to offer the latest cutting-edge treatments for phase I/II trials and accelerate promising therapies for later stage trials, and train the next generation</p> <p>Further develop research in areas such as antifungal diagnostics, convection-enhanced delivery treatment for brain tumours, optimising nutrition in children with cancer, obesity/metabolic syndrome in cancer survivors, psychological impacts</p> <p>Build on links to the national MRC Centre for Medical Mycology (one of the largest medical mycology groupings worldwide) to provide national (and international) opportunities for anti-fungal research (currently St George's leads a national initiative in Paediatric Antifungal Stewardship)</p> <p>St George's will invest in developing a new state of the art paediatric cancer centre, which will accommodate both a paediatric cancer clinical research facility and an adjacent 'spoke' with office, seminar room and lab space for ICR staff, so that they can spend time next to and interact with the clinical service and clinical researchers as required.</p>

Both organisations made reference to the Research Excellence Framework (REF)<sup>50</sup>. It provides metrics on:

- global list for clinical and health
- research power
- impact.

Further information is available at the link in the footnote below.

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<sup>50</sup> [The REF: World University Rankings 2022 by subject: clinical and health | Times Higher Education \(THE\)](#)

## 6. Evaluation of proposals in the pre-consultation phase

In November 2022, the two shortlisted providers submitted their proposals. During December 2022, the four expert panels (one for each domain) scored the two proposals against each sub-criterion except where an absolute metric was available (e.g., patient travel times). There was broad panel membership involving over 32 panel members, with no individual sitting on more than two panels. NHS England London deliberately involved a wide group of people in the scoring process, including clinicians, parents who use the current Principal Treatment Centre service at The Royal Marsden, charities, and expert independent researchers, to get the benefit of their views and expertise.

The scoring framework contained details for scoring between a minimum and maximum score. The majority of scoring ran between a maximum of 10 and a minimum of 0, with a definition given for each gradation.

Panel members scored on their own, and then met once for a 'verification session' where overall scores were shared and an opportunity to identify any verification questions was provided. This produced a number of questions for the two shortlisted Trusts to answer before panel members submitted their final scores. There was no requirement in these sessions to reach a consensus. Six people in all chose to change their scoring after the verification session, which the agreed process allowed for.

### 6.1. Scoring outcome

Final scores were then calculated by the programme team for each proposal using the median score as agreed by the Programme Board. The median is the middle score when the scores are in order from the smallest to the largest. The benefit of a median is that it reduces the impact of extremes and so the potential skewing effect of a very high or a very low score. The median for each sub-criterion in each domain was then weighted, using the predetermined weights, and added together to calculate the score for that domain. The same weighting process was followed to calculate the final overall score. The final overall score and scores per domain are shown in the table below:



**Table 37: Overall scores and scores by domain for the two proposals**

Weighted score	Evelina London Children's Hospital	St George's
<b>Overall Score</b>	<b>80.505%</b>	<b>75.267%</b>
<b>1. Clinical</b>	29.626%	27.005%
<b>2. Patient and Carer Experience</b>	20.586%	21.840%
<b>3. Enabling</b>	15.419%	15.266%
<b>4. Research</b>	14.875%	11.156%

To note - Final domain and total scores have been presented to 3 decimal places, however the underlying calculation used full values of 12 decimal places. This means that when manually adding up the domain scores to 3 decimal places, the total score for Guys and St Thomas' is 80.506% rather than 80.505%. This is due to the method of calculation only. The method of calculation does not affect St George's total score.

### 6.1.1. Scoring breakdown

The detailed scores from the evaluation of the proposals are set out below. It should be noted that the scoring of the options is a significant part of the evaluation process, but it does not provide a decision at this stage on the future location of the Principal Treatment Centre. Following consultation, further analysis and evaluation of the options will take place, using consultation feedback and all other collated evidence and data to inform the final decision. This work will be described in detail in a decision-making business case.

#### How the options were scored

1. Once the proposals were submitted by the two Trusts, NHS England London undertook fact verification checks. Where necessary, NHS England London asked for clarification or follow ups from the Trusts within a set timeframe.
2. NHS England London assessed certain aspects of the proposals which required pre analysis, for instance, travel time analysis and vacancy rates, and summarised these for the panels to review when their members came to score.
3. Panel members were responsible for allocating scores for each of the sub criteria within their allocated domain – they used the pre-agreed evaluation criteria to mark against and gave a rationale for their chosen score, in relation to the evaluation criteria.
4. NHS England London collated all the initial scores for each panel and held a 'verification session' for each panel. At these sessions, each panel members' scores (while being

kept anonymous) were shared. Panel members could describe their considerations in reviewing the information provided which resulted in them scoring the way they did. This allowed each of the members to hear the approach taken by others in applying the scoring criteria, and to identify any clarifications they wanted about the proposals.

5. This produced a number of questions for the two shortlisted Trusts to answer before panel members submitted their final scores. There was no requirement in these sessions to reach a consensus.
6. Following the meeting, panel members were given the opportunity to revise their initial score, if they wanted to (there was no requirement to do so), based on new information surfaced for them by the panel meeting or through the clarification information. Alternatively, members could simply confirm their initial score. Panel members were able to reflect and come to their own decisions. Six people in all chose to change their initial scoring.
7. The scoring process produced a 'median score' from panel members for each sub-criterion.

NHS England London took the median value for each sub criteria and processed with the pre-agreed weights to calculate the final score for each proposal. The median value for each sub-criteria, or pre-calculated score in the case of '2.1 staff impact – transport' and '4.1 Service access', can be seen in the value column of the score tables below.

The column headed 'score range', shows the maximum possible scores available for each criterion and sub-criterion. The 'percentage mark question' column shows the percentage of the median value awarded to each criterion and sub-criteria, based on the maximum possible score of their respective Score Range. Scores are then weighted on a sub domain and overall domain basis to achieve a final score. If a criterion had a number of elements (i.e., sub-criteria), the percentage for each is shown in the sub-facet column and the overall score for that criterion is given in the percentage mark column.

Proposals for the future location of very specialist cancer treatment services for children

**Table 38: scores for Evelina London Children's Hospital proposal<sup>51</sup>**

Domain	Ref	Criterion (-subcriterion)	Requested value	Score range	Value	Percentage Subfacet	Percentage mark question	Criteria weights	Weighted score	Domain score	Domain weight	Domain score weighted	Overall score
Clinical	1.1	Interdependencies	1 point peryes	0-11	9	N/A	81.82%	35.00%	28.64%	82.44%	35.94%	29.63%	80.51%
	1.2	Transition	Swing 0-10	0-10	9	N/A	90.00%	18.00%	16.20%				
	1.3	Transfers	Swing 0-10	0-10	8	N/A	80.00%	27.50%	22.00%				
	1.4	Network effectiveness	Swing 0-10	0-10	8	N/A	80.00%	19.50%	15.60%				
Enabling	2.1	Staff impact - benefits	0-2 per element	0-14	10.5	75%	71.13%	21.00%	14.94%	80.23%	19.22%	15.42%	
		Staff impact - training	0-2 per element	0-4	3	75%							
		Staff impact - transport	% staff >15min increase	0-100%	39.30%	63%							
	2.2	Staff support - vacancy	0-2 score	0-2	1	50%	88.90%	23.50%	20.89%				
		Staff support - turnover	0-2 score	0-2	2	100%							
		Staff support - sickness	0-2 score	0-2	2	100%							
		Staff support - survey	0-2 score	0-2	1.89	95%							
		Staff support - CQC	0-2 score	0-2	2	100%							
	2.3	Resilience	Swing 0-10	0-10	8	N/A	80.00%	25.00%	20.00%				
	2.4	Capacity	Swing 0-10	0-10	8	N/A	80.00%	30.50%	24.40%				
Research	3.1	People	Swing 0-10	0-10	8	N/A	80.00%	32.29%	25.83%	80.00%	18.59%	14.88%	
	3.2	Place	Swing 0-10	0-10	8	N/A	80.00%	28.86%	23.09%				
	3.3	Performance	Swing 0-10	0-10	8	N/A	80.00%	38.86%	31.09%				
Pt & Carer	4.1	Service access - private	% with increase >15min	0-100%	71.07%	6%	52.81%	14.90%	7.87%	78.42%	26.25%	20.59%	
		Service access - public	% with increase >15min	0-100%	4.53%	100%							
	4.2	Facilities - age appropriate	0-2 score	0-2	2	100%	90.00%	24.75%	22.28%				
		Facilities - play	0-2 score	0-2	2	100%							
		Facilities - privacy	0-2 score	0-2	1	50%							
		Facilities - parents	0-2 score	0-2	2	100%							
		Facilities - education	0-2 score	0-2	2	100%							
	4.3	Engagement	Swing 0-10	0-10	8	N/A	80.00%	16.50%	13.20%				
	4.4	Navigation	Swing 0-10	0-10	8	N/A	80.00%	23.05%	18.44%				
	4.5	Support in difficulty	Swing 0-10	0-10	8	N/A	80.00%	20.80%	16.64%				

<sup>51</sup> "Final domain and total scores have been presented to 3 decimal places, however the underlying calculation used full values of 12 decimal places. This means that when manually adding up the domain scores to 3 decimal places, the total score for Guys and St Thomas' is 80.506% rather than 80.505%. This is due to the method of calculation only. The method of calculation does not affect St George's total score".

Proposals for the future location of very specialist cancer treatment services for children

**Table 39: scores for St George's proposal**

Domain	Ref	Criterion (-subcriterion)	Requested value	Score range	Value	Percentage Subfacet	Percentage mark question	Criteria weights	Weighted score	Domain score	Domain weight	Domain score weighted	Overall score
Clinical	1.1	Interdependencies	1 point per yes	0-11	8.50	N/A	77.27%	35.00%	27.05%	75.15%	35.94%	27.01%	75.27%
	1.2	Transition	Swing 0-10	0-10	8	N/A	80.00%	18.00%	14.40%				
	1.3	Transfers	Swing 0-10	0-10	8	N/A	80.00%	27.50%	22.00%				
	1.4	Network effectiveness	Swing 0-10	0-10	6	N/A	60.00%	19.50%	11.70%				
Enabling	2.1	Staff impact - benefits	0-2 per element	0-14	10.5	75%	77.29%	21.00%	16.23%	79.43%	19.22%	15.27%	
		Staff impact - training	0-2 per element	0-4	3.50	88%							
		Staff impact - transport	% staff >15min increase	0-100%	34.50%	69%							
	2.2	Staff support - vacancy	0-2 score	0-2	2	100%	80.00%	23.50%	18.80%				
		Staff support - turnover	0-2 score	0-2	1	50%							
		Staff support - sickness	0-2 score	0-2	2	100%							
		Staff support - survey	0-2 score	0-2	1	50%							
		Staff support - CQC	0-2 score	0-2	2	100%							
	2.3	Resilience	Swing 0-10	0-10	8	N/A	80.00%	25.00%	20.00%				
	2.4	Capacity	Swing 0-10	0-10	8	N/A	80.00%	30.50%	24.40%				
Research	3.1	People	Swing 0-10	0-10	6	N/A	60.00%	32.29%	19.37%	60.00%	18.59%	11.16%	
	3.2	Place	Swing 0-10	0-10	6	N/A	60.00%	28.86%	17.31%				
	3.3	Performance	Swing 0-10	0-10	6	N/A	60.00%	38.86%	23.31%				
Pt & Carer	4.1	Service access - private	% with increase >15min	0-100%	49.46%	36%	68.24%	14.90%	10.17%	83.20%	26.25%	21.84%	
		Service access - public	% with increase >15min	0-100%	3.33%	100%							
	4.2	Facilities - age appropriate	0-2 score	0-2	2	100%	100.00%	24.75%	24.75%				
		Facilities - play	0-2 score	0-2	2	100%							
		Facilities - privacy	0-2 score	0-2	2	100%							
		Facilities - parents	0-2 score	0-2	2	100%							
		Facilities - education	0-2 score	0-2	2	100%							
	4.3	Engagement	Swing 0-10	0-10	8	N/A	80.00%	16.50%	13.20%				
	4.4	Navigation	Swing 0-10	0-10	8	N/A	80.00%	23.05%	18.44%				
	4.5	Support in difficulty	Swing 0-10	0-10	8	N/A	80.00%	20.80%	16.64%				

## 6.1.2. Quantitative benefits appraisal: comparison of specific scores

### Clinical

Evelina London scored a total of 29.63% (rounded), St George's scored 27.01%. Evelina London scored higher on three of the four clinical domain areas.

**Table 40: Clinical Domain Scores**

Option	Evelina London	St George's	Evelina London	St George's
Clinical Domain	Absolute	Absolute	Weighted	Weighted
Interdependencies	9	8.5	28.64%	27.05%
Transition	9	8	16.20%	14.40%
Transfers	8	8	22.00%	22.00%
Network effectiveness	8	6	15.60%	11.70%
Total Domain score			<b>82.44%</b>	<b>75.15%</b>
Total Weighted score			<b>29.63%</b>	<b>27.01%</b>

### *Interdependencies*

Scores were given in relation to the scoring structure for specialties delivered by each provider that must be 'readily available' (see Tables 18 and Table 19, section 5.2.1 Interdependent services) in line with the interdependent services set out in the national service specification. Evelina London scored '9' compared to '8.5' for St George's. Evelina London scored higher because it would have all but two of these services (neurosurgery and radiotherapy), while St George's would have all but three (cardiology, nephrology and radiotherapy).

### *Transition*

Both proposals scored well on 'Transition,' Evelina London scored a '9' and St George's scored an '8.' Aspects of Evelina London's proposal were very strong, exceeding requirements of the national service specification. St George's proposal was considered strong, addressing requirements of the service specification. One of the strengths of Evelina London's proposal was the transition model that they set out with reference to transition planning for other disease groups, including the example of transition planning for their specialist renal service, an example of the model that they would deploy if they were to become the future Principal Treatment Centre. From age 13 onwards, a clinical nurse specialist, consultant and psychologist will work with the young person to build understanding of their condition, agreeing with them and their family which is the most appropriate adult service to transfer to, and when. The nurse specialist will work with colleagues to organise a joint appointment in a flexible process over a period of time. Arrangements included a clear transfer plan and follow-up to ensure treatment is going well, and to learn about how patient experience can be improved.

The existing transition model, particularly the empowerment of young people in decision making and examples given were recognised as a strength, along with the availability of dedicated clinical nurse specialists to support transition.

St George's proposal was strong. Panel members reflected the Trust's bid was compliant with NICE quality standards with a good explanation of transition model using Ready Steady Go methodology. St George's already have a well-established transition pathway for young people without cancer and have experience of supporting children with cancer to transition to Teenage and Young Adult services with the Royal Marsden. It was recognised that existing links with The Royal Marsden would be helpful. They have a 'Ready Steady Go' method embedded and joint clinics in place, including access to clinical psychology and social support. They also have a range of patient choices available for those between 0-18 years, including an established longer transition for those patients with complex needs, demonstrating a focus on a person-centred approach to transitioning.

### ***Treatment Transfers***

The expert clinical panel reviewing this element of both submissions was confident that treatment transfers would reduce significantly hence the 80% score for both the options. They did not assess either proposal as being able to eliminate transfers completely given London's configuration of services, therefore neither option was awarded top marks. For an overview of treatment transfers please see description in section 5.2.2. Reducing avoidable treatment transfers.

### ***Network effectiveness and system benefits***

For the 'Network effectiveness and system benefits' sub-domain, Evelina London scored '8' compared to '6' for St George's. The panel scored Evelina London '8' out of 10 on their demonstrated ability to drive change through clinical networks, due to the greater experience demonstrated by Evelina London in managing complex paediatric networks, including networks that cover the geography of the Principal Treatment Centre including Kent, Surrey and Sussex. This is particularly so for congenital heart disease services, the strategic paediatric network and delivery of the South Thames Paediatric Retrieval Service.

For this criterion St George's provided evidence which primarily focused on the management of adult networks such as the London Kidney Network, hosted by St George's. In terms of geography, networks referenced in St George's proposal predominantly cover south west London and Surrey. St George's is also a member of the network as the current Principal Treatment Centre and a POSCU.

Both proposals reflected plans to build networks to support the children's cancer network.

### **Patient and Carer Experience**

Evelina London scored a total of 20.59%. St George's received a higher score of 21.84% for this domain. Drivers for this were travel times for patients/carers and the privacy component on the Facilities sub-domain.



**Table 41: Patient and Carer Experience Scores**

Patient and carer experience domain	Evelina London	St George's	Evelina London	St George's
	Absolute	Absolute	Weighted	Weighted
Service access reduction: private transport (patients living in areas categorised as being in the most deprived 20% of areas in England)	69.93% <sup>52</sup>	49.76%	7.87%	10.17%
Service access reduction: private transport (patients living in areas categorised as being least deprived 80% of areas in England)	72.22%	49.16%		
Service access reduction: public transport (patients living in areas categorised as being in the most deprived 20% of areas in England)	1.48%	1.59%		
Service access reduction: public transport (patients living in areas categorised as being least deprived 80% of areas in England)	7.58%	5.06%		
Facilities	1 for Privacy, 2 for other sub-domains	2 for all sub-domains	22.28%	24.75%
Engagement	8	8	13.20%	13.20%
Navigation	8	8	18.44%	18.44%
Support in difficulty	8	8	16.64%	16.64%
Total Domain score			78.42%	83.20%
Total Weighted score			20.59%	21.84%

<sup>52</sup> Please note that in this table, figures are shown separately for those living in areas categorised as being in the most deprived 20% of areas in England versus those in the least deprived 80%. The average of these two figures corresponds to the percentages shown in the yellow column of Tables 39 and 40. For example, the result of 71.07% for Evalina London is the average of the 69.93% and 72.22% shown in this table.

## **Service access**

As set out in section 5.3.3 Service accessibility including travel, there was a difference in the percentage of patients who would see an increase of 15 minutes or more in travel time following the proposed move. For example, when travelling by private car, 49.76% of people living in the most deprived areas would experience an increase of more than 15 minutes in travel time if the service moved to St George's rather than Evelina London, where 69.93% of patients from deprived areas would experience an increase. The outcomes for both travel by private car and public transport were combined into a single service access score, giving each travel modality a 50/50 weighting. The available percentage points allocated to this sub-domain (15%) was then split between the two providers, according to their scores. This results in the final score of 7.87% for Evelina London compared to 10.17% for St George's (see top right cells of the table above).

### **Approach to evaluation of Travel**

Parents and carers who were part of the panel evaluating the patient and carer experience key area did not agree with the way travel times for patients and families were assessed and scored. They believed they should have had more say in assessing travel times, drawing on their knowledge and experience of travelling with children who have cancer.

The approach we took to assessing travel times is usual for NHS reconfigurations. An independent analyst used a statistical approach to map all possible journey times to the current centre and the two options.

Parents and carers also did not think the scoring should have been on the basis that half the journeys would be by public transport and half by road. Parents said this did not reflect what actually happens. Many more journeys are by road, because of parents' concerns to protect their children from crowded trains, and from distress at being looked at by strangers.

NHS England London took this very seriously. We carried out a sensitivity analysis, which was a way of finding what impact a change in what is measured would have on the scores. We switched journeys by road from 50% to 70% and public transport from 50% to 30%. We deemed this to be the right change because data showed not all parents are likely to have access to cars. This reduced the score for both options, as travelling by car to either option would take longer for a lot of people than travelling to The Royal Marsden, unlike public transport which is similar to The Royal Marsden or faster for almost everyone.

However, it did not impact the overall outcome: from this initial assessment the Guy's and St Thomas' bid on behalf of Evelina London still scored higher than St George's bid in all scenarios.

See section 5.3.3 Service accessibility including travel for more information on travel time methodology and outcomes and please note the sensitivity analysis in relation to the service access criterion, described in section 6.1.3 Sensitivity analysis.

## **Facilities**

St George's and Evelina London scored the same maximum points on four of the five elements for the facilities sub-criterion: education, play, age-appropriateness and parent support. St George's also scored the maximum available score (2) for the privacy element of the facilities criterion, reflecting that privacy and dignity maintenance was well evidenced for all ages of patients. Evelina London scored lower on this (1), reflecting that privacy and dignity maintenance was evidenced for some ages of patient but not the differing needs of different ages of patient.

Panel members assessing the patient experience domain were invited to visit each potential provider of the future Principal Treatment Centre. Some members of the panel visited St George's Hospital; although arrangements were made no members of the panels visited Evelina London during this process.

Being a children's hospital already, panel members noted that Evelina London understand that the facilities need to be age appropriate can evidence that facilities are age appropriate for all ages, and that they would have dedicated facilities for children with cancer.

There is a team of 10 qualified and registered Health Play Specialists and Play Assistants who cover all inpatient wards, outpatient areas and the Emergency Department. Each ward has a dedicated play area, with a range of age-appropriate activities and materials, including a rocket simulator.

The Evelina Hospital School has an Outstanding Ofsted rating, teaching approximately 1,500 children and young people aged between 2-19 each year, with different learning areas for early years, primary and secondary classes. The school received a Bronze award from the Pearson National Teaching Awards, recognising excellence in education, for work with dialysis patients during the pandemic.

There is a large children's psychology service with a lead consultant, dedicated family support nurse, and 24/7 helpline.

St George's also offer current experience in facilities for children, including experienced play therapists, and an Ofsted rated Outstanding with good links to local schools.

In their proposal for future facilities, they plan to offer a large amount of single treatment rooms, with en-suites and a dedicated outdoor space, with a private entrance to the centre. This shows good consideration of privacy and dignity requirements and mitigates against cross-infection.

The panel noted understanding of the need for age-appropriate areas which will focus on the specific needs of younger, and older children. St George's also plan to have co-located facilities for dining, play, recreation, relaxation, and study. Parking for parents would be made available. The proposals for the new build have been co-produced with children, families, and charitable organisations.

### Other sub-criteria

Both Trusts provided a high level of confidence for the sub-criteria relating to support in time of crisis, navigation of services and engagement (which is to be expected from two children's tertiary services rated as Outstanding by the CQC), and this was reflected in their scores.

Both proposals scored an '8' out of 10 on the 'engagement' domain reflecting the fact that both proposals 'provided a high level of confidence with evidence of active and routine collaboration with patients and carers, including evidence of reasonable 'co-design' in relation to their proposals'. Both evidenced features of engagement which parents had highlighted as being key to good engagement and collaboration, these included: working with local and national charities to support children and young people with cancer; talking to patient groups/panels with direct experience of services; and using children and young people-friendly activities to seek feedback.

### Enabling

In the case of both options, it is anticipated that staff would transfer from The Royal Marsden to the future provider. The evaluation criteria were therefore designed to reflect the potential of each organisation to attract staff. Key aspects considered were:

- Organisational support to staff – current performance based on workforce statistics (as indicator of the extent to which the organisation can help mitigate workforce risks by moving to an organisation that current staff rate highly)
- Impact on staff – benefits that would be offered to staff, with the ambition that these are either equivalent to, or an improvement against existing benefits they receive. This also included consideration of travel impact.

Evelina London scored a total of 15.42%, St George's scored 15.27% for this domain.

**Table 42: Enabling Domain Scores**

Enabling Domain	Evelina London	St George's	Evelina London	St George's
	Absolute	Absolute	Weighted	Weighted
Staff-impact:				
Benefits	10.5	10.5	14.94%	16.23%
Training	3	3.5		
Transport*	39.30%	34.50%		
Staff support				
Vacancy	1	2	20.89%	18.80%

Turnover	2	1		
Sickness	2	2		
Survey	1.89	1		
CQC	2	2		
Resilience	8	8	20.00%	20.00%
Capacity	8	8	24.40%	24.40%
Total Domain score			<b>80.23%</b>	<b>79.43%</b>
Total Weighted score			<b>15.42%</b>	<b>15.27%</b>

\*(lower score is better for this criteria reflecting the fact that a small percentage of staff would experience an increase in travel)

### Staff Impact

St George's received a higher score reflecting the fact that a smaller percentage of staff (34.50%) would experience an increase in travel time of 15 minutes or more as compared to Evelina London (39.30%). St George's received 0.5 higher score for the training element (scoring based on ensuring current professional programmes and Continuing Professional Development provision is maintained).

### Staff Support

Evelina London scored 8.89 out of a possible 10 compared to St George's proposal which scored 8. Evelina scored more highly on the basis of their staff survey score and rate of staff turnover.

Both proposals scored '8' out of a possible 10 on the capacity and resilience sub-criteria.

The panel noted workforce risks that exist for both options if fewer staff transfer than planned. Whichever provider is chosen to provide the future Principal Treatment Centre, they will need to work on plans to mitigate this during the Implementation phase.

### Research

Evelina London scored 14.88% for this domain and St George's scored 11.16%.

**Table 43: Research Domain Scores**

Research Domain	Evelina London Absolute	St George's Absolute	Evelina London Weighted	St George's Weighted
People	8	6	25.83%	19.37%
Place	8	6	23.09%	17.31%
Performance	8	6	31.09%	23.31%
Domain score			80.00%	60.00%
Weighted score			14.88%	11.16%

The median score for all three elements of the research criteria appraisal for Evelina London was '8' and for St George's '6'. The panel comprised seven independent research assessors and two nominees from The Royal Marsden and the Institute of Cancer Research. The evaluation process recognised the research expertise of both organisations.

The research evaluation panel was particularly positive about the research opportunities that Evelina London offered for continuation and further development of children's cancer research in partnership with the Institute of Cancer Research. The panel cited the internationally recognised research teams and research leadership at Guy's and St Thomas' across a range of paediatric research themes, particularly in imaging, neonatal medicine, foetal/neonatal brain and heart development, and allergies.

They noted the existing research infrastructure with two existing dedicated research wards, and over 70 staff already involved in paediatric research. Adult basic and clinical cancer research was also noted as very strong in leukaemia, stem cell transplantation and immunotherapy. The current scope (and future potential) of research at Guy's and St. Thomas' was noted. The panel recognised clear evidence of significant relevant cancer research experience, outputs and impact via Guy's and St Thomas' and King's Health Partners particularly for adults, and to some extent Teenage and Young Adult cancers, via the Experimental Cancer Medicine Centre. Network leadership from Professor James Spicer who also chaired the Paediatric Experimental Cancer Medicine Centre Network for a period (Professor Spicer is a King's College London researcher and Guy's and St Thomas' medical oncologist) was recognised. The panel appreciated the financial and other support in place in terms of education, training and career development for research active professionals across disciplines at Guy's and St Thomas'. The proposed approach to implementation and co-design of the future research model with researchers from The Royal Marsden was also appreciated. The Evelina London proposal demonstrated significant partnerships with industry which were specifically noted.

St George's proposal set out a research model that demonstrated its international paediatric research particularly on infection and vaccines, its existing 25 staff involved in paediatric research, and its current and expanding capacity in complex clinical trials. The panel assessed that while it was likely to provide a safe continuation of existing research, it did not demonstrate the same level of capability in adult cancer research to work alongside the transferred children's service, and the proposal did not reference the potential for future industry partnerships.

The panel, while appreciating the very real strengths of research at St George's, did not see its proposal as having the same potential as Guy's and St Thomas's to sustain and enhance children's cancer research and thereby create the strongest future facing service.

Whichever option is finally chosen, both Evelina London Children's Hospital and St George's would need to put in place a focused and ongoing effort to ensure that Institute of Cancer



Research staff felt truly integrated as per their model and that the opportunities for building on and optimising research are fully recognised.

### **6.1.3. Sensitivity analysis**

A sensitivity analysis determines how different values of an independent variable affect a particular dependent variable under a given set of assumptions.

A sensitivity analysis was applied to the final scoring, exploring flat weighting; use of the mean instead of the median; and switching values for patient transport:

Flat weights in which each domain had the same weighting of 25% produced the same outcome of a higher score for Evelina London (79.881%, versus 73.822% for St George's); using the mean instead of the median was used to work out the scores (a different definition of the average which did not remove the impact of very high or very low scores as the median does) the mean also gave a higher score for Evelina London (78.087%, versus 74.820% for St George's).

Switching values. A final sensitivity check was undertaken on patient travel times as parents had said they did not think that the 50/50 split on public and car travel reflected the reality of patient travel. In this test, the proportion of marks going to public transport was reduced to 30% of the marks (on the understanding, drawing on our EHIA, that not all parents have access to a car) with the proportion going to car transport increasing to 70%. The impact of this was to reduce the scores for both proposals, as car travel will take longer for both options for a significant number of people when compared to travelling to The Royal Marsden, whereas public transport improves for most people and worsens for very few. Changing the weight of the transport score towards car use produced the same outcome of a higher overall score for the Evelina London proposal (79.767%, versus 74.770% for St George's).

Since this sensitivity analysis, more information has been gathered on how families typically travel to their appointments. As part of our pre-consultation engagement, we asked children, young people and families currently undergoing treatment how they currently travel either to The Royal Marsden or to St George's Hospital. Out of 88 respondents:

- 81% said they travelled by car (whether their own vehicle or a taxi)
- 11% said they travelled by public transport
- 6% said they used hospital provided transport
- 1% said they travelled by bicycle
- 1% said they travelled by foot

Additionally:

- 65% said their journey took up to one hour
- 35% said they travelled for more than one hour

In addition, in June 2023, the charity Young Lives vs Cancer published research exploring the costs for young cancer patients and their families of travelling for treatment. This included asking families which forms of transport they used most often to get to and from treatment. 91% said they mostly travelled by car. Other forms of transport that were used were non-emergency hospital transport (17%), taxi (16%) and train (14%). It should be noted that respondents could select more than one type of transport (meaning that the proportions will add up to more than 100%) and also that this is a national report not specific to the Principal Treatment Centre which is the subject of this pre-consultation business case.

This extra data indicates that public transport use could be only 10 to 15% of families, rather than 30% as in the sensitivity analysis. We undertook further sensitivity testing as a result. This showed that even if public transport was assumed to be 0%, the impact on the service accessibility score would not change the overall outcome of the options appraisal. Guy's and St Thomas' bid on behalf of Evelina London would still score higher overall than St George's (78.660% versus 74.025% for St George's).

**Table 44: Overall scores when applying sensitivity analysis**

Total Score (%)	Original score (using weights and median) %	Score using the mean %	Score using flat weights %	Score with public transport/car weighting at 30/70 %	Score excluding public transport %
Evelina London	80.505	78.087	79.881	79.767	78.660
St George's	75.267	74.820	73.822	74.770	74.025

## 6.2. Impact on other services

NHS England London has identified potential impacts of the proposed changes on the following services:

- radiotherapy
- teenage and young adult cancer services at The Royal Marsden
- St George's children's services if the final decision were to locate the proposed future children's cancer Principal Treatment Centre to Evelina London
- Evelina London Children's Hospital if the final decision were to locate the future children's cancer Principal Treatment Centre to St George's.

There are a number of services where impact is considered to be minimal including:

- social care
- South Thames Retrieval Service
- other trusts and patient pathways outside of London.

Further detail on these are set out below.

### **6.2.1. Radiotherapy**

As set out in section 3.3 Essential co-dependencies, and in the two proposals received from Guy's and St Thomas' for Evelina London Children's Hospital and St George's University Hospitals NHS Foundation Trust for St George's Hospital, we propose that, as part of the overarching reconfiguration, conventional radiotherapy services for children, currently provided by The Royal Marsden at its site in Sutton, move to University College Hospital. This would mean that all radiotherapy rather than some, as now, would be provided by University College Hospital in central London. This would be the same for both potential options that will be consulted on for the future Principal Treatment Centre.

Benefits of this change are set out earlier in this document at Section 3.3 Essential clinical co-dependencies.

#### **Impacts of proposed change:**

##### ***Travel***

Proton beam patients would continue to travel to University College Hospital's Grafton Way building, near Euston, central London irrespective of the location of the proposed future Principal Treatment Centre. However, the move of conventional radiotherapy would introduce the need for planned travel to University College Hospital, near Euston for children in the future.

- Up to 10<sup>53</sup> children a year who have radiotherapy ahead of a bone marrow transplant (total body irradiation, which often needs to be provided during a hospital stay) would have a planned transfer from the proposed future Principal Treatment Centre to University College Hospital for this treatment. This would be scheduled in line with each patient's treatment plan.
- About 25 other children with cancer a year would require conventional radiotherapy. These children would travel to University College Hospital for conventional radiotherapy as outpatients or day cases, travelling from home to University College Hospital and back

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<sup>53</sup> In 2019/20, 7 children from the current Principal Treatment Centre had total body irradiation as part of their treatment.

instead of, as currently, from home to The Royal Marsden and back. Some children stay in the hospital if they are too unwell to travel and/or family circumstances determine this is best. Around 35 other children would travel (as they do now) for proton beam therapy and other types of radiotherapy.

The delivery of conventional radiotherapy services at University College Hospital would result in longer journeys for some children and their families. If needed, they could make use of accommodation that is already available for children with cancer and their families close to University College Hospital while they are having radiotherapy treatment.

Analysis of travel times for patients across the catchment areas who would need to attend University College Hospital as outpatients or day cases is included in Appendix 1 – Integrated Impact Assessment and summarised in section 9.2.3 Summary of travel time analysis.

Recommendations that have been developed as part of the Interim Integrated Impact Assessment for the service reconfiguration would support the future Principal Treatment Centre to work with University College Hospital to help mitigate travel impacts on patients and their families. We would also learn from arrangements that are currently in place for patients who travel to University College Hospital from the catchment areas of the other Principal Treatment Centres.

### ***Resilience***

While there are many potential benefits from the proposal to provide services for patients at University College Hospital, including greater resilience and specialism in the workforce, there are also potential downsides of consolidation. As the single provider of conventional radiotherapy services for London and the south east, a problem with University College London Hospitals' estates or equipment could impact on the ability to provide care for patients across a wide area. Some of the associated risks are mitigated by the fact that University College Hospital has a number of different machines for both conventional and proton beam therapy in the event of any problem with a particular piece of equipment. In addition, conventional radiotherapy and proton beam therapy are provided in different buildings on the University College Hospital campus, giving some resilience against any building issue. University College London Hospitals has business continuity plans in place for radiotherapy services including further mitigations for these types of risks. NHS England, nationally and regionally, would continue its existing work with the Trust to support ongoing review and management of risks.

### ***Capacity***

NHS England will work with stakeholders including University College London Hospitals to ensure that there is the necessary capacity to treat patients from The Royal Marsden should the services transfer. Building on work to date, detailed planning work would be undertaken to agree the best way to provide care for children that need to have treatment after a decision is made. This would determine the specific details of how much capacity would be

needed so that plans can be finalised and implemented ahead of the proposed move of services.

### ***Teenage and Young Adult radiotherapy services at The Royal Marsden***

The radiotherapy service provided by The Royal Marsden for teenagers and adults is not expected to be impacted by proposed changes to the Principal Treatment Centre. It would continue to see a large number of patients every year and has the workforce to sustain this.

### ***Other radiotherapy service considerations***

University College Hospital already provides photon and proton radiotherapy services for the Principal Treatment Centre at Southampton, as well as some children from the Principal Treatment Centre in Oxford.

Services providing radiotherapy for patients in other parts of the country will not form part of this consultation.

As noted below, NHS England is committed to securing the ongoing provision of high-quality radiotherapy services for children with cancer.

### ***Other patients who currently access radiotherapy services at The Royal Marsden***

There are a very small number of children who do not have cancer who require conventional radiotherapy as part of their treatment. Where there is an impact on these children as a result of the proposal, we would work with relevant organisations, including University College London Hospitals to support the ongoing delivery of their treatment.

### **Enabling this change to take place**

University College London Hospitals NHS Foundation Trust provided letters of support to both Guy's and St Thomas' NHS Foundation Trust, which submitted its proposal for the future Principal Treatment Centre to be at Evelina London Children's Hospital, and to St George's University Hospitals NHS Foundation Trust, which submitted its proposal for the future Principal Treatment Centre to be at St George's Hospital. The letters included the following:

“Our Executive team have discussed the proposal that should your bid be successful, radiotherapy for these children would be delivered at UCLH [University College London Hospitals], in a consolidated paediatric radiotherapy service. In this proposal, the clinical model of support for the Principal Treatment Centre [and its catchment area] would reflect the current arrangements in place with the Principal Treatment Centre at GOSH [Great Ormond Street Hospital], including UCLH tumour site-specific clinical oncologist representation within all appropriate Principal Treatment Centre MDTs [multidisciplinary teams], clinics at your site, and the ability for UCLH clinicians to visit and review any urgent inpatients within the Principal Treatment Centre (if required). Radiotherapy would be delivered at UCLH.

“There are clear clinical and operational benefits of consolidation of a highly specialist service such as paediatric radiotherapy into one centre, sitting alongside our Proton Beam Therapy service. This will enable a resilient and super-specialist multidisciplinary team to provide the best possible radiotherapy care to children. As you know, our team also have experience of providing radiotherapy for children from Southampton and Oxford Principal Treatment Centres.”

University College London Hospitals NHS Foundation Trust also set out some considerations around the way in which the service would be provided and the clinical model developed, drawing on its experience of becoming the provider of conventional radiotherapy services for the Principal Treatment Centres in Southampton as well as some children from Oxford.

### ***Implementation***

Detailed planning for the proposed move of children’s radiotherapy would follow a decision about the location of the proposed future Principal Treatment Centre and subsequent discussion between The Royal Marsden, University College London Hospitals and the future centre, with support from NHS England. This would include specific details of the patient pathway which would draw on existing arrangements for children under the care of the Principal Treatment Centres located in north London, Southampton and Oxford, and be developed further through detailed discussion between clinicians in light of the needs of this specific patient group and pathways at the future Principal Treatment Centre.

The radiotherapy service is a key part of the service for children with cancer. NHS England would work to support the transition arrangements, including the negotiation and agreement of funding to ensure that the future service had sufficient capacity and was sustainably resourced. Discussions to support the development of the funding model are underway including with University College London Hospitals, NHS England London, NHS England South East and NHS England nationally.

## **6.2.2. Services at the Royal Marsden**

### **Teenage and Young Adult cancer services**

Irrespective of the future location of the proposed future Principal Treatment Centre, The Royal Marsden would continue to be the Principal Treatment Centre for teenage and young adult cancer services<sup>54</sup>. Part of this service is currently provided by staff who support the children and young people’s service. The move of the children and young people’s service will require The Royal Marsden to review the mix of clinical specialists across its Sutton and Chelsea sites to ensure there is an appropriate skill mix to address the cancer presentations most prevalent in young people.

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<sup>54</sup> The National Service Specification for the Teenage and Young Adult is available here [Principal Treatment Centre](#)



NHS England is committed to work with the trust to ensure there is a sustainable model for this service as part of the Implementation phase.

More broadly, it is important to note that the transition of care between the proposed future Principal Treatment Centre and the Teenage and Young Adult service at The Royal Marsden would need careful planning to ensure risks associated with the services being on different sites can be mitigated. Consideration of this was made by Trusts in their proposals under the clinical domain and the transition sub-criterion. Consideration of transitional arrangements will form an important part of implementation planning. This will also include planning for patients who are part of the service at the time of its transfer, specifically those who may go through pathway changes more than once. Mitigations to manage risks relating to continuity of research for this patient cohort will also need to be made, further detail on these is reflected in section 5.5 Research and section 10.3 Management of Risks and Issues.

### **Loss of the children and young people's cancer service**

As a robust and stable specialist Trust, the loss of the children's service should not destabilise The Royal Marsden or other parts of its service delivery. However, NHS England (London and South East regions) are committed to working with The Royal Marsden (and other stakeholders) up to and during transition to ensure appropriate support is provided to the organisation.

The service has an estimated deficit of £6.7m in the financial year 2022/2023; and has generated a deficit for the last five years. Contributing factors include the provision of a service without the wider paediatrics infrastructure of a specialist Trust which does not enable efficiencies. On the face of it then the proposed service transfer would remove the headline deficit subject to the effective mitigation of stranded costs including overheads. NHS England will continue working with The Royal Marsden on how those costs can be mitigated and has indicated that it will in principle provided transitional funding although the quantum and phasing of that is still to be agreed.

### **6.2.3. Potential impact on St George's children's services**

The following outlines the potential impact on St George's children's services if the proposed future children's cancer Principal Treatment Centre were to be at Evelina London. Its neurosurgery service, paediatric oncology shared care unit and, potentially, elements of inpatient chemotherapy would be delivered at St George's Hospital (the latter would happen if St George's Hospital developed its shared care unit to deliver enhanced level B services). However, other services that it provides for children with cancer - children's intensive care for children with cancer, children's cancer surgery, and elements of its other specialist children's services which are used by children with cancer - would be impacted.

The following section describes the potential impact on St George's which would need to be mitigated.

Paediatric cancer care at St George's is delivered by a wide range of specialties, as part of their broader caseload, including paediatric surgery, paediatric intensive care, paediatric acute medicine, gastroenterology, haematology, infectious disease, neurology, paediatric neurosurgery, and clinical support services such as paediatric pathology and radiology.

For most of these services, St George's believes it would be able to mitigate the impact over time. For some services, the impact is potentially more significant.

- Paediatric surgery. If the proposed future Principal Treatment Centre were not to be at St George's Hospital, the associated surgery (which St George's has advised is about 20% of its elective workload for children)<sup>55</sup> would no longer be undertaken at the hospital. St George's advises this is one of the elements of St George's paediatric surgery caseload that makes it most attractive to current and future surgical staff. This includes the staff that the Trust currently relies on to deliver other key paediatric surgical work. The Trust provided the example of thoracic surgery including complex congenital lung lesions; complications of infections such as empyema, and other lesions requiring surgery.
- Pathology - paediatric cancer constitutes a significant proportion of each department's workload and is described as one of the elements of the caseload that makes the department attractive to current and future staff. For those involved, it is likely to constitute a significant proportion of their work. Without this work, there is a risk that clinicians may choose to work elsewhere. As a result, St George's is concerned about its ability to continue to provide some aspects of these services.
- Lost opportunities - St George's is concerned that its ability to deliver wider improvements and other benefits for non-cancer patients where there are synergies between the cancer service and the delivery of treatment to other patients which could support this, including:
  - the development of bone marrow and stem cell transplant service for non-malignant conditions and associated research opportunities
  - the development of expertise in delivering immunotherapy for non-malignant conditions like aplastic anaemia
  - the extension of experience providing cellular and gene therapies from adults to paediatrics
  - the development of the genomics service, including for adult cancer

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<sup>55</sup> In 2019/20, St George's delivered the following activity for paediatric oncology that required theatre time: 82 elective spells; 108 non-elective spells and 108 day cases. Not all activity required theatre time. See page 27, Appendix 3 – Activity Data Pack.

- the opportunity for the Paediatric Infectious Diseases Unit at the trust to continue developing its expertise in managing complex infections in immunocompromised cancer patients
- ongoing development of non-malignant interventional radiology procedures
- expansion of children's research which the PTC infrastructure and staff offers

It should be noted that if the final decision is to locate the future Principal Treatment Centre at Evelina London, St George's would continue to have the opportunity to develop and sustain its services, including through collaborative and close working with partners across the paediatric network to which it belongs and through the commitment that has been made jointly across south London to delegated specialised services through which both ICBs have an important role to play in any mitigations. There are other specific partnerships that would also have a role to play, including the partnership that St George's has through the Genomic Medicine Service Alliance with Guy's and St Thomas' and the south east.

St George's is also concerned about potential stranded costs if the proposed future Principal Treatment Centre were to be at Evelina London. This is because the Trust would lose the associated income but not necessarily be able to eliminate all associated costs straight away. See further detail in section 7.5 Revenue affordability of the finance chapter.

Considerations in relation to the impact on these services and mitigations are ongoing. At this stage in the process, it is not appropriate (as a decision on the future location has not yet been made) and has not been possible, nor proportionate, to invest significant amounts of time developing comprehensive solutions to mitigate the impact on services at St George's should the future Principal Treatment Centre be at the Evelina London.

However, parties to the reconfiguration programme have discussed the concerns St George's has raised and have noted the importance of addressing these should a decision be made to transfer the Principal Treatment Centre from The Royal Marsden and St George's to Evelina London Children's Hospital.

Noting concerns raised, NHS England London convened a meeting between St George's, Guy's and St Thomas' and The Royal Marsden Trusts to discuss the concerns that St George's have raised should they not be successful in their bid to become the future Principal Treatment Centre.

Representatives agreed to the following principles that would underpin detailed work to be taken forward as part of the implementation phase if a decision to move the Principal Treatment Centre to Evelina London is made. It is important to note, that although these principles were agreed in relation to a discussion about potential mitigations in the scenario referred to above, they **would also apply to a range of other potential scenarios where collaboration between NHS partners is needed**; this includes the management of other potential impacts of the service reconfiguration, including at The Royal Marsden and lost

opportunities at Evelina London. The Programme Board has given support for this to, including representatives from King's College Hospital. The principles are as follows:

- to support the development and implementation of mitigations that will aim to minimise the impact on all related services arising from a decision to move the Principal Treatment Centre
- a commitment to work closely together with the shared aim of ensuring continued delivery of high-quality and sustainable care for patients across the catchment area
- to work together to support and retain clinicians with specialist skills and expertise in the catchment area and in the future system of care, wherever possible, through, for example, shared/ joint rotas, joint contracts, a review of arrangements across the network, joint workforce planning
- to review activity flows between centres and to work with the wider system (including NHS England and Integrated Care Boards) to ensure service sustainability.

The above principles would follow in the context of other reviews (e.g. GIRFT paediatric surgery review) and ongoing pieces of work supporting by existing networking arrangements which have the objective of strengthening the provision of children's services across the regions.

Although St George's concerns are real and reasonable, it is noted that:

- there are examples of other paediatric surgery units in London and the South East which do not provide paediatric oncology surgery and which are considered sustainable (this includes at Chelsea & Westminster NHS Foundation Trust; and Barts Health NHS Trust). The existence of these units indicate it may be possible to attract and retain high quality staff without the need to have oncology surgery
- across the sector, there are significant waiting lists for a range of different types of children's surgery which all providers need to tackle collectively; how (and where) activity is delivered in the future can be explored meaningfully once a decision has been taken about where the future Principal Treatment Centre will be based. NHS England would support such discussions, including through clinical networks which operate across the regions
- it should be possible to agree networking solutions between different pathology networks to allow for service continuity and make best use of paediatric pathologists who are in short-supply nationally. For instance, across London and the rest of the country, there is already cross cover occurring within the paediatric/perinatal service and in addition a programme of mutual aid between departments that is being developed by NHS England

working closely with the Royal College of Pathology to mitigate for pressures on the stretched paediatric/perinatal service. Digital pathology would enable this, allowing for remote reporting to ensure we make best use of available skills and resources

- demand for paediatric intensive care unit services currently exceeds bed availability
- NHS England (London and South East regions) are committed, in principle, to working with Trusts on stranded costs at the appropriate time. Further detail on this is within Section 7.5 Revenue Affordability.

**Table 45: Summary of activity and income for the joint Principal Treatment Centre in 2019/20**

## Summary of activity and income relating to The Royal Marsden/St George's PTC

80% of the income relating to the PTC is received by The Royal Marsden with the remaining 20% of this being received by St George's.  
Two thirds of the £3m income received by St George's was for critical care.  
70% of the income associated with the activity below related to inpatient/critical care.

19/20 PTC Summary	St George's			Royal Marsden			Total		
	Patients*	Activity	Income	Patients*	Activity	Income	Patients*	Activity	Income
<b>Inpatient</b>	208	313	£1,018,422	456	4,599	£7,958,503	536	4,912	£8,976,925
<i>Elective</i>	72	90		147	412		191	502	
<i>Day case</i>	96	108		398	1,774		454	1,882	
<i>Regular Day</i>	-	-		283	2,363		283	2,363	
<i>Non-Elective</i>	93	115		44	50		136	165	
<b>Outpatient</b>	72	275	£40,439	1,354	7,943	£1,984,896	1,367	8,218	£2,025,335
<b>Critical Care</b>	84	1,451	£2,019,106				84	1,451	£2,019,106
<b>Radiotherapy</b>				41	700	£195,300	41	700	£195,300
<b>Drugs</b>				398		£2,298,700	398		£2,298,700
<b>Total</b>	<b>210</b>		<b>£3,077,967</b>	<b>1,356</b>		<b>£12,437,399</b>	<b>1,373</b>		<b>£15,515,366</b>

Inpatient care includes all admitted patient care including overnight stays and day cases.  
Outpatient care includes attendances for imaging, ward attenders and other non-admitted ambulatory activity as well as outpatient appointments.  
The total number of patients is likely to be lower than the total you would get from adding up rows as an individual patient can be in more than one row  
The income column will not include all of the income related to paediatric oncology at the Royal Marsden  
Of the 1,451 critical care days 819 were undertaken in a HDU bed rather than within the PICU  
\*The total number of patients is likely to be lower than the total you would get from adding up rows as an individual patient can be in more than one row.



**Table 46: Principal Treatment Centre inpatient activity at St George's in 2019/20**

## Inpatient activity at St George's

In 19/20 208 children aged 1-15 received paediatric oncology care as an inpatient at St George's. These children received 121 day cases, 82 elective spells and 110 non-elective spells. This activity required approximately three HDU level ward beds\* and two paediatric critical care beds and 399 theatre hours.

19/20 - St George's Admitted Patient Care	Day Case			Elective				Non-Elective				Total			
	Patients	Activity	Theatre Hours	Patients	Activity	Ward days	Theatre Hours	Patients	Activity	Ward days	Theatre Hours	Patients	Activity	Ward days	Theatre Hours
Benign/Uncertain/In situ	3	3	1	8	9	45	33	2	2	7	3	12	14	52	37
BMT	2	3	1	5	7	18	16	10	14	0	16	12	24	18	32
Haematological	35	37	20	17	20	28	28	44	58	57	72	86	115	85	120
Ill Defined, Secondary And Unspecified Sites	1	2	1	7	7	13	31	2	2	0	3	9	11	13	35
Solid Tumours	40	45	20	29	33	108	106	14	15	21	28	68	93	129	154
Other	26	31	10	4	6	10	8	10	19	19	3	34	56	29	21
<b>Grand Total</b>	<b>106**</b>	<b>121</b>	<b>52</b>	<b>67</b>	<b>82</b>	<b>222</b>	<b>222</b>	<b>79</b>	<b>110</b>	<b>104</b>	<b>125</b>	<b>208</b>	<b>313</b>	<b>326</b>	<b>399</b>

19/20 St George's Critical Care	Patients	Bed days
PICU	48	632
Ward	63	819
<b>Grand Total</b>	<b>84</b>	<b>1,451</b>

\* This is based on 85%-90% occupancy 365 days a year of combined ward days and critical care ward days.  
\*\* The total number of patients is likely to be lower than the total you would get from adding up rows as an individual patient can be in more than one row

### 6.2.4. Impact on Evelina London Children's Hospital

The following outlines the impact on Evelina London Children's Hospital if the proposed future Principal Treatment Centre were to be at St George's.

Evelina London Children's Hospital is the only children's hospital in the Children's Hospital Alliance of 11 children's hospitals in England that does not have an oncology service (the other member of the alliance in London is Great Ormond Street).

If the future Principal Treatment Centre were to be at St George's Hospital, Evelina London contends the potential impact on its services and the children they care for would take the form of missed opportunities in their ability to deliver wider improvements and other benefits for non-cancer patients where there are synergies between the cancer services and the delivery of treatment to other patients which could support this. Evelina London highlights the opportunity to develop a comprehensive care model for children with complex needs that could deliver a range of synergies across different clinical specialties with the potential to improve care for children with cancer and those with other conditions.

Examples of new therapies where there could be synergies include:

- immune therapies including gene and cellular therapies. These therapies are an increasing part of the clinical and research workload for Evelina London in non-cancer areas
- stem cell transplantation (bone marrow transplants). If Evelina was successful in its bid to be the Principal Treatment Centre it would provide stem cell transplants for children with



cancer, this service also has the potential to support non-malignant disease already managed in the children's hospital, including significant existing services in haemoglobinopathy, haemophilia, inherited metabolic disease and auto-immunity

- Expansion of children's research which the Principal Treatment Centre infrastructure and staff offers.

It should be noted if the final decision is to locate the future Principal Treatment Centre at St George's:

- Evelina London Children's Hospital would continue to provide specialist cardiac and renal services to children with cancer, including cardiac surgery and interventional cardiology. Related multi-disciplinary teams would be expected to continue
- Evelina London would continue to share and receive learning to develop and sustain its services from the wide range of networks it is part of, including through collaborative and close working with partners across the paediatric network.

Impact on other services is expected to be minimal

### **6.2.5. Impact on social care**

Young Lives vs Cancer provide a social work support service to the Principal Treatment Centre (as they do with a number of Principal Treatment Centres). The charity is represented on the stakeholder group (and more recently through their CEO's membership on the Programme Board) for this service change and they are aware of the proposed changes. They will work with the future Principal Treatment Centre wherever it is located and would plan to transfer their services across.

Proposals for both options articulate plans for providing a wide range of support to patients and their families, including through dedicated staff resource, referrals to psychology and social worker teams or specialist charities.

More widely, it is not anticipated that there will be changes to individual county or borough social care service demand. Integrated Care Boards with local authorities will continue to have a role in social care engagement with responsibility to patients who live in their postcode area

### **6.2.6. Impact on the South Thames Retrieval Services (STRS)**

South Thames Retrieval Service which is hosted by Guy's and St Thomas' NHS Foundation Trust provides critical care paramedics and patient transfers. The service already works collaboratively with The Royal Marsden team to ensure that children at the Sutton site who are at risk of becoming critically ill are proactively moved to a tertiary paediatric centre. South Thames Retrieval Service works on a strict protocol basis across the geography.

South Thames Retrieval Service are fully aware of the proposed service reconfiguration and would continue to provide a seamless retrieval service for children who need to be transferred to or from the Principal Treatment Centre, irrespective of the location to which it ultimately transfers. The South Thames Retrieval Service Paediatric Intensive Care ambulance service is provided by British Emergency Ambulance Response Service, which ensures there are two fully equipped paediatric intensive care ambulances 24/7 and two dedicated technicians to drive the ambulances 24/7. There is a third fully equipped ambulance to ensure the availability of two vehicles at all times. This would all continue without disruption during and beyond the service transfer.

The impact on the service of a relocation of the current Principal Treatment Centre is considered minimal. Specific details of the future emergency retrieval pathway will be determined with the future Principal Treatment Centre.

### **6.2.7. Impact on other Trusts, including patient pathways beyond London**

No significant changes arising from the reconfiguration would be expected for other Trusts:

- Supra-regional services including referral pathways to Stanmore (sarcoma surgery), Barts (retinoblastomas), Hammersmith and Oxford (fertility), Great Ormond Street (under 1s) will continue as is.
- Other Principal Treatment Centres: There would not be a change to the catchment area as a result of the service reconfiguration. As a consequence, there will only be minimal consequences for other nearby Principal Treatment Centres at Southampton or Great Ormond Street (any changes would be as the result of patient choice only).
- Trusts across the NHS England South East region: There is no perceived change for any of the other Trusts arising from the proposed reconfiguration of the Principal Treatment Centre.
- Primary and community care/out of hospital: Minimal impact is anticipated with respect to primary and community care provision because of the proposed service reconfiguration of the Principal Treatment Centre.
- King's College Hospital: King's will continue to provide neurosurgery services for children with cancer as part of its paediatric neurosurgery provision and also liver surgery for children with cancer. There is the opportunity to support King's to become an enhanced level B paediatric oncology shared care unit enabling it to deliver more chemotherapy on site (creating the potential to reduce transfers for patients who need this treatment alongside other services the trust provides). King's, through its CEO and Site Managing Director, has been involved in the Programme Board throughout.

### 6.3. Conclusion

In the evaluation carried out as part of our pre-consultation work, the expert panels scored Evelina London Children's Hospital's proposal higher overall (80.51% as compared to 75.27% for St George's) and for three of the four domains: clinical, research and enabling factors. The Evelina London option scored higher on three of the four sub-criteria for the clinical domain and on all three sub-criteria for the research domain. The St George's option scored higher on two of the five sub-criteria for patient and carer experience. Other scores were the same or very similar. A summary of the outcome is set out in the table below.

**Table 47: Summary of Scoring Outcome**

Key area	Sub-criteria			
<b>Clinical</b>	<p><b>Evelina scored higher</b> on network effectiveness, needed for leading and coordinating children's cancer care through the children's cancer network.</p> <p><b>Why:</b> It already runs children's networks and the retrieval service for very sick children across the children's cancer centre catchment area. The expert panel assessed that these are a good match for supporting children's cancer care.</p>	<p><b>Evelina London scored higher</b> for the number of the services that must be 'readily available' that it would have on site if it became the future Principal Treatment Centre.</p> <p><b>Why:</b> Evelina London would have all but two of these services, while St George's would have all but three.</p>	<p><b>Evelina London scored higher</b> for its support for children to move on to teenage and young adult services, especially its example of how this already works for children with kidney problems.</p> <p><b>Why:</b> Its support was assessed by the panel as very good – better than the service specification. (St George's proposal was assessed as meeting the service specification.)</p>	<p><b>Both hospitals scored the same</b> for transfers of children to a different hospital for care</p> <p><b>Why:</b> They were both assessed by the panel as reducing transfers of care for children with cancer staying in their hospitals but not being able to get rid of them completely because of the way cancer services are organised in London</p>

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Key area	Sub-criteria		
<b>Patient and carer experience</b>	<p><b>St George's scored higher</b> on quality of facilities – specifically privacy and dignity</p> <p><b>Why:</b> St George's proposed plans for the future centre were assessed by panels as protecting patient privacy and dignity for all ages of children.</p>	<p><b>St George's scored higher</b> on patient travel times, especially by road</p> <p><b>Why:</b> A smaller number of patients would have longer travel times than now if the future centre was at St George's rather than Evelina London</p>	<p><b>Both hospitals scored the same</b> for</p> <ol style="list-style-type: none"> <li>1. quality of facilities, specifically education, play specialists, age-appropriateness of spaces, support for parents to stay with child</li> <li>2. how they would support patients' cancer care including at other hospitals</li> <li>3. how they would support families during times of extreme difficulty</li> <li>4. their approach to patient and family engagement.</li> </ol> <p><b>Why:</b> both proposals scored maximum marks for all these services</p>

Key area	Sub-criteria		
Enabling	<p><b>Evelina scored higher</b> on ongoing support for staff</p> <p><b>Why:</b> Evelina London has slightly better staff survey scores than St George's and a lower rate of staff turnover.</p>	<p><b>St George's scored higher</b> on two aspects of impact on staff:</p> <ol style="list-style-type: none"> <li>1. its training offer</li> <li>2. travel times</li> </ol> <p><b>Why:</b> Both options scored the same on continuous professional development for staff but St George's proposal was assessed by the panel to offer an enhanced package of professional training.</p> <p><b>Why:</b> Fewer staff would have longer journeys by public transport to St George's than to Evelina London when compared to their current journeys to work (see section 5.4.5 Impact on staff including benefits, training, travel times).</p>	<p><b>Both hospitals scored the same for</b></p> <ol style="list-style-type: none"> <li>1. Capacity: enough workforce, space and equipment to provide speedy access for children from across the catchment area and offer bone marrow transplants.</li> <li>2. Resilience: good plans for keeping services running smoothly, including in emergencies.</li> </ol> <p><b>Why:</b> Both Trusts were assessed to have enough capacity to provide the future services, and strong resilience.</p> <p>They also both scored equally highly on benefits for staff.</p>



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Key area	Sub-criteria		
<b>Research</b>	<b>Evelina scored higher</b> on people, which assessed research workforce; staff development programmes; income supporting research staffing; research networks and collaboration; previous impact on collaborating to advance international health policy.	<b>Evelina scored higher</b> on place which assessed current capacity and excellence - physical space for research, including infrastructure to support and enhance transferring research teams, capacity for (phase I, II, and III research) trials and tissues studies, ability to link with industry; plans to improve existing provision and capacity to scale.	<b>Evelina scored higher</b> on capability and performance which assessed current research performance and capability, providers' ambition and future vision for research and innovation.
	<p>Why:</p> <p>Evelina London was seen as having the greater potential for sustaining and enhancing children's cancer research in partnership with the Institute of Cancer Research. The reasons included:</p> <ul style="list-style-type: none"> <li>• the strength of Evelina London's existing children's research and facilities</li> <li>• Guy's and St Thomas' internationally recognised research teams and strong leadership</li> <li>• the Trust's track record including in adult cancer research (including leukaemia, stem cell transplantation and immunotherapy)</li> <li>• the financial and other support it offers research active professionals</li> <li>• its significant partnerships with industry.</li> </ul>		

Based on the outcome of the options evaluation process outlined above, in which Evelina London's proposal received the higher overall score, the Evelina proposal is our preferred option at this stage in the process. In presenting a preferred option, NHS England (London and South East regions) are making it clear what we, as commissioners, think about the shortlisted options based on the evidence we currently have.

Having said this, we want to make it very clear that we are undertaking consultation with an open mind. Both options scored highly, we will consult on both options for the future Principal Treatment Centre. A decision will only be made on the location of the future Principal Treatment Centre after considering views and any additional information, data or evidence that come forward during the consultation period.

We will take account of all relevant factors, including the evaluation criteria. The evaluation scoring will form one part of the information that shapes the final decision on the future location of the Principal Treatment Centre in which the key question to be answered will be which option, Evelina London's or St George's, will offer the best children's cancer service for children with cancer across south London and south east England once implemented and for the future.

## 7. Financial Impact Assessment

### 7.1. Introduction

NHS England has laid out the process to follow for service changes in 'Planning, Assuring and Delivering Service Change for Patients 2018'. This was subsequently updated in March 2022. The key financial test is that any proposal is affordable in capital and revenue terms ahead of public consultation. The financial test is therefore a hurdle criterion as agreed by the Programme Board. Where option(s) require capital funding of more than £15million, consultation cannot be launched without confirmation that the capital required is affordable within integrated care system (ICS) capital envelopes or the availability of capital funding, and capital departmental expenditure limit (CDEL) cover has been agreed in principle.

The guidance outlines that those developing service change schemes can save time during the subsequent capital approval process by aligning the service change, PCBC and capital strategic outline case (SOC). In this case the PCBC has received shortlisted options each with a considered proposal to describe how the Principal Treatment Centre could be provided in the future, and it would not be an effective use of resources at this stage for both Trusts to work up detailed business case level proposals at a significant cost. Therefore, assurance of the financial content of both proposals is necessarily at a high level and confined to capital and revenue affordability.

Although not technically part of the scoring criteria or financial hurdle test, it is important that proposals deliver value for money (VfM) for the taxpayer; more detail on the economic case is outlined for each trust in section 7.4 Economic Case. Both proposals deliver a modest and positive VfM outcome.

The fact that affordability is a hurdle criterion means that, so long as our work shows that both options remain affordable, finance will not impact which option is selected. Instead, we are focusing on which site can best provide what we are looking for: a future Principal Treatment Centre that will give best quality care, is affordable in both capital and revenue terms, and will maintain world-class outcomes for children with cancer for decades to come.

The Programme Board decided that introducing finance as a scoring domain would risk financial scores potentially being the deciding factor in choosing a final option which would not be appropriate. In terms of the NHS England guidance, proposals are required to show that the capital and revenue costs included in submissions are affordable. There is no requirement in the guidance for finance to be a scoring domain and the Programme Board agreed that financial affordability should be a hurdle criterion.

In May 2022, it was confirmed that £20million of national CDEL would be made available as a contribution toward the capital costs of the proposals. Proposals were required to demonstrate the affordability of any additional capital above this.

We have two shortlisted options for the location of the future Principal Treatment Centre, and proposals have been received from each of the two organisations that could provide the

future service – Guy’s and St Thomas’ NHS Foundation Trust’s Evelina London Children’s Hospital and St George’s University Hospitals NHS Foundation Trust. The financial details of those proposals are summarised in this chapter with detail in the appendices.

Standard NHS England short form business case templates were sent to Trusts on 24 August 2022, including business case and financial templates, with a VfM model and summary financial tables, for revenue and capital costs. A letter was sent to both Trusts on 27 October 2022 confirming Specialised Commissioning income assumptions to be included in proposals. This included guidance that NHS England would consider funding capital charges and transition costs on a time limited and non-recurrent basis. The regional assurance team held several working sessions with the two potential provider Trusts through October and November 2022, to ensure that queries were addressed, that proposals used consistent assumptions, and NHS England understood the proposals in sufficient and reasonable detail.

The Trusts were required to submit the standard NHS England short form 5-case narrative business case, a VfM financial model, a SOCNI (Statement of Comprehensive Net Income) and summary financial tables. Supporting schedules including maps, costing schedules or OB forms (Outline Business Case standardised cost forms), drawings etc were also supplied by the Trusts. Both proposals are to refurbish existing estate rather than for new build. Both are at an initial stage, RIBA stage 0-1, with outline but not detailed technical drawings. The Guy’s and St Thomas’ short form business case and key estates information return stated that their proposal was at Royal Institute of British Architects (RIBA) Plan of Work stage 0-1 while the St. George’s return stated that their proposal is at RIBA stage 1. Both are therefore at pre-SOC/SOC stage. Costs have been estimated by specialist cost advisors for both proposals based on NHS estate guidance and benchmark costs, with significant contingencies in place as one would expect at this stage. More detailed costings will be undertaken once the final provider is chosen. This approach ensures that significant costs are not incurred developing unsuccessful proposals to a very detailed level and is a reasonable approach.

Submissions were assured by the regional finance team and the London Estates Delivery team at the level appropriate for this stage in the process. Both Trusts were invited to submit revised/refreshed financial content for their proposals prior to the update of this PCBC. These were duly received and have been incorporated into the review. Both Trusts have updated their capital costs, including inflation, and timelines, to account for the PCBC and decision-making business case (DMBC) schedules moving out by six months. In addition, Guy’s and St Thomas’ shared further information on the proposed location of the service within its estate, were Evelina London to be the future Principal Treatment Centre (April 2023).

The NHS England position on capital charges is that funding will be considered on a time-limited basis with an expectation that these are managed within existing revenue envelopes within a reasonable timeframe from go-live. This position is consistent with national programme capital investments including elective recovery, diagnostics, digital, mental

health, primary care and ambulance services. These costs will therefore not form part of the revenue affordability assessment and both Trusts were notified accordingly. The process, time limit and detail for funding capital charges will be discussed between NHS England and the successful Trust. The PCBC does not give any warranties or guarantees on capital charges or funding assumptions included in proposal submissions. However, both Trusts have outlined the assumptions on which capital charge calculations are based and both are deemed reasonable at this stage.

Guy's and St Thomas' expect cost efficiencies to be achieved in this service, in line with their existing efficiency targets, which will fully mitigate the impact of capital costs after five years. Similarly, the impact of capital charges is mitigated out within five years in the St George's bid. Effectively this means that both proposals assume that support for funding capital charges is mitigated out of Trust revenue assumptions after an initial period, and that proposals are affordable in revenue terms.

Both Trusts have submitted requests for transitional revenue support up to 'steady state'. NHS England has made clear that it would consider reasonable submissions, subject to a maximum three-year taper to zero. Such costs will not form part of the revenue hurdle assessment therefore, given that these would be expected to have been absorbed by the 'steady state' year and are non-recurrent. The process and detail for providing transitional revenue support will be discussed between NHS England and the successful Trust. This paper does not provide a guarantee of funding or give warranty to any of the transitional costs included in the proposals.

NHS England will also consider funding stranded costs/transitional costs for The Royal Marsden and for St. George's (if it is not the chosen option). Such costs are likely to be incurred both before and after service transition. NHS England would expect such costs to be mitigated out within three years of the service transfer and will work with both Trusts to ensure that such costs are minimised.

Letters of support have been received from the relevant ICB for each of the proposals.

## **7.2. Capital Costs**

The approach adopted in each proposal has been worked up by each Trust using standard early-stage NHS costing assumptions on such things as inflation, fees, contingency and optimism bias, plus benchmarked costs for previous Trust developments. We would not expect these to be identical, but they should be reasonably consistent and explicable. Both Trusts have engaged professional cost consultants and have produced the standard Business Case OB detailed cost forms. These are used in all NHS capital investments to provide a consistent method of presenting costing information. Appendix 5d - OB Forms summarise the line-by-line costings for each of the proposals.

The capital costs of both schemes are set out in the table below:

**Table 48: Capital costs of both schemes**

SUMMARY COST DESCRIPTION	Guy's and St Thomas'	St George's
	£000's	£000's
Works costs	£17,669	£12,914
Equipment costs	£3,321	£2,138
Other (non-work costs, optimism bias, inflation, contingency)	£16,400	£11,811
VAT	£6,948	£3,933
<b>Total</b>	<b>£44,338</b>	<b>£30,796</b>

Guy's and St Thomas' gross costs for its Evelina London proposal are £44.3 million and St George's gross capital costs are £30.8 million. £10 million of the former's costs will be met by a contribution from the Evelina London Children's Charity, this means that the NHS cost of the Evelina London proposal is £34.3 million. The Charity has provided a letter of support for their contribution. Both proposals are refurbishments of existing estate and therefore are expected to be better value for money than a new build solution. Drivers for the cost difference are:

- A works and equipment cost difference of £5.9 million. Work costs at London Evelina are circa £21 million set against those for St. George's Hospital of £15.1m million.
- To some extent this will be driven by the difference in location factors which impact on costs. The Evelina London being in Westminster and the St. George's Hospital being in Tooting means that works costs will be slightly different within central London, a higher cost location.
- Guys' and St Thomas's proposal is 4,708m<sup>2</sup> compared to St. George's, which is 4,210m<sup>2</sup>, the former being around 12% bigger in size. The difference in size reflects individual approaches that each Trust has taken, the location in which the service is would be based, and available space.
- The Guy's and St Thomas' proposal includes the refurbishment of ward space to accommodate services on the third floor of the Evelina London Children's Hospital building. The proposal includes decant costs. All areas to be refurbished are currently clinical spaces within children's hospital departments. The St George's proposal is to



refurbish current office accommodation. It will take more work to refurbish the clinical space due to the need to remove or change existing infrastructure.

- The Guy's and St Thomas' programme also includes the establishment of a new aseptic pharmacy which the Trust requires to provide additional chemotherapy for existing services but, as it would also be required for this service, the costs have been included within this programme. St George's has indicated that aseptic pharmacy will be absorbed within existing facilities.
- Guy's and St Thomas' would have to fully equip its service proposal; St. George's already has some of the equipment required to run the service. This equates to a cost difference of £1.5m more in the former's proposal.
- Both Trusts assume 15% for fees which is a standard NHS assumption.
- Both Trusts assume 10% planning contingency. Optimism bias is 23% for Guy's and St Thomas' and 21% for St. George's. Inflation assumptions are 12.7% for the former and 10% for the latter. The NHS England Regional Finance and Estates teams met with both Trusts to go through these assumptions which are aligned with what we would expect to see at this stage – total contingencies of around 41%-46%.
- The relatively small variations in assumptions for optimism bias and inflation reflect firstly that Guy's and St Thomas' has used a slightly earlier PUBSEC index to St George's, so there would be a slightly higher inflation % in the former's proposal. Secondly Guy's and St Thomas' proposal is at RIBA stage 0/1, while St George's is RIBA stage 1, so the latter is slightly more developed. See Costing Assumptions section below on PUBSEC.
- The differences in works and equipment costs then drive differences in fees, optimism bias, contingency and inflation provisions, although the percentage (%) assumptions used by both Trusts are consistent.
- There is no uniform way in which Trusts deliver capital investments although they use common principles. In this case, they have taken slightly differing approaches to specifications and follow the approaches that each Trust has taken historically in delivering capital projects.

### **Costing Assumptions**

The Tender Price Index of Public Sector Building Non-Housing (PUBSEC) measures the movement of prices in tenders for building contracts in the public sector in Great Britain. It is maintained and operated by the Building Cost Information Service (BCIS). The index has a baseline of 100 in 1975 and is updated quarterly to reflect the impact of inflation and increasing prices on the construction industry. It is standard in the NHS for costing capital projects. See Appendix 5e – PUBSEC Indices for the list of these.

**Guy's and St Thomas'** - The scheme cost assessment has been prepared by specialist cost advisors, using benchmarking data from previously delivered projects to inform the forecast. The costs are built up from:

- The Trust has used PUBSEC indices for Q2 2022 at 285 and inflated this to an assumed construction mid-point of Q2 2025 to anticipate contractors accounting for construction inflation on their tender price, given the duration of the construction period
- Healthcare Premises Costs Guides (HPCG) benchmark rates
- Fees at 15% as per standard NHS guidance
- Contingency of 10% and inflation of 12.7% has been assumed
- Optimism bias has been calculated using the Comprehensive Investment Appraisal (CIA) Model at 23% on works costs, equipment costs, non-works costs and equipment costs.
- VAT at 20% on all costs excluding fees.

**St. George's** - As this would be a refurbishment of existing space, no planning permission is assumed by the Trust. The costs have been provided by specialist cost advisors. The costs are built up from:

- The Trust has used PUBSEC indices for Q3 2022 at 294 and inflated this to an assumed construction mid-point of Q2 2025 to anticipate contractors accounting for construction inflation on their tender price, given the duration of the construction period. Currently BCIS predict an index of 315 in Q4 and the Trust has assumed inflation continues at similar levels in 2025 with a further 1.3% increase to construction mid-point, May 2025. The Trust has also added an additional 20% premium on top of this in recognition of current economic uncertainty. This will be subject to fluctuations as published by BCIS PUBSEC
- HPCG benchmark rates
- Fees at 15% as per standard NHS guidance
- Contingency of 10% and inflation of 10.2% has been assumed
- Optimism bias has been calculated using the CIA Model at 21% on works costs, equipment costs, non-works costs and equipment costs
- VAT at 20% on all costs excluding fees.

### **Capital Funding Assumptions**

**Guy's and St Thomas'** – The total capital cost of the scheme is £44.3million with £20million provided by national capital funding, £10million from charitable sources and £14.3million coming from ICS operational capital envelopes. A letter of support from the charity for the £10 million is available. No assumptions on impairment have been made by the Trust which

is reasonable given the early stage of design/development. This would be revisited in the Outline Business Case if this option is chosen. See Table 49.

**Table 49: Capital Funding for Evelina London Children's Hospital**

CAPITAL EXPENDITURE PROFILE						
FUNDING SOURCE	2023/24 Q4 £'000	2023/24 Total £'000	2024/25 Total £'000	2025/26 Total £'000	2026/27 Total £'000	TOTAL £'000
DHSC PDC funded capital expenditure	-	-	5,000	15,000	-	20,000
Charitable Funding	-	-	-	5,000	5,000	10,000
ICS CDEL/Trust Cash	2,359	2,359	4,176	3,394	4,409	14,338
<b>Total</b>	<b>2,359</b>	<b>2,359</b>	<b>9,176</b>	<b>23,394</b>	<b>9,409</b>	<b>44,338</b>

**St George's** – Funding for capital costs of £30.8million consists of £20million national capital funding with the balance of £10.8million coming from Trust/ICS capital sources. This is phased from the end of the current year (2023/24) to the end of 2025/26. Key assumptions are that the capital build will be impaired in the year of completion (2025/26) by 15% of the total capital cost and that 20% of the VAT is recoverable in line with guidance for estate solutions of this nature. There will be no revenue impact of the impairment as the Trust has a sufficient revaluation reserve for Grosvenor Wing. See Table 50.

**Table 50: Capital Funding for St George's**

CAPITAL EXPENDITURE PROFILE					
FUNDING SOURCE	2023/24 Q4 £'000	2023/24 Total £'000	2024/25 Total £'000	2025/26 Total £'000	TOTAL £'000
DHSC PDC funded Capital	1,359	1,359	10,947	7,694	19,999
ICS CDEL/Trust Cash	734	734	5,909	4,154	10,797
<b>Total</b>	<b>2,093</b>	<b>2,093</b>	<b>16,856</b>	<b>11,848</b>	<b>30,796</b>

### **Capital Costs – Risks and Mitigations**

The Guy's and St Thomas' proposal has 46% total contingency in for the capital costs at RIBA stage 0/1. The St George's proposal has just over 41% at RIBA stage 1. This includes planning contingency, optimism bias and inflation provision. Both proposals therefore currently include a significant level of risk contingency, and this would be expected to be applied at OBC and FBC stages to the point at which a guaranteed minimum price (GMP) - is achieved from contractors. There is always a risk in capital projects that costs will overshoot. The mitigations that are in place to manage this are:

- use of professional cost consultants, benchmarked costs and up to date PUBSEC indices which have been employed by both proposals
- detailed feasibility studies have already been done by each of the Trusts
- proposals are refurbishment rather than new build and therefore should have a lower risk than new build of enabling costs discovering significant problems – a common risk in building projects
- significant contingency in place in the costings submitted – 46% for Guy's and St Thomas's and 41% for St George's
- capital cost and funding risk will need to be managed within the ICS CDEL envelope and would be phased over two to three years. NHS England (London and South East regions) will oversee this if required.

### **Due Diligence**

The Trust submissions were reviewed by the Regional Estates and Finance Teams. A set of assurance and clarification questions was submitted to each Trust requesting further information on elements of their proposals. The estates key lines of enquiry focussed on the schedule of works, OB form detailed costings, planning issues, critical milestones, Private Finance Initiative (PFI) issues, net carbon zero, commercial and procurement strategy and so on. The financial key lines of enquiry focussed on capital and revenue affordability as laid out in the detailed Value for Money templates and financial tables submitted alongside the short form business case. The due diligence process was necessarily conducted at a high level given the early stage both proposals are currently at. The key test in this process was that each Trust was able to explain how they had determined the assumptions they were using and providing supporting evidence on any which required review. An example would be Trust assumptions on inflation and timelines – in this case both Trusts revised their submissions. The costing approach adopted by each Trust was also reviewed and deemed reasonable being similar to Trust approaches in other successful developments, using professional cost advisors, and appropriate to the early stage of development.

### **Conclusion**

The two Trusts have submitted proposals with different capital costs which are broadly consistently derived and explainable. Guy's and St Thomas's proposal is estimated to cost £44 million and St George's a lower cost of £31 million. The former includes funding from the Evelina London Children's Charity of £10 million which (because it is an external source of funding) reduces the net NHS cost of the Guy's and St Thomas' scheme to £34 million.

Due diligence on submissions was conducted by NHS England's Regional Finance and Estates teams and the response from the two Trusts was considered satisfactory given the stage at which proposals were at – RIBA stage 0-1 or pre-SOC/SOC. This is not a guarantee that costs will remain within the envelopes provided by each Trust but does provide assurance that their assumptions are reasonable. In particular:

- Both proposals have satisfactorily demonstrated that the capital costs of their proposals are affordable at this early stage.
- Both Trusts have put forward proposals which involve the refurbishment of existing estate with standard asset lives of around 30 years.
- Both proposals include works costs assumptions which look reasonable. Professional cost advisors have been deployed to develop costs in the standard NHS OB costing format.
- The difference in works costs between the two proposals is partly explicable by the size difference between the proposals, location factors, slightly differing approaches to specifications and the different approaches each Trust has taken historically in delivering capital projects.
- Both Trusts have included assumptions on non-works costs in line with NHS assumptions for RIBA Stage 0/1. These includes fees, planning contingency, inflation, and optimism bias. Both Trusts have included substantial overall financial contingencies in their capital costings – 46% for Guy's and St. Thomas' and 41% for St. George'.
- The £10m charitable donation included in the funding for the Guy's and St Thomas' proposal makes the capital cost to the NHS of both schemes broadly similar within the range £31m-£34m. Charitable funding is classed as external to the NHS in Business Cases.
- Because no capital charges are applied to donated or charitably funded assets, capital charges are only applied to the NHS costs of the Guy's and St Thomas' proposal – i.e. the £34m. This mean that the revenue impact of capital charges in both proposals is broadly similar – 30 years' worth of capital charges on £34m of capital cost for Guy's and St Thomas' and 30 years' of capital charges on £31m of capital costs for St George's. This will drive a small variation in the revenue impact of capital charges but is accounted for by the size differential between the two proposals.
- The focus on costs and affordability will continue as the future Principal Treatment Centre provider works up their proposal to outline business case and full business case stages.

### 7.3. Estate and Commercial

#### Scheme Description

Detailed descriptions of the facilities for each scheme are given elsewhere in the pre-consultation business case.

**Guy's and St Thomas'** – The Trust is proposing to refurbish existing space on the third floor of the Evelina Children's Hospital to provide a dedicated paediatric oncology ward for

inpatients and co-location with inter-dependent children's services, including PICU on the second floor.

**St George's** – The Trust is proposing the conversion of Grosvenor Wing (ground and first floors) into a dedicated Children's Cancer Centre (it is currently offices), co-locating a new paediatric oncology ward, day care unit, outpatients and range of educational, recreational and therapeutic spaces as well as research together, with opportunities to extend Children's Services further on the second floor.

### **Fit with Estates Strategies**

**Guy's and St Thomas'** – The Trust proposal aligns with the estates strategy to co-locate high acuity care with existing children's facilities (including PICU) and to work with POSCUs to deliver lower acuity care. The estate strategy was discussed at the Trust Transformation and Major Programmes Board on 5 October, with sign-off of the proposed estates option to be developed to SOC stage provided by the Trust Board on 2 November. Approvals were initially based on locating the service within the North Wing of St Thomas' Hospital, but subsequent Board approval to submit a revised SFBC for Evelina London was agreed at the Trust's Finance, Commercial and Investment Board on 12<sup>th</sup> April 2022.

**St George's** – The St George's estates strategy is to concentrate clinical activity on the main Tooting site, with ancillary requirements accommodated elsewhere or outside the Perimeter Road. This project would contribute to this aim, ensuring that the Grosvenor building is focussed on clinical activity rather than administrative offices. The Grosvenor building is immediately adjacent to existing paediatric facilities and a new MRI facility. The Trust decant option, extending the existing Blackshaw Annex, situates administrative functions outside the Perimeter Road but close to the clinical base.

### **Procurement**

**Evelina London Children's Hospital** – The Trust position is that, given the early stage of this programme of works, and the fact that a decision has not yet been made on the location of the future Principal Treatment Centre, the commercial and procurement strategy has not yet been developed but would consider ProCure 23 (P23) if Evelina London was the chosen site. The project team would progress the strategy in RIBA stage 2, being cognisant of the complex nature of the programme, focussing on value and selecting the right commercial approach to achieve this with proactive market engagement and effective risk management, complying with Guy's and St Thomas' and wider NHS procurement policies and protocols. Given where the Trust is, this is a reasonable position.

**St George's** – If chosen to be the Principal Treatment Centre location, the Trust's intention is to contract under the P23 framework. P23 is the NHS standard procurement framework for the design and construction of NHS capital projects so therefore includes all the potential suppliers to construct the building. Design development is at RIBA Stage 1 and in progress. The Trust intention, following completion of Stage 3 design, would be to novate the design over to the appointed Principal Supply Chain Partner (PSCP) under the P23 framework to



deliver detailed design development and building works. Given where the Trust is, this is a reasonable position.

### **Timelines**

The original project timelines for both Trusts were based on the decision-making business case being completed by late summer/autumn 2023. Both assumed that the new facilities would be fully open in 2025/26. Given that the DMBC date has now moved to Winter/Spring 2024, the timelines given by each Trust have moved out accordingly. Both Trusts have resubmitted their timelines which show completion in May 2026. The Evelina London timeline with key milestones is shown in the table below.

**Table 51: Evelina London Children's Hospital High-Level Timeline**

<b>TASK</b>	<b>END</b>
RIBA Stage 0/1	Nov-23
RIBA Stage 2	Feb-24
RIBA Stage 3	Jun 24
OBC	Jul 24
Contractor Procurement	Dec 24
FBC	Nov 24
Construction complete	May 26

The current St George's Hospital timeline with key milestones is shown in the table below.

**Table 52: St. George's Hospital High-Level Timeline**

<b>TASK</b>	<b>END</b>
Principal Supply Chain Partner (PSCP) Appointed	Mar-24
OBC	Mar-24
FBC	Jul-24
Main Works Commence	Nov-24
Main Works Complete	May-26
PTC Operational	May-26

See Appendix 5c – Schedule of Works for further detail.

## **Planning Consents**

**Guy's and St Thomas'** – The Trust assumes the usual requirements relating to planning consent and building control approval would apply. Applications for each of these would be made once designs have been progressed. As this would be an internal refurbishment project where the Trust does not envisage either change of use or modifying the building facade, it does not foresee the requirement for any major planning consents for the design and construction works. However, how the new building services plant will be integrated will present a space challenge, particularly if this is on the roof. Some minor planning consents may therefore be required for acoustic shielding and louvre screens. The Trust commits to ensure that any planning requirements would be met early in the project, allowing sufficient time in the programme for approvals and avoiding any delay to the construction works.

**St. George's** – The Trust assumes the usual requirements relating to planning consent and building control approval would apply. As this would be a refurbishment of existing space, no planning permissions are envisaged by the Trust.

## **Modern Methods of Construction**

Both Trusts have assumed that Modern Methods of Construction (MMC) will be used for new builds only and is not applicable as their schemes are essentially refurbishment of an existing building.

## **Private Finance Initiative Issues**

There are no PFI issues to note in either option.

## **Net Zero & Sustainability**

**Guy's and St Thomas'** – The Trust has said it would work with contractors to take a whole-life carbon and costing approach to the project. The Trust submission supports the delivery of the Trust Net Zero strategy by reducing transfers of care between hospitals and reducing travel by removing the need for multiple outpatient appointments at different hospitals. In addition, Evelina London is close to both Waterloo stations with mainline trains serving the south, south-west and south east of England, as well as London Underground services at Westminster and Waterloo stations. Finally, repurposing space will be less carbon intensive than a new build option.

**St. George's** – The Trust's submission is a key part of the overall Trust Net Zero strategy. Of the options evaluated by the Trust for the location of the children's cancer service, the option selected has the lowest carbon of all options presented and reduces transfers of care between hospitals as well as travel by removing the need for multiple outpatient appointments at different hospitals. This option extends the lifespan of the building, helping to avoid the embodied carbon needed to replace the existing Grosvenor building with a new one. St George's is also close to Tooting Broadway underground station and Tooting station with mainline trains connected to London Blackfriars and Wimbledon and ongoing connections serving south, south west and south east England.

## **Conclusion**

Both Trusts have submitted clear proposals which fit with their respective estate strategies and have clear timelines based on the DMBC being approved early in 2024. There are no significant planning consent issues to flag. Both proposals have submitted satisfactory content on modern methods of construction and net zero. Both Trusts provided satisfactory responses for assurance and clarification questions.

## **7.4. Economic Case**

The economic case is not part of the financial hurdle on revenue and capital affordability. However, it is important that proposals deliver value for money in the economic analysis. Both Trusts submitted economic evaluations which compared two options;

- The 'Business As Usual' (BAU) option of not taking on Principal Treatment Centre services currently provided by The Royal Marsden – the Trust's own total costs without the Principal Treatment Centre plus the cost of the Principal Treatment Centre service as provided by The Royal Marsden and St. George's.
- The 'Do Something' option of taking on the Principal Treatment Centre services at The Royal Marsden and St. George's – the marginal cost impact on the Trust of taking on provision of those services.

Trusts used the standard NHS England programme VfM template. Both Trusts entered costs and benefits over a 30-year period (being the average lifecycle for a refurbishment project). Costs and benefits are consolidated over a 30-year period and then discounted to provide a VfM ratio. The VfM ratio compares the value of incremental benefits to incremental costs on a 'real' basis, i.e., discounted for inflation, to give a 'net present social value' (NPSV) of costs and benefits. Inflation, VAT, and capital charges are excluded from the economic analysis.

Discounting in the public sector allows costs and benefits with different time spans to be compared on a common "present value" basis. The public sector discount rate for use in UK government appraisal is set at 3.5% in real terms. The VfM ratio shows the relationship between a project's costs and benefits by expressing the ratio as a decimal. If the ratio is greater than 1, the benefits outweigh the costs. If the ratio is less than 1, the costs outweigh the benefits. In investment cases one would often look for a high VfM ratio. However, in the case of service transfers for clinical reasons there would not always be significant net economic benefits. Here, a VfM ratio of at least 1 could be deemed satisfactory particularly where significant capital investment is required.

**Guy's and St Thomas'** – The economic case generates a VfM ratio of 1.3 compared to the BAU option, which is a modest net economic benefit. Generally speaking, service transfers of this nature would not necessarily be expected to generate large cost benefits so therefore this is a satisfactory output. The Trust looked at a number of long-listed options for locating the children's cancer service within the Evelina London/St Thomas' Hospital site if chosen to

be the future centre. The Trust then short-listed the options based on a series of criteria including:

- patient safety and clinical outcomes
- strategic fit
- patient and staff experience
- timescale and programme
- deliverability and future flexibility.

High level costings for the above shortlisted options were provided by Lexica, and scoring criteria across clinical and non-clinical domains were developed. The options were independently scored by members of the working group, whose membership included Evelina London Directors, Clinical Directors, colleagues from Essentia (estates and engineering), site team, and Heads of Nursing.

St. George's Hospital – St George's economic case generates a VfM ratio of 1.5. This proposal therefore generates a modest net economic benefit. Service transfers of this nature would not necessarily be expected to generate large cost benefits so therefore this is a satisfactory output.

The Trust considered and explored ten options before deciding was their preferred option for locating the children's cancer service within their estate if chosen to be the future centre. These options were reviewed in terms of various criteria to determine the options presented within the case. Key parameters for the appraisal are detailed below:

- clinical adjacency and impact on patient flow
- fit with overall Trust strategy as well as triangulated with the clinical, estates and research strategies
- minimise impact on existing services from space identified
- financial affordability (capital and revenue)
- best value
- position on site
- feedback from staff, patients, families and partners.

### **Sensitivity Analysis**

**Guy's and St Thomas'** – The Trust has run three specific sensitivities to the analysis. They are:

- A 25% reduction in private patient income
- A 25% reduction in the level of overhead efficiencies achieved by the move
- A 10% reduction in the level of charitable funding received by the Trust.

This scenario generates a VfM ratio of 1.1, and the Trust would seek to mitigate this by exploring further economies of scale across the entire Evelina London estate and service cost to tie into existing Trust productivity schemes. From a financial perspective, the Trust would need to generate an additional £1.5 m of efficiencies to cover off this downside scenario. This is considered a reasonable assumption – set against the Trust turnover of around £2.5bn the additional efficiency amounts to 0.06% across the Trust.

**St. George's Hospital** – The Trust has run three specific sensitivities to the analysis. They are:

- A 15% reduction in private patient income
- A 15% reduction in the level of research and development (R&D) funding
- A 15% reduction in the level of charitable funding.

This scenario generates a VfM ratio of 1.25 and the Trust has a number of planned mitigations in the event of reduced income:

- St George's Hospital Charity have committed to providing an additional £500k per annum which currently has only been factored into the above model from 2028/29. However, this could be drawn down from 2025/26 to help mitigate the financial position.
- If R&D grant income failed to fully materialise once the service is fully bedded in, then non-core workforce models would be reviewed. This would not involve any posts considered under the protected core service.

## **Conclusion**

Both Trusts have undertaken detailed option appraisals to shortlist viable options. NHS England would expect to see this outlined in greater detail in the economic case of the OBC for the successful option. Both Trusts have submitted proposals which meet a satisfactory economic VfM ratio minimum of 1. This means that at the sum of relevant discounted economic benefits is at least equal to net discounted economic costs, so is not effectively an economic 'loss'. Conventionally with a significant capital investment, we would expect to see an economic VfM return significantly greater than 1. Service transfers of this nature would not necessarily be expected to generate large cost benefits, therefore this is a satisfactory output from both Trusts. Both Trusts have run reasonable sensitivity analysis in their downside scenarios and have reasonable proposed mitigations in place. This would need to be tested in greater detail at OBC level.

## **7.5. Revenue Affordability**

**Guy's and St Thomas'** – The financial modelling assumes the service would transfer in May 2026. It is assumed that the service reaches a steady state position in 2027/28. The incremental impact on the Trust income and expenditure in 2027/28 is a deficit position of circa £3million, reducing to £1.9 million by 2030/31. This is driven by increased capital

charges associated with new facilities required to accommodate the Principal Treatment Centre service. Capital charges of around £2m annually are included within operating expenditure which is driving the operating deficit position as presented. Excluding incremental capital charges, the income and expenditure impact on the Trust is a small surplus in 2027/28. The Trust would need an additional efficiency of around 0.05% per annum to mitigate out the impact of capital charges after 2030/1 which is not deemed material and which it has agreed it would manage. See Table 53 below for the summary SOCNI.

**Table 53: SOCNI for Evelina London Children's Hospital Service Transfer**

STATEMENT OF COMPREHENSIVE NET INCOME								
Incremental impact of scheme on the I&E of GSTT								
	2023/24 £'000	2024/25 £'000	2025/26 £'000	2026/27 £'000	2027/28 £'000	2028/29 £'000	2029/30 £'000	2030/31 £'000
Operating income from patient care activities	£0	£0	£0	£15,536	£19,571	£21,068	£21,489	£21,919
Other operating income	£0	£0	£0	£2,394	£2,959	£3,018	£3,079	£3,140
(Employee expenses)	(£542)	(£749)	(£1,317)	(£13,994)	(£16,439)	(£16,792)	(£17,128)	(£17,470)
(Operating expenses excluding employee expenses)	(£28)	(£39)	(£70)	(£8,813)	(£10,873)	(£11,349)	(£11,561)	(£11,778)
<b>Less</b> Cash Releasing Benefits				£3,000	£3,060	£3,121	£3,184	£3,247
<b>Operating surplus / (deficit)</b>	(£570)	(£788)	(£1,387)	(£1,877)	(£1,722)	(£934)	(£937)	(£942)
(PDC Dividends Payable)	(£31)	(£208)	(£721)	(£1,124)	(£1,135)	(£1,087)	(£1,039)	(£990)
<b>Retained surplus / (deficit)</b>	(£601)	(£996)	(£2,108)	(£3,001)	(£2,857)	(£2,021)	(£1,976)	(£1,932)
<b>Adjusted financial performance retained surplus / (deficit)</b>	(£601)	(£996)	(£2,108)	(£3,001)	(£2,857)	(£2,021)	(£1,976)	(£1,932)

St. George's – the SOCNI is the standard business case format for summary revenue statements. In the first full year of service transition (26/27) there would be an underlying £278k operating surplus in the service (excluding capital charges) but a £1.7million deficit including capital charges from year two, with a stabilisation of the cost base giving an operating surplus of £268k (excluding capital charges) but including capital charges a deficit of around £1.4 million. The Trust then shows an annual incremental improvement. This position demonstrates that at an operating level the service contributes to the trust financial position from year two. The capital charges for the proposal however total around £2m per annum (split equally between depreciation and public dividend capital (PDC) interest) and drive a deficit for the Trust. This is the indicative additional funding that would be required, to be provided as capital charges funding, to ensure that the services do not operate at a



deficit. The Trust has indicated that it would mitigate the capital charges impact out in 2030/31

See Table 54 below for the summary SOCNI.

**Table 54: SOCNI for St. George's Service Transfer**

STATEMENT OF COMPREHENSIVE NET INCOME								
Incremental impact of scheme on the I&E of SGUH								
	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'001
Operating income from patient care activities	£5,838	£5,939	£8,685	£22,305	£22,710	£23,115	£23,520	£23,926
Other operating income	£15	£15	£238	£1,537	£1,780	£2,547	£2,992	£3,131
(Employee expenses)	(£3,755)	(£3,820)	(£6,913)	(£16,619)	(£16,922)	(£17,224)	(£17,527)	(£17,830)
(Operating expenses excluding employee expenses)	(£2,244)	(£2,283)	(£3,396)	(£8,902)	(£9,045)	(£9,187)	(£9,330)	(£9,472)
<b>Less</b> Cash Releasing Benefits	-	-	£149	£911	£928	£945	£962	£978
<b>Operating surplus / (deficit)</b>	(£146)	(£149)	(£1,237)	(£768)	(£549)	£196	£617	£733
(PDC Dividends Payable)	(£53)	(£385)	(£871)	(£898)	(£861)	(£825)	(£788)	(£751)
<b>Retained surplus / (deficit)</b>	(£199)	(£534)	(£2,108)	(£1,666)	(£1,410)	(£629)	(£171)	(£18)
<b>Adjusted financial performance retained surplus / (deficit)</b>	(£199)	(£534)	(£2,108)	(£1,666)	(£1,410)	(£629)	(£171)	(£18)

## NHS Income

**Guy's and St Thomas'** – Operating income from patient care activities' is comprised of specialist commissioning income and private patient income. The former reflects the service transfer income values in the letter from NHS England of 27 October 2022. These have been uplifted by the inflation rates provided by NHS England as set out in the NHS England VfM template.

**St. George's Hospital** – The Trust has modelled income in line with the NHS England letter received 27 October 2022 and inflated in line with the NHS England VfM template uplift assumptions.

### **Non-NHS Income**

The two proposals have similar levels of non-NHS funding from a combination of R&D income, grant funding and private income.

### **Pay Costs**

**Guy's and St Thomas'** – Staffing levels predominantly reflect the existing workforce structure. Staff have been costed at agenda for change mid-point, with inner London weighting and pay uplifts applied as per NHS England guidance.

**St George's Hospital** – Pay costings are aligned to the workforce templates submitted. Posts have been costed agenda for change rates and inner London weighting and inflated as per NHS England guidance over the appraisal period.

### **Non-Pay Clinical Costs**

**Guy's and St Thomas'** – An incremental increase in overheads has been included at 5% of modelled direct and indirect costs. This recognises that some categories of overhead expenditure would increase because of the transfer, notably facilities and estates costs, but many would not. The assessment also assumes that where such costs are impacted, a marginal efficiency is achieved through economies of scale. This has been modelled as a monetizable benefit within the VFM and within "Cash Releasing Benefits" in the SOCI above.

**St George's** – A review of overheads has been carried out to identify variable elements e.g., facilities, Clinical Negligence Scheme for Trusts (CNST) and defence costs, which have been costed based on existing St George's costs proportionately increased for the incremental service size and estates solution.

### **Transition Costs**

**Guy's and St Thomas'** – costs of a transitional programme team have been included from 2023/24 until the year after transfer, 2026/27. These transitional costs also include time for staff training and phased recruitment to roles not expected to TUPE with the service transfer. Cumulatively these amount to £3.2m, with the highest spend arising in the year of transfer at £1.3m.

**St George's** – There are some staffing areas where it is possible that more staff TUPE than required for the St George's proposal (assuming a 100% transfer of staff). A gross estimate of the risk is £1.7m although much of this is expected to be managed through choice and existing vacancies/turnover within the organisation. Therefore, a prudent figure of £0.65m has been allocated to manage the transition. An additional £0.27m has been allocated to support the transition period across the two sites and mainly is additional bank/agency nurses to support the short-term double running of the old and new wards.

### **Capital Costs**

**Guy's and St Thomas'** – Capital charges have been calculated on the capital cost with no impairment assumption. Should the asset be impaired this may reduce the overall capital

charge amount. Depreciation is calculated as a straight line over 30 years and PDC has been estimated as 3.5% of the average net book value in the year. The Trust has included around £2m annually within. The capital charges for the proposal represent a significant challenge to Guy's and St Thomas' and the profitability of the service. As a result, the Trust has included an assumption that NHS England funds capital charges to meet the revenue affordability hurdle.

**St George's** – Capital charges have been calculated on the capital cost net of a 15% impairment. Depreciation is calculated as a straight line over 30 years and PDC has been estimated as 3.5% of the average net book value in the year. The Trust has included approximately £1.5m annually within operating expenditure which is driving the operating deficit position as presented. The capital charges for the proposal do represent a significant challenge to St George's and the profitability of the service. As a result, the Trust has included an assumption that NHS England funds capital charges to meet the revenue affordability hurdle.

### **Cash Releasing benefits**

**Guy's and St Thomas'** – The Trust submissions shows modest cash releasing benefits of around £3m from 2026/27. This is driven by an increase in private patient income of £1.3m per annum and an efficiency factor assumed on marginal overheads of £1.7m per annum, transferring over where economies of scale and being on one site results in a lower level of marginal overheads in comparison to the baseline.

**St George's** – There are two cash releasing benefits. Firstly, pay efficiencies have been calculated through comparing the current total workforce across the two sites versus the total St George's model in the supporting workforce template, which leads to a £0.83m per year benefit based on 2022/23 pricing. Secondly, the refurbishment of the area would lead to a more energy efficient building and is estimated to give a £8k per year saving in energy costs. There is also a further cost avoided in backlog maintenance reduction which has been calculated at £3.12m and included as a non-cash releasing benefit within the VfM model.

### **Stranded and Transitional Costs**

Currently, NHS England is the commissioner for Principal Treatment Centre services. NHS England has outlined that the commissioner will consider the impact of both capital charges and transitional/stranded costs on Trusts. However, it is important to be clear that what is agreed is the principle only and that no warranties are given in this PCBC to funding specific costs included in Trust proposals. Before the commissioner would consider specific financial support there would be an expectation that all parties would explore potential mitigations for those costs and the shortest possible period to manage such costs within Trust operational revenue baselines – no longer than three years. Post a decision, NHS England would convene a task and finish group with Trusts to develop transition and cut over plans which include stranded and transitional costs. It is envisaged that this work would include clinical, workforce, estates and financial subject matter experts. There is a risk of an additional financial call on NHS England Specialised Commissioning for such costs and potentially a

pre-commitment on Specialised Commissioning budgets which may eventually be delegated to ICBs. The range of costs included in Trust proposals is given below.

**Recurrent** – maximum capital charges funding of around £2m in any given year for a fixed term dependent on the successful trust and final capital cost details.

**Non-recurrent** – Transitional costs for trusts in the range of £1.7m - £3.2m phased over three years.

**Non-recurrent Other** – This includes transitional and stranded costs for The Royal Marsden, and for St George's should the Evelina be chosen. NHS England will discuss this further with The Royal Marsden (and St George's if needed) once a decision has been made.

### **Potential impact on The Royal Marsden**

The service has an estimated deficit of £6.7m<sup>56</sup> in FY2022/23; and has generated a deficit for the last five years. Contributing factors include the provision of a service without the wider paediatrics infrastructure of a specialist Trust which does not enable efficiencies. The proposed service transfer would remove the headline deficit subject to the effective mitigation of stranded costs including overheads. NHS England will continue working with The Royal Marsden on how those costs can be mitigated and has indicated that it will in principle provided transitional funding although the quantum and phasing of that is still to be agreed. Both Trust proposals mitigate out the current deficit via a blend of overhead efficiencies, income growth for private patients and R&D, and pay/non-pay efficiencies.

### **Potential impact on St George's**

St George's is concerned about the potential impact on some of its services should a decision to be made that the Principal Treatment Centre would be Evelina London. More detail is set out in section 6.2.3 Potential impact on St George's children's services, along with potential mitigations.

St George's have also raised concerns about potential stranded costs that could result from this scenario. With regards management of stranded costs that could be incurred, NHS England has been clear that stranded costs should be mitigated out over a maximum of three years. If St George's does not become the site of the future Principal Treatment Centre, commissioners would work with the Trust and the ICB on a detailed decant and transition plan, post the final decision on the location of the Principal Treatment Centre, ensuring that stranded costs are minimised and over as short a time period as possible.

The Trust has shared initial broad estimates for these costs but these are before mitigations are applied, rather than a definitive final position. As noted above, if it were required, further work would be needed on these after a decision is made.

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<sup>56</sup> An independent report found that the current service generates a recurrent deficit of £6.5m per annum.

## Conclusion

Both Trusts have used the prescribed NHS England financial templates in their submissions. This includes default inflation uplift assumptions. Both Trusts have applied a consistent and reasonable set of assumptions in setting out their income and cost assumptions including both pay and non-pay. Transitional support costs have been included in both proposals. Both Trusts have applied appropriate capital charging methodology in their proposal submission. Both have included lifecycle costs in the financial model and in the calculation of capital charges. However, they differ both in asset cost and asset life. Guy's and St Thomas' has chosen to depreciate their asset over 20 years compared to the 25-year asset life used by St George's. This, along with lower capital costs, explains why capital charges for the St George's proposal are somewhat lower. If Guy's and St Thomas' were to adopt a 25-year asset life for their proposal this would clearly reduce the annual capital charge impact on the financial position of the Trust. This should be explored with Guy's and St Thomas' if this were to be the option chosen by commissioners. Both Trusts have submitted proposals which show that, net of capital charges, the proposed Principal Treatment Centre transfer delivers a modest operating surplus but that including capital charges both proposals have a deficit.

## 7.6. Risks

Risk management is recognised as an essential tool to deliver projects successfully and realise the intended benefits. Both Trusts have outlined key risks to delivery from a management perspective with their associated mitigating actions. See the tables 55 and 56 below.

**Table 55: Guy's and St Thomas' Summary Risk Assessment**

RISK	MITIGATION
Delays to decision-making of NHS England paediatric oncology programme and/or public consultation lead to significant programme delays, changed brief or cost increases.	Ongoing communication with NHS England to understand programme status and close engagement with public consultation process.  Robust project plan developed with clarity around gateways and key points for decision/escalation
Engagement with The Royal Marsden team and other users following conclusion of NHS England-led process results in material change to the brief	Analysis of NHS England-provided data lake has informed scope alongside current The Royal Marsden footprint. Robust process in place including a structured project initiation process to develop and iterate clear brief that meets user needs Work closely with design team to establish flexible design which is easily adaptable. This option already reflects feedback from The Royal Marsden and other colleagues so further changes are not anticipated.

RISK	MITIGATION
Design does not meet user needs	Early and ongoing structured engagement with clinical users and patients/families
Infrastructure upgrades more extensive requiring greater MEP replacement	Ensure full surveys are carried out in advance and loadings are determined to ensure power availability
Mechanical, electrical and plumbing (MEP) coordination between new and existing areas; risk of greater MEP upgrades; lack of as-built information; lack of power to support functions and lack of space to support new MEP requirements, particularly with new plant room areas	<p>Engineering department input to advise on the existing systems.</p> <p>Detailed coordination with the design team</p> <p>Using an experienced MEP contractor who is familiar with Guy's and St Thomas'</p>
Complexity of managing multiple projects across a number of construction sites (e.g., inpatient and day case facilities)	Employ experienced project managers (either internally within Guy's and St Thomas' and/or external consultants), coupled with a rigorous contract management system. Employ only experienced contractors who are adept at complex schemes
Contractor / consultant selection, procurement, performance, and staff turnover: risk that 3 <sup>rd</sup> parties don't have sufficient capacity or readily available management resources to deliver the project	<p>Ensure robust and clear brief issued to consultants and contractor as well as selection criteria. Pro-actively monitor appointments / replacement individuals</p> <p>Ensure that consultants are selected on the basis of a coordinated set of duties and deliverables</p>
Material and labour shortages	Larger contractors have greater buying power; therefore materials can be purchased in advance or stockpiled, to prevent programming issues. Ensure a detailed programme is maintained throughout the duration of the contract



**Table 56: St George's Hospital Summary Risk Assessment**

RISK	MITIGATION
Disruption to business continuity as the hospital's Atkinson Morley Wing will be temporarily designated as the hospital's main entrance.	Work areas to be screened off from all other operational areas
Construction access and logistics as main entrance and concourse to hospital (in Grosvenor Wing) will be closed and temporarily relocated	Traffic management and delivery schedules to be controlled to suit hospital operations.
Delivery of the project is dependent on decant of existing services within Grosvenor Wing, the majority of which is currently office space; there is therefore a risk of delay in gaining access to the site.	This can be mitigated and potentially eliminated through effective planning and there is a robust plan to decant the existing offices within the capital figures.
Risk of inflationary impact being higher than anticipated due to the current instability of the economy, leading to incorrect cost estimates.	Costs have been calculated with a prudent assumption of 7.22% inflation, in line with current industry standards.
The financial case uses baseline data from the Royal Marsden based on the information available to St George's at the time of calculation; the current accuracy of which cannot be guaranteed by St George's	If new or existing information becomes available this will need to be reviewed and reflected in updated workings.
Disruption of clinical services due to handover of services from Royal Marsden	St George's is part of the current join Principal Treatment Centre thus has expertise and positive relationships with clinical staff across the Principal Treatment Centre to manage risk appropriately.

## 7.7. Conclusions

The primary focus of this PCBC is the clinical aspects of the proposals. Finance is an important VfM consideration and although financial considerations are not part of the option scoring process, both proposals demonstrate that they are affordable and deliver a small and

positive value for money outcome. Because the proposal to transfer the Paediatric Cancer services is based entirely on clinical considerations rather than financial, the financial test is therefore about the affordability of capital and revenue costs. That does not mean, however, that financial issues are not important.

The financial detail included in proposal submissions is high level. Proposals are at an early stage of technical drawing – RIBA stage 0/1. Therefore, the level of due diligence done on submissions is also at a high level. As the detail of the successful proposal is developed to OBC stage, there will need to be a more detailed formal assurance process put in place with a paper to the national Joint Investment sub-committee between NHS England and the Department of Health and Social Care – given the national capital contribution.

Both Trusts have submitted reasonable and consistent capital costing schedules to support their proposals although there is variation in capital costs. The Guy's and St Thomas' proposal is estimated to cost £44 million and St George's a lower cost of £31 million. It includes charitable funding donations of £10 million which reduces the net NHS cost of the Guy's and St Thomas' proposal to £34 million. Both Trusts have satisfactorily demonstrated how capital costs have been worked up and how costs would be funded. Both Trusts therefore meet the capital affordability hurdle criterion subject to the national £20 million CDEL contribution being forthcoming and further cost detail, confirming the capital envelope, being worked up at OBC stage.

Both Trusts have applied consistent principles in their revenue costing submissions. Pay costs are based substantively on existing pay costs and non-pay costs follow a similar pattern. Income assumptions are based on the existing SLA with NHS England Specialised Commissioning with some local assumptions for private patient income, R&D and grant funding. These are deemed reasonable.

Both Trusts have submitted sensitivity analysis based on non-NHS income sources being less than planned. Both Trusts have shown, at a reasonable level, how this would be mitigated.

Both proposals meet the revenue financial hurdle criteria, subject to resolution of the impact of capital charges and show that the capital and revenue costs are affordable to both trusts.

NHS England has outlined that the commissioner will consider the impact of both capital charges and transitional/stranded costs on Trusts. However, what is agreed is the principle only and no warranties are given in this PCBC to funding specific costs included in Trust proposals. Before the commissioner would consider specific financial support there would be an expectation that all parties would explore potential mitigations for those costs and the shortest possible period to manage such costs within Trust operational revenue baselines.

Any eventual funding of this type will come from specialised commissioning budgets to be delegated in the future to ICBs, therefore it is important to be clear that this would be a pre-commitment should specific funding be agreed.

## 8. Engagement

### 8.1. Approach to patient, public, and staff engagement to date and during consultation

When a child is ill with cancer it can be a stressful time for them, their parents, carers, and families. The proposals for change set out in this pre-consultation business case are about ensuring children with cancer get the best care in the best way.

Capturing and embedding the voices of children with cancer, young people, parents and carers, staff and wider stakeholders into our processes is ongoing and iterative. We continue to take a flexible approach, led by these key stakeholders, to ensure we are engaging effectively.

Our approach to patient, public, and staff engagement for the forthcoming consultation will be multi-layered and targeted to different stakeholder groups, to ensure the best chance of hearing from as many different perspectives as possible.

We recognise that the vast majority of patients and families concerned with this process are clinically vulnerable and therefore it is essential that any engagement protects their wellbeing and focuses on involving them in a meaningful and safe way. We are taking a collaborative approach to planning our patient and public engagement through:

- seeking advice and guidance from clinical leads around the appropriateness and logistics of different engagement activities
- understanding from children and young people what is important to them so that we can focus on appropriate engagement that will truly influence things that matter in their experiences working with charities and advocacy organisations to draw on their insights directly as representatives of different patient and community groups and learn from what they already know, including engagement work they have done
- learning from Trust engagement leads around what has worked well and using existing networks and insights to avoid duplication
- understanding from children and young people what is important to them so that we can focus on appropriate engagement that will truly influence things that matter in their experiences.

At all key stages, as we progress towards consultation, we have reviewed and adapted our plans as we learn.

We are committed to working with expert organisations to reach and engage children and young people most affected by this programme of work, so their voice is heard strongly. Following feedback from charities and voluntary organisations, we have tested key materials, such as our animation script, with children and young people and are planning further testing

to ensure activities and materials are engaging, accessible and worthwhile for young people. We are also exploring how charities can support us in creating engaging social media content, produced by children and young people – encouraging their peers to respond.

Please see appendix 10 for our consultation plan. A report on our pre-engagement work can be found on our Public Consultation website.

## 8.2. Identification of stakeholders

At the outset of this programme key stakeholders and audiences to engage were identified. In addition, key findings from the early equality and health inequalities impact assessment and travel analysis identified several groups most likely to be impacted by any changes to children's specialist cancer services across south London and south east England (see Appendix 1 – Integrated Impact Assessment for more detail). Many of these groups have already been engaged as part of this work and will continue to be engaged through our consultation process.

For the consultation, we want to prioritise engaging with these groups, as well as those with protected characteristics under the equalities legislation, those who come from more deprived areas, and audiences and stakeholders we know have an interest in our proposals. Audiences and groups we have identified include:

- **Current and recent service users** and their families and carers from across the Principal Treatment Centre's catchment area
- Children and young people from **minority ethnic backgrounds** (reflecting the catchment area population)
- Children with physical and/or learning disabilities and autism
- Children, young people and families experiencing high levels of health inequalities and in areas of deprivation
- All children aged 15 years and under.

We will also prioritise engaging and consulting with:

- **clinical and non-clinical staff** – those working most intensively with those delivering the services impacted by the proposals but also engaging with wider staff groups to understand any impacts and other perspectives
- **research staff** – particularly those working on children's cancer research in south London and south east England
- **clinical staff and hospital teams** in the Principal Treatment Centre catchment area, including hospitals which provide part of the wider system of cancer care for children

- **voluntary and community organisations** which support children and young people and other communities identified here, including Healthwatch
- **health and care partners** – such as connected services, nearby trusts and organisations across the catchment area
- **political and elected representatives** – such as local MPs, councillors, local mayors and the Mayor of London

We will partner with expert community/charity organisations to support us to reach and hear from children and young people in a meaningful way.

### **Engagement with Health Overview and Scrutiny Committees (HOSCs) and consultation with local authorities**

Our plan describes the formal consultation that we are required to undertake with relevant local authorities under Section 244 of the National Health Service Act 2006 (as amended by the Health and Social Care Act 2012 and Health and Care Act 2022) and the Local Authority (Public Health, Health and Wellbeing Boards and Health Scrutiny) Regulations 2013.

Building on existing relationships with scrutiny committees, meetings have taken place with JHOSCs across the south London catchment and HOSCs across the south east region catchment.

Following initial briefings with HOSC Chairs in late 2022, we began formal engagement with HOSCs in January 2023. We met with the HOSCs for Brighton and Hove, East Sussex, Kent, Medway and West Sussex, and with the South West London and Surrey Joint Health Overview and Scrutiny Committee (JHOSC), and the South East London JHOSC. We briefed each committee and answered questions pertinent to their consideration of whether the service change was ‘substantial’ or not for their populations.

Brighton and Hove HOSC, South East London JHOSC, and South West London and Surrey JHOSC took the decision that the proposed changes were ‘substantial’ for their populations. All the committees recognised Principal Treatment Centre services were very important for their populations. We are engaging with all of them as stakeholders, as determined by their preferences and a proportionate and balanced approach across the entire geography.

South West London and Surrey JHOSC, Brighton and Hove HOSC and South East London JHOSC advised that they wish to be formally consulted and to provide three separate responses. In a meeting subsequent to this (July 2023), after joint working between Sussex ICB, NHS England London and NHS England South East regional teams, Brighton and Hove scrutiny committee formally agreed that they did not wish to undertake further formal scrutiny of these plans, but they wish to remain informed of progress. Surrey and South West London have conceived a JHOSC sub-committee to focus on this work.

NHS England will continue to engage and consult with the South West London and Surrey, and the South East London JHOSCs over the coming period and in line with their preferences. Plans for this will be drawn up with the committees.

Where scrutiny committees have not deemed the service change substantial for their population, we will continue to keep them abreast of developments, as per their request, including proactively sharing information that is presented to committees that are considering this as substantial change.

To ensure engagement from across the geography, during the development of the EHIA, colleagues from Medway Council and Surrey Heartlands ICB participated as panel members and actively contributed to the development of this working document.

### **8.3. Statutory responsibilities**

Since the inception of this project, engagement and involvement has been an essential strand of our work. Section 13Q of the National Health Service Act 2006 (as amended) states that:

- (1) This section applies in relation to any health services which are, or are to be, provided pursuant to arrangements made by NHS England in the exercise of its functions (“commissioning arrangements”).
- (2) NHS England must make arrangements to secure that individuals to whom the services are being or may be provided, and their carers and representatives (if any), are involved (whether by being consulted or provided with information or in other ways)
  - (a) in the planning of the commissioning arrangements by NHS England,
  - (b) in the development and consideration of proposals by NHS England for changes in the commissioning arrangements where the implementation of the proposals would have an impact on the manner in which the services are delivered to the individuals or the range of health services available to them, and
  - (c) in decisions of NHS England affecting the operation of the commissioning arrangements where the implementation of the decisions would (if made) have such an impact.
- (3) The reference in subsection (2)(b) to the delivery of services is a reference to their delivery at the point when they are received by users.



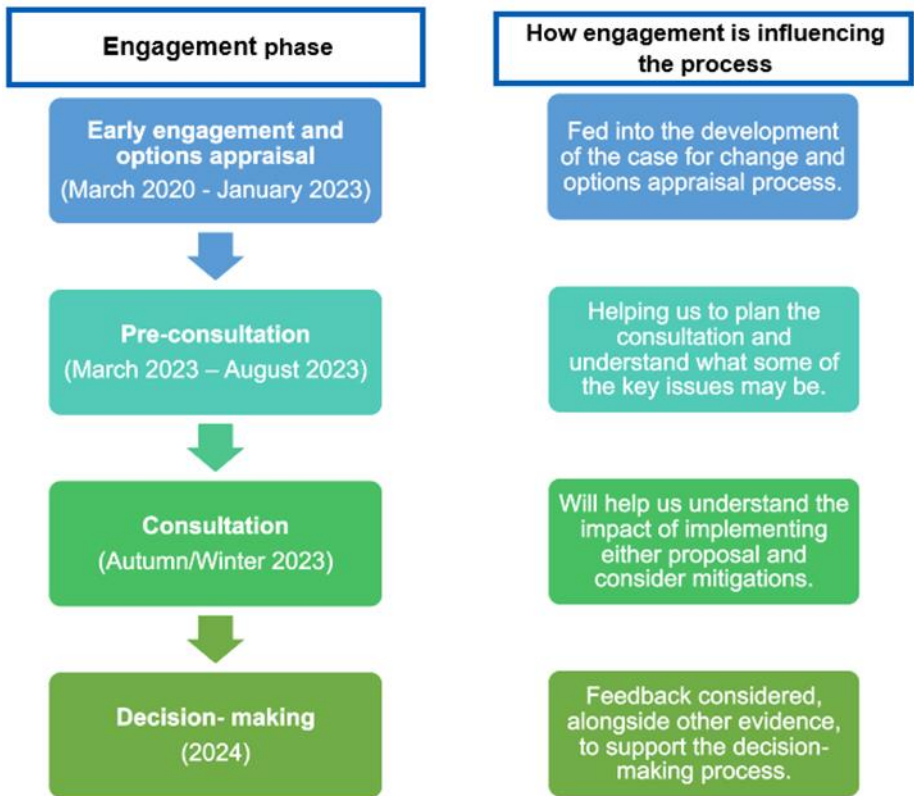
NHS England has a duty to exercise its functions with a view to securing continuous improvement in the quality of services provided to individuals and in the outcomes achieved from the provision of the services: specifically, the effectiveness and safety of the services and the quality of the experience for patients.

All our engagement plans have taken account of relevant equalities legislation, best practice guidance from law, and other statutory duties – all set out in our pre-consultation engagement and consultation plan – see Appendix 10. These are the key underlying duties that have governed the development of this pre-consultation business case.

### 8.4. Engagement to date

Early engagement was undertaken as part of a four-stage process which additionally includes pre-consultation, consultation and post-consultation. This section outlines the early engagement responsibilities and activities.

**Figure 14: Engagement stages**



Early engagement for this pre-consultation business case began after the conclusion of the national consultation between June and August 2019 on children’s cancer services and the publication of Professor Sir Mike Richards’ report on children’s cancer services in January 2020.

Early engagement helped us to:

- develop a case for change
- understand what is valued about current services
- explore potential solutions to ensure the Principal Treatment Centre for children with cancer from Brighton and Hove, East Sussex, Kent, Medway, south London and most of Surrey<sup>57</sup> fully meets national standards.
- understand what we should be looking for and how we should score the patient experience domain as part of the options appraisal process.

### **Early engagement activities**

Early engagement ran between September 2020 and March 2021. Below is an overview of activities including detail on how engagement has shaped our approach:

***Table 57: Early Engagement Activities***

Overview and Scrutiny Committees	Initial meetings with the six affected committees to understand what different views these groups had on whether the change was substantial.
Parents and carers	<ul style="list-style-type: none"> <li>• <b>Seven meetings of the Stakeholder Group</b> – 17 parents worked with us to comment on and influence engagement plans, options development and domain and sub-criteria content and weightings</li> <li>• <b>More than 70 contacts</b> with parents/carers/ - A combination of individual conversations (telephone or virtual) and emails to support flexible engagement – listening and feeding these into the Stakeholder Group</li> <li>• <b>More than 250 survey responses across two surveys</b> - The Association for Young People's Health spoke to children and young people about current patient experience and what was important, from their perspective, in terms of the service.</li> <li>• Clinical staff spoke to current parents of children and young people about what aspects of patient experience were important to them.</li> <li>• We heard from people from a range of different locations and backgrounds. These surveys helped us develop the clinical model and the sub-criteria for the patient and carer experience domain.</li> </ul>

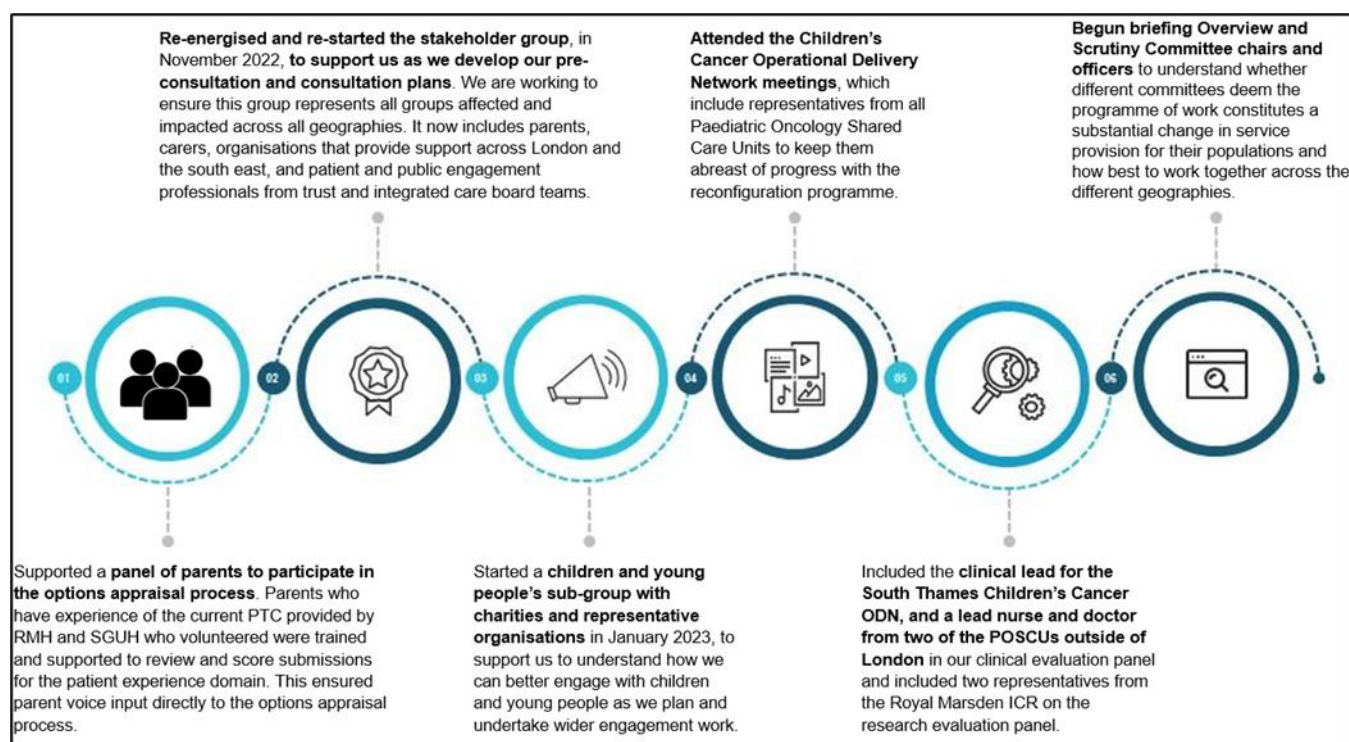
<sup>57</sup> A full description of the catchment area of the Principal Treatment Centre, including border areas, is in the introduction at section 1.3 Geography and Demography

Staff	<p>Staff have been involved in two working groups for the programme, shaping the fixed points and hurdle criteria for assessing the potential options, and the evaluation criteria for assessing the two proposals.</p> <p>The groups were:</p> <ul style="list-style-type: none"> <li>• a clinical advisory group involving clinicians from St George's, Evelina London, King's, and The Royal Marsden. They considered and commented on the fixed points, hurdle criteria and evaluation criteria. Representatives from the children's cancer and strategic paediatric network for south London and South East region attended the meetings. Both networks supplied written submissions to the chair of the clinical advisory group</li> <li>• a group of senior managers and clinicians from the same four Trusts who considered the impacts of the change on staff and what would be needed to deliver it (in terms of capacity and activity).</li> </ul> <p>There was also a workshop with staff from The Royal Marsden, St George's and Evelina London Children's Hospital to capture their views on what the future Principal Treatment Centre could deliver. Discussions highlighted concerns about support to staff during the change process. This led to more in-depth work with Royal Marsden staff which identified that:</p> <ul style="list-style-type: none"> <li>• staff wanted to be reassured that the benefits (such as childcare and opportunities for staff learning and development) they currently receive at the Royal Marsden would be maintained or improved upon by the future Principal Treatment Centre, wherever it is.</li> <li>• staff wanted to understand the likely difference to their travel times to work for both of the shortlisted options.</li> </ul>
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Early engagement was paused between March 2021 and spring 2022 while we waited for the national service specification to be published and other important decisions.

Since autumn 2022, we have undertaken a range of activities which is set out below.

**Figure 15: Engagement activities we have undertaken since autumn 2022**



## 8.5. Early Engagement key findings

Our engagement processes recognise the importance of hearing separately from children with cancer, and their parents and carers. Feedback from both groups has raised the importance to them of:

- access to specialists who are highly knowledgeable about care for specific cancers, and to the best treatments and interventions, including clinical trials
- child and youth friendly communications, care and environment
- continuity of care from clinical and non-clinical staff
- making travel to and from hospitals as quick, simple and stress free as possible
- facilities which are clean with access to good food
- access to a range of other services including mental health support.

Young people were more likely than parents or carers to talk about, or mention the critical importance to them, of youth friendly care and a general feeling of caring around them during visits. They also were more likely to mention the quality of the food, and the impact of treatment on their stress levels and mental health. The fact that the impact of treatment on their mental health and wellbeing came up despite not being the subject of any particular question emphasises how critical an issue it is to young people experiencing this kind of life crisis.

Parents and carers were more likely than young people with cancer to talk about or mention the importance of the quality of the cancer care that their children were receiving, and access to research and latest interventions. They were more likely than the young people to refer to logistical challenges and threats posed by, for example, lack of cleanliness and transport.

### **Impact and influence**

Feedback from children, young people and parents/carers during this early phase of engagement has already influenced a number of important aspects of our pre-consultation activities.

### ***Supporting communications and engagement planning***

- Informing frequently asked questions.
- Designing and agreeing the Association for Young People's Health survey questions to ensure they were accessible.
- Recommending Trusts engage with their own service users about the change, which has been undertaken by Trusts and fed into the options appraisal process.
- A proposal that we continue to seek direct views from children under 15 and young people with cancer or who have experienced cancer. This is work which is continuing.

### ***Options development***

- Several changes and additions were made to the patient experience domain criteria to reflect what was being heard. For instance, the requirement for the two Trusts to "describe how families/carers will be supported through the different phases of illness, with particular focus on support during periods of extreme difficulty, including acute and rapidly evolving situations" was added by parents. This subsequently formed one of the evaluation criteria used to assess the proposals.

### ***Staff***

Staff who are part of the current Principal Treatment Centre say they want the future centre

- to keep giving patients excellent care
- to keep doing really strong research
- to provide staff benefits (such as childcare and opportunities for staff learning and development) at least as good as the ones they currently get.

They are concerned about:

- staff leaving the service
- travel times to the future Principal Treatment Centre and its cost.

They have some questions about how services would be delivered in the future (this will be looked at in great detail as part of planning the move).

NHS England London also attends the Children's Cancer Network meetings, which include representatives from all Paediatric Oncology Shared Care Units, to give updates on the reconfiguration programme for discussion and feedback, and for the representatives to take back and share with colleagues in their local POSCU teams. This includes both the London and south east geography.

## **8.6. Pre-consultation engagement**

During the pre-consultation stage, which ran until August 2023, we aimed to broaden our engagement to ensure we are reaching all groups affected by or interested in the proposals for change. Our stakeholder map for this work has been – based on those highlighted in the Equality and Health Inequalities Impact Assessment (EHIA) and what we have been told in early feedback. In addition, it includes elected representatives such as MPs, local councillors, local authority leaders, elected mayors and other community representatives, clinicians and front-line staff in the affected organisations, and health and care system partners across the catchment area.

During the pre-consultation period, we strengthened our working with ICB Communication and Engagement leads across the geography to ensure we are maximising all opportunities to reach patients and their families, as well as other interested stakeholders, using established ICB relationships and channels where possible. The programme team liaised with all of the ICBs across London and the south east to seek their input into the stakeholder mapping to identify key local audiences for the pre-consultation and consultation period.

Recognising that Surrey and South West London Joint Overview and Scrutiny Committee are considering this substantial change, the Associate Director for Engagement at Surrey Heartlands ICB is a member of the programme Communication Engagement Group so also feeds in via this process.

MP engagement is important across the geography, as although areas of London may be perceived to lose or gain a PTC service in their constituencies, there are similar numbers of patients and families impacted across each area, and so MP interest from impacted areas across the south east, is being considered as equally important.

Written communication (including that for MPs) has been shared with ICBs for information.

For South East regional governance processes, programme updates have been shared at the Clinical Recovery and Transformation Committee, chaired by the Deputy Director of



Transformation and Recovery, Specialised Commissioning, South East Region. A deep dive took place in June 2023 ahead of wider communication as part of Specialised Commissioning Partnership Board (July 2023), which has representation from all ICBs on the Board. Further engagement on a one-to-one basis is also taking place.

### **Pre-consultation aims**

Throughout this period of engagement, our aim was to:

- socialise the case for change and options with stakeholders, tailoring our engagement approach to the needs of each audience
- build on previous engagement and insights from the EHIA – ensuring that we are reaching those communities most affected by possible changes to services in scope of any consultation
- ensure the case for change and options are discussed within the context of wider support services for children's cancer
- build and strengthen our relationships with local communities and stakeholders to prepare for and ensure an effective consultation
- demonstrate we are listening and responding to what is heard.

### **Pre-consultation focus**

The pre-consultation phase of engagement is not about seeking feedback on the case for change or national standards (as these have already been consulted on during the national consultation) or the different options (which will be focus of our planned consultation). Instead, during the pre-consultation phase, we sought feedback that helped us to understand how we can best consult, with different audiences and the kinds of information needed for them to fully contribute, through understanding:

- what information should be included in any consultation materials and how that information should be presented
- the best methods to engage with stakeholders, including the public, during consultation
- any communities we have not reached but need to.
- Pre-consultation engagement ran from mid-April 2023 to the end of August 2023, following the conclusion of the initial evaluation of the two shortlisted options. A summary of activities is included below:

- Over 2,015 organisations and individuals directly contacted to encourage responses Directly either by NHS England, Trusts or national and local charities on our behalf including:
  - specialist children and young people cancer charities/groups (including parent-led organisations)
  - Youth Forums/Councils/ Parliaments
  - Healthwatch organisations
  - Maternity Voice Partnerships
  - mental health umbrella organisations
  - Black and minority ethnic forums/ groups
  - pan-geography organisations supporting; refugees or asylum seekers, addiction and/or substance misuse issues, people involved in the criminal justice system, people experiencing homelessness and gypsies or travellers)
  - learning disability and autism groups
  - groups supporting people with physical impairments
  - carers (young and adult)
  - community groups in the most deprived areas within the catchment
- Meeting with our Stakeholder Group including parents and charities
- Attended a Teenage and Young Adults Forum at the Royal Marsden Hospital
- Session with POSCU staff and patient representatives
- Working with engagement leads from all three Trusts to reach their patient groups, forums and volunteers
- Visit to wards at all three sites to directly engage with children and young people and their families
- Session with representatives from overview and scrutiny committees from across the catchment area to discuss the consultation plan and document
- Sessions for staff from all three Trusts involved to provide an overview of our work to date and gather feedback as part of our pre-consultation engagement. A summary of the feedback received at each session was shared with staff from each trust, along with a survey to give staff who were unable to attend the engagement sessions an opportunity to share their feedback. Further engagement will continue throughout the change process
- Ad-hoc briefing sessions to provide information about the programme and seek feedback as part of our pre-consultation engagement
- Briefing session with Healthwatch representatives from across the catchment area

- Survey for young people and parents promoted via key national charities to hear from families from a broader geography
- Interviews with TYA patients from Evelina London
- Meeting with the Institute of Cancer Research
- Briefing document shared with GPs and community providers
- Follow up communications to all groups we originally contacted.

We received a significant amount of feedback during our pre-consultation engagement phase. A few examples of how feedback has influenced our thinking includes adjusting our consultation plan to include more ward visits, making changes to our animation script to reassure young people and their families that the service will be of similar or improved quality, creating new fact sheets and information about topics like research, finance and the decision-making process on these proposals for change, strengthening our governance by adding national charity representatives, getting external impartial reviews of key documents to ensure balance and non-bias and working with Trusts to develop and describe some of the potential mitigations that could be put in place to reduce the negative impact of the proposed changes. You can read more about feedback from the pre-consultation feedback report in our Public Consultation website.

## **8.7. Planned approach to consultation**

This section sets out:

- the scope for the planned consultation on our proposals for change, following the initial options appraisal process that has led to a confirmed shortlist of two options for consultation.
- how we will approach consultation, having listened to our key stakeholders, following best practice principles and ensuring it complies with our legal and statutory duties.

We have and will continue to update our approach with learning from the pre-consultation engagement stage of our work, that concluded in August 2023.

Although cancer is fortunately rare in children and young people, we recognise the vital role that the children's cancer Principal Treatment Centre plays, and the impact it has on children aged one to 15 who need this specialist care, their parents, carers and families.

Our activities are proportionate to this and take account of people having varying levels of interest and prior involvement in our proposals. In addition to our duty to consult with local authorities (via health overview and scrutiny committees), our consultation activities have been designed to reach and collect feedback from a broad range of audiences, including:

- those most impacted by our proposals, and specifically including those who may be disproportionately impacted compared to other groups

- under-served communities, including those from areas of deprivation and where there are existing health inequalities
- those with protected characteristics
- the digitally excluded.

How people want to participate in public consultations varies widely and we will offer different ways to receive information and participate. Once consultation is underway, we will maintain a flexible approach to assessing the effectiveness of the activities identified in this plan and will amend our approach as appropriate. To ensure our materials are designed to maximise opportunities to hear the views of children, a number of our materials are child-friendly, for example our animation (we were able to test our script with some children and young people), easy read summary document and questionnaire. We are also specifically commissioning play therapists to create (during consultation) age-appropriate activities to capture and engage children and young people.

Our consultation plan has been designed to ensure we deliver effective patient and public engagement and involvement as part of our obligations and legal duties under:

- the five tests for service change laid down by the Secretary of State for Health and Social Care and NHS England
- the National Health Service Act 2006 (as amended by the Health and Social Care Act 2012 and Health and Care Act 2022)
- the Equality Act 2010

And adhering to the Gunning Principles, set out in our consultation plan – see Appendix 10.<sup>58</sup>

Consultation responses will be used to:

- inform the decision-making process to decide which option is taken forward
- identify if changes are needed to help develop and strengthen the option taken forward
- identify actions and opportunities to improve/mitigate concerns raised.

Consultation responses will be used to shape the final option and allow us to consider mitigating actions for concerns that are raised. The results of consultation are an important factor in health service decision making and are one of several factors that need to be taken into account.

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<sup>58</sup> [The Gunning Principles and Digital First – Staying out of Court in an Online World — The Consultation Institute](#)

We will undertake a mid-point review to understand which communities and stakeholders we have heard from so that:

- we can make decisions about providing information differently or additionally to support people to respond
- we can proactively target groups that we are not hearing from in the second half of the consultation
- we can make a decision around whether an extension to the consultation will add value to the process
- we can test early feedback with different groups to understand the impact of the proposals on different groups.

The mid-point review process will involve a desktop review of responses received to date, demographic information, communications activities, and engagement work undertaken and planned. This intelligence and insight will form the basis of a discussion both internally (with the programme team and with communications and engagement leads) and externally with our Stakeholder Group and JOSCs (either at formal meetings or informally). Feedback from these conversations will form recommendations that will be implemented to redirect resources, if and as needed, to reaching identified priority groups either through commissioned activity or increases in proactive communications and engagement.

### **Consultation activities**

At the core of our consultation will be a public-facing document which clearly lays out the basis on which we are consulting, the background to the consultation including what children, parents, carers, stakeholders and staff have told us, a summary of the options we are consulting on and how they were arrived at, information about potential impacts of the options, and where to find more detailed technical information if needed. While clearly it contains technical information, we are endeavouring to make this document clear, accessible and easy to understand for a lay audience. It will support people's understanding of the issues and enable them to give their feedback. We will also promote other methods by which people can engage in the consultation.

The consultation document, associated materials and consultation questionnaire will be published online. To best meet the needs of people with additional requirements, our summary consultation document and questionnaire will be in plain English and also available in accessible formats, such as Easy Read, and in different print formats on request e.g., small and large print, audio, foreign language translation, Braille etc.

Our plan uses a mix of digital and non-digital response mechanisms, so no groups are disadvantaged – for example using online events and surveys as well as meeting face to face, on request, offering options for postal and telephone responses and going to children and young people and their families when they visit hospital for treatment. Feedback on preferred approaches has been gathered from the pre-consultation engagement phase.

Given that the children and young people we are most hoping to reach have conditions which make them clinically vulnerable, our approach will be to engage online first – being led by their families and carers about appropriate face to face activities. Our consultation plan (see Appendix 10) provides a more detailed overview of our planned consultation methods which include:

- general publicity, awareness raising and information sharing – via a mix of physical and digital channels
- designated webpage – with comprehensive guide to consultation, events and activities people can get involved with, regularly updated
- telephone, online and freepost options for feedback
- online and hard copy consultation questionnaire (including a children and young people friendly format) for completion in response to general publicity, specific outreach or after attending events
- writing to current and recent service users and their families/carers – to signpost to engagement opportunities
- online public events – panel-led plenary and breakout facilitated discussions to ensure everyone has an opportunity to give feedback on proposals
- targeted sessions with the Stakeholder Group and other charities/voluntary and community organisations already closely involved with us
- creative activities to reach children and young people with specific characteristics identified in the Equality and Health Inequalities Impact Assessment, undertaken by children and young people engagement specialists
- activities on existing sites with children and young people currently accessing services as well as parents/ carers – undertaken by play specialists
- information within wards/ departments
- discussions at existing meetings in the community
- staff engagement – in-person and online, particularly for those staff who work directly in these services
- wide use of animation
- posters with QR codes linking to online materials
- non-digital channels: completion of surveys by post, interviews by phone, printed documents in wards/given out by volunteers/in flats used by long-stay parents.

We will work closely with NHS England London's (and NHS England South East's as needed) freedom of information, correspondence, complaints, stakeholder engagement, social media and media teams, to ensure timely and appropriate responses to queries and



proactive media updates at key milestones. We will seek to promote consultation events and opportunities through the local news media and social media, working with the regional and trust communications teams.

We will continue to work closely with MPs to ensure that they feel adequately engaged with during the pre-consultation period and at consultation launch, during consultation and following consultation. We will pre-brief when necessary and time communications to MPs so that they receive information at the same time as other key stakeholders, taking a 'no surprises' approach.

Planned communications activities specifically aimed at MPs, local authority leaders, J/HOSC chairs and councillors, elected mayors, other elected representatives and community stakeholders include:

- briefing note at consultation launch
- regular on-going updates via email with key dates and information including:
- mid-point review overview
- post-consultation
- opportunities for briefing meetings if requested.

Detailed and sequenced communications plans will be put in place to cover the launch, midpoint and close of the consultation with proactive communications activity with all our stakeholders and reactive communications as needed. Additional communications assets in a variety of formats that illustrate the case for change and the expected benefits of the proposals will be developed where appropriate.

### **Consultation scope**

The consultation will seek to:

- ensure children and young people with cancer, their parents and carers, clinical, research and non-clinical staff providing the service, and other engaged stakeholders from the Principal Treatment Centre catchment area are aware of and understand the case for change and the proposed options for change. We will do this by providing information in clear and accessible language and in a variety of formats
- hear their views on the proposed options for the location of the future Principal Treatment Centre
- understand the impact of implementing each option and any mitigations or enhancements that could be put in place

- ensure NHS England London and NHS England South East, as joint decision-makers, are made aware of any additional and new information which may help to inform the options and the decision-making process.

This will help to inform the decision about which option is best placed to create a future Principal Treatment Centre that will give best quality care and achieve world-class outcomes for children with cancer for decades to come and should therefore be the location of the future centre.

### **Consultation questions and feedback mechanisms**

Our consultation questions will be focused on:

- assessing the degree to which there is a widespread mandate for change, based on how well the case for change is understood and accepted
- gathering insights on the expected good points, opportunities and drawbacks (of each option, and of the proposed change overall)
- understanding if there is any additional information or evidence that should be considered, or any alternative options that successfully address the case for change
- understanding insights related to travel and access, was a key issue of importance arising from our early engagement and pre-consultation engagement activity for several key stakeholders including parents and carers, staff and overview and scrutiny committees
- capturing mitigations/opportunities/actions that can help improve the options and ease transition to the location of the future centre.

### **Impact of consultation on outcome and decision making**

A public consultation is not a referendum. As set out above, what we will be seeking from the consultation responses is to fully understand the good points, opportunities and drawbacks that people believe the options will have. We want to understand all our identified stakeholders responses to the information we have set out in this pre-consultation business case. We want to understand how any drawbacks that stakeholders identify might be mitigated, and good points enhanced, and provide an opportunity for any additional evidence, data or alternative proposals and solutions to be put forward that would meet our case for change. Consultation responses will be used to help shape the final option, alongside all the other data, evidence and insights we have gathered, and allow us to consider mitigating actions for concerns that are raised, or further opportunities and benefits that should be exploited. This will be alongside other evidence gathered as part of the decision-making process and any other relevant information (such as the EHIA, outcome of the evaluation process and the environmental assessment).

Consultation responses will be used to:

- help decide which option is taken forward
- identify if changes are needed to help develop the option taken forward
- identify actions to progress opportunities and/or to improve/mitigate concerns raised

This decision-making process will comply with the NHS England guidance 'Planning and Delivering Service Changes for Patients'<sup>59</sup>.

Feedback from all engagement methods will be analysed by an external organisation and written up into a report, which will be made publicly available and shared with HOSCs and JHOSCs as part of the formal consultation. The report will be considered by NHS England and will help to inform the Decision-Making Business Case, on which a final decision will be based. The results of consultation are an important factor in health service decision making and are one of a number of factors that need to be taken into account.

### **Communications and engagement post-decision making**

Feedback from all phases of this reconfiguration programme will be shared with all affected Trusts and used to help inform preparations for implementation of the transition to the proposed future centre. We know from staff and service users/families, within the current Principal Treatment Centre, that there is some excitement about the possibility of being involved in creating/ influencing a space for the future service however some have also expressed concerns about the change. Feedback will be captured in a variety of forms, including in the write-up of feedback from the pre-consultation period; and of consultation responses.

In their proposals, both Evelina London and St George's set out their desire and commitment to work closely with parents, families and staff to co-design the future Principal Treatment Centre. We will continue to support this, including exploring with individual Trusts how patients and the public can be further engaged in looking at the model going forward – considering all aspects of care and the future ward and social environments. (Quality indicators are important in measuring this). We are conscious that The Royal Marsden NHS Foundation Trust itself has existing patient forums and structures. We will work closely with the Trust to sensitively manage the proposed change going forward.

All staff involved in the service will be asked to be part of this work. Patients and parents will also be able to help design the new service – the team running the future centre will make sure that people from different groups and communities have the chance to get involved.

We will continue to engage and communicate post-consultation, and in the implementation phase once a decision has been made, with other stakeholders too such as elected

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<sup>59</sup> [NHS England » Planning, assuring and delivering service change for patients](#)

representatives, health overview and scrutiny colleagues, system partners and others with an interest in this programme.

During consultation, we will be capturing contact details for those who may wish to continue to be involved in the process/ understand the outcome of the consultation. This will be an opportunity to enable an ongoing dialogue. We will also be discussing with our Stakeholder Group how they wish to continue to be involved. An important element of the post-decision making phase will be the development of quality metrics to ensure that good progress is being made against implementation plans. The national service specification includes a wide range of metrics on clinical care, patient experience and organisational structures and processes – see Appendix 9 – Service Specification Outcome Indicators. We will be drawing on these mandatory measures of outcomes and standards of care, in addition to consideration of other monitoring sources.

## 9. Approval process

### 9.1. Programme governance and decision making

This programme has had robust governance. This includes the work that has informed this pre-consultation business case which has been overseen by a Programme Board, advised by a number of expert groups (see below).

The Programme Board comprises commissioners for specialised services from NHS England London and South East regions, the two Accountable Officers for South East and South West London Integrated Care Boards, the Chief Executives of the four tertiary trusts in south London (The Royal Marsden, Guy's and St Thomas', St George's and King's) and the Chief Executive of the other Principal Treatment Centre in London for children under 13, Great Ormond Street, as well as two external expert advisers and two patient and public voice partners. After advice from the Joint Clinical Senate (May 2023) the membership was expanded to include patient/public voice representation. It is chaired jointly by the Executive Regional Medical Director for NHS England London alongside the Regional Director of Commissioning (Specialised Services) until May 2023 and subsequently the Programme Director.

The Programme Board is responsible for overseeing the delivery of the proposed service reconfiguration to provide advice and inform decision-making of NHS England leaders who anticipate taking a decision regarding the future location and provider for the relocated Principal Treatment Centre in early 2024.

The Programme Board has a formal reporting line to the London Regional Executive team.

The work of the Programme Board has been supported by a number of working groups. The South East Region was represented on all but the finance group.

- Clinical Advisory Panel (CAP) chaired by Professor Sir Terence Stephenson, former President of the Royal College of Paediatrics and Child Health, former chair of the Academy of Medical Royal Colleges, former chair of the General Medical Council, chair of the Health Research Authority. Michelle McLoughlin, NHS England's National Specialty Advisor was vice chair. CAP attendance included medical directors from each of the Trusts involved, clinical network leads and national Clinical Reference Group (CRG) representatives. At a later stage, an independent clinical review group was established with clinicians external to the current providers, and in some cases external to London, to advise on issues which those with an interest in the outcome understandably found it difficult to deal with objectively.
- Stakeholder Group chaired by Michelle McLoughlin. This group originally comprised parents and carers using current services. Its work paused when the overall programme

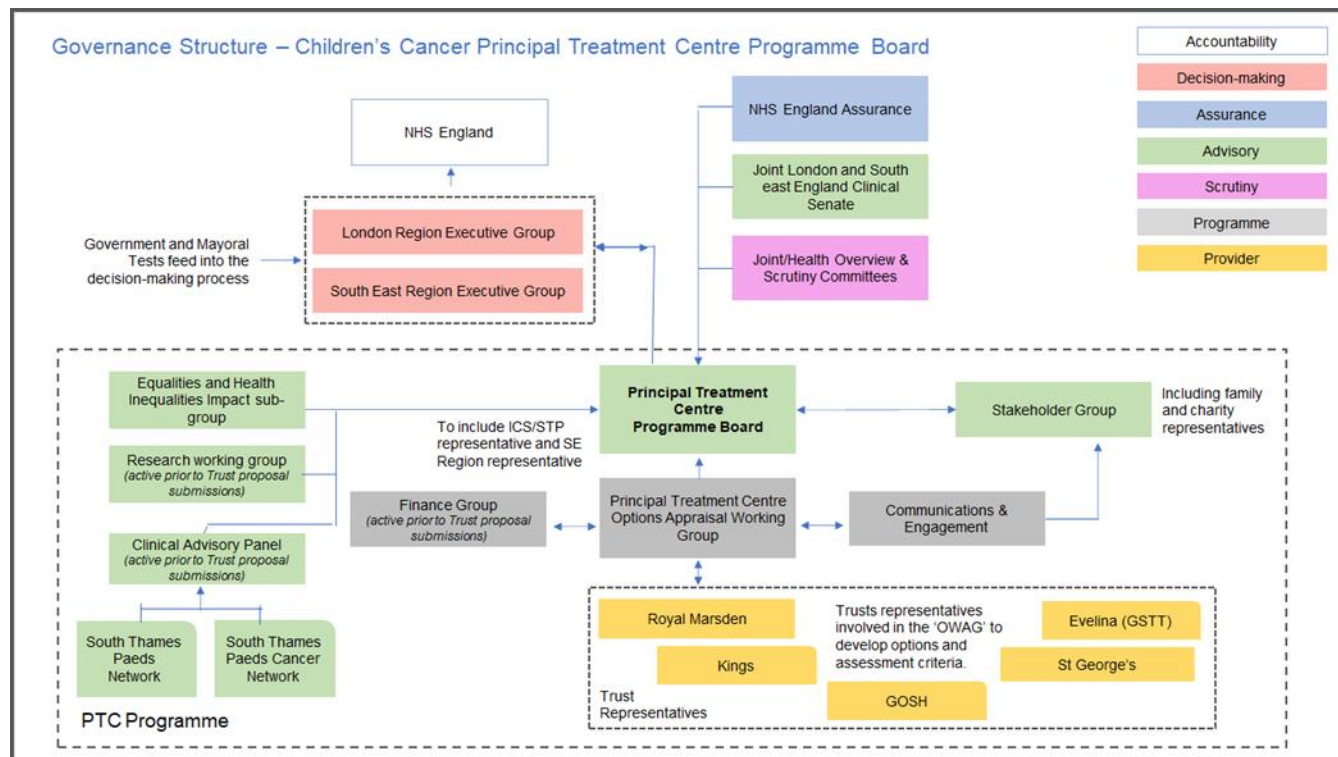
paused due to Covid and was re-established in November 2022 with a wider range of charities involved as well as parents and carers with a short-term sub-group particularly looking at how to incorporate the voice of children aged 15 and under with cancer, and young people aged 16 and over with survivorship experience.

- Options Appraisal Working Group (OAWG) chaired by the Medical Director for Specialised Commissioning in London. Attendance included senior managerial and clinical representatives from each of the Trusts involved, NHS England Programme of Care leads and Public Health leads. This group disbanded in 2021 when it had finalised and submitted the enabling criteria for the options appraisal.
- Communications and Engagement Group chaired initially by the Director of Transformation and Programmes at NHS England London Specialised Commissioning and now by the Deputy Head of Strategic Communications for NHS England London. Attendance included communication leads from each of the Trusts involved. Its work paused when the overall programme paused due to Covid, and it was re-established in November 2022. It has now been expanded to include engagement leads from the Trusts.
- Finance Group chaired by the Director of Operational Finance at NHS England London. Attendance comprised finance leads from each of the Trusts involved, south west London and an options appraisal analyst.
- Equality and Health Inequalities Impact sub-group convened and chaired by a Consultant in Public Health at NHS England London, and consisting of representatives from NHS England - London, NHS England - South East, South West London. South East London and Surrey Heartlands Integrated Care Boards, the South Thames CYP Cancer Organisational Development Network, Kent and Medway Cancer Alliance and Medway Council, and two parent and family representatives. Professional roles include those with expertise in children's cancer care, patient engagement, equality and diversity, public health and health inequalities. They are independent of the two Trusts involved in the options appraisal process. Individual meetings were also held with Sussex Integrated Care Board and Young Lives vs Cancer.

The diagram below sets out the programme governance structure. The Programme Board and working groups were paused in line with the overall programme pause due to Covid throughout some of 2020 and 2021. Relevant and necessary groups were re-established following the programme pause to continue driving forwards and supporting the programme.



**Figure 16: Principal Treatment Centre review and reconfiguration programme governance structure**



## 9.2. Equality and Health Inequalities Impact Assessment

An Equality and Health Inequalities Impact assessment (EHIA) is a tool intended to help with decisions by assessing the consequences for different groups within the population to which the proposed decision, policy or service change would apply. It results in recommendations as to how the positive consequences of the proposed change could be enhanced and how the adverse consequences could be avoided or minimised (mitigation). An EHIA can be used to demonstrate compliance with the Public Sector Equality Duty (PSED) and the duty to reduce inequalities of access and outcomes under the NHS Act 2006 (as amended by the Health and Social Care Act 2012). An additional purpose of the EHIA will be to support consideration of whether the first of the “London Mayor’s six tests” has been met (see section 9.6 London Mayors Six Tests). This first test concerns health and healthcare inequalities.

The Interim EHIA is included in Appendix 1 – Integrated Impact Assessment. This section summarises the impact of both options, the accompanying travel analysis and the recommendations made to mitigate the potential adverse impacts of the proposed change to the Principal Treatment Centre for south London and the south east. It should be noted that development of the EHIA is an ongoing process, the Interim EHIA will be revisited and updated regularly following findings and activities carried out as part of the public consultation and overall reconfiguration process.

### **9.2.1. The change impacts that need to be assessed**

Both the shortlisted options are compliant with the national service specification, offer capacity to meet the needs of the service and are deemed viable options (via the options appraisal process). It is recognised that in gaining the wider benefits from our clinical model, some families would need to travel further for care compared to now (and some would have shorter journeys). Therefore, the main change considered by the EHIA is the proposed change in location of the current Principal Treatment Centre and the implications of this change on patient travel arrangements such as journey time, complexity of journey (including parking arrangements) and cost. This change will affect current (at the time-of-service transfer) and future patient cohorts, as well as staff groups.

Also of note is the prospect of the service change process itself and the uncertainty that it may cause for patients and their families. For example, they may have concerns about moving to a site they have not been to before (including accessibility of the site) or potential changes in their relationships with known healthcare professionals. While these concerns are something that any patient or family may experience, it may be of more consequence for certain groups e.g., those with communication difficulties or disability, and this needs to be considered.

### **9.2.2. The EHIA process**

An EHIA sub-group has been established to conduct the EHIA process (led by the NHS England London Public Health team). The sub-group includes professionals and patient representatives from across the Principal Treatment Centre area.

Professional roles include those with expertise in children's cancer care, patient engagement, equality and diversity, public health and health inequalities. They are independent of both the potential future Principal Treatment Centre providers. Both organisations for each of the shortlisted options had the opportunity to provide input to the Interim EHIA.

The EHIA sub-group reviewed several sources of information to inform a summary of the potential positive and adverse impacts of the proposed Principal Treatment Centre relocation for people with protected characteristics or other characteristics:

- an equalities profile (see Appendix 2 – Equalities Profile Report for the Principal Treatment Centre catchment area). This report describes the epidemiology of childhood cancer and socio-demographics for the catchment area of the Principal Treatment Centre. A summary of the findings of this report have been included in section 1.3, Geography and Demography, of this document.
- a travel time analysis on the estimated changes to travel time for patients within certain demographic groups or areas
- qualitative insight collected through patient engagement activities.

The sub-group considered each of the population groups shown in the table below and were asked to ascertain any differential impacts of the proposed changes in relation to both the Public Sector Equality Duty and on inequalities in access to, and outcomes from the service.

**Table 58: Population groups considered in the EHIA**

Those with protected characteristics under the Equalities Act 2010	People who typically experience inequalities in health status or access to healthcare
<ul style="list-style-type: none"> <li>• Age</li> <li>• Sex</li> <li>• Race and ethnicity</li> <li>• Disability</li> <li>• Pregnancy and maternity</li> <li>• Marriage and civil partnership</li> <li>• Gender reassignment</li> <li>• Religion and belief</li> <li>• Sexual orientation</li> </ul>	<ul style="list-style-type: none"> <li>• Looked after and accommodated children and young people</li> <li>• People or families on a low income/living in more deprived areas</li> <li>• People with poor literacy and/or language barriers.</li> <li>• People with caring responsibilities (including young carers)</li> <li>• People living in more remote areas</li> <li>• Refugees, asylum seekers (including unaccompanied children)</li> <li>• People with addictions and/or substance misuse issues</li> <li>• People involved in the criminal justice system: offenders in prison/on probation, ex-offenders</li> <li>• Homelessness: people living on the street, staying temporarily with friends or family, in hostels or B&amp;Bs</li> <li>• Family structure: single parents/carers</li> <li>• Families experiencing digital exclusion</li> </ul>

### 9.2.3. Summary of travel times analysis

As part of the evidence to assess the impact of the proposals, a travel time analysis was undertaken to understand the effect on travel times for children and their families.

The analysis looked at travel times by public transport and car to The Royal Marsden and compared this with journey times to both Evelina London Children's Hospital and to St George's Hospital. This analysis was conducted on a catchment population basis. This means that journey times have been modelled for all children resident in the Principal Treatment Centre catchment, based on the Lower Super Output Area<sup>60</sup> where they live. The

<sup>60</sup> Lower Super Output Areas (LSOAs) are a small area of geography averaging approximately 1,500 people. Each LSOA has a population weighted centroid (PWC) which represents the centre of the distribution of residents across the LSOA. These were used as the child resident origin points for the analysis.

travel times are for the fastest trip departing from the resident origins for arrival at midday on a Wednesday. Details of the methodology can be found in Appendix 1 – Integrated Impact Assessment.

We also analysed the likely impact on median travel times for a change in location of radiotherapy services, currently provided at The Royal Marsden.

It should be noted that the main purpose of the population-based travel analysis is to assess the impact of the proposed change on groups with protected characteristics or other vulnerabilities. It is in *addition* to the comparison (and scoring) of changes to patient travel undertaken as part of the evaluation of the patient experience component of the options appraisal. This is described in section 6.1.2 Qualitative benefits appraisal: comparison of specific scores.

Both sets of travel time analyses utilise the same underlying methodology. This is explained in more detail in Appendix 1 – Integrated Impact Assessment.

#### **9.2.4. Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment**

Please see the Appendix 1 – Integrated Impact Assessment for more details on the current travel times to The Royal Marsden.

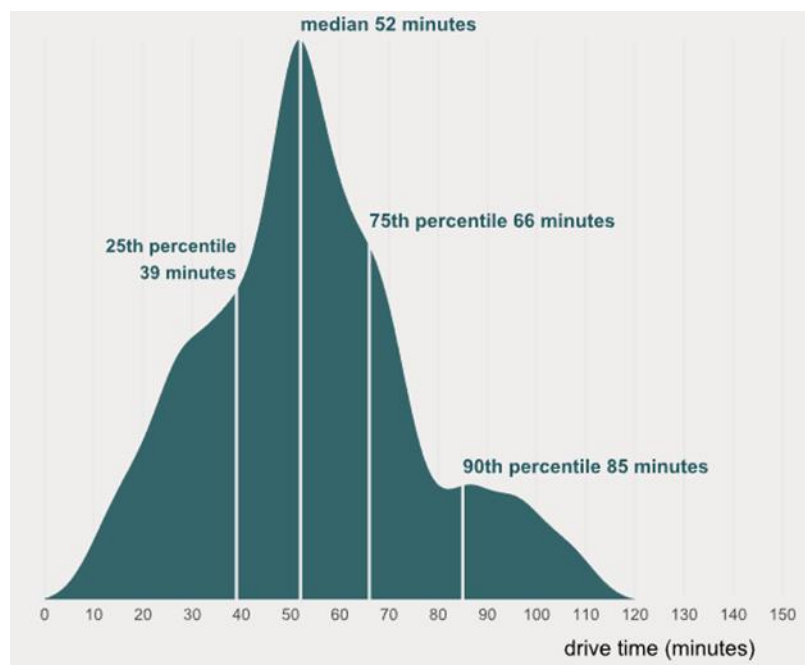
##### **Journeys by road vehicle**

The median travel time for driving to The Royal Marsden was 52 minutes. This increases to a median of 61 minutes for journeys from outside London. For those non-London residents with the longest journeys<sup>61</sup>, the travel time is 95 minutes. Overall, 66% of the Principal Treatment Centre catchment population has a travel time of less than an hour, with journey times ranging from a minimum of 3 minutes to 85 minutes at the 90<sup>th</sup> percentile. For residents living in areas categorised as the most deprived, 46% have a travel time of less than an hour.

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<sup>61</sup> The longest journeys are represented by the 90<sup>th</sup> percentile travel time, that is the travel time below which 90% of all other travel times lie. The purpose of choosing the 90<sup>th</sup> percentile, rather than the maximum, is to mitigate the impact of outliers and avoid drawing conclusions about journey time based on small numbers of children.

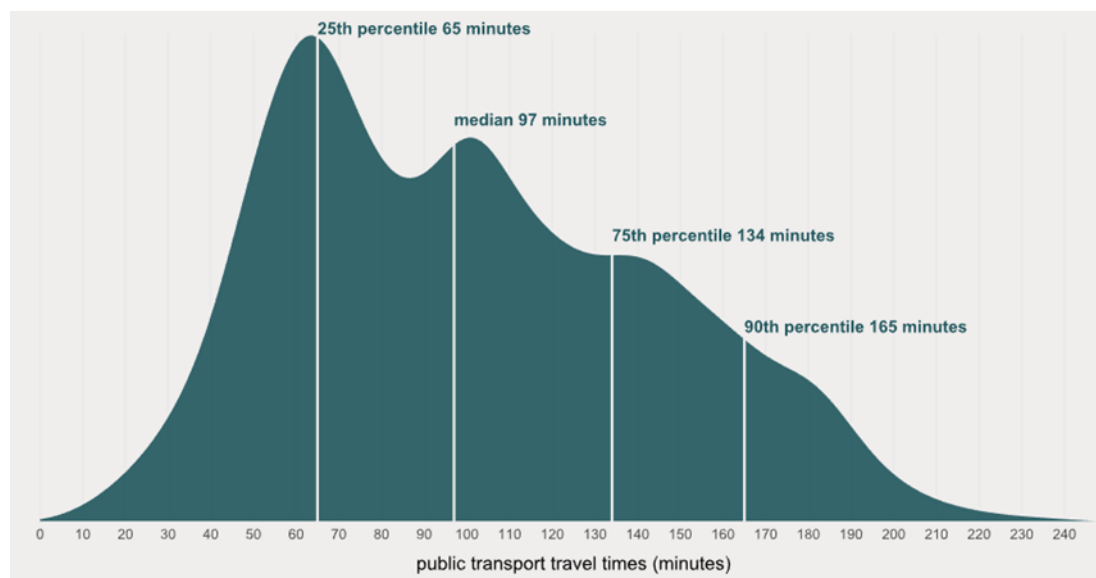
**Figure 17: Drive times by road vehicle to The Royal Marsden for residents (children) of the Principal Treatment Centre catchment**



### **Public Transport**

Public transport travel times to The Royal Marsden had a median travel time of 97 minutes. This increased to a median of 133 minutes for journeys from outside London. For non-London residents with the longest journeys the travel time is 180 minutes. Overall, 20% of the Principal Treatment Centre catchment population has a travel time of less than an hour, with journey times ranging from a minimum of 5 minutes to 165 minutes at the 90<sup>th</sup> percentile. For residents living in areas categorised as the most deprived, 14% have a travel time of less than an hour.

**Figure 18: Public transport travel times to The Royal Marsden for residents (children) of the Principal Treatment Centre catchment**



### 9.2.5. Impact of the proposed options on journey for children resident in the Principal Treatment Centre catchment

Please see Appendix 1 – Integrated Impact Assessment for more details on the impact of the proposed options on journeys for children resident in the Principal Treatment Centre catchment. Please note that the impact on journey times is summarised to either potential future Principal Treatment Centre location, without differentiating between them. This is in keeping with the principles of the Equality and Health Inequalities Impact Assessment. Further travel time analyses to each potential future Principal Treatment Centre location for children living in different local authorities within the catchment is presented in Appendix 1 – Integrated Impact Assessment..

#### Journeys by road vehicle

- Modelled travel times by road vehicle to either potential future Principal Treatment Centre location are increased as compared to current travel times to The Royal Marsden. Non-London residents are the most negatively impacted, with increases in travel time of approximately 30 minutes. For non-London residents with the longest journey times\*\*, this increase could be up to 41 minutes. Overall, 46% of the Principal Treatment Centre catchment population would have a travel time of less than an hour (compared to 66% for the current location).
- For residents living in areas categorised as the most deprived, 40% would have a travel time of less than an hour (compared to 46% for the current location).



## **Public Transport**

Modelled travel times by public transport to either potential future Principal Treatment Centre location are reduced as compared to current travel times to The Royal Marsden. There would be a reduction in travel time for both London and non-London residents to either location, with non-London residents experiencing the greatest benefit (with a reduction of at least 20 minutes). For non-London residents with the longest journey times, this reduction could be at least 26 minutes.

- Overall, 37% of the Principal Treatment Centre catchment population would have a travel time of less than an hour (compared to 20% for the current location).
- For residents living in areas categorised as the most deprived, 33% would have a travel time of less than an hour (compared to 13% for the current location).

## **Radiotherapy services**

Travel time analysis found that travel time by road will increase on average by 22 minutes to University College Hospital (as compared to The Royal Marsden) while the same journey by public transport will reduce by 27 minutes.

For those living in areas categorised as the most deprived, journey times to University College Hospital (as compared to The Royal Marsden) will increase on average by 20 minutes by road and reduce by an average of 40 minutes by public transport.

## **Impact on costs associated with a difference in travel time to a future Principal Treatment Centre location**

In addition to changes in travel time for some people in the catchment, the importance and impact of additional costs due to a longer or more complex journey on some geographic or demographic groups are recognised. Conducting an analysis of the different costs of travelling to any of the three providers involved in this change programme is complex, due to (but not limited to) the following reasons:

- all the different possible routes for train or road journeys from multiple locations across the Principal Treatment Centre catchment
- variable ticket pricing for public transport
- lack of publicly available information on certain types of transport. For example, taxi fares from train stations to the hospitals
- variation in fuel type, consumption and costs for road vehicles.

However, qualitative insights from patients and families on the impact of additional costs associated with travel have been collated and will continue to be throughout the consultation period. These will feed into the development of recommendations for mitigating actions.

## 9.2.6. The EHIA: summary of impacts

### Impact relating to travel time

The EHIA identified (via the travel time analysis described above) the following impacts in relation to changes in travel time.

- There are some differential positive impacts for children living in the most deprived areas and rural areas when travelling by public transport.
- There are some differential adverse impacts for children living outside London or in rural areas when driving.

### Other impacts: positive

The service change programme is aimed at achieving full compliance with the national service specification for Principal Treatment Centres, ensuring all required services including a paediatric intensive care unit are delivered on the same site as the Principal Treatment Centre along with a high number of other specialist children's services which, if not onsite, must be readily available.

We expect the proposed changes (described fully in section 3.6 Overall impact of the clinical model) will:

- end hospital transfers from the specialist centre of very sick children with cancer who need or might need intensive care, eliminating the added risks and stress these transfers bring. If children did need an intensive care bed, the intensive care unit would be very close
- enable children with cancer to get more of their care on the specialist cancer ward, and minimise the number of children admitted to intensive care, which can be very frightening for children and families. With intensive care specialists on site:
  - children would never be transferred as a precaution in case they might go on to need intensive care
  - specialist input from intensive care teams could help some children avoid intensive care. Cancer specialists say cancer services in children's hospitals with intensive care units on site have fewer intensive care admissions for this reason.
- have more services on the same site than now, improving experience for many children and families
- meet the national requirements and be capable of offering cutting-edge treatments that need intensive care on site
- make it easier for different specialist teams treating the same child to work closely together, improving care for children and supporting new kinds of research

- make it easier for specialist cancer and non-cancer specialists to learn from each other and share learning, and for staff to share their learning with staff who deliver other specialist children's services, and to learn from them. As well as being good for children's care, this would be likely to help the future centre to keep and attract new staff. While this will benefit all children attending the Principal Treatment Centre, the EHIA sub-group concluded that there may be a differential positive benefit for certain groups who may have a higher need for additional paediatric specialties (e.g., those with complex cancer care needs, co-morbidities, who are disabled or have other conditions) or with communication difficulties (e.g., language barriers or poor literacy) where the reduced need for treatment transfers/multi-site appointments may be beneficial.

### **Other impacts: adverse**

The EHIA sub-group also concluded that the following groups may experience a differential adverse impact in terms of the complexity or cost of their journey, or, for patients and their families under the care of the Principal Treatment Centre at the time of service transfer, uncertainty brought on by the prospect of the service change process itself. Additionally, onsite accessibility, such as parking, signage, family facilities, wheelchair access etc, will be an important consideration for many. These groups include patients and/or families:

- with very young children (under five years)
- from ethnic groups other than white
- where a family member is disabled (or has a spectrum disorder)
- where a family member is pregnant or has recently given birth
- who are a Looked After Child
- are on a low income/living in more deprived areas
- with poor literacy and/or language barriers
- with caring responsibilities (including young carers)
- living in more remote areas
- who may be refugees or asylum seekers (including unaccompanied children)
- with addictions and/or substance misuse issues
- involved in the criminal justice system
- experiencing homelessness
- where there is a single parent/carers
- experiencing digital exclusion.

### 9.2.7. EHIA sub-group recommendations for mitigations

The EHIA sub-group has put forward a range of potential systems, processes or programmes that could serve to mitigate the adverse impacts outlined above (or enhance the positive impacts).

All of the recommendations would benefit from patient, family and carer engagement to support their planning and delivery. This engagement would also give the opportunity for additional mitigations or enhancements to be identified. The main themes are below.

- Systems and processes aimed at helping patients and families plan their journeys to hospital, including provision of inclusive and accessible information and translation services. For example, each family having a named care coordinator who can identify whether additional support with travel planning or transport is required as early as possible in their care pathway. The care coordinator can also help families understand what their journey is likely to be, including which locations they will visit, details of any overnight stays and how many appointments they are likely to have. This support would then extend to help with booking transport or other arrangements, taking into account any communication, interpretation or translation requirements.
- Systems and processes aimed at reducing the financial impact of travel, such as reimbursements schemes for travel costs or supporting patients to access other financial support. This includes support to access national reimbursement schemes for travel costs including the Congestion Charge, Ultra-Low Emission Zone (ULEZ) charges and the Healthcare Travel Costs Scheme. It is recognised that families experiencing financial difficulties may find these further compounded by any additional costs incurred due to a different journey to a future Principal Treatment Centre<sup>62</sup>. Families should be supported to understand what financial aid they could access, or what benefits they may be entitled to, through partnerships with organisations who can offer this kind of service.
- Transport services provided directly to patients and their families. The service should have clear eligibility criteria that considers both medical need and financial circumstances (based on the national guidance for non-emergency patient transport services). This should include the option to customise the service together with families to meet the needs of children.
- High quality onsite accessibility arrangements, including dedicated parking and drop-off facilities. Families should also be supported to access timely reimbursements for parking costs in line with hospital policies. These policies should consider parking requirements

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<sup>62</sup> <https://www.younglivesvscancer.org.uk/wp-content/uploads/2023/06/Running-on-Empty-Report.pdf>

for families with children who are immunosuppressed, meet disability eligibility criteria, who need to attend frequent appointments and/or are too unwell to travel via public transport.

- Good quality, overnight family accommodation (within a short walking distance), including capacity to stay with the child on the ward.
- Other aspects of care planning including flexibility on appointment times, shared care closer to home, strong communication systems between different health and social care teams, and remote (non-face to face) appointments. Any arrangements must allow for families experiencing digital exclusion, perhaps because of an inability to use technology, lack of access to technology or insufficient wifi. Any such issues should be identified early in the care pathway.
- An excellent implementation plan for the service change process, to support patients through the transfer period, with high quality continuity of care and clear, timely, accessible information.
- Development of key access, quality and outcome metrics by socio-demographic groups (guided by the national Core20Plus5 approach) to enable monitoring and evaluation of progress towards improvements in equity.

A full description of the recommendations is available in the Interim EHIA report (included in Appendix 1 – Integrated Impact Assessment.). The Interim EHIA will be revisited and updated regularly following findings and activities carried out as part of the public consultation and overall reconfiguration process. Post-decision, a dedicated Travel and Access Working Group will be set up during the Implementation Phase to support the development of action plans around each of the recommendations.

### **9.3. Implementation timing and governance**

Once the public consultation is complete, a Report on Responses will be prepared by an external agency with expertise in analysis and reporting on consultation feedback. At the same time, work will begin on the Decision-Making Business Case which will take into account all the information currently available and provided during the public consultation period, including the Report on Responses. The impact assessments will all be updated for consideration by those making a final decision. Relevant J/HOSCs will be provided with a copy of the Report on Responses for any comments prior to the final decision-making meeting.

NHS England (London and South East regions) will be able to make a final decision about the proposed service move, taking into account the option appraisal process, feedback from the consultation and all other relevant factors. Indicatively, the final decision is expected in early 2024.

Following the final decision being made, minutes will be prepared and shared with all J/HOSCs. Meetings will be arranged with all relevant J/HOSCs to answer questions on the final decision and the implementation plan as soon as possible after the final decision is made.

## Implementation

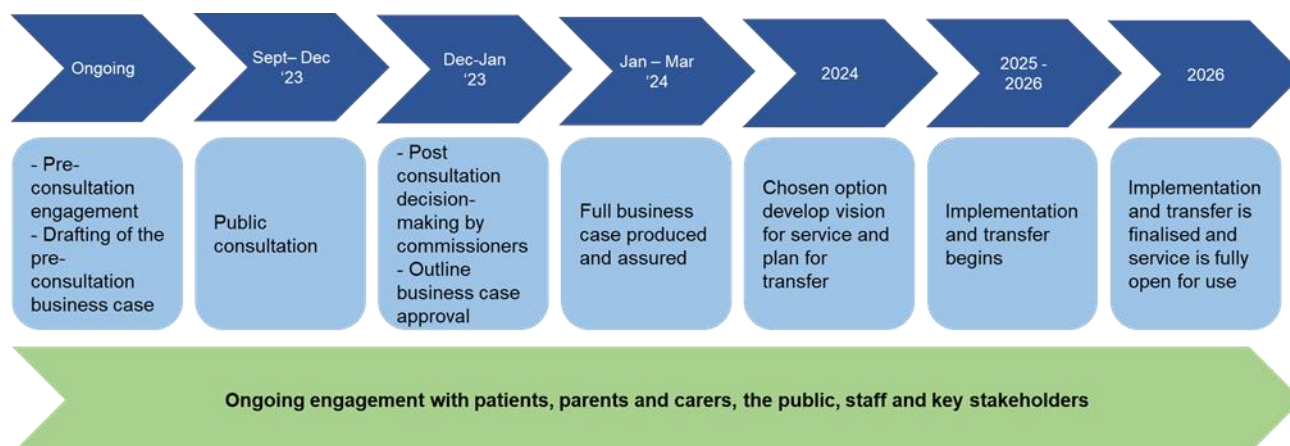
Subject to any queries from the J/HOSCs requiring a response or any other processes to challenge the final decision, the provider of the chosen option will then start work on implementation.

Following this, a full business case for capital approvals will need to be completed by the Trust that will be providing the future Principal Treatment Centre. Implementation is likely to take up to 2.5 years from that date as time will be needed for capital works and for the Trust to secure JACIE accreditation for bone marrow transplants.

During this time, it is proposed that the current Programme Board re-forms as an Implementation Board to advise and support delivery of priorities and benefits; support collaboration between stakeholders; and ensure risks related to the service transfer are as fully mitigated as possible. The role of the Stakeholder Group and Communications Group will be reviewed to ensure that arrangements going forward are fit for purpose.

The actual move of service will **not happen before 2026**. These steps are set out in the timeline below:

**Figure 19: Indicative timeline for the children's cancer Principal Treatment Centre review and reconfiguration process**



After the consultation, detailed work will be required to implement this proposed change, develop the estate, and move staff, services and research effort from The Royal Marsden. The Trust which will become the future Principal Treatment Centre will need to work with other organisations to develop clear action plans for transfer and service delivery going forward. Further detail is set out in Section 10 Next Steps, Recommendations and Implementation.



## 9.4. Advice, scrutiny, and approvals

The NHS England London programme team has led the development of the pre-consultation business case working in partnership with NHS England South East Region with input from Transformation Partners in Health and Care.

### London and South East Clinical Senate

The role of the Clinical Senate is to provide clinical advice and leadership to assist statutory bodies in making the best decisions about health for the populations they serve. Their advice is impartial and is informed by the best available evidence. The London and South East Clinical Senates have jointly reviewed the proposal documentation and, in April 2023, convened a review panel, including national subject matter clinicians and co-chaired by the respective chairs of both Senates. The panel heard presentations from the NHS England London programme team and then put questions to the team and representatives from the current Principal Treatment Centre and both potential future providers.

The Clinical Senates have examined the proposals to assess the following points.

- Is the case for change clear from a clinical perspective?
- Does the Equality and Health Inequalities Impact Assessment provide sufficient mitigation to possible health impacts, particularly travel times that might otherwise increase inequities?
- Is the clinical evidence set out in the pre-consultation business case clear about both options, following the evaluation of the proposals?
- Is there any further clinical evidence that NHS England (London and South East regions) should consider in making a final decision on the options?

The Joint Clinical Senate found that the case for change is clear with a sound evidence base and the plans do meet the Principal Treatment Centre service specification. The review panel noted that the Equality and Health Inequalities Impact Assessment undertaken to date was an important starting point and recommended this work continues through and after consultation.

Beyond this overall summary, the review panel made recommendations for commissioners for further development of the pre-consultation business case. The recommendations are in depth and wide ranging but include aspects such as:

- Ensuring that strong clinical leadership is in place and dedicated to the programme implementation.
- Ensuring that staff, children and their families are central to the co-design of the future service and involved throughout the implementation phase.

- Supporting the specialist workforce through the service transition, thus maximising retention and transfer of key skills and competencies (including research capacity).
- Ensuring that the service reconfiguration plans maximise opportunities to reduce health inequalities in access, quality and outcomes.
- Exploring how the service reconfiguration plans can take account of environmental sustainability.
- Ensuring that the care pathway is well described in the consultation documentation, including established shared care processes between the Principal Treatment Centre and Paediatric Oncology Shared Care Units.
- Ensuring that robust risk management and assurance mechanisms are in place for the implementation phase.

The recommendations are incorporated into the Clinical Senate's full report, which will be published on both the Programme's consultation website, and the websites of both Senates.

The advice is extremely helpful and constructive. Further to this, NHS England has held a workshop with representatives from the three Trusts to discuss how the advice can be addressed, particularly those relating to the Implementation Phase. NHS England's full response to the Joint Clinical Senate's recommendations, setting out how we are taking into account their advice, can be found in Appendix 8 – Our approach to addressing advice from the London and South East Clinical Senate.

## 9.5. Five tests for service reconfiguration

The Government has four tests for service reconfiguration, and NHS England has an additional one. The programme has addressed them as set out below.

- **Strong public and patient engagement:** the Stakeholder Group meetings, the additional survey work undertaken, the discussions held with overview and scrutiny committees across Brighton and Hove, East Sussex, Kent, Medway, West Sussex and with the South West London and Surrey Joint Overview and Scrutiny Committee (JOSC), and the South East London JOSC, together with all the activity described in Section 8 'Engagement' covering the early engagement and pre-consultation engagement periods, as well as our comprehensive plans for consultation, demonstrate strong public and patient engagement. This proposed reconfiguration is needed to implement a service change required as a response to national standards and to future proof children's cancer services. The national standards have also already been through a considerable amount of public engagement and detailed scrutiny.

- **Consistency with current and prospective need for patient choice:** the proposal for consolidating the Principal Treatment Centre onto one site with a co-located paediatric intensive care unit and other specialist children's services does not alter the position on patient choice. There are only 13 Principal Treatment Centres in England and that will remain the case following the implementation of this proposal. The incidence of cancer in children is mercifully low, which is why Principal Treatment Centres as centres of excellence have to cover a wide geography to see a sufficient caseload. The 'fixed points' applied for this reconfiguration mean the service will still be delivered in south London. Furthermore, this change will mean that, for the first time, children and families from south London, Kent and Medway, most of Surrey, East Sussex and Brighton and Hove will be able to attend a Principal Treatment Centre compliant with the new national service specification.
- **Clear, clinical evidence base:** the rationale for this proposed service reconfiguration is compliance with the national service specification which is based on years of thorough work and reviews. NHS England accepted the conclusions of Professor Sir Mike Richards' report that co-location with a paediatric intensive care unit should be a mandatory requirement for all Principal Treatment Centres, and worked with patients, families, professionals and the public to develop a new service specification which delivers this.

Both options, in meeting the hurdle criteria, show that they have a high degree of capability in the delivery of children's services, and either option could meet the service specification. The clinical panel assessed the proposals against agreed evaluation criteria developed through wide-ranging engagement.

Review from the Joint Clinical Senate found that the case for change is clear and sound from a clinical perspective, and they supported the new clinical model for south London and the south east that has been developed in response to the national service specification for Principal Treatment Centres. The full clinical senate report is available for consideration, alongside our response to it – see Appendix 7 – London and South East Clinical Senate Review Final Report, and Appendix 8 – Our approach to addressing advice from the London and South East Clinical Senate.

- **Support for proposals from commissioners** – this is a specialised service commissioned by NHS England for London and the South East. The two regions have worked together as members of the Programme Board.
  - ICBs from London are also members of the Programme Board and support achieving a compliant service.

- Relevant ICBs from the south east region have and continue to be engaged through a range of approaches, including through the communication and engagement routes, as well as via young people leads and/or cancer leads.
- **Other engagement with stakeholders across the south east region**
  - Building on existing relationships with scrutiny committees across the south east, meetings have been put in place with HOSCs across Kent, Medway, Surrey and Sussex.
  - During the development of the EHIA, invitations were shared with all ICBs and actively sought from Kent and Medway as well as Surrey Heartlands and Sussex.
  - All stakeholder mapping was circulated for input by South East ICBs to ensure that all appropriate groups are actively approached through the pre-consultation and consultation period.
  - Communication with MPs in the south east region has been shared with ICBs, for them to actively use their own existing channels to disseminate the messages, supplementing NHS England London direct communications with this group.
  - The engagement lead for Surrey Heartlands ICB sits as part of the programme's communication and engagement stakeholder group.
  - Programme updates have been shared at the Clinical Recovery and Transformation Committee, chaired by the Deputy Director of Transformation and Recovery, Specialised Commissioning, NHS England South East. A deep dive took place in June 2023 alongside engagement through the Specialised Commissioning Partnership Board in July which has representation from all ICBs on the Board.
  - Representatives from south east region were involved in the panels scoring the options.
- **Hospital bed closures.** The proposed service change is not about reducing hospital bed numbers. It is about supporting continued access to patients of the Principal Treatment Centre in a location that is compliant with the national service specification. So this fifth test does not apply for this programme.

## 9.6. London Mayor's six tests

The London Mayor's six tests are applied to major service reconfigurations in London alongside the five tests from the Department of Health and Social Care and NHS England, and the statutory consultation processes which accompany large scale change. The list below sets out the tests and how the programme has addressed them for this review.

- **TEST 1:** Health and healthcare inequalities test. The proposed changes have maximised the opportunities available to the health system to reduce health and healthcare inequalities, which have been set out transparently together with an evidenced plan for further action. The plans clearly set out proposed action to prevent ill-health, including targeting action and resources to improve the healthy life expectancies of the most disadvantaged
  - This has been addressed through the Equality and Health Inequalities Impact Assessment (see Appendix 1 – Integrated Impact Assessment) which takes into account respective populations in both London and the South East of England.
- **TEST 2:** Hospital beds. The proposed bed capacity will need to be independently scrutinised in relation to the latest demographic projections. Any plans which involve a proposed bed capacity that is less than that implied by these projections should meet at least one of the following conditions (which are based on NHS England's 'common sense' conditions):
  - Demonstrate that sufficient alternative provision is being put in place alongside or ahead of the proposed changes, and that the additional workforce required will be there to deliver it.
  - Show that specific new treatments and therapies, such as new anti-coagulation drugs used to treat strokes, will reduce specific categories of admissions.
  - Show, where a hospital has been using beds less efficiently than the national average, that the hospital has a credible plan to improve performance without affecting patient care (for example in line with the Getting it Right First-Time programme).
    - The service change is not about reducing hospital bed numbers. It is about supporting continued access to patients of the Principal Treatment Centre in a location that is compliant with the national service specification.
- **TEST 3:** Financial investment and savings. Sufficient funding is identified (both capital and revenue) and available to deliver all aspects of plans including moving resources from hospital to primary and community care and investing in prevention work. Proposals to close the projected funding gap, including planned efficiency savings, are credible.
  - There is no aim to make savings in this service reconfiguration. Both options have been assessed for financial affordability and both have passed this test.

- **TEST 4:** Social care impact. Proposals take into account a) the full financial impacts on local authority services (including social care) of new models of healthcare, and b) the funding challenges they are already facing. Sufficient investment is available from the Government to support the added burden on local authorities and primary care.
  - There should be no impact on social care as a result of this reconfiguration, as the proposed new service does not alter in size or scope. Currently Young Lives vs Cancer provides a social work service at The Royal Marsden (alongside their support to other Centres) for children using the Principal Treatment Centre. It is anticipated that this service would continue when the Principal Treatment Centre moves to its future location and provider.
- **TEST 5:** Clinical support. Proposals demonstrate widespread clinical engagement and support, including from frontline staff.
  - There is widespread clinical support for the children's cancer Principal Treatment Centre for south London, Kent and Medway, most of Surrey, East Sussex, Brighton and Hove, to be co-located with a paediatric intensive care unit and the other specialist children's services required by the national specification.
    - The Royal Marsden acknowledges that the decision on mandatory co-location has been made by the NHS England Board and confirms their commitment to work with NHS England and colleagues at both Guy's and St Thomas' and St George's to arrive at the best outcome for children. They are committed to ensuring that the very best service is provided for children and families, including making the changes that may be required to respond to the development of new technologies and treatments.
    - Employees of the Institute of Cancer Research participated in the research panel evaluating the proposals.
    - The clinical lead for the Children's Cancer Network covering south London, Kent, Medway, Surrey and Sussex, and the Sussex Paediatric Oncology Shared Care Unit representative were both on the clinical panel evaluating the proposals.
    - Both options met the hurdle criteria, meaning both are viable. This reflected the fact that both options also comply fully with the service specification once The Royal Marsden service moves across and proposals are implemented. Both Evelina London Children's Hospital and St George's have submitted proposals, supported by their respective clinical teams, on how they would deliver the service if they are chosen to do so.



- The Joint Clinical Senate has reviewed the proposals and confirmed their support for the clinical evidence behind the case for change, and for the proposed new model of care.
- **TEST 6:** Patient and public engagement. Proposals demonstrate credible, widespread, ongoing, iterative patient and public engagement, including with marginalised groups, in line with Healthwatch recommendations.
  - The work undertaken on patient and public engagement to date and that which is planned is highlighted throughout this business case, and more detail is specifically in Section 8 ‘Engagement’ and can be found in the Consultation Plan – see Appendix 10.

The Mayor’s position will be informed by an independent review that is being commissioned for this purpose.

The Mayor will write two letters to NHS England London outlining his position on the proposals. The first letter will be a response to the public consultation on the proposed changes with respect to the first of the Four Tests. The second will share his final position on the proposals against all six of the tests, following the publication of the consultation report and final plans in the decision-making business case.

The Mayor will not provide a position on which of the two potential sites is his preferred option. He will apply his Six Tests to both options and set out any further information or changes he would like to see in each case.

## 9.7. Wider Effect of Decision and Climate Change Duties

Under the Health and Care Act 2022, new duties were introduced which require NHS England to have regard to the wider effect of decisions it makes (s.13NA NHS Act), generally referred to as the triple aim duty, and to have regard to the need to contribute towards compliance with the UK net zero emissions target (s.13NC NHS Act). Currently, an assessment is being prepared for consideration during the decision-making process.

### **Climate Change Duty (s.13NC of NHS Act 2006)**

In considering the proposals from both the Evelina London and St George’s, the environmental impact in relation to capital build and transport access is therefore subject to assessment. Other impacts associated with the proposed service change to bring children’s cancer service in line with the national service specification have also been considered, including by an Equality and Health Inequalities Impact Assessment.

Part of the vision for the future of the service is that travel to the specialist centre will reduce, with enhanced paediatric oncology shared care units able to provide a wider range of care, closer to many children’s homes. However, the Principal Treatment Centre is a specialised service, and by definition covers a wide geography. Consideration has been given on the

impact of travel; either option offers a better public transport solution compared to now, but individual transport to the Principal Treatment Centre will continue to be required for children with cancer (whether through families driving or hospital transport).

Guy's and St Thomas' has committed to electrification, with electric vehicle charging points addressed in their infrastructure plan. Electrification of their fleet is in hand (this includes patient transport, pool and lease vehicles), and the planned recommissioning of their patient transport service for children will meet their environmental sustainability requirements.

The Trust has a stake in Apian (a drone start-up small to medium-sized enterprise) which is piloting a drone delivery service, starting with a trial to deliver urgent pathology from Guy's to St Thomas' Hospital with up to 100 urgent renal pathology samples per day. Guy's and St Thomas' have stated that further opportunities will be explored. More widely, Guy's and St Thomas' has commissioned ARUP to carry out a report on climate resilience to inform annual business planning. The Trust has an EPRR register that is regularly reviewed to support preparation for instances of extreme weather and flooding. The Trust is also drawing on lessons learnt from a recent business continuity incident relating to its IT systems. These have been incorporated within the EPIC go live planning. The Trust has an established Environmental Sustainability Strategy for 2021-2031 which sets out a path forward, in line with NHS commitments to reach net zero direct carbon emissions by 2040 and net zero indirect carbon emissions by 2045.

St George's is in the process of installing electric vehicle charging points to support the conversion of its fleet of cars to all electric vehicles (estimated to be installed by September 2023). St George's model of care includes supporting the use of virtual appointments where appropriate, so that travel to the Principal Treatment Centre takes place only where necessary. The site Travel Plan considers travel to the site including most carbon efficient transportation as well as mapping out walking routes with low air pollution. The Trust's Children's Cancer Centre would be co-designed with children and their families with the exploration and incorporation of innovations, including digital, intelligent buildings and in the provision of services, where possible, realistic and value for money. The Trust sets out that in designing the children's cancer centre it would look for opportunities to improve resilience in the face of extreme weather events and review risks as part of this.

St George's has a Green Plan which describes the Trusts' commitment to delivering its contribution to the Net Zero plan and to adopting the broader principles of sustainable development.

Both Trusts are proposing internal refurbishment projects where they do not envisage either change of use or modifying the building façade: both should be able to offer developments with lower environmental impact.

### **Wider Effects of Decisions Duty (s.13NA NHS Act 2006)**

NHS England has a duty under section 13NA of the National Health Service Act 2006<sup>63</sup> to ensure that the organisation has regard to all likely effects of its decision-making into account. NHS England has ensured that regard for matters such as climate change have been taken into consideration in the development of the PCBC and been part of the discussions with providers involved – key examples of this has been understanding and describing the impact any decision may have on other organisations and the EHIA. A key consideration through this process has been how cancer services for young children more widely can and may be impacted and how this decision will lead to a positive change. Further, as is set out above, NHS England has engaged with all involved providers to better understand the potential impacts that arise on service delivery from whichever option is finally determined for the location of the PTC.

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<sup>63</sup> [National Health Service Act 2006 \(legislation.gov.uk\)](https://legislation.gov.uk)

## 10. Next steps, implementation, and recommendations

### 10.1. Decision-making process

NHS England London and NHS England South East are committed to understanding and reducing inequalities their population may face in the healthcare setting. There is a requirement to understand the impact of the proposed changes on health inequalities. An initial IIA (see Appendix 1 – Integrated Impact Assessment) has been developed and supplements the EHIA which has already been developed. The IIA will continue to be reviewed and refined in response to new data or lines of enquiry.

Following approval of the pre-consultation business case anticipated September 2023 an indicative timeline of future programme milestones is set out. This may be subject to change (Figure 20).

The Programme Board and NHS England London and NHS England South East will lead and oversee the consultation with local authorities via health overview and scrutiny committees and the planned public consultation. The results of public consultation are an important factor in health service decision making and are one of a number of factors that will be taken into account in the decision-making business case.

Throughout the consultation period, we will respond to questions raised by the health overview and scrutiny committees, the public, NHS staff and other stakeholders.

Once the consultation is complete, an independent Report on Responses will be prepared. At the same, time, work will begin on the Decision-Making-Business Case which will take into account all the information currently available and provided during the public consultation period, including the Report on Responses.

- The IIA will be updated for consideration by those making a final decision – while the impact assessment does not, in itself, determine the decision it will assist decision-making.
- Relevant J/HOSCs will be provided with a copy of the Report on Responses for any comments prior to the final decision-making meeting.

The decision-making business case will be underpinned by the following principles:

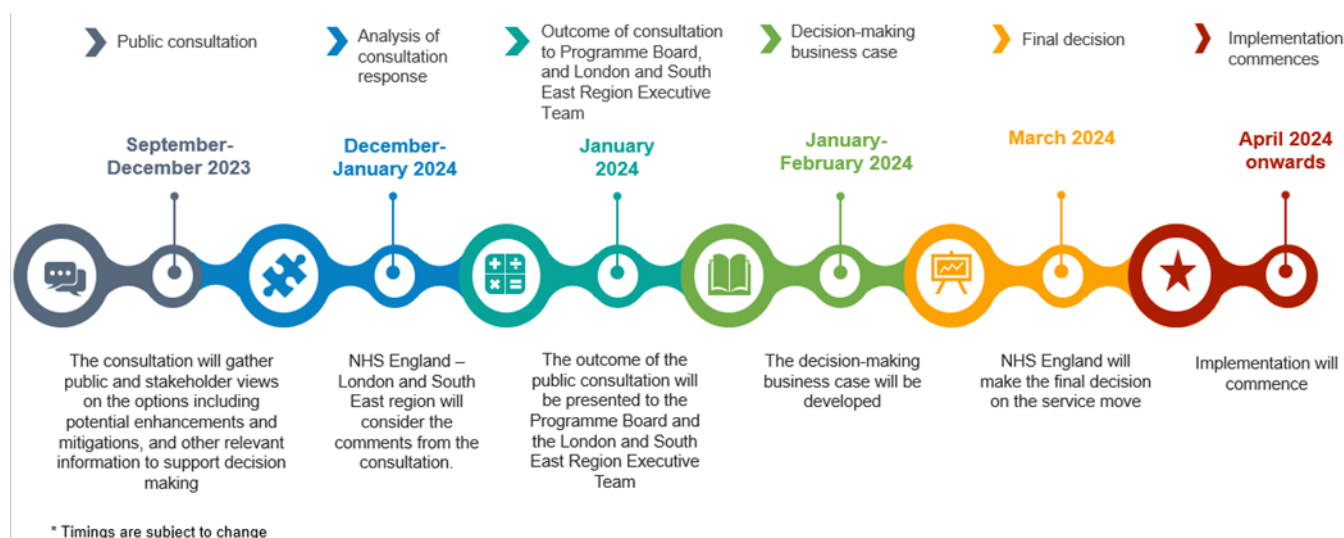
- conscientious consideration of consultation feedback before making a final decision
- consultation and collaboration with relevant local authorities in respect of the proposals
- principles of lawful decision-making – reasonableness, taking account of relevant factors and inquiry

Senior leaders at NHS England will make a final decision about the service move, taking into account the option appraisal process, feedback from the consultation and all other relevant factors. Indicatively, the final decision is expected in early 2024.

Following the final decision being made a minute will be prepared and shared with all J/HOSCs and published on the NHS England website. Meetings will be arranged with all relevant J/HOSCs to answer questions on the final decisions and its implementation plan as soon as possible after the final decision is made.

An indicative timeline for the decision-making process is set out below; however, this may be subject to change.

**Figure 20: Indicative timeline for the children's cancer Principal Treatment Centre decision-making process**



Throughout this period there will be regular updates for all stakeholders including J/OSCs and MPs.

## 10.2. Implementation and transition, and impacts

In their proposals, the two Trusts were asked to set out their implementation plans, including a high-level timeline, covering how the Principal Treatment Centre service and clinical model would be implemented. Once a decision is made, it will be important that implementation is undertaken in a timely fashion to ensure safe transition that provides continuity of care and to relieve uncertainty amongst staff and patients. It is envisaged that an Implementation Board will be established to advise and support delivery of priorities and benefits; support collaboration between stakeholders; and ensure risks related to the service transfer are as fully mitigated as possible.

Proposals for both options included information on implementation, considerations related to risks that would need to be managed, and previous provider experience of major service change.

Both Trusts outlined their proposals for:

- robust and effective governance led by a Programme Board with appropriate membership to oversee timely development of the estate option for the future Principal Treatment Centre, timely accreditation where required (JACIE) and a safe transition of service and partnerships (particularly with the Institute of Cancer Research)
- strong engagement with patients and families, ensuring they understand the plans for how future care will be provided and involving them in the design of the new facilities (this was tested as part of evaluation criteria)
- involving and engaging with staff who will shape the future service and have all the information they need at every stage including if they need to change employer
- development of existing estate to provide a child and family-friendly facility to accommodate the Principal Treatment Centre, co-designed with patients, families and staff
- ongoing engagement with Paediatric Oncology Shared Care Units and other hospitals key to the future service and transition of patients beyond
- early engagement with industry, academic and other partners to ensure smooth transfer of research programmes and a positive future.

Guy's and St Thomas' provided a detailed project plan covering the key considerations for the safe delivery of the transfer of service should the Evelina London be chosen, setting out month by month how these would be worked on over the next two years<sup>64</sup>.

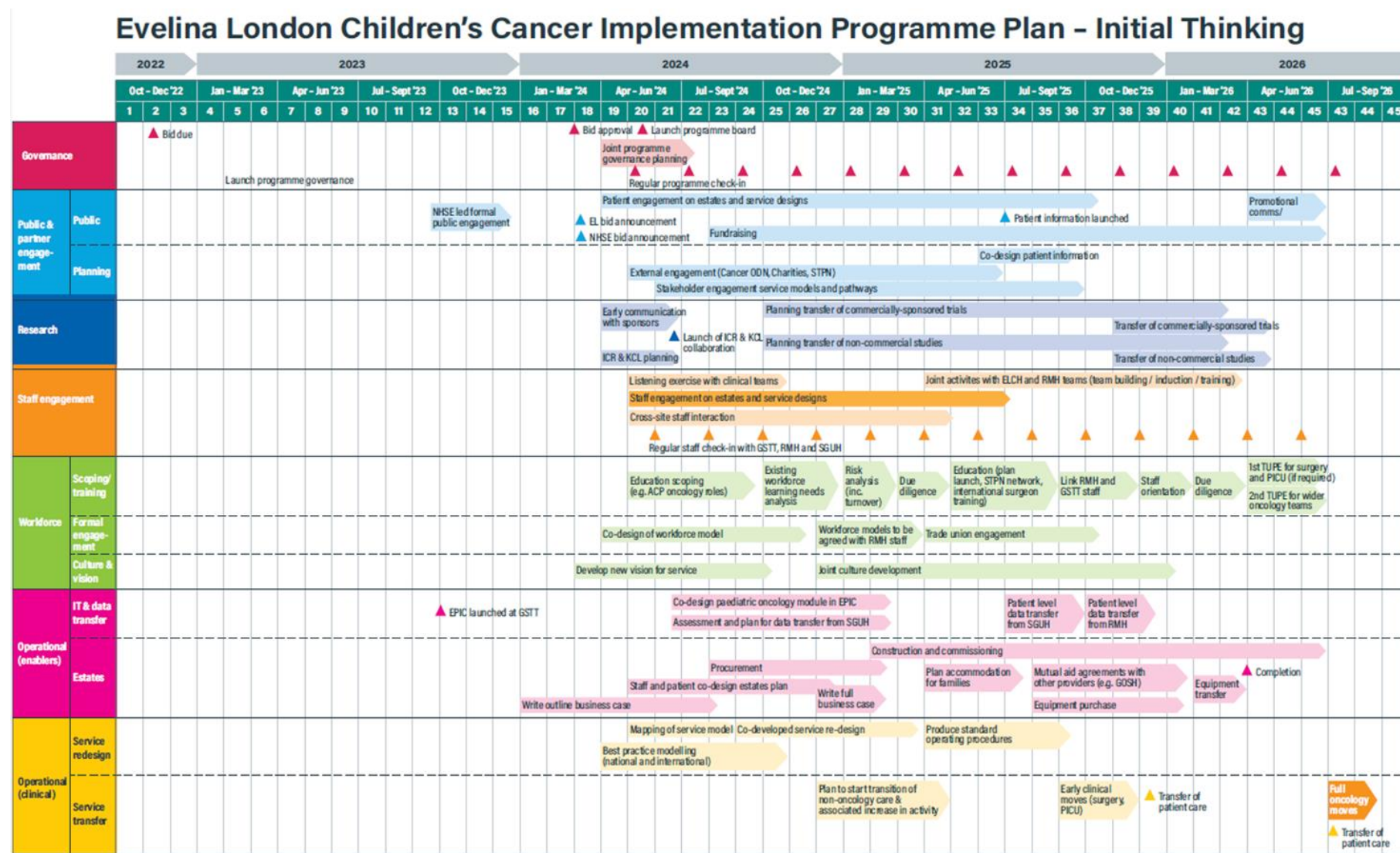
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<sup>64</sup> Note – the timescale for decision-making has changed since the proposals were first submitted. Plans set out by trusts were subsequently moved out by approximately 6 months. Trusts were asked to submit a refreshed timeline before the PCBC was finalised, these have been incorporated.



Proposals for the future location of very specialist cancer treatment services for children

Figure 21: Evelina Initial Programme Plan



In their proposal, St George's set out a similar transition plan for the clinical service, should St George's Hospital be chosen in three key phases (see figure below) and a broader narrative for the key stages of transition for research and facilities<sup>65</sup>.

**Figure 22: St George's transition plan**

Phase	Activities
1 Pre transition: commencing post public consultation decision	<ul style="list-style-type: none"> <li>The Joint Accreditation Committee ISCT-Europe application commences, quality standards required for accreditation implemented by Q4 2025/26 with potential to deliver earlier within a year.</li> <li>Standards, policies, and procedures developed with input from all staff.</li> <li>Integrated electronic chemotherapy prescribing, and administration system rolled out.</li> <li>Robust clinical rotational training programme established.</li> <li>Doctors approved to administer intrathecal chemotherapy at St George's University Hospital.</li> </ul>
2 Clinical transition: Delivered over 1- week period (Q1 2026/27)	<ul style="list-style-type: none"> <li>Risk assessments completed for all inpatients, outpatients and transfer of care ensuring clinical robust and safe transfers of care area maintained.</li> <li>St George's University Hospital existing PTC inpatient beds move to new ward.</li> <li>New patients and any patients who relapse admitted to St George's University Hospital.</li> <li>Minor procedures for St George's University Hospital inpatients carried out in theatre (dedicated list) until sufficient volumes to open day care unit following phase 3 service transition.</li> </ul>
3 Clinical Transition: Delivered over 1- week period directly after Phase 2 (Q1 2026/27)	<ul style="list-style-type: none"> <li>Transplant patients and team moved to St George's University Hospital.</li> <li>Remaining Royal Marsden Hospital inpatients move to St George's University Hospital.</li> <li>Day care unit fully open at St George's University Hospital.</li> <li>All outpatients clinics transferred over the new clinics opened.</li> </ul>

NHS England has confidence that both potential providers for the future Principal Treatment Centre would adhere to these transition plans and work effectively with The Royal Marsden in putting them in place.

<sup>65</sup> Note – the timescale for decision-making has changed since the proposals were first submitted. Plans set out by trusts were subsequently moved out by approximately 6 months. Trusts were asked to submit a refreshed timeline before the PCBC was finalised, which have been incorporated.

NHS England recognises that the Implementation Programme (during which collaboration between providers will be an essential part) will be an essential building block to the strength of services at the relocated Principal Treatment Centre. Key areas of focus will include:

- Maintaining the sustainability of the current service at The Royal Marsden until the service transfers; and ensuring workforce requirements can be met at the future Principal Treatment Centre will require detailed planning during the Implementation Phase. Strategies to enable organisational development, the transfer of as many staff as possible, retention and where needed recruitment, education and training will be fundamental. It will be key to safeguard the expertise and experience of staff within the current Principal Treatment Centre. It will also be important that teams come together and are supported to integrate with one another.
  - One of the actions that will be taken is expected to include a Nursing Lead joint appointment between The Royal Marsden and the future provider; this will help support joint working, integration between teams and early identification of risks related to patient safety. Nursing is the largest staff group that will be impacted by the transfer and nursing leadership in this capacity; and from other leaders within respective organisations will assist in managing the service transition. This may also require mutual aid from the future provider if staff numbers reduce.
- Ensuring continuity of research including through close engagement with the Institute of Cancer Research to support the development of a new clinical model and with The Royal Marsden to support continuity in research funding and grants; activities will include the development and implementation of mitigations to manage risks associated with the transfer.
- Inclusive and wide-ranging engagement with patients, parents and carers to design and develop the future service to not just meet the service specification but aspire beyond it. Efforts must also be devoted to preserving the legacies that underpin services at The Royal Marsden.
- Ongoing work to assess impact on Equalities and Health Inequalities including the development of detailed recommendations.
- Progressing JACIE accreditation for Paediatric Bone Marrow Transplants (for which the lead time is significant).
- Working with the current Principal Treatment Centre, POSCUs and Teenage and Young Adult Services to help ensure smooth transition arrangements for patients.

- Working with other stakeholders with whom there are interdependencies, including University College London Hospitals (radiotherapy) to help ensure readiness for the proposed move of conventional radiotherapy services.

Progressing business case development for the estates solution which is also part of the critical path to service transfer.

### **10.3. Management of risks and issues**

There are five main reasons why we have to change the location of specialist cancer services for children with cancer living in Brighton and Hove, East Sussex, Kent, Medway, south London and most of Surrey. These are set out in detail within our case for change – section 2. Reasons include:

- The current Principal Treatment Centre does not meet national service specifications and requirements.
- Hospital transfers of very sick children with cancer for intensive care add risks and stress.
- The intensive care team is not able to advise on the care of children on the ward.
- The way services are arranged can mean distress and poor experience for some children and families.
- The current Principal Treatment Centre is excluded from giving specific types of new treatment.

#### **Benefits**

Whether the future Principal Treatment Centre was at Evelina London or St George's, it would:

- end hospital transfers from the specialist centre of very sick children with cancer who need or might need intensive care, eliminating the added risks and stress these transfers bring. If children did need an intensive care bed, the intensive care unit would be very close
- enable children to get more of their care on the specialist cancer ward, and minimise the number of children admitted to intensive care, which can be very frightening for children and families. With intensive care specialists on site:
  - children would never be transferred as a precaution in case they might go on to need intensive care; and,
  - specialist input from intensive care teams would potentially help some children avoid intensive care. Cancer specialists say cancer services in children's hospitals with intensive care on site have fewer intensive care admissions for this reason

- have more services on the same site than now, reducing distress and improving experience for many children and families
- meet the national requirements and be capable of offering cutting-edge treatments that need intensive care on site
- be designed with children, families and staff. This would help tailor it to their needs.

There would be opportunities for:

- different specialist teams to work more closely together and share learning, improving care for children and supporting new areas and types of research too
- specialist cancer staff to share their learning and to learn from others. This is likely to help the future centre to keep and attract new staff.

Risks will need to be managed before, during and after the transition of service to maximise the benefits of this change. All reconfiguration programmes carry risk. Recognised risks and their mitigations will need to be closely managed during the Implementation Phase.

As part of the submissions for the two shortlisted options, both Guy's and St Thomas' and St George's shared similar risks and mitigations and gave evidence of experiences at managing and delivering major service change (including those identified in tables 43 and 44, section 7.6 Risks). It will be important for all parties involved to work together to manage risks to help ensure service continuity and smooth transition arrangements.

In section 6.2 3 Potential impact on St George's children's services, St George's have noted the impact on them that would need to be managed if they were not successful in securing the Principal Treatment Centre, specifically to paediatric surgery, pathology and of lost opportunities. Guy's and St Thomas' have also indicated that there would be an impact on them, principally of lost opportunities. It is recognised by the wider system, including NHS England that mitigations would need to be worked through in advance of the service transferring. This will include pathways between providers for services which can't all be provided on the same site as the Principal Treatment Centre.

Representatives from St George's, Guy's and St Thomas' and The Royal Marsden have agreed to key principles that will underpin detailed work in the implementation phase after a decision has been made – these apply regardless of the decision that is taken. The principles include: working in a professional and supportive manner to ensure continuity of current services, the willingness to look for system-wide solutions, cherishing staff skills and ensuring a place for these to be used to the benefit of individual staff and patients going forwards. These are all in line with the duty on Trusts to collaborate.

The transfer to a new provider is not without risks. The NHS England Programme Team will support the trusts concerned through the period until a decision is made; and will continue to do so once a provider for the future Principal Treatment Centre has been selected to help



mitigate risks. We will work with parties to ensure that the transition is as smooth as possible, and that transfer of the service is safely managed. An Implementation Board will be established to help oversee the Implementation Phase including the management of risks. Further detail on this is set out in the PCBC. The role of quality indicators to monitor risks associated with the service transfer will form part of the governance around the service transition.

As described in section 3 Developing the clinical model, the national service specification includes a wide range of metrics on clinical care, patient experience and organisational structures and processes – see Appendix 9 – Service Specification Outcome Indicators. We will be drawing on these mandatory measures of outcomes and standards of care, in addition to consideration of other monitoring sources. The development of a set of specific metrics, underpinning some broad headings we have already identified, will be the focus of a dedicated working group as the programme progresses, including during the Implementation Phase. The headings are:

- Clinical metrics (including outcomes)
- Patient experience (including transport)
- Workforce metrics
- Clinical trial access
- Tumour banking.

NHS England London working with NHS England South East has a comprehensive risk and issue log to oversee and manage the reconfiguration programme. The London Region Executive Team has regular oversight of these risks and issues to support and oversee the mitigations in place. Pertinent programme level risks and issues include:



**Table 59: Programme level risks and issues**

Risk	Potential mitigation
<p><b>Robust and Effective Governance</b></p> <p>There is a risk that there is not robust and effective governance led by a Programme Board with appropriate membership to oversee the Programme to identify and transfer services to the future Principal Treatment Centre in a timely and safe manner.</p>	<p>This risk is being managed through a formally established Programme Board with a wide range of stakeholders committed to delivering the best Principal Treatment Centre solution for patients.</p> <p>Once a decision has been made, the Board will transition to become an Implementation Board with membership reviewed accordingly. The Terms of Reference for the Board continue to be kept under review, ensuring that the purpose of the Board continues to be reflective through the phases of the programme and that the membership is diverse and reflective of the needs of the programme.</p> <p>The Programme Board reports into NHS England which will receive regular progress updates throughout the implementation phase.</p>
<p><b>Deterioration of current service</b></p> <p>There is a risk that current and continued uncertainty on where the future PTC will be located increases the instability of the current service, increasing the risk profile, causing unsettlement amongst staff, patients, families, carers and other stakeholders.</p>	<p>The current Principal Treatment Centre needs to continue to offer and maintain a high-quality sustainable service until the service transfers to the new provider. Once a decision is made, there will continue to be sustainability risks, including to staff recruitment and retention, which will need to be carefully managed to avoid destabilising the service and losing valuable skills and expertise that will be an important contributory factor to success of the future service.</p> <p>Close engagement with staff alongside the development of organisational development plans will be important to support staff, including readiness for change. Regular and continued communication with stakeholders across the programme is key to maintaining as much stability as possible.</p> <p>The programme team and SROs are continuing to progress all the required steps to support a decision to be made in a timely way. More broadly and into</p>

Risk	Potential mitigation
	<p>the medium term, it is important that risks to sustainability of the current PTC and to its transfer are understood and mitigated. NHS England aims to work closely with parties to support this, including during the Implementation Phase when all organisations involved will need to work very closely together.</p>
<p><b>Lack of engagement with patients and families</b></p> <p>There is a risk that there is a lack of strong engagement with patients and families with implications that our decision does not take into account of their feedback (alongside that of other stakeholders too); this will also be important to the implementation phase also.</p>	<p>To mitigate this risk we have ensured our consultation includes a variety of ways to reach and hear from patients and families. We have tested, and continue to test, our proposals for change with our Stakeholder Group, communications and engagement leads as part of Trusts and ICS', Overview and Scrutiny Committees and external experts like the Consultation Institute and Hood &amp; Woolf to ensure our approach is robust. Our pre-consultation engagement phase has reached a number of patients and families (see pre-consultation feedback report).</p> <p>Our plans for reaching current and recent patients/families during consultation include writing to patients and their families – via Trusts, attending wards and outpatient areas to directly seek feedback, providing posters with QR codes in waiting rooms so that the survey and online information about the consultation can be accessed, providing hard copy documentation on sites so that people can pick up a copy, we will also make use of existing patient groups/ forums that Trusts run to reach patients and we are commissioning play therapy experts to come onto wards to engage directly with children and young people. Through our pre-consultation activity, the engagement to date has delivered 'you said we did' outcomes. We will continue to work closely with our stakeholders to ensure that we are able to demonstrate that feedback has been heard.</p>

Risk	Potential mitigation
	<p>We are working with the Greater London Authority, where the London Mayor's six test framework is applied to the reconfiguration programme. One of the tests is on patient and public engagement. We are ensuring that our proposals demonstrate credible, widespread, ongoing, iterative patient and public engagement, including with marginalised groups, in line with Healthwatch recommendations.</p> <p>Through our pre-consultation activity, we also captured the names of parents who are interested in hearing more and will be emailing these contacts once we launch consultation. As well as these specific, tailored channels, they can also attend our public events or complete our survey. Further detail is in our consultation plan, found in Appendix 10.</p>
<p><b>Staff Engagement</b></p> <p>There is a risk that staff are not involved and engaged in shaping the future service and do not have the information they need at every stage, including, for those who will change employer.</p> <p>Implications of this include potential de-stabilisation of the current service (through challenges in recruitment and retention) and significant attrition of staff resulting in loss of valuable expertise.</p>	<p>Regular engagement with staff throughout the process will ensure that staff are kept informed of the impact and their feedback taken account. NHS England are working with the current Principal Treatment Centre to support this.</p> <p>Staff have been actively involved in pre-consultation engagement activities to help ensure they are able to feed into the consultation.</p> <p>An organisational development plan will be developed to support staff through the process and transition, as and when it occurs.</p> <p>We will produce regular 'you said, we did' information to demonstrate to staff that their views and suggestions are being heard and valued.</p>
<p><b>Staff Recruitment and Retention</b></p> <p>There is a risk relating to staff recruitment and retention to the current Principal</p>	<p>Close engagement with staff during the consultation period will be important. NHS England are working with the current Principal Treatment Centre to support this; including plans during the consultation phase for staff to be able to find out more about the two options and share their feedback.</p>

Risk	Potential mitigation
<p>Treatment Centre (and other key organisations such as the Institute of Cancer Research) during the period of uncertainty until a decision is made; and thereafter, during the period until services transfer (of up to 2.5 years).</p> <p>There is also a risk that staff from The Royal Marsden (and St George's if the Evelina London is the chosen option) do not choose to transfer (or work cross-site) to the future provider. Respective impacts of this include destabilising the current service; and a loss of valuable skills, expertise and experience upon service transfer to the future provider.</p>	<p>During the Implementation Phase, the organisations involved will need to work very closely together. This will include on workforce planning, organisational development and education and development support to staff. Consideration is being made to joint appointments to provide leadership across organisations to support this. Quality metrics will also need to be monitored to ensure that any risks to destabilisation of the services can be quickly identified and mitigated. Mitigations to help address concerns around the impact of travel will also be important.</p> <p>NB. To assess organisational capabilities with respect to managing the transition, evaluation criteria included 'organisational support to staff' and 'impact on staff'. The outputs of this fed into the 'enabling' domain scores in the initial options appraisal. This included things like staff benefits like study leave which we know are important to staff.</p>
<p><b>Lack of Engagement with POSCUs</b></p> <p>There is a risk that there may be a lack of engagement with Paediatric Oncology Shared Care Units (POSCUs) and other hospitals who will be part of the future service and play a role supporting the transition of patients</p>	<p>This risk is being managed through engagement with stakeholders, including Paediatric Oncology Shared Care Units (within and outside London), led by NHS England London and South East and Operational Delivery Network leads. There is a collective commitment amongst stakeholders to engage throughout the process.</p> <p>Going forward, it will be vital that the future provider engages with networks and builds on its own experience of managing networks, including across the geography to lead this service. The shortlisted options were evaluated with respect to capability in managing networks under the 'Network Effectiveness and System Benefits' sub-domain to assess capability of future options in network leadership.</p>

Risk	Potential mitigation
<p><b>Collaboration between current and future Principal Treatment Centre and other stakeholders to help ensure future success</b></p> <p>This is a risk that the current and future Principal Treatment Centre's engagement with key stakeholders is disjointed and fragmented, ultimately impacting on the quality of service delivered to children and young people throughout this process.</p>	<p>The success of the future relocated Principal Treatment Centre will, in part, be dependent on the ability of the future and current (alongside other key stakeholders such as the Institute of Cancer Research) to work closely and collaboratively together with the collective ambition to ensure that the relocated service is not only compliant with the national service specification; but that the service builds on this while preserving the strengths and expertise of the current service.</p> <p>Close working to ensure the development of robust plans to transfer the service and minimise risks associated with staff attrition, transfer of patient care, and continuity of (and access to) paediatric oncology research, is key. Parties to the reconfiguration have agreed a set of principles around collaborative working with the ambition of ensuring sustainable and high quality services that will support delivery and help mitigate impact irrespective of the decision made.</p> <p>We would like to make a joint clinical appointment between NHS England London and The Royal Marsden in the interim period to support this, ahead of joint appointments we envisage being made between The Royal Marsden and the future Principal Treatment Centre.</p>
<p><b>Research Grant Income</b></p> <p>There is a risk that research grant income is lost, thereby significantly impacting on the scale and scope of children's cancer research due to the uncertainty created about future delivery of research for grant/research partners.</p>	<p>NHS England-London will work with the Institute of Cancer Research and The Royal Marsden to meet with research funders (as appropriate) to discuss this proposed reconfiguration and encourage continued research funding, assuring them of the opportunities and giving them confidence in how the transition will be managed.</p> <p>NHS England will also work closely with stakeholders to ensure risks are understood and that where possible, NHS England is able to help mitigate these.</p>

Risk	Potential mitigation
<p>Risks pertain to a range of factors including: the need to set up multi-site trials, including at the future centre; recruitment; a potential lack of confidence from funders who are currently working very closely with The Royal Marsden on a wide-range of trials and research; clinical scientists potentially having reduced access to clinical teams and patients; and reduced opportunity for in-person discussions and collaborations.</p>	<p>Much high impact research does not now rely exclusively on patients co-located with the scientific researchers. Indeed, much of the ground-breaking research led by the Institute of Cancer Research/The Royal Marsden has recruited patients from all over the UK or in pan-European trials. With work (to reassure funders of grants that research will remain a huge priority, including with continued access to one of the largest centres for children with cancer in Europe), it should therefore be feasible to continue to obtain funding for well designed, innovative, multicentre studies.</p> <p>Recruiting children from nearby sites where the funders can be reassured that the children are receiving comprehensive care will remove one of the risks which funders and ethics committees could be concerned about. This will be easier once a final decision is made and that future provider too can join these discussions and formulate a grant application strategy with the Institute of Cancer Research, identifying the opportunities across the it, The Royal Marsden and the future provider. Close working during the Implementation Phase will be key to this.</p> <p>Until a decision is made, NHS England is supporting engagement between The Royal Marsden, the Institute of Cancer Research, both future options and other stakeholders (as needed) in support of this.</p> <p>Careful planning during the Implementation phase will be needed to support the management of other risks identified, including through organisational development programmes and the design of flexible working arrangements.</p>



Risk	Potential mitigation
<p><b>Access to research trials</b></p> <p>There is a risk that access to research trials for children’s cancer is impacted through the reconfiguration of the Principal Treatment Centre. Furthermore, there is a risk that companies do not want to open trials in an environment where significant change (and transfer of services) will be taking place.</p> <p>A specific example relates to potential impact on the ability for both children and Teenage and Young Adults to be consented and recruited to trials, including of more ‘adult’ cancers.</p>	<p>The evaluation criteria for the Principal Treatment Centre reflected risks associated with transfer of services. The two shortlisted options were assessed against a range of criteria including for research, with sub-criteria which covered people; place; and performance and capability.</p> <p>Much high impact research does not now rely exclusively on patients co-located with the scientific researchers. Indeed, much of the ground-breaking research led by the Institute of Cancer Research/The Royal Marsden has recruited patients from all over the UK or in pan-European trials. So, with work and careful planning, it should be possible to recruit to Institute of Cancer Research initiated research, children who are receiving care only a few miles away from the laboratories and scientists.</p> <p>Key to the ability to maintain ongoing support, is the relationship that the future provider will need to build once a decision is made and provide assurances to trial providers – academic or commercial. Both providers are committed to working with the Institute of Cancer Research and The Royal Marsden to build on and identify strategies to manage risks.</p> <p>Close working during the Implementation Phase will be key to this, including to ensure that there is timely set up and opening of trials, that recruitment to trials can be done on time and on budget and that there are good quality systems in place for high quality data collection and reporting. Strategies to support this need to be developed.</p> <p>Careful planning work will be needed to identify and make plans to support risks associated with teenage and young adult access. It will be imperative that stakeholders work closely to manage risks in the forthcoming period.</p>

Risk	Potential mitigation
<p><b>Creating the conditions for collaborative working on research</b></p> <p>In the future, under these proposals, research will be conducted across at least two sites where clinical oncology teams are based on one site and scientists on another; this will also require cross-site working and transfer of samples and data. There are associated risks including discontinuity in current research and clinical trials.</p> <p>Specific risks are also identified in relation to the ability of Children and Young People to be consented and recruited to trials if there is not the right expertise of staff in the future Principal Treatment Centre. This could be the case if some of the current Principal Treatment Centre staff do not choose to transfer.</p>	<p>In order to support continuity and ongoing collaboration it will be important that consideration is given to factors such as: the structure of employment arrangements; cross-site working arrangements; robust consent processes and governance arrangements in line with the human tissue act, logistics for handling, storing and transporting samples between sites; and arrangements for managing data including patient records.</p> <p>Close working; planning and a solution focussed approach will be required between current and future stakeholders to overcome some of the difficulties that this presents.</p> <p>Mitigations to support collaboration between clinical oncology teams at the Principal Treatment Centre and scientists at the Institute of Cancer Research may include: joint appointments, mutual honorary contracts, split site working, exploring funding opportunities to ensure continuity of funding for posts, cross-site training including of cancer research nurses (and other professions) if the potential for gaps is identified.</p> <p>Care planning and investment may be required to ensure infrastructure is in place for handling, storage and transporting samples. This extends to the management of relevant data for which interoperability between sites/organisations will need to be ensured.</p>
<p><b>Managed and compassionate access</b></p> <p>The Royal Marsden currently supports 'managed' and 'compassionate access' programmes to facilitate access for patients to innovative medicines where no open clinical trial is available. The impact</p>	<p>The future provider will need to work closely with the Institute of Cancer Research, The Royal Marsden and other stakeholders (such as pharmaceutical companies) to support continued access on a similar basis to current provision. There is a risk that the agility and ability to do this is lost when the service transfers, unless the new Principal Treatment Centre provider ensures ongoing partnerships with pharma partners and these partners have confidence in the</p>

Risk	Potential mitigation
<p>of losing this is that children and young people could miss out on accessing treatment that could potentially increase their chance of their cancer responding, and with fewer side effects, and thus impact on the outcome.</p>	<p>ability of the new Principal Treatment Centre to govern and deliver these safely with appropriate reporting, within clinically necessary time frames.</p>
<p><b>Equalities and Health Inequalities</b></p> <p>There is a risk that the proposed service reconfiguration does not sufficiently meet duties under the Equality Act 2010 and Health and Social Care Act 2022 with regards Equalities and Health Inequalities</p>	<p>A comprehensive Integrated Impact Assessment (IIA) has been prepared in relation to this programme and the decisions that need to be made. This will be updated post consultation and prior to final decision making to take account of information provided during the consultation process.</p> <p>These are duties that are relevant to all NHS bodies, including the Trust that is awarded the Principal Treatment Centre, they will need an action plan to follow through the work identified, including recommendations.</p> <p>Further development of mitigation actions will be required as part of implementation planning, taking into account feedback collected as part of the public consultation and further stakeholder engagement. Both providers have committed, in principle to the creation of a dedicated Travel and Access Working Group during the Implementation Phase to support this.</p>
<p><b>Travel and access to the future Principal Treatment Centre</b></p> <p>Patients and their families will have longer journeys (on average) by car to access care at the Principal Treatment. Costs of travel may also increase.</p>	<p>Concerns raised by stakeholders around travel and access are taken very seriously by NHS England. We have looked at travel and access in a variety of ways to date, including through quantitative and qualitative analysis.</p> <p>To date, the interim EHIA has identified a number of recommended mitigations that will play an important role in addressing concerns that patients, their families and other stakeholders have raised. These will continue to be developed in response to feedback that we receive during the consultation.</p>

Risk	Potential mitigation
	To support our consideration of these, work is ongoing with an EHIA sub-group. Both providers have committed to the principle of a dedicated Travel and Access Working Group during the Implementation Phase to oversee the development and delivery of mitigations.
<p><b>Transition: Impact on St George's</b></p> <p>There is a risk that service change will have an impact on other organisations which will need to be managed. This includes on St George's if a decision is made for the future Principal Treatment Centre to be at Evelina London. St George's has identified a number of risks associated with this (see section 6.2 Impacts on other services).</p>	<p>Considerations in relation to the likely impact on these services and mitigations will be ongoing. At this stage in the process, it has not been possible, nor proportionate, to invest significant amounts of time developing comprehensive solutions to mitigate the potential impact on services at St George's. Parties to the reconfiguration have discussed the concerns St George's has raised and have noted the importance of addressing should a decision be made that Evelina London is the future centre.</p>
<p><b>Teenage and Young Adult services</b></p> <p>The Royal Marsden will continue to provide cancer services for teenagers and young adults. In the future, older children who are cared for at the future Principal Treatment Centre will transfer to a different site for Teenage and Young Adult services (usually around the time of their 16th birthday although there is flexibility). This will need to be managed carefully to make sure children have an excellent experience of moving to the teenage service.</p>	<p>The Royal Marsden and the future Principal Treatment Centre will work very closely together and with patients and parents to plan this before specialist children's cancer services move. By doing this, they will make sure all patients continue to get the support and care they need during their move to Teenage and Young Adult services.</p> <p>The Royal Marsden will undertake a review of the mix of clinical specialists across its sites and review how the services are provided across its estate, including with reference to the new service specification. NHS England will support this work.</p>

Risk	Potential mitigation
<p><b>Supporting those who are and/or could become distressed by the move</b></p> <p>However important it is to move a service, it is always difficult for the people involved. Families and staff care very deeply about children's cancer care. The proposed move of specialist children's cancer services will have an impact on The Royal Marsden and on patients, parents and staff (including research staff) as well as bereaved families whose children received their care at The Royal Marsden.</p>	<p>The Royal Marsden is working closely and constructively with NHS England, patients, families and staff to contribute to the process. We all share the same objective, to ensure the very best service is provided for children and families. The Royal Marsden and the team at the future Principal Treatment Centre will make sure staff and families have the support they need through this time of change and that the service runs smoothly throughout. They will work with families on preserving memorials for children in line with families' wishes.</p>
<p><b>Variation in assumptions on capital costs</b></p> <p>There is an issue that there is variation in assumptions on capital costs in terms of inflation, contingency and other costs, between the proposals and a risk that further capital may be required for either option moving into the Outline Business Case (OBC) and Full Business Case (FBC) stage.</p>	<p>Financial affordability has been assessed as one of the option hurdle criteria for this programme (see section 4.4 Financial appraisal as a hurdle criterion, 4.5 Developing the evaluation criteria and 7.1 Financial Impact Assessment Introduction).</p> <p>Capital costings from both Trusts are at a high level because neither Trust has yet done the detailed drawings required to develop more detailed costings for works and equipment. Both have mitigated this by using professional cost advisors and benchmark costs, holding levels of financial contingency, including inflation and optimism bias, to develop the costing.</p> <p>The programme will work closely with the successful Trust in developing the OBC and FBC. Any downside risk that increases capital costs will need to be met by operational capital envelopes held by Integrated Care Systems.</p>

Risk	Potential mitigation
<p><b>JACIE Accreditation</b></p> <p>Both providers would need to satisfy The Joint Accreditation Committee ISCT-Europe &amp; EBMT (JACIE) for stem cell transplantation. Accreditation can be a lengthy process this would need to be done within the 2.5 years allocated for implementation. Although both trusts set out how they will do this, the accreditation process is a 6-step process excluding amendments needed to the service which could themselves be timely.</p> <p>Accreditation demonstrates that the provider is performing to a required level of practice in accordance with agreed standards of excellence.</p> <p>Failure to be accredited would not prevent the provider from providing the service, however it is considered good practice and they may be advised throughout the process that it is unsafe for them to do so.</p>	<p>Both providers would need commit to begin the JACIE accreditation as soon as a decision is made, including starting a self-assessment as soon as possible. Providers would be expected to keep track of their implementation plans, and the time effect this may have.</p> <p>The chosen providers would need to flag the risk of not being JACIE accredited within the implementation timeline in a timely manner. This will be monitored by the Implementation Board.</p>
<p><b>Risk of legal challenge or HOSC referral to Secretary of State for Health and Social Care</b></p>	<p>Acceptance of risk</p> <p>Challenge has to be on the grounds of inadequate process rather than dislike for the outcome; so the programme team is ensuring a robust and fair process</p>



Risk	Potential mitigation
<p>There is a risk that the programme is taken to Judicial Review or referred to (or called in by) the Secretary of State by those who are unhappy with the outcome and the proposed changes. This will have a significant impact in terms of delay to the implementation timeline, the opportunity costs of not making the improvements to the clinical model as soon as possible, requirements for additional resources to support the programme's work over a longer time period and for legal advice, ongoing uncertainty for staff that will impact recruitment and retention, ongoing uncertainty for patients and families currently receiving Principal Treatment Centre services that will impact their experience, and ongoing uncertainty for research teams and research funders that may impact research and clinical trials over time. Delay to implementation (while any challenge is ongoing) could lead to a rise in capital and labour costs</p>	<p>is undertaken at every stage; internal governance and assurances are embedded into the work of the programme; legal advice is sought at each stage</p>

Risks will continue to be kept under regular review including the need for new mitigation strategies.

## 10.4. Recommendations

This pre-consultation business case sets out how NHS England (London and South East regions) have had regard to the Government's four tests for service reconfiguration alongside NHS England's test. Our proposals have been drawn up with strong public and patient engagement; regard to consistency with current and prospective needs for choice; and reference to a clear, clinical evidence base. Proposals have support from commissioners and do not include any reduction in capacity.

Both options described in this business case meet our hurdle criteria, meaning both are viable. This reflects the fact that a future Principal Treatment Centre at either Evelina London Children's Hospital or St George's Hospital would comply fully with the national service specification once The Royal Marsden service moved across and all other aspects of the relevant option were implemented.

Based on the initial outcome of the options evaluation process outlined above, in which Evelina London's proposal received the higher overall score, the Evelina London proposal is our preferred option at this stage in the process. In presenting a preferred option, NHS England is making it clear what we, as commissioners, think about the options based on the evidence we currently have.

Having said this, we want to make it very clear that we are undertaking consultation with an open mind. Both options scored highly, and we recommend consulting on both options for the centre and only making a decision on the location of the future Principal Treatment Centre after considering views and additional information that come forward during the consultation. There may also be other solutions that meet our case for change that we haven't identified and should consider. We will do so if viable alternatives are suggested.

We will take account of all relevant factors. The evaluation scoring will form one part of the information that shapes the final decision on the future location of the Principal Treatment Centre in which the key question to be answered will be which option, Evelina London or St George's, will offer the best children's cancer care service once implemented and for the future.

Once a decision has been made, NHS England will work with stakeholders, including The Royal Marsden and the provider of the future Principal Treatment Centre to oversee the implementation phase to help ensure the safe and timely transfer of services, including full compliance with the national service specification and the development of a service that will give best quality care and achieve world-class outcomes for children with cancer for decades to come.

## Appendices

[Appendix 1 – Integrated Impact Assessment](#)

[Appendix 2 – Equalities Profile Report for the Principal Treatment Centre catchment](#)

[Appendix 3 – Activity Data Pack](#)

[Appendix 4 – Association for Young People's Health report](#)

[Appendix 4.1 – Association for Young People's Health report results from young people age 11-16](#)

[Appendix 5 – Financial Impact Assessment](#)

[Appendix 6 – Risks, Issues and Mitigation Plan](#)

[Appendix 7 – London and South East Clinical Senates Review](#)

[Appendix 8 – NHS England response to the recommendations of the London and South East Clinical Senate Panel Review](#)

[Appendix 9 – National Service Specification for Children's Cancer Principal Treatment Centres: outcomes and applicable quality standards](#)

[Appendix 10 – Consultation plan – approach to communications and engagement](#)