Decision Making Business Case: Proposals for the future location of very specialist cancer treatment services for children who live in south London and much of south east England

Appendix 4:

Integrated Impact Assessment



About the Integrated Impact Assessment (IIA)

The Integrated Impact Assessment is a set of collated evidence that provides information about the potential positive and negative impacts of proposed changes to services. It also lists a set of potential solutions (mitigations) that may help to address some of the areas identified as having a negative impact on a particular group, organisation or community.

Here, the service change being considered is the relocation of the Children's Cancer Principal Treatment Centre serving Brighton and Hove, East Sussex, Kent, Medway, south London and most of Surrey, to ensure compliance with the <u>NHS England service specification</u>.

It is important to read this document alongside the broader context of why this service change is needed. The case for change is described in the Decision Making Business Case (DMBC) and is centred around the need to ensure compliance with the NHS England service specification, which states that all specialist children's cancer services must be on the same site as a children's intensive care unit and other specialist children's services. This followed a national consultation, reviews and reports. The current service does not and cannot meet this standard. As a result, we are consulting on moving the specialist cancer currently provided at The Royal Marsden and St George's Hospital to a hospital in south London which already has children's intensive care and other specialist children's services on site.

Please note that the purpose of the IIA is not to determine any decision within this service change programme, but to provide support to decision-makers by giving them better information on potential impacts and how best they can promote and protect the wellbeing of patients, staff and communities.

Integrated Impact Assessment to support the Decision Making Business Case: what has changed since publication of the Interim Integrated Impact Assessment to support the Pre-Consultation Business case?

The following amendments have been made to the IIA since the publication of the <u>interim document</u> to accompany the Pre-Consultation Business Case. Many of these amendments have been made in response to reviews of the interim IIA by the Mayor of London's office, or the Clinical Senate. A more detailed response to the findings of these reviews can be found on the <u>following slides</u>.

- 1. An expanded executive summary
- 2. Acknowledgement of the impacts that structural racism can have on access to healthcare for certain population groups and confirmation of commitment of the potential future Principal Treatment Centres to address it (link)
- 3. Mention of adjustments provided for learning disability
- 4. More detailed information on financial advice and support available through voluntary sector organisations (link)
- 5. A summary of the wider inequalities work undertaken by the potential future Principal Treatment Centres (link)
- 6. A summary of likely direction of travel for children's cancer shared care unit transformation (link)
- 7. A summary of national patient experience survey results (link)
- 8. Equity analysis of the current Principal Treatment Centre patient cohort (link)
- 9. Future metrics for monitoring access, quality and outcomes of the new service specification (link)
- 10. Incorporation of new travel time analysis by ethnicity (link)
- 11. Incorporation of new travel cost analysis (link)
- 12. Incorporation of feedback received through the public consultation, in relation to equity, travel and access (link)
- 13. Updating of recommendations for mitigation (link)
- 14. Updating of sustainability section (link)
- 15. Updating of wider Impacts on other providers (link)

The Mayor's six tests (1 of 2)

Below we set out NHS England's response to the findings of the Mayor's review of this change programme, in relation to the first of the six tests applied to all major service reconfiguration programmes: Health and healthcare inequalities. We also indicate where a similar recommendation was made by the London and South East Clinical Senate in their review.

Final plans should "Set out greater analysis of existing inequalities within the current service in access to diagnosis and treatment, experience of care and outcomes from treatment. This baseline analysis is needed to show whether the proposed changes will reduce inequalities compared to the current service."

Response: Whilst demographic analysis of those diagnosed with childhood cancer (incidence) was already presented in the "Equalities" appendix that supports the IIA, we have strengthened the IIA with an analysis of the current patient cohort and compared this to both the Principal Treatment Centre catchment population and the cancer incident population. This reveals that the patient cohort is broadly representative of those diagnosed with cancer and the child population in general.

Travel time analysis to the current service has already been presented for age, sex, socio-economic status and rural vs. urban areas. We have now included analysis of travel time by ethnic group.

We explored other measures of access and/or service quality and can confirm the following findings:

- Clinical outcomes within the new Children's Principal Treatment Centre service specification will be monitored via the Specialised Services Quality Dashboard (SSQD), published on Model Hospital (see <u>appendix H</u> for details). This data is not currently available and will be published in summer 2024, enabling the establishment of a baseline for the current Principal Treatment Centre service.
- Data available through the national Cancer Registry is not available at Principal Treatment Centre level and/or the age-group breakdown required (due to small numbers):
 - o Survival data: data on childhood cancer survival is available at the national level only
 - Routes to diagnosis (e.g. whether cancer diagnosed through screening, two week wait process, emergency presentation etc): no age breakdown available
 - Systemic Anti-Cancer Therapy (time to first treatment): no age breakdown available
 - Cancer Alliance Data, Evaluation and Analysis Service (CADEAS) (emergency presentations / early diagnosis): no age breakdown available
- Cancer waiting times: the national cancer waiting times cover children, but data is not published by age due to small numbers.
- Patient experience surveys are available at Trust level and are summarised later in this IIA.

To summarise, in response to the recommendation to demonstrate whether the new service will reduce inequalities compared to the current <u>service</u>:

- In terms of the current patient population accessing the service, analysis reveals that this access is representative of need (incidence) and so the aim would be to *maintain* this equity in access. All childhood cancer diagnoses must be made by a Principal Treatment Centre, and the existing <u>NICE guidelines</u> on presentation, referral and diagnoses will apply to the future service, as well as the core service requirements of the <u>national</u> <u>service specification</u>. This will be supported by ongoing development of the associated clinical network (which the future Principal Treatment Centre will host), helping to ensure that the established care pathways continue, allowing the same equity of service access.
- Equalities analysis of the impact of the proposed changes reveals that the impact of travel to a new location was lower for those from the most deprived areas of the catchment or for those of ethnicities other than white (i.e. the increase in travel time was proportionally lower for these groups compared to the general catchment population). However, this does not negate the fact that some families, particularly those from more remote or coastal areas of the catchment, will face longer, more costly journeys that need to be mitigated. Analysis by sex and age did not reveal any differential impacts.
- Equity in relation to other measures of access, quality or outcomes will need to be established as part of the implementation phase, once we have an understanding of the current baseline (summer 2024). To support this Principal Treatment Centre-level baseline, we have also made a recommendation for the new service to conduct Health Equity Audit to monitor equity between socio-demographic groups.

The Mayor's six tests (2 of 2)

"Commit to specific plans for how the future service will maximise opportunities to reduce health and healthcare inequalities, with clear targets and mechanisms for monitoring progress." [also a recommendation of the London and South East Clinical Senate review]	"Provide an analysis of travel costs and a strengthened analysis of travel times, with plans set out to mitigate any potential negative or inequitable impacts on patients and families. This should reflect the fact that a significant majority of patients and families travel to appointments by car." "Attention should be paid to the cumulative journeys experienced by children and their families over the course of their diagnosis and treatment".
Response: As well as the service specific opportunities to maintain or improve equity of access, via monitoring (described on previous slide) and putting in place support to facilitate easier travel and access for vulnerable groups, we sought information from both potential future Principal Treatment Centres on their wider activities on reducing inequalities and how they will comply with the five priority areas for reducing health inequalities described within the <u>NHS Operating Guidance</u> . For example, their development as an anchor institution, Core20PLUS5 approaches or proactive outreach work. This includes confirmation that they are committed to the London approach to tackling structural racism and also <u>NHS Providers recommendations for reducing health inequalities faced by children and young people</u> . The information has been summarised within this IIA.	Response: We commissioned new travel time analysis to incorporate the impact on travel cost, for the whole patient population and also for those who live in the most deprived areas. This has a focus on travel by car, as the preferred travel option (but also relates to the difficulties of producing "average" public transport costs). This analysis is presented within this IIA. Estimation of cumulative travel costs is challenging due to the complexity and variation of cancer care for children, depending on their age and cancer type, i.e. there is no single typical care pathway. However, we have explored data regarding the number of visits currently made by patients to the Principal Treatment Centre and used this information to provide examples of the cumulative impact for travel costs over an annual time period. This analysis is presented within this IIA.
Whilst these strategies represent Trust ambitions on reducing health inequalities, the setting of specific targets for the Principal Treatment Centre service is not possible until a baseline has been established (summer 2024).	The impacts on changes to travel time have already been presented for age, sex, socio- economic status and rural v urban areas. We have now included analysis of travel time by ethnic group.
Targets and monitoring of wider Trust work to reduce inequalities will be informed by NHS performance reports, via platforms such as Model Hospital or the Health Inequalities Improvement Dashboard, that are delineated by variables such as geography, ethnicity and deprivation.	Recommendations for mitigation of equity impacts have already been described in the interim IIA. However, we have updated these recommendations with information collated as part of the public consultation on the service change. We will also ensure that these recommendations are included within future implementation plans, once the future Principal Treatment Centre provider is known.
"Set out detailed analysis of the potential impacts of the proposed changes on other services, particularly wider children's inpatient services. This should consider and address potential knock-on effects in terms of service viability, access and outcomes, especially where these risk widening health and healthcare inequalities."	"The proposals state an ambition to provide more services locally where appropriate. This has the welcome potential to reduce the burden of travel for patients and families. this ambition should be set out in more detail in the DMBC, in terms of its nature, scale and implications for healthcare inequalities" [also a recommendation of the London and South East Clinical Senate review]
There are a number of potential impacts on wider organisations that will need to be addressed and/or mitigated in the implementation phase. These, alongside supporting mitigations, are described in section 8.6 of the Decision Making Business Case.	The children's cancer shared care unit transformation programme, underway across the North and South Thames Children's Cancer Networks, will be key to developing this mitigation proposal. See <u>Appendix G</u> for further information on this programme.

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Integrated Impact Assessment

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IIA Executive Summary (1 of 4)

Section 1: Equalities profile of the Principal Treatment Centre catchment population The Principal Treatment Centre provides cancer care for children aged one to 15 who live in the area which covers Brighton and Hove, East Sussex, Kent, Medway, south London and the majority of Surrey

Childhood cancer incidence rates do not vary significantly between the different geographies within the catchment area. South London (in particular, south east London) tends to have a higher proportion of people from ethnic groups other than white, deprivation, asylum seekers, homelessness and alcohol admission rates. Deprivation and homelessness also affect areas outside London, in particular 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.



Income Deprivation Affecting Children Index (IDACI) 2019 by Local Authority



IIA Executive Summary (2 of 4)

Section 2: Equality and Health Inequalities Impact Assessment

Travel time impact analysis:

When comparing travel times to The Royal Marsden to either option for the future Principal Treatment Centre there are positive impacts for children of ethnicities other than white and for children living in the most deprived areas, outside London and in rural areas when travelling by public transport. Children living in the most deprived areas would see their travel times reduce by at least 25 minutes









However, those living outside London, and in particular rural areas, would likely have a longer journey when driving, with increases of up to 30 minutes per journey. For non-London residents with the longest journey times, this increase could be up to 41 minutes (and longer for those living in specific parts of the catchment area). There were also more moderate increases in journey time whilst driving for children of ethnicities other than white and for children living in the most deprived areas.

Radiotherapy services: travel time analysis found travel time by road will increase on average by 22 minutes to University College Hospital (as compared to The Royal Marsden) whilst the same journey by public transport will reduce by 27 minutes.

Travel cost impact analysis:

Driving costs (based on standard fuel rates) for the whole catchment population are estimated to be, on average, lower (by £2-£3 per return journey) to either potential Principal Treatment Centre location than to The Royal Marsden (with similar driving costs to University College Hospital as compared to The Royal Marsden). However, there are differences across the catchment, with a proportion of the population who have some of the longer journeys likely to face an *increase* in travel costs of £2-5 per return journey. A family experiencing 15 visits in a year (for example) could experience additional fuel costs in the region of £29-35 over the period (and in terms of time, experience up to 20-24 hours of additional travel time).

Additional impacts

It was also thought that there would be additional impacts for some groups if their journey was more complicated, or they felt uncertainty about the prospect of the service changing, for instance, concerned about how accessible the new location may be. There would also likely be benefits for some groups because more children's services will be available in one place, with less travel between them required.

A summary of the assessment of likelihood of impact on groups with protected characteristics or who typically experience health inequalities is shown on the <u>next slide</u>.

Consultation feedback

Through the consultation, feedback was received that it would be costly and time consuming for families to travel to either Principal Treatment Centre location, especially by car. It was clear that support and information about public transport near the future Principal Treatment Centre, the provision of family accommodation nearby, and parking availability were very important. Other feedback referenced the importance of help with parking and travel costs, including Ultra Low Emission Zone and congestion zone charges.

IIA Executive Summary (3 of 4)

Section 2: Equality and Health Inequalities Impact Assessment The table below summarises which groups may be disproportionately impacted in terms of their ability to access the service, their experience of service change, or outcomes. Further detail on the evidence underlying this assessment is available in <u>Section 2</u>.

Is there likely to be a disproportionate impact on ability to access the service (travel/onsite access), experience of change or of the services being co-located with other services?

Those with protected characteristic	s (Equalities Act 2010)	People who typically experience inequalities in health status or	access to healthcare
Age	Yes	Looked after and accommodated children and young people	Yes
Sex	No	People or families on a low income/living in more deprived areas	Yes
Disability (other than a cancer diagnosis) and spectrum disorders	Yes	People with poor literacy and/or language barriers	Yes
Ethnicity (including Gypsy, Roma and Traveller ethnic groups)	Yes	People with caring responsibilities (including young carers)	Yes
Pregnancy and maternity	Yes	People living in more remote areas	Yes
Religion or belief	No	Newly arrived groups: Refugees, asylum seekers (including unaccompanied children)	Yes
Marriage / civil partnership	No	People with addictions and/or substance misuse issues	Yes
Gender reassignment	No	People involved in the criminal justice system: offenders in prison/on probation, ex-offenders	Yes
Sexual orientation	No	Homelessness. People living on the street; staying temporarily with friends/family; in hostels or bed and breakfasts	Yes
		Family structure: single parents/carers	Yes
		Families experiencing digital exclusion	Yes

IIA Executive Summary (4 of 4)

Section 2: Equality and Health Inequalities Impact Assessment (continued)	 Summary of recommendations for mitigation of adverse impacts. The future Principal Treatment Centre should have in place: Systems and processes aimed at helping patients and families plan their journeys to hospital, including provision of inclusive and accessible information and translation services. Systems and processes aimed at reducing the financial impact of travel, such as reimbursement schemes for travel costs or support for 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. A non-emergency patient transport service provided directly to patients and their families. The service should have clear eligibility criteria that considers both medical need and other relevant circumstances. High quality onsite accessibility arrangements, including dedicated parking and drop-off facilities. 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. 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.
Section 3: Local Authority Travel Times Analysis	Children in most local authority areas would experience a reduction in travel times by public transport, but conversely, most areas would see an increase in travel time when driving. Local authorities in south west London, Surrey and East Sussex see the largest impacts on travel time when comparing travel to the two potential Principal Treatment Centre locations to travel to The Royal Marsden.
Section 4: environmental sustainability	Both organisations have published environmental strategies which detail how they will support the national NHS commitment to delivering a 'Net Zero' health service. Both strategies outline plans to reduce emissions from all sources, contribute to improving local air quality, develop sustainable use of resources, and enhance green spaces. A detailed environmental impact assessment will need to be conducted as part of the planning and implementation phase.
Section 5: wider impacts on other organisations	NHS England London has identified potential impacts on wider services, depending on the final decision on where to move the children's cancer Principal Treatment Centre. Consideration has been given within Decision Making Business Case to impacts on radiotherapy provision, the service for teenagers and young people at The Royal Marsden, and both Evelina London Children's Hospital and St George's Hospital's specialist services for children. Also considered are impacts on social care, the South Thames Retrieval Service, other Trusts and patient pathways. There are not expected to be significant impacts arising from the reconfiguration on these other Trusts or wider services.

Section 1: Equalities Profile Report

The full Equalities profile is in <u>Appendix 2 of the Pre-Consultation Business Case</u>.

To support the Equality and Health Inequalities Impact Assessment (EHIA) process, the Equalities profile shows the distribution of certain population groups in the catchment area of the Principal Treatment Centre.

It contains information on:

- the socio-demographics of the Principal Treatment Centre catchment, including groups with protected characteristics or other vulnerabilities
- the socio-demographic profile of children diagnosed with cancer (the "incident population")

The next five slides contain a summary of key aspects of the Equalities Profile.

In addition, we also include a comparison (where data is available) to the socio-demographics of the current Principal Treatment Centre patient cohort (the "patient cohort") as well as a summary of patient experience survey results for the current Principal Treatment Centre.

Defining the Principal Treatment Centre catchment area

The Principal Treatment Centre provides cancer care for children aged one to 15 who live in the area which covers south London, Kent, Medway, East Sussex, Brighton and Hove, and the majority of Surrey. It is acknowledged that children can access a Principal Treatment Centre (PTC) who live outside its defined catchment area, and not all children diagnosed with cancer who live in a defined PTC catchment area, choose to attend that particular centre for their treatment.



The catchment area of the Joint Principal Treatment Centre (The Royal Marsden and St George's)

A note on border areas

West Sussex is part of the Wessex Children's Cancer Network which is led and coordinated by the Principal Treatment Centre at Southampton. For this reason, West Sussex is not included in the definition of the catchment area.

However, children who live in Crawley, Mid Sussex and Horsham (the hatched area) live close to a shared care unit in Redhill, Surrey which comes under the Principal Treatment Centre provided by The Royal Marsden NHS Foundation Trust and St George's University Hospitals NHS Foundation Trust. Care for children who go to Redhill for their treatment will be led and coordinated by The Royal Marsden. To support an understanding of the impact on children and families living in this part of West Sussex, the Integrated Impact Assessment includes data for Crawley, Mid Sussex and Horsham.

Children who live in the west of Surrey - Surrey Heath and Farnham – typically go to the shared care unit at Frimley Park Hospital which comes under the Principal Treatment Centre at Southampton. This means care for children with cancer who go to Frimley Park is led and coordinated by the Principal Treatment Centre at Southampton. For this reason, we have not included them in our analyses for this consultation.

The child population of the Principal Treatment Centre catchment

The population aged one to 15 in the Principal Treatment Centre catchment area is approximately 1.3 million and is distributed evenly across the age bands 1 to 5-year-olds, 6 to 10-year-olds and 11 to 15-year-olds (see figure 1). Figure 2 below shows that the 0 to 14-year-old* population is projected to decline over the next 20 years on average by 7% across the catchment area. This assumption will be reviewed when the Office for National Statistics release updated sub-national population projections based on the 2021 Census.



*ONS population projections are calculated in 0-4, 5-9 and 10-14 year age bands only

Incidence of childhood cancer

The rate of new childhood cancer diagnoses (incidence) in the Principal Treatment Centre's catchment area is comparable to that of

England. Incidence rates do not vary significantly between the different geographies within the catchment area (see figure 3 below). The distribution of new cancer diagnoses is also similar between the Principal Treatment Centre catchment and England (Figure 4) and this distribution is broadly reflected in the age-structure of the Principal Treatment Centre patient cohort.

National data shows a slightly higher incidence of cancer in boys than girls and for both boys and girls, incidence is highest in the first five years.

Leukaemia is the most common type of cancer, accounting for 31% of registrations, cancers of the central nervous system for 25% and lymphomas for 10%. The latest available data shows that 5-year survival was 84% for those diagnosed but survival rates differ by cancer type. (*Children, Teenagers and Young Adults UK Cancer Statistics, 2021*)



Disability

Please note that disability status is not recorded within Cancer Registry or hospital activity data so we are not able to review diagnosis rates or Principal Treatment Centre (PTC) access rates by this status.

In England in 2020, 34 per 1,000 children had learning difficulties known to schools, with a lower rate in the south east (31/1,000) and London (23/1,000). None of the local authorities within the PTC catchment had rates higher than England.



The chart below shows the proportion of people of all ages living in the Principal Treatment Centre catchment area who stated that they had a disability (according to the Equality Act definition) in the 2021 census. Hastings in Sussex and Dover, Folkestone, Swale and Thanet in Kent have higher than average proportions. The proportion of disabled people is lower in south west London and Surrey Heartlands.



Deprivation

The map below demonstrates areas of relatively higher deprivation in households with children in south London and distributed along coastal areas, in particular Swale, Medway, Thanet and Hastings (represented by darker shades of blue).

Please see <u>Appendix A</u> for further information on the metrics used to explore deprivation levels (the Index of Multiple Deprivation)

Figure 7: Income Deprivation Affecting Children Index (IDACI) 2019 by Local Authority



In figure 8, we compare the proportion of the current patient cohort by socioeconomic group to the socio-economic distribution of new cases (incidence) and the Principal Treatment Centre catchment child resident population. The distribution between socio-economic groups for all three sources is similar, indicating that this factor does not unduly influence the risk of being diagnosed with cancer and that access to the service is equitable in relation to this factor.



Car ownership

Within this programme, an important consideration is that of <u>travel</u> <u>poverty</u> (a difficulty or inability to make necessary journeys due to a combination of income, cost and service availability).

The map demonstrates the percentage of households across south London and the relevant parts of the south east who have no access to a road vehicle (Census 2021). This proportion is highest in the urban areas of south London and Brighton and then to a lesser extent in Eastbourne, Hastings and Thanet.



31.0%

47.9%



22.1%

No cars or vans in household

15.7%

7.8%

77.2%

Ethnicity

South London has the highest proportion of children from ethnic backgrounds other than white (50%). In contrast, 83% of the child population of Kent, Medway and the parts of Surrey and Sussex represented here were from white ethnic groups in 2021. In contrast, 72% of children in England as a whole come from a white ethnic group.



In figure 11, we compare the proportion of the current patient cohort by ethnic group to the ethnicity distribution of new cases (incidence) and to the ethnicity of the Principal Treatment Centre catchment child population. The distribution of ethnicity in the patient cohort and those newly diagnosed is broadly similar to the child resident population, indicating that ethnic group does not unduly influence the risk of being diagnosed with cancer. Please note that 22% of records for the PTC patient cohort did not have a valid ethnic group code so findings associated with this data source should be interpreted with caution.



Patient experience survey: baseline

The charts show findings of the latest Under 16 Cancer Patient Experience Survey 2022 for the current Principal Treatment Centre.

In the 2022 survey, results for the current Principal Treatment Centre were not significantly different from the overall national result on any area, except for one metric*. It should be noted that the results are based on 100 responses to the survey. This is a response rate of 25% which is the same as the national response rate. Due to the small number of patients completing this survey, findings should be interpreted with caution.

The charts below show findings between different age-groups (chart a) against the question "overall, please rate your child's cancer care from 0 (very poor) or 10 (very good)".

Also shown (b-d) are findings between boys and girls, different ethnic groups and socio-economic groups against the guestion "overall, how well are you looked after for your cancer or tumour by the healthcare staff?".



There is no significant difference in responses to these questions between the demographic groups.





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Section 2: Equality and Health Inequalities Impact Assessment

What is an Equality and Health Inequalities Impact Assessment?

Equality and Health Inequalities Impact Assessments (EHIAs) assess the potential impact of a policy, practice or programme of work on population groups with a protected characteristic, or who face health inequalities.

A. Equality Act 2010 : Public Sector Equality Duty (PSED)

(We must) have due regard* to the need to eliminate discrimination, harassment and victimisation, to advance equality of opportunity, and to foster good relations between people who share a relevant protected characteristic and those who do not share it.

A. The Health and Care Act 2022

(We must) have regard to the need to reduce inequalities between persons in access to, and outcomes from healthcare services.

* Having "due regard" means consider the aims of the Duty in a way that is proportionate to the issue at hand. Decision makers should ensure that they give real consideration to these aims and think about the impact of proposals with rigour and an open mind.



What changes are we assessing the impact of?

The change programme concerns the location of specialist cancer services for children living in Brighton and Hove, East Sussex, Kent, Medway, south London and most of Surrey, to ensure compliance with the <u>NHS England service specification</u> for Principal Treatment Centres. A shortlisting and options appraisal process has resulted in two potential options for delivery of the future Principal Treatment Centre:

- Evelina London Children's Hospital, which is part of Guy's and St Thomas' NHS Foundation Trust or
- St George's Hospital, which is part of St George's University Hospitals NHS Foundation Trust.
- For both, it is proposed that radiotherapy services would be delivered at University College London Hospitals NHS Foundation Trust.

Both potential future locations

- would be compliant with the national service specification
- offer sufficient capacity to meet the needs of the service
- are deemed viable options (via the options appraisal process)

Therefore, the main change that will be assessed within this EHIA will be:

A change in location of specialist children's cancer services (including conventional radiotherapy) currently provided at The Royal Marsden and the implications of this change on patient travel arrangements including travel time, complexity of journey (including parking arrangements) and cost. Additional impacts/outcomes considered:

- 1. Potential beneficial outcomes as a result of achieving full compliance with the service specification (please see DMBC for more detail). The future clinical model for the Principal Treatment Centre will:
- Be safer because all children with cancer receiving Principal Treatment Centre care as inpatients will be on the same site as a children's intensive care unit and many other specialist children's services. This will remove avoidable underlying risks associated with the current service arrangement because very sick children who need intensive care input will no longer be transferred for it from one part of the Principal Treatment Centre to the other
- Enable children to get more of their care on the specialist cancer ward in a more familiar, comfortable environment, minimising the number of children admitted to intensive care, which can be frightening for children and families.
- Provide on-site access to more of the services that children with cancer need, including the associated diagnostics . Reduce the need for most patients to travel to sites other than the Principal Treatment Centre for specialist care, improving their and their families' experience:. this is likely to be particularly important for children with a higher need for treatment by other children's specialties (such as those with additional health needs and complex co-morbidities) and for families with language barriers or poor literacy who find attending several sites particularly difficult.
- 1. the prospect of the service change process itself and the uncertainty that may cause for patients and their families
- 2. the development of the future Principal Treatment Centre site and how it should meet recognised on-site access standards.

The EHIA process: key points

- The EHIA sub-group received the information described on the <u>next slide</u> and then met to discuss potential impacts for people with protected characteristics and groups known to experience health inequalities. The sub-group includes representatives from both London and the south east and parent 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 which are seeking to provide the future Principal Treatment Centre. Representatives from both Trusts have also had opportunity to review and provide input.
- The main travel time analysis to support the EHIA takes a non-comparative, population-based approach. This means we consider the potential disproportionate impacts for all groups (with protected characteristics or other vulnerabilities) who live in the Principal Treatment Centre catchment. The impact considered is that of changing from the current situation to a future situation where specialist children's cancer services currently provided at The Royal Marsden would be in a different location. Specialist cancer services provided by St George's Hospital could be affected too. In response to recommendations from the Mayor of London's office, we also include comparative of estimates of potential travel cost impact to each location and cumulative impacts over time.
- Intersectionality: data availability means that it is only practical to consider each socio-demographic group in isolation. However, the EHIA sub-group acknowledges the fact that families may fall within more than one of the characteristics considered, and that this combination of factors may interact to create unique patterns of challenge in terms of accessing healthcare services.
- Socio-economic status and other "categorisations": Socio-economic status (or "deprivation" status) within the EHIA process is measured via the Index of Multiple Deprivation (IMD) (see <u>appendix A</u> of this slide set for more detail on the IMD). The IMD relates to the area in which a person lives, rather than their individual status. Therefore, the reader must be aware of "ecological fallacy"; an incorrect assumption about an individual based on data for a group. Not everyone living in a deprived neighbourhood experiences deprivation, and people can live in non-deprived areas and experience financial difficulties. The same principle can be applied to every other characteristic considered in the EHIA, for example, not everyone within a certain ethnic group or who is disabled may experience challenges accessing healthcare and so on.

Sources of information used in this EHIA

1) **The "Equalities" profile**, detailing:

- The epidemiology of childhood cancer
- The socio-demographics of the Principal Treatment Centre catchment area.

Please see <u>previous section</u> and appendix 2 of the PCBC for the full report

2) <u>Travel time analysis to support the</u> <u>EHIA</u>

Population-based travel time analysis for the Principal Treatment Centre catchment area (starts on next page). **3) Qualitative insight** collected from patients, families and professionals.

(slides 29-30)







Travel analysis to support the EHIA

- The purpose of the travel analysis in this section is to support the assessment of impact on groups with protected characteristics or other vulnerabilities, and not to compare the two potential future Principal Treatment Centre providers.
- The travel time analysis was conducted by the Insights Team, which was then part of NHS North East London Commissioning Support Unit. Please see <u>appendix B</u> for the underlying travel time methodology
- The analysis is population-based i.e., it considers the journeys of all residents within the Principal Treatment Centre catchment, rather than a specific patient cohort.
- The travel measures are intended to provide an *indication* of the *average* quickest journey from different areas of the Principal Treatment Centre catchment to each destination. Individual experiences may not completely align with analysis presented here.

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Please note, this analysis is not the same as the patient
<u>cohort travel time analysis conducted as part of the options</u>
<u>appraisal process</u>. The options appraisal modelled travel times
for actual patients in 2019/20, using anonymised data. The
analysis to support the EHIA modelled travel times for *all* children
living in the catchment area whether they have cancer or not.
Please click here for further information on how travel times were
assessed and scored for that process.

Summary of the section structure:

- This section begins with a description of travel times to The Royal Marsden site in Sutton. We look at the catchment population as a whole, London versus non-London, by socio-economic status, ethnicity and rural versus urban.
- We then summarise the likely impact on median travel times for a change in the location of specialist children's cancer services currently provided at The Royal Marsden. We also use a summary metric that looks at the proportion of the Principal Treatment Centre catchment population who live within defined travel cohorts (in 15-minute intervals) of *either* potential future Principal Treatment Centre provider. For example, if 20% of the population live within 60 minutes of provider X, and 15% live within 60 minutes of provider Y, we use a population-weighted average of these two proportions.
- The move of conventional radiotherapy, which approximately 40 children a year currently require, would introduce the need for travel to University College Hospital for those children. We summarise the likely impact on median travel times for a change in location of the radiotherapy services which are currently provided at The Royal Marsden.
- We also incorporate travel cost analysis and look at some examples of the cumulative impact on time and travel cost an annual time period.

Current travel time to The Royal Marsden: summary

When considering current travel times to The Royal Marsden (Sutton site), travel time analysis shows:

- when travelling by public transport.
 - children living outside London, in the most deprived areas or in rural areas, have longer median travel times compared to those living in the least deprived areas
 - children of ethnicities other than white have shorter median travel times compared to those of white ethnicity
 - the median public transport travel time for the whole catchment population is 97 minutes.
- when travelling by road.
 - children living outside London, in the most deprived areas or in rural areas have longer median travel times compared to those living in the least deprived areas
 - children of ethnicities other than white have similar median travel times to children of white ethnicity
 - the median driving travel time for the whole catchment population is 52 minutes.
- As part of the engagement carried out within this change programme, families were asked about how they travel to the current Principal Treatment Centre (both The Royal Marsden and St George's Hospital). Out of 88 respondents:
 - 81% said they travelled by car (including taxi)
 - 11% said they travelled by public transport
 - · 35% said they travelled for more than one hour
- Based on data from 2021-2022, on average, 146 individual patients (and their families) used the Non-Emergency Patient Transport service. This equates to around 10% of the total number of patients typically treated at the Principal Treatment Centre each year.
- Those participating in research undertaken by Young Lives vs Cancer for a national report on the impact of travelling for cancer treatment, reported living an average of 40 miles from their main cancer treatment centre. This gives context to the distances for those living in the south eastern coastal areas of the Principal Treatment Centre catchment, which can be 60 to 90 miles from the current Principal Treatment Centre location.





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Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment (**driving**)

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. 10% of non-London residents had a drive time of more than 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 90th percentile.



Cumulative proportion of Principal Treatment Centre catchment population who can access The Royal Marsden by driving in 15 minute cohorts

less than 15	less than 30	less than 45	less than 60	less than 75	less than 90	less than 105	less than 120
mins	mins						
2.9%	15.4%	33.8%	66.2%	85.8%	92.7%	98.4%	

*The median is the middle value when all travel times are listed from shortest to longest. This means that half of all potential journeys are estimated to be shorter than this, and half longer. The median has been used for the analysis to mitigate against the impact of outliers (very low and very high values in the data).

** the longest journeys are represented by the 90th percentile travel time, that is the travel time below which 90% of all other travel times lie. The purpose of showing the 90th percentile, rather than the maximum travel time, is to produce a general threshold for longer journeys that avoids drawing conclusions about travel time based solely on occasional extreme outliers.



Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment by **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 longer journeys, 10% of non-London residents had a journey time of more than 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 90th percentile.



Cumulative proportion of Principal Treatment Centre catchment population who can access The Royal Marsden by public transport in 15 minute cohorts

| less than |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 15 mins | 30 mins | 45 mins | 60 mins | 75 mins | 90 mins | 105 mins | 120 mins | 135 mins | 150 mins | 165 mins | 180 mins |
| 0.3% | 2.1% | 7.3% | 20.2% | 35.5% | 45.5% | 57.6% | 67.4% | 75.5% | 83.7% | 90.0% | 94.7% |

* ** See previous slide for explanation of median and 90th percentile values

Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment (**driving**) **DEPRIVATION**: Most deprived areas compared to least deprived

Children living in areas categorised as the most deprived within the Principal Treatment Centre catchment had a median travel time of 61 minutes, compared to a median of 47 minutes for those living in the least deprived areas. 46% of children living in the most deprived areas have a travel time of less than an hour (compared to 83% for those in the least deprived).



Range and density of driving travel times for children living in the <u>least</u> deprived areas (IMD quintile 5)



Cumulative proportion of Principal Treatment Centre catchment population (who live in the most deprived areas) who can access The Royal Marsden by road vehicle (driving) in 15 minute cohorts

| less than |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 15 mins | 30 mins | 45 mins | 60 mins | 75 mins | 90 mins | 105 mins | 120 mins |
| 0.6% | 7.5% | 17.7% | 46.4% | 72.7% | 84.8% | 95.4% | |



Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment by **public transport DEPRIVATION**: Most deprived areas compared to least deprived

Children living in areas categorised as the most deprived within the Principal Treatment Centre catchment had a median travel time of 113 minutes, compared to a median of 90 minutes for those living in the least deprived areas. 14% of children living in the most deprived areas have a travel time of less than an hour (compared to 19% for those in the least deprived).

Range and density of public transport travel times for children living in the <u>most</u> deprived areas (IMD quintile 1)



Range and density of public transport travel times for children living in the <u>least</u> deprived areas (IMD quintile 5)



Cumulative proportion of Principal Treatment Centre catchment population (who live in the most deprived areas) who can access The Royal Marsden by public transport in 15 minute

cohorts	less than											
	15 mins	30 mins	45 mins	60 mins	75 mins	90 mins	105 mins	120 mins	135 mins	150 mins	165 mins	180 mins
	0.2%	0.4%	5.2%	13.5%	28.9%	36.2%	48.4%	55.3%	63.6%	73.6%	81.8%	92.8%



Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment (**driving**): **ETHNICITY**

Children of ethnicities other than white had a median travel time of 60 minutes, compared to a median of 64 minutes for those of white ethnicity. 51% of children of ethnicities other than white have a travel time of less than an hour (compared to 43% for those of white ethnicity).



Range and density of driving travel times for children of ethnicities other than white



Range and density of driving travel times for children of white ethnicity

Cumulative proportion of Principal Treatment Centre catchment population (of ethnicities other than white) who can access The Royal Marsden by road vehicle (driving) in 15 minute

cohorts	less than	less than	less than	less than	ess than	less than	less than	less than	less than
	15 mins	30 mins	45 mins	60 mins	75 mins	90 mins	105 mins	120 mins	135 mins
	2.4%	13.6%	31.9%	51.1%	76.7%	96.3%	99.3%	100.0%	100.0%



Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment by **public transport**: **ETHNICITY**

Range and density of public transport travel times for children of white ethnicity

Children of ethnicities other than white had a median travel time of 74 minutes, compared to a median of 107 minutes for those of white ethnicity. 31% of children of ethnicities other than white have a travel time of less than an hour (compared to 15% for those of white ethnicity).



Range and density of public transport travel times for children of ethnicities other than white

Cumulative proportion of Principal Treatment Centre catchment population (of ethnicities other than white) who can access The Royal Marsden by public transport in 15 minute

| less than |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 15 mins | 30 mins | 45 mins | 60 mins | 75 mins | 90 mins | 105 mins | 120 mins | 135 mins | 150 mins | 165 mins | 180 mins |
| 0.5% | 3.1% | 11.6% | 30.9% | 51.7% | 63.9% | 77.0% | 86.1% | 90.9% | 94.6% | 97.5% | |





Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment (driving): RURAL vs **URBAN**

Children living in rural areas had a median travel time of 68 minutes, compared to a median of 52 minutes for those in urban areas. 37% of children living in rural areas have a travel time of less than an hour (compared to 69% for those in urban areas).



Range and density of driving travel times for children living in rural areas

Cumulative proportion of Principal Treatment Centre catchment population (rural areas) who can access The Royal Marsden by road vehicle (driving) in 15 minute cohorts

| less than |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 15 mins | 30 mins | 45 mins | 60 mins | 75 mins | 90 mins | 105 mins | 120 mins |
| | 2.5% | 14.7% | 37.3% | 65.3% | 85.6% | 98.5% | |



Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment by **public transport**: **RURAL - URBAN**

Children living in rural areas had a median travel time of 153 minutes, compared to a median of 91 minutes for those in urban areas. Just 1% of children living in rural areas have a travel time of less than an hour (compared to 22% for those in urban areas).

Range and density of public transport travel times for children living in rural areas







Cumulative proportion of Principal Treatment Centre catchment population (rural) who can access The Royal Marsden by public transport in 15 minute cohorts

less than 45 mins	less than 60 mins	less than 75 mins	less than 90 mins	less than 105 mins	less than 120 mins	less than 135 mins	less than 150 mins	less than 165 mins	less than 180 mins	
0.3%	0.9%	1.3%	5.4%	11.6%	18.6%	33.6%	48.0%	62.2%	76.9%	3

Further information on how patients travel to the current Principal Treatment Centre

Data on **how patients travel to the current Principal Treatment Centre** is not routinely captured as part of standard datasets. However, as part of preconsultation engagement, NHS England asked children, young people and their families who have direct experience of the service, about their mode of transport and travel times to the site at which they were currently receiving treatment.

Families were asked about how they travel to either The Royal Marsden or St George's Hospital. Out of 88 respondents:

- 81% said they travelled by car (including taxi)
- 11% said they travelled by public transport
- · 2% said they travelled by bicycle or foot
- 6% said they used hospital provided transport. Please note that this is a smaller proportion than that found in the analysis of the Non-Emergency Patient Transport Service data (see box on right). The difference is likely due to the size of the survey sample which can introduce a variation in results.

Families were asked how long their journey takes to either The Royal Marsden or St George's Hospital. Out of 88 respondents:

- · 65% said their journey took less than one hour
- · 35% said they travelled for more than one hour

These survey results correlate well with the modelled estimates for driving shown on the <u>previous slide</u> (where it is estimated that 66% of the Principal Treatment Centre catchment child population live within 60 minutes of The Royal Marsden's Sutton site). Data relating to children who use the **Non-Emergency Patient Transport service** (NEPTS) provided by The Royal Marsden shows that during 2021 and 2022:

- In each year, on average, 146 individual patients (and their families) used the service. This equates to around 10% of the total number of patients typically treated at the Principal Treatment Centre each year.
- The average journey was 29 miles
- The typical longest journey was 87 miles.

It is not possible to present information on how many patients access financial reimbursement schemes for travel costs as The Royal Marsden does not currently collect data that separates out claims made by patients of the adult and the paediatric service.

The charity Young Lives vs Cancer conducted research exploring the costs young cancer patients and their families face travelling for treatment. This included asking families about which forms of transport they used most often to get to and from treatment. 91% said they mostly travelled by car. The other most used forms of transport included non-emergency hospital transport (17%), taxi (16%) and train (14%). It should be noted that this is a national report, and not specific to the Principal Treatment Centre catchment under consideration here.



<u>Running-on-Empty-Report.pdf</u> (younglivesvscancer.org.uk)

Travel time impact: public transport summary

When comparing travel times by public transport to The Royal Marsden to **either option for the future Principal Treatment Centre**, analysis shows:

- there are positive impacts for children living in the most deprived areas, outside London and rural areas when travelling by public transport
 - Children living in the most deprived areas would see their average travel time reduce by at least 25 minutes. A greater proportion of them (up to 33%) would be able to have a journey time of less than 1 hour, compared to 13% to The Royal Marsden
 - Children of ethnicities other than white would see their travel times reduce by at least 13 minutes. A greater proportion of them (up to 55%) would be able to have a journey time of less than 1 hour, compared to 31% to The Royal Marsden
 - Children living in rural areas would see their average travel time reduce by at least 25 minutes. A greater proportion of them (up to 53%) would be able to have a journey time of less than 2 hours, compared to 19% to The Royal Marsden
 - Children living outside London would see their travel times reduce by at least 20 minutes. For non-London residents with the longest journey times*, this reduction could be at least 26 minutes.

Radiotherapy services: travel time analysis found travel time by public transport will decrease on average by 27 minutes to University College Hospital (as compared to The Royal Marsden).

It is acknowledged that patients also currently attend St George's Hospital, which provides the current Principal Treatment Centre in partnership with The Royal Marsden. An analysis of travel times for patients travelling to Evelina London Children's Hospital (as compared to current travel to St George's Hospital) is shown in <u>appendix F</u>.

It is important to note that this analysis can only capture impacts in terms of travel time. It cannot describe impact in terms of complexity of journey, reliability of transport services and costs. Therefore, qualitative insights from patients, families and other stakeholders are important to consider when developing mitigation actions.

*the longest journeys are represented by the 90th percentile travel time, that is the travel time below which 90% of all other travel times lie. The purpose of showing the 90th percentile, rather than the maximum travel time, is to produce a general threshold for longer journeys that avoids drawing conclusions about travel time based solely on occasional extreme outliers.

Please see <u>appendix B</u> for the underlying travel time analysis methodology
Travel time impact: driving summary



When comparing travel times for driving to The Royal Marsden to either option for the future Principal Treatment Centre, analysis shows:

- there are <u>negative</u> impacts for children living in the most deprived areas, outside London and rural areas when travelling by road.
 - Children living in the most deprived areas would see their travel times increase by up to 16 minutes. A slightly smaller proportion of them (up to 40%) would be able to have a journey time of less than 1 hour, compared to 46% to The Royal Marsden
 - Children of ethnicities other than white would see their travel times increase by up to 9 minutes. A smaller proportion of them (up to 38%) would be able to have a journey time of less than 1 hour, compared to 51% to The Royal Marsden
 - Children living in rural areas would see their travel times increase by up to 30 minutes. A smaller proportion of them (up to 3%) would be able to have a journey time of less than 1 hour, compared to 37% to The Royal Marsden
 - Children living outside London would see their travel times increase by up to 30 minutes. For non-London residents with the longest journey times*, this increase could be up to 41 minutes (and longer for those living in specific parts of the catchment area).

Radiotherapy services: travel time analysis found travel time by road will increase on average by 22 minutes to University College Hospital (as compared to The Royal Marsden).

It is acknowledged that patients also currently attend St George's Hospital, which provides the current Principal Treatment Centre in partnership with The Royal Marsden. An analysis of travel times for patients travelling to Evelina London Children's Hospital (as compared to current travel to St George's Hospital) is shown in <u>appendix F</u>.

It is important to note that this analysis can only capture impacts in terms of travel time. It cannot describe impact in terms of complexity of journey, reliability of transport services and costs. Therefore, qualitative insights from patients, families and other stakeholders are important to consider when developing mitigation actions.



How long it would take children in the most deprived areas to get to a future Principal Treatment Centre location, compared to current travel times to The Royal Marsden.

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Most deprived areas compared to all areas – public transport

Those living in areas categorised as the most deprived would have a reduction in median travel time (by public transport) to either option for the future Principal Treatment Centre (PTC) compared to The Royal Marsden. The median travel time would reduce by more than 25 minutes.

The chart shows that the percentage of children living in the most deprived areas in the catchment who would have a journey time of less than 60 minutes by public transport to either potential location would be 33%, compared to 13% within 60 minutes of The Royal Marsden.

The relative benefit in terms of reduced travel time for children from the most deprived areas (33% vs 13%) is more than the relative benefit that would be seen for all children in the PTC catchment (37% vs 20%).

Percentage of children from the <u>most deprived</u> areas whose journey is within 60 mins:

- Either future PTC option: 33%
- The Royal Marsden: 13%

Percentage of <u>all children</u> in the PTC catchment whose journey is within 60 mins:

- Either future PTC option: 37%
- The Royal Marsden: 20%



A future PTC location (most deprived)

rived) ■ The Royal Marsden (most deprived)

A future PTC location (all children)

The Royal Marsden (all children)



How long it would take children in the most deprived areas to get to a future Principal Treatment Centre location, compared to current travel times to The Royal Marsden.



Most deprived areas compared to all areas - driving

Those living in areas categorised as the most deprived would have moderate increases in median travel time (driving) to either option for the future Principal Treatment Centre (PTC) compared to The Royal Marsden (an increase of up to 16 minutes).

The chart shows that the percentage of children living in the most deprived areas in the PTC catchment, who would have a journey time of less than 60 minutes driving to either potential location would be 40%, compared to 46% within 60 minutes of The Royal Marsden.

The relative adverse impact in terms of increased travel time for children from the most deprived areas (40% vs 46%) is less than the relative adverse impact that would be seen for all children in the PTC catchment (46% vs 66%).

of PTC catchment

proportion

Cumulative

Percentage of children from the most deprived areas whose journey is within 60 mins:

- Either future PTC option: 40%
- The Royal Marsden: 46%

Percentage of all children in the PTC catchment whose journey is within 60 mins:

- Either future PTC option : 46%
- The Royal Marsden: 66%



A future PTC location (most deprived) The Royal Marsden (most deprived) A future PTC location (all children)



How long it would take children of ethnicities other than white to get to a future Principal Treatment Centre location, compared to current travel times to The Royal Marsden.



Children of ethnicities other than white compared to all children - public transport

Children of ethnicities other than white would have a reduction in median travel time (by public transport) to either option for the future Principal Treatment Centre (PTC) compared to The Royal Marsden (in excess of 13 minutes reduced median travel time).

The chart shows that the percentage of children resident in the PTC catchment. of ethnicities other than white, who would have a journey time of less than 60 minutes by public transport to either potential location would be 55% (compared to 31% within 60 minutes of The Royal Marsden.

catchment

PTC

Cumulative proportion of

The relative benefit seen in terms of reduced travel time for children of ethnicities other than white (55% vs 31%) is more than the relative benefit that would be seen for all children in the PTC catchment (37% vs 20%).

Percentage of children of ethnicities other than white whose journey is within 60 mins:

- Either future PTC option : 55%
- The Royal Marsden: 31%

Percentage of all children in the PTC catchment whose journey is within 60 mins:

- Either future PTC option : 37%
- The Royal Marsden: 20%

The cumulative proportion of the PTC catchment population who can access the The Royal Marsden within 15 minute journey time cohorts (public transport), compared to the future PTC locations. Children from ethnicities other than white compared to the general child population



A future PTC location (other than white) The Royal Marsden (other than white)

A future PTC location (all children)

The Royal Marsden (all children)



How long it would take children of ethnicities other than white to get to a future Principal Treatment Centre location, compared to current travel times to The Royal Marsden.



Children of ethnicities other than white compared to all children - driving

Children of ethnicities other than white would have moderate increases in median travel time (driving) to a new Principal Treatment Centre (PTC) location compared to The Royal Marsden (an increase of up to 9 minutes).

The chart shows that the percentage of children resident in the PTC catchment, of ethnicities other than white, who would have a drive time of less than 60 minutes to a new PTC location would be 38% (compared to 51% within 60 minutes of the current PTC (RM).

The relative adverse impact (in terms of increased travel time for children of ethnicities other than white (38% vs 51%) is less than the relative adverse impact that would be seen for all children in the PTC catchment (46% vs 66%).

Percentage of children of ethnicities other than white whose journey is within 60 mins:

- Either future PTC option : 38%
- The Royal Marsden: 51%

Percentage of <u>all children</u> in the PTC catchment whose journey is within 60 mins:

- Either future PTC option : 46%
- The Royal Marsden: 66%

The cumulative proportion of the PTC catchment population who can access The Royal Marsden within 15 minute journey time cohorts (driving), compared to the future PTC locations. Children from ethnicities other than white compared to the general child population



A future PTC location (other than white)

population

of

Cumulative

The Royal Marsden (other than white)

A future PTC location (all children)

The Royal Marsden (all children)



How long it would take children from rural areas to get to a future Principal Treatment Centre location compared to current travel times to The Royal Marsden.



Children from rural areas compared to all children - public transport

Those living in areas categorised as being rural would have a reduction in median travel time (by public transport) to a new Principal Treatment Centre (PTC) location compared to The Royal Marsden (in excess of 25 minutes reduced median travel time). This is similar to the reductions for non-London residents.

The chart shows that the percentage of children resident in the Principal Treatment Centre catchment, living in rural areas, who would have a journey time of less than 120* minutes by public transport to a new PTC location would be 53% (compared to 19% within 120 minutes of The Royal Marsden.

The relative benefit seen in terms of reduced travel time for children from rural areas (53% vs 19%) is more than the relative benefit that would be seen for all children in the PTC catchment (83% vs 68%).

Percentage of children from rural areas whose journey is within 120 mins:

- Either future PTC option : 53%
- The Royal Marsden: 19%

Percentage of <u>all children</u> in the PTC catchment whose journey is within 120 mins:Either future PTC option : 83%

The Royal Marsden: 68%



The cumulative proportion of the PTC catchment population who can access the The Royal Marsden

* The metric of proportion within 120 minutes was chosen here because almost no children from rural areas have a journey time of less than 60 minutes to any location.





How long it would take children from rural areas to get to a future Principal Treatment Centre location compared to current travel times to The Royal Marsden.

Children from rural areas compared to all children - driving

Those living in areas categorised as being rural would have an increase in median travel time (driving) to a new Principal Treatment Centre (PTC) location compared to The Royal Marsden of approximately 30 minutes. This is similar to the increases seen for non-London residents.

The chart shows that the percentage of children resident in the PTC catchment, living in rural areas, who would have a journey time of less than 60 minutes by driving to a new PTC location would be 3% (compared to 37% within 60 minutes of The Royal Marsden.

The relative adverse impact (in terms of increased travel time for children from rural areas (3% vs 37%) is more than the relative adverse impact that would be seen for all children in the PTC catchment (46% vs 66%).

Percentage of children from rural areas whose journey is within 60 mins:

- Either future PTC option : 3%
- The Royal Marsden: 37%

Percentage of <u>all children</u> in the PTC catchment whose journey is within 60 mins:

- Either future PTC option : 46%
- The Royal Marsden: 66%

The cumulative proportion of the PTC catchment population who can access the The Royal Marsden within 15 minute journey time cohorts (driving), compared to the future PTC locations. Those living in rural areas compared to the general child population



A future PTC location (rural)

The Royal Marsden (rural)
A future PT

A future PTC location (all children)

The Royal Marsden (all children)

Radiotherapy: a comparison of current travel times to The Royal Marsden to University College Hospital

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Travel time when driving will increase on average by 22 minutes to University College Hospital (as compared to The Royal Marsden) for all children living within the Principal Treatment Centre (PTC) catchment. The average increase for those living in areas categorised as being the most deprived in England is 20 minutes, and 22 minutes for those of ethnicities other than white.

Median travel time (minutes), when driving, to The Royal Marsden and to University College Hospital. Children living in the most deprived areas or of ethnicities other than

white compared to the whole PTC population 90



Travel time by public transport will reduce on average by 27 minutes to University College Hospital (as compared to The Royal Marsden) for all children living within the PTC catchment. The average reduction for those living in areas categorised as being the most deprived in England is 40 minutes, and 15 minutes for those of ethnicities other than white.

Median travel time (minutes), by public transport, to The Royal Marsden and to University College Hospital. Children living in the most deprived areas or of ethnicities other than white compared to the whole PTC population



Cumulative impacts due to multiple journeys



In the <u>data appendix</u> of the Pre-Consultation Business Plan, data is presented on the number of visits (outpatient, daycase or inpatient) experienced by patients at the current Principal Treatment Centre. This table is replicated below. As stated below, the majority (46%) have three or fewer visits. Indeed, the 1,544 visits shown in the table below, were experienced between 1,373 individual patients, indicating that on average, each platent has fewer than two visits each. It should be noted that this activity includes patients at all stages of their treatment, not just in the most intensive phase after diagnosis.

We can see that this average is not reflective of the range of number of visits (from three or fewer to more than 50 visits). This range is due to the different types of treatment protocols, responses and experiences of those undergoing treatment for childhood cancer. Additionally, whilst the patient themselves may spend some weeks in hospital as an inpatient as part of the active phase of their treatment (which would count as a single visit), friends and family may make separate journeys during this time period. As part of research undertaken by Young Lives vs Cancer for their national report on the impact of travelling for cancer treatment, half of young cancer patients and their families (50%) reporting having to travel more than once a week across the duration of their cancer treatment and care.

For these reasons, any conclusions drawn about the "typical travel time (or cost) incurred over the treatment period" must be interpreted with caution.

16. Children aged 1-15 accessing PTC paediatric cancer care at The Royal Marsden or St George's in 19/20 – Number of visits

- 46% of children receiving care at the PTC in 19/20 had three or fewer visits throughout the year.
- 17% of children receiving care at the PTC in 19/20 had over 15 visits throughout the year.

		Number of visits to PTC - In							- Inpatient/Day Case/Outpatient					
Catchment Area	1	2	3	4	5	6-10	11-15	16-20	21-30	31-40	41-50	51+	Grand Total	
Kent and Medway	61	51	39	21	8	53	24	9	13	10	4	9	302	
South West London	39	39	27	21	11	38	26	13	16	13	7	8	258	
South East London	52	38	27	17	15	36	27	12	12	5	5	6	252	
Surrey Heartlands	43	39	30	12	10	36	15	18	15	5	4	5	232	
East Sussex	9	9	9	5	4	11	12	3	2	5		5	74	
Brighton and Hove	5	2	3	4	2	10	4	3				1	34	
Other	41	45	25	34	18	80	37	32	27	12	18	23	392	
Percentage of patients	18%	16%	11%	8%	5%	16%	9%	5%	5%	3%	2%	3%	100%	

Estimating typical travel time impact over a year



In the table below we take three example annual treatment experiences (3 visits, 15 visits and 30 visits) and compare the changes in estimated time (in hours and minutes) for driving to and from* each future Principal Treatment Centre location compared to driving to The Royal Marsden. For University College Hospital, we show 15 visits per year as this approximates the average (mean) number of spells per patient for radiotherapy treatment (source: PCBC data appendix table 28)

Whilst the most typical experience (up to 3 visits per year) does not result in significant changes in time spent travelling, as the number of visits increases, the potential time spent travelling for those with average journey time (median) and longer journeys (90th percentile) begins to rise. For example, a family with one of the longer journeys, undertaking 15 visits in a year, could experience 20 to 24 hours additional travel time to either potential future Principal Treatment Centre location.

Examples of the annual impact on travel time for those with average journey times (median) and longer journey times (90th percentile)

	3 visits per year: annual cumulative travel time (hours and minutes)		Impact: change in annual cumulative travel time (hours and minutes)		15 visits per year: annual cumulative travel time (hours and minutes)		Impact: change in annual cumulative travel time (hours and minutes)		30 visits per year: annual cumulative travel time (hours and minutes)		Impact: change in annual cumulative travel time (hours and minutes)	
	Average	Longer	Average	Longer	Average	Longer	Average	Longer	Average	Longer	Average	Longer
	time	time	time	time	time	time	time	time	time	time	time	journey time
The Royal Marsden	5:12	7:30			26:00	37:30			52:00	75:00		
St. George's	0.10	44-00	4.00	4.00	04.00	57.00	5.00	00.00	00.00	445-00	10.00	40-00
Hospitai	6:12	11:30	1:00	4:00	31:00	57:30	5:00	20:00	62:00	115:00	10:00	40:00
The Evelina London	6:30	12:24	1:18	4:54	32:30	62:00	6:30	24:30	65:00	124:00	13:00	49:00
University College Hospital					37:00	64:00	11:00	26:30				

* Return journeys estimated by doubling the modelled drive time for outward journeys.

Travel cost analysis

As described in <u>section 1</u>, variation in socio-economic status across the catchment population is an important consideration within this change programme. The concept of <u>travel poverty</u> (a difficulty or inability to make necessary journeys due to a combination of income, cost and service availability) is highly relevant in the light of the potential impacts on patient journeys as a result of the change of location of the Principal Treatment Centre (PTC). In the next section we consider the impact of a change of journey length on travel cost for the PTC child catchment population.

Driving costs

We present driving costs for the catchment population as a whole, and those living in areas categorised as being among the most deprived in England (Index of Multiple Deprivation quintile 1).

- Driving costs are based on average fuel cost per mile along road network, set to the <u>government advisory fuel reimbursement rate</u> for 1600c car (16p per mile)
- Inner London congestion charge (£15.00) is not applied to hospital sites and population areas in the zone due to reimbursement schemes in place. However, we highlight in the analysis where this charge may apply.
- ULEZ is not applied as all hospital destinations are within the area, and so equal in this extra cost. According to <u>government data</u>, an estimated 95% of cars in inner and outer London are compliant.
- Also not included are potential future costs relating to planned tolls for routes such as the <u>Blackwall or Silvertown tunnels</u>. These have yet to be agreed by Transport for London.
- The main analysis is shown as a cost for a single occurrence of a <u>return</u> <u>journey</u>. However, we then provide an indication of how costs may accumulate over an annual period of treatment.

Public transport costs

Conducting an analysis of the different costs of travelling by public transport is complex, due to (but not limited to) the following reasons:

- all the different possible routes 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.

As a result, we are unable to conduct a systematic analysis of public transport cost across the catchment population. However, we recognise that public transport availability is important. As a result, we present an estimation of the impact on cost in relation to five example journeys from areas of higher deprivation within the Principal Treatment Centre catchment.



Travel Cost Analysis: summary

The median* travel cost for driving to The Royal Marsden was, on average, £8, rising to £13 for those living in the most deprived parts of the catchment. For those with the longest journeys, the travel cost was £20**.

Evelina London

• The median travel cost for driving to Evelina London was, on average, £2 less than that for driving to The Royal Marsden but 12% of the catchment would expect to see travel costs increase by more than £5 per return journey. 78% of the catchment population would see little or no change, whilst 10% would see a reduction of more than £5 per return journey.

St George's Hospital

• The median travel cost for driving to/from St George's Hospital was, on average, £3 less than that for driving to The Royal Marsden and 78% of the catchment population would see little or no change, whilst 9% would see a reduction of more than £5 per return journey.

University College Hospital

• The median travel cost for driving to/from University College Hospital was, on average, similar to that for driving to The Royal Marsden but 17% of the catchment would expect to see travel costs increase by more than £5 per return journey. 74% of the catchment population would see little or no change, whilst 9% would see a reduction of more than £5 per return journey.

A note on median journey costs. It may seem counter-intuitive that a longer journey time (as reported earlier) should result in a less expensive median journey cost. The travel cost has been weighted by population and therefore, the findings reflect the fact that there are more children who live closer to the future Principal Treatment Centre locations. Whilst the same population weighting methodology was also used for travel time analysis, here traffic density as well as distance has an influence on the findings.

The summary findings here do not negate the fact that some families, particularly those living in coastal or more remote areas of the catchment, will experience both longer and more costly journeys, which needs to be addressed through mitigations.

^{*}The median is the middle value when all costs are listed from shortest to longest. This means that half of all potential journeys are estimated to cost less than this, and half cost more. The median has been used for the analysis to mitigate against the impact of outliers (very low and very high values in the data).

^{**} the longest journeys are represented by the 90th percentile travel distance (cost), that is the travel distance below which 90% of all other travel distances lie. The purpose of showing the 90th percentile, rather than the maximum, is to produce a general threshold for longer journeys that avoids drawing conclusions about travel based solely on occasional extreme outliers.

The median travel cost for driving to/from The Royal Marsden was, on average, £8, rising to £13 for those living in the most deprived parts of the catchment. For those with the longest journeys, the travel cost of a return journey was £20.



Cumulative % of the population by driving cost to The Royal Marsden



Driving cost to Evelina London Children's Hospital

The median travel cost for driving to/from Evelina London was, on average, £6, rising to £7 for those living in the most deprived parts of the catchment (see <u>slide 53</u>). For those with the longest journeys, the travel cost of a return journey was £22.

When comparing to the average cost for driving to The Royal Marsden, 12% of the catchment would expect to see travel costs increase by more than £5 per return journey.

78% of the catchment population would see little or no change, whilst 10% would see a reduction of more than £5 per return journey.



Proportion of population (%) by change in return journey cost: the Evelina London compared to The Royal Marsden



Comparison of median return journey cost: Evelina London compared to The Royal Marsden

	Weighted median		
	journey cost to	Weighted median	Difference in
Population	The Royal	journey cost to the	median cost
group	Marsden (£)	Evelina London (£)	(£)
All	8.35	6.13	-2.22

Please note that ULEZ and Inner London Congestion Zone charges have not been applied. ULEZ charges for non-compliant cars apply to all locations (and can be reimbursed). Congestion Zone charges apply to The Evelina and UCLH, but reimbursement schemes are available.



Driving cost to St George's Hospital

The median travel cost for driving to/from St George's Hospital was, on average, £5, rising to £8 for those living in the most deprived parts of the catchment (see <u>slide 53</u>). For those with the longest journeys, the travel cost of a return journey was £22.

When comparing to the average cost for driving to The Royal Marsden, 91% of the catchment would experience little or no change in cost per return journey, whilst 9% would see a reduction of more than £5 per return journey.



Range and density of driving cost to St. George's Hospital

Proportion of population (%) by change in return journey cost: St George's Hospital compared to The Royal Marsden



Comparison of median return journey cost: St George's Hospital compared to The Royal Marsden

	Weighted median	Weighted median	
	journey cost to	journey cost to St.	Difference in
Population	The Royal	George's Hospital	median cost
group	Marsden (£)	(£)	(£)
All	8.35	5.4	-2.95

Please note that ULEZ and Inner London Congestion Zone charges have not been applied. ULEZ charges for non-compliant cars apply to all locations. Congestion Zone charges apply to The Evelina and UCLH, but reimbursement schemes are available.

Driving cost to University College Hospital

The median travel cost for driving to/from University College Hospital was, on average, £8, and this was same for those living in the most deprived parts of the catchment (see <u>slide 53</u>). For those with the longest journeys, the travel cost was £24 per return journey.

When comparing to the average cost for driving to The Royal Marsden, 16% of the catchment would expect to see travel costs increase by more than £5 per return journey.

74% of the catchment population would see little or no change, whilst 9% would see a reduction of more than £5 per return journey.



Proportion of population (%) by change in return journey cost: University College Hospital compared to The Royal Marsden



Comparison of median return journey cost: University College London Hospital compared to The Royal Marsden

	Weighted median	Weighted median	
	journey cost to	journey cost to	Difference in
Population	The Royal	University College	median cost
group	Marsden (£)	Hospital (£)	(£)
All	8.35	7.73	-0.62

Please note that ULEZ and Inner London Congestion Zone charges have not been applied. ULEZ charges for non-compliant cars apply to all locations. Congestion Zone charges apply to The Evelina and UCLH, but reimbursement schemes are available.

Driving cost by deprivation area

- Return journeys to all four providers are more expensive for populations living in the most deprived areas, compared to the rest of the population
- The difference in median cost for a return journey (driving) between the populations living in the most deprived areas, compared to the rest of the population, is larger for The Royal Marsden (a £7 difference between the two populations) than for the other three providers (a £0 to £3 difference)
- The median cost for driving to and from both potential Principal Treatment Centres (and University College Hospital) for the populations living in the most deprived areas is similar, in the region of an additional £5-£6 per return journey.

Royal Marsden, Sutton	table: Cumulative proportion of population accessing Royal Marsden (Surrey) by car in £5 cost cohorts (estimated return journey, mileage)											
	location	travel mode	minimum cost (£)	median cost (£)	less than £5	less than £10	less than £15	less than £20	less than £25	less than £30	less than £35	
	IMD1 (most deprived)	car Wed off peak	0.32	13.4	32.8%	38.6%	67.1%	81.4%	91.1%	100.0%		
	IMD2-5 combined	car Wed off peak	0.16	6.83	41.3%	56.0%	82.6%	91.8%	97.6%	100.0%		
St George's Hospital	table: Cumulative proportion of population accessing St George's Hospital by car in £5 cost cohorts (estimated return journey, mileage)											
	location	travel mode	minimum cost (£)	median cost (£)	less than £5	less than £10	less than £15	less than £20	less than £25	less than £30	less than £35	
	IMD1 (most deprived)	car Wed off peak	0.22	7.9	43.6%	53.3%	59.4%	72.7%	88.0%	99.8%	100.0%	
	IMD2-5 combined	car Wed off peak	0.16	5.3	47.7%	67.3%	76.0%	87.8%	95.8%	99.5%	100.0%	
Evelina London	table: Cumulative proportion of population	accessing GSTT (St Thomas	site) by car in £5 cost co	horts (estimated	return journey,	mileage)						
	location	travel mode	minimum cost (£)	median cost (£)	less than £5	less than £10	less than £15	less than £20	less than £25	less than £30	less than £35	
	IMD1 (most deprived)	car Wed off peak	0.3	7.3	45.6%	55.6%	66.8%	73.8%	93.8%	100.0%		
	IMD2-5 combined	car Wed off peak	0.1	6.1	41.3%	63.3%	80.5%	87.0%	96.8%	100.0%		
niversity College Hospital	table: Cumulative proportion of population	accessing UCL (Grafton Way) by car in £5 cost cohort	s (estimated retu	n journey, mile	age)						
	location	travel mode	minimum cost (£)	median cost (£)	less than £5	less than £10	less than £15	less than £20	less than £25	less than £30	less than £35	
	IMD1 (most deprived)	car Wed off peak	1.1	8.13	35.9%	54.6%	65.9%	73.6%	85.4%	97.6%	100.0%	
	IMD2-5 combined	car Wed off peak	0.78	7.71	30.4%	58.2%	74.2%	84.9%	91.6%	97.7%	100.0%	

IMD1: populations in the catchment area that live in the 20% most deprived areas in England (IMD 2019).

IMD 2-5: combined are populations in the catchment area that reside in the other 80% of areas.

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Estimating typical travel cost impact over a year

In the table below we take three example annual treatment experiences (3 visits, 15 visits and 30 visits) and compare the changes in estimated costs for driving to each future Principal Treatment Centre (PTC) location compared to driving to The Royal Marsden. For University College Hospital, we show 15 visits per year as this approximates the average number of spells per patient for radiotherapy treatment (source: <u>PCBC data appendix table 28</u>).



Whilst the most typical experience (up to 3 visits per year) does not result in significant changes in travel costs, as the number of visits increases, the potential cost for those with the longest journeys (the 90th percentile) begins to rise. A family experiencing 15 visits in a year could experience £29-£35 worth of additional fuel costs for travelling to either future PTC location. Conversely, for the most typical journeys (the median), families may see a reduction in annual travel costs to either future PTC location.

Examples of the annual impact on travel cost for those with average journey distances (median) and longer journey distances (90th percentile)

	3 visits per year: annual cumulative travel cost		Impact: change in 15 annual cumulative an travel cost		15 visits annual c trave	15 visits per year: annual cumulative travel cost		Impact: change in annual cumulative travel cost		30 visits per year: annual cumulative travel cost		Impact: change in annual cumulative travel cost	
	Average journeys	Longer journeys	Average journeys	Longer journeys	Average journeys	Longer journeys	Average journeys	Longer journeys	Average journeys	Longer journeys	Average journeys	Longer journeys	
The Royal Marsden	£25	£60			£125	£298			£251	£597			
St. George's Hospital	£16	£67	-£9	£7	£81	£333	-£44	£35	£162	£667	-£89	£70	
The Evelina London	£18	£66	-£7	£6	£92	£328	-£33	£29	£184	£656	-£67	£59	
University College Hospital					£116	£367	-£9	£69					

Please note that ULEZ and Inner London Congestion Zone charges have not been applied. ULEZ charges for non-compliant cars apply to all four locations. Congestion Zone charges apply to Evelina London and University College Hospital, but reimbursement schemes are available.

Public transport costs: example journeys (1)

Due to the complexity of public transport fares, we are unable to conduct a systematic analysis of public transport cost across the catchment population. However, we recognise that public transport availability is important, as highlighted in feedback from the public consultation. Here, we present an estimate of the impact on cost for five example journeys from areas of higher deprivation* within the catchment.

The relative impact on public transport costs is greater for the example journeys starting in Croydon and Reigate and Banstead. The large impact on costs for journeys to all three locations from Reigate and Banstead are because the fastest route to The Royal Marsden is entirely by bus, rather than train. The same applies to journeys from Croydon to St. George's Hospital and University College Hospital. The relatively modest impact on costs to Evelina from Croydon is also because there is a bus route.

Although the example journeys from Swale and Hastings do not have a large relative impact between The Royal Marsden and each location, the absolute costs for public transport from these areas are higher (in the region of \pounds 50-55 per return journey). The actual cost ranges are shown on the next slide.

It should be noted that these cost comparisons are illustrative only. Choice of mode of transport, timing, route and concessions held will all affect the cost and the examples shown here may not align with individual experiences.



*For each ICB within the catchment, we have chosen the Lower Super Output Area categorised as the most deprived according to the Index of Multiple Deprivation 2019. The journey origin is the population weighted centroid of the LSOA. Public transport search parameters (in Google maps) were set to the fastest journey that arrives as the destination by 12pm on a Wednesday, that did not involve more than 20 minutes to, from or between any transport hubs. Off-peak return fares were then recorded for each journey (search completed on 23rd February 2024). Fares are for one adult only to illustrate the potential cost per person. Free or discounted travel for children would be in addition to these costs.

Public transport costs: example journeys (2)

The table demonstrates the cost ranges of each of the example journeys from areas of higher deprivation*, the relative impact of a change of Principal Treatment Centre and radiotherapy location, and the absolute impact in terms of cost.

It should be noted that these cost comparisons are illustrative only. Choice of mode of transport, timing, route and concessions held will all affect the cost and the examples shown here may not align with individual experiences.

*For each ICB within the catchment, we have chosen the Lower Super Output Area categorised as the most deprived according to the Index of Multiple Deprivation 2019. The journey origin is the population weighted centroid of the LSOA. Public transport search parameters (in Google maps) were set to the fastest journey that arrives at the destination by 12pm on a Wednesday. Off-peak return fares were then recorded for each journey (search completed on 23rd February 2024). Fares are for one adult only to illustrate that maximum cost per person. Free or discounted travel for children would be in addition to these costs.

		Public Transport	Public Transport		
		cost to The	cost to Evelina		Absolute change
ICB	Local Authority	Royal Marsden	London	Relative change in cost	in cost
South East London	Southwark	£5-10	<£5	Less expensive	£5-10 less
South West London	Croydon	<£5	<£5	Similar cost	No change
Kent and Medway	Swale	£30-35	£30-35	Similar cost	No change
Surrey Heartlands	Reigate and Banstead	<£5	£15-20	6 times as expensive	£10-15 more
Sussex	Hastings	£45-50	£45-50	Similar cost	£0-5 more

Example return journey costs by public transport: The Royal Marsden compared to Evelina London

Example return journey costs by public transport: The Royal Marsden compared to St George's Hospital

		Public Transport	Public Transport		
		cost to The	cost to St. George's		Absolute change
ICB	Local Authority	Royal Marsden	Hospital	Relative change in cost	in cost
South East London	Southwark	£5-10	£5-10	Less expensive	£0-5 less
South West London	Croydon	<£5	£10-15	7 times more expensive	£5-10 more
Kent and Medway	Swale	£30-35	£35-40	1.1 times more expensive	£0-5 more
Surrey Heartlands	Reigate and Banstead	<£5	£15-20	6 times as expensive	£10-15 more
Sussex	Hastings	£45-50	£50-55	1.2 times more expensive	£5-10 more

Example return journey costs by public transport: The Royal Marsden compared to University College Hospital

		Public Transport	Public Transport		
		cost to The	cost to University		Absolute change
ICB	Local Authority	Royal Marsden	College London	Relative change in cost	in cost
South East London	Southwark	£5-10	£5-10	Less expensive	£0-5 less
South West London	Croydon	<£5	£5-10	5 times more expensive	£5-10 more
Kent and Medway	Swale	£30-35	£35-40	1.1 times more expensive	£0-5 more
Surrey Heartlands	Reigate and Banstead	<£5	£15-20	8 times as expensive	£15-20 more
Sussex	Hastings	£45-50	£50-55	1.1 times more expensive	£5-10 more

Consultation feedback

Between 26 September and 18 December 20023, NHS England (London and South East regions) consulted on proposals for the future location of very specialist cancer treatment services for children aged 1 to 15 years. For details of the approach taken to consultation, the methodology and how different population groups were reached, please see the <u>Consultation report Executive Summary</u> or the <u>Full Report</u>.

A summary of feedback received as part of pre-consultation engagement (previously published in the Interim IIA) can be seen in <u>appendix J.</u>

During the consultation, people were asked to give their feedback on what attributes mattered most to them when thinking about the future Principal Treatment Centre, the strengths and challenges of both options (Evelina London and St George's Hospital) as well as the proposal to move conventional radiotherapy to University College Hospital. People were also asked to make suggestions to address any challenges they had identified in relation to the proposals. They were also asked to reflect on travel and access; and information and support needs.

It was clear that the availability of family accommodation nearby, parking and help with costs, including Ultra Low Emission Zone and congestion charges, were very important. Other feedback referenced the importance of support and information about public transport near the future Principal Treatment Centre.

Across all engagement methods and answers to most of the questions asked in the questionnaire, many respondents left comments and reflections about travel and access. This was a big topic. While some felt positively about the location of Evelina London, St George's, and University College Hospital, there were many more who highlighted challenges associated with all three sites in relation to travel and access.

In particular, respondents commented that would be difficult for families to access all three locations by car, which is a preferred method of transport. It was also felt that the suggestion that children receiving cancer treatment should use public transport was considered at odds with advice that parents and family advocates have received in the past

In summary, the consultation report highlighted the importance of car parking, accommodation, hospital transport and financial support.

This feedback has been used to update the recommendations for <u>mitigation of additional travel</u> and access challenges.





*Respondents were asked on a score of 1-5 where 1 is not at all important and 5 is very important, how important certain aspects of travel were.



Consultation feedback on equality groups

Feedback on the disproportionate burden of impacts which affect individuals who are from equality groups:

- Some may not have private transport or adequate funds to pay for public transport upfront
- Some may feel dismissed or ignored due to language barriers
- · Negotiating change can be daunting, particularly for people with mental health and learning difficulties
- Understanding and accessing NHS services can be difficult.



People from ethnic minority groups and people who speak English as an Additional Language

- 1. Translated healthcare information available
- 2. Translated information on travel options to the Principal Treatment Centre available
- 3. Free hospital transport available, with eligibility criteria for this reconsidered so more people can benefit from it
- Hospital food to cater for dietary needs
- 5. Bedside family acommodation important so family can stay together

People with mental health difficulties



- 1. Videos used to communicate the change, featuring parents, carers, and staff
- 2. Offer of visits to the future Principal Treatment Centre to meet staff
- 3. Allowance for time to have repeated conversations with individuals who may need repeated assurances about the change

People with physical disabilities

- 1. Access ramps and working lifts
- 2. Flexibility in appointment times
- Disabled parking, and ample parking available
- 4. Support with the cost of transport and provision of hospital transport where available
- 5. Communications and hospital signage suitable for those with sight impairments

People with learning disabilities

- 1. Training for staff; provision of dedicated disability liaison nurses
- 2. Good communication, including slowing down and speaking in plain English
- 3. Support to navigate new or unfamiliar healthcare spaces, in particular when thinking about
- the transition to the new Principal Treatment Centre
- Use of Hospital Passports
- 5. Having menus with photographs
- Easy read that is not so dumbed down to cater for those with less severe learning disabilities

People with autism

1. Trained staff 2. Having quiet rooms available

consultation reflected on what NHS England (London and South East) could do to minimise the disproportionate burden of impacts on equality groups. These suggestions are shown here.

Respondents to the public

This feedback has been used to update the recommendations for mitigation of additional travel and access challenges.



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Looked after children

Children with special needs

1. Involving children in decision-making about their care; talking and explaining to them

4. Having mirrors in scanners so children can see their parent or carer; it was noted that

2. Letting parents or carers into treatment rooms

3. Allowing children to listen to music or watch video as a distraction

about what is happening, so they feel involved and able to discuss their preferences

1. Ensuring smooth transition, with tailored information and support 2. Reassurance about which members of staff would be moving to the new Principal Treatment Centre

Families on low incomes

- 1. Speedy reimbursement of travel costs
- 2. Affordable accommodation
- 3. Affordable amenities in the surrounding area, with families being away from home
- and needing to use cafes and takeaways
- Help with childcare costs

Rural families

Flexibility with appointment times

2. Offer of overnight accommodation if travelling a long way or experiencing a long journey time Support with travel costs

EHIA: Assessment of impact on groups with protected characteristics

The following slides represent the findings of the EHIA sub-group on whether there could be a disproportionate impact on population groups with protected characteristics or who face health inequalities.

The group considered the following:

- 1. Is there evidence of higher need for cancer services among this group (that is, a higher risk of cancer in epidemiological terms)?
- 2. Where available, what did the travel time analysis indicate for each group in terms of changes in journey time to a new Principal Treatment Centre location?
- 3. Is it likely that this group could be <u>disproportionately*</u> impacted by the changes under consideration, in terms of access to and outcomes of healthcare services?
- 4. What mitigations could be put in place to help counteract any negative impact (or enhance a positive impact)?

It should be noted that as a group, paediatric cancer patients would all be recognised as having a protected characteristic. Under the Equality Act 2010, a diagnosis of cancer is considered as a disability (regardless of symptoms). The Disability Discrimination Act, Equality Act and cancer | Cancer Research UK

*The legal requirement is to test whether there is disproportionate impact on groups with protected characteristics compared to the general population.

EHIA: Assessment of impact on groups with protected characteristics

	Is there evidence of disproportionate need for childhood cancer services (i.e. higher rates of incidence)?	Is there evidence of disproportionate impact on travel times for this group?	Did the EHIA sub-group think there could be a disproportionate impact on their ability to access the service (travel/onsite access), experience of change or of the services being co-located with other services?
Age	Yes. Overall cancer incidence rates are higher among 0-5 year olds compared to older children.	There is no disproportionate impact in terms of travel time between families with children of different ages.	Possibly in terms of access but the group recognised that families with older children can have other circumstances that also raise challenges (intersectionality). Children approaching the age of transition to teenage and young adult services at the time of service change may face additional uncertainty.
Sex	Yes. Overall cancer incidence rates are higher among boys than girls.	There is no disproportionate impact in terms of travel time between families with boys compared to girls	No
Disability (other than a cancer diagnosis) and spectrum disorders	Possibly. Cancer incidence in children aged 0 to four with learning disabilities have been reported to be higher than for the general population. There has also been found to be an increased risk of leukaemia in individuals with Down's syndrome.	Travel time analysis for this characteristic not possible due to availability of data for those with this characteristic. Accessibility information from Transport for London could be useful in future (ramps/lifts/step free etc)	Yes. Travel or onsite access where a family member has a disability (or a spectrum disorder) is likely to be more challenging. They may also have more concerns about the service change itself, in terms of wider support services for the child's other condition(s). Conversely, family members with disability may benefit from co-location of services due to reduced requirement for travel to different locations.
Ethnicity (including Gypsy, Roma and Traveller ethnic groups)	Possibly. Evidence on whether the risk of being diagnosed with cancer varies with ethnic group is mixed and it is difficult to quantify those differences at this time.	Yes. A positive impact on travel time by public transport for children on ethnicity other than white. A negative impact for this group was found for driving but this was not disproportionate compared to the rest of the population.	Yes, although the underlying causes of additional travel challenges could be due to interaction with deprivation and/or language barriers. It is recognised that racism is a driver of health inequalities, with different types of racism operating at different levels of the health system (structural, institutional, discrimination and stigma).
Pregnancy and maternity	No evidence found	Travel time analysis for this characteristic not possible due to availability of data for those with this characteristic.	Yes. Travel/onsite access during pregnancy or the maternity period may be more challenging.
Religion or belief	No evidence found	Travel time analysis for these characteristics not	Not in this instance but ensuring a high level of cultural
Marriage / civil ptp	No evidence found	possible due to availability of data for those with this characteristic.	and Inclusion programmes, will help to ensure that staff are
Gender reassignment	No evidence found		aware of the specific needs of patients or families who are part of these groups.
Sexual orientation	No evidence found		

EHIA: Assessment of impact on groups who typically face inequalities in health or healthcare access (1)

	Is there evidence of disproportionate need for childhood cancer services (i.e. higher rates of incidence)?	Is there evidence of disproportionate impact on travel times for this group?	Did the EHIA sub-group think there could be a disproportionate impact on their ability to access the service (travel/onsite access), experience of change or of the services being co-located with other services?
Looked after and accommodated children and young people	No evidence found	Travel time analysis for this characteristic not possible due to availability of data for those with this characteristic.	Yes. Travel and experience of change may pose challenges for this group.
People or families on a low income/living in more deprived areas	The wider evidence on paediatric cancer and deprivation is mixed, with some evidence for a higher diagnosis rate among less deprived groups for some leukaemias and some evidence for poorer survival among more deprived groups. However, it is difficult to draw conclusions from the available evidence.	Yes. A positive impact on travel time by public transport for living in the most deprived areas. A negative impact was found for driving but this was not disproportionate compared to the rest of the population.	Yes. Families experiencing financial difficulties may find these further compounded by any additional costs incurred due to a different journey to a future PTC. This would be in addition to the costs that family face already through caring for a child with cancer (<u>Cancer costs - Young Lives vs Cancer</u>). Conversely, families experiencing financial difficulties may benefit from co-location of service due to reduced requirement for travel to different locations.
People with poor literacy and/or language barriers	No evidence found	Travel time analysis for this characteristic not possible due to availability of data for those with this characteristic.	Yes. Travel, onsite access and experience of change may pose challenges for this group. Conversely, families with communication barriers may benefit from co-location of services due to reduced requirement for travel to different locations.
People with caring responsibilities (including young carers)	No evidence found	Travel time analysis for this characteristic not possible due to availability of data for those with this characteristic.	Yes. Travel may pose challenges for this group.
People living in more remote areas	No evidence found	Travel time analysis shows that children living in rural areas experience a disproportionate negative impact on journey times for driving but a positive impact for travel via public transport.	Yes. Travel may pose challenges for this group.

EHIA: Assessment of impact on groups who typically face inequalities in health or healthcare access (2)

	Is there evidence of disproportionate need for childhood cancer services (i.e. higher rates of incidence)?	Is there evidence of disproportionate impact on travel times for this group?	Did the EHIA sub-group think there could be a disproportionate impact on their ability to access the service (travel/onsite access), experience of change or of the services being co- located with other services?
Newly arrived groups: Refugees, asylum seekers (including unaccompanied children)	No evidence found	Travel time analysis for this characteristic not possible due to availability of data for those with this characteristic.	Yes. Travel and experience of change may pose challenges for this group.
People with addictions and/or substance misuse issues	No evidence found	Travel time analysis for this characteristic not possible due to availability of data for those with this characteristic.	Possibly, but likely through association with other characteristics such as socio- economic status.
People involved in the criminal justice system: offenders in prison/on probation, ex- offenders	No evidence found	Travel time analysis for this characteristic not possible due to availability of data for those with this characteristic.	Possibly, but likely through association with other characteristics such as socio- economic status.
Homelessness. People living on the street; staying temporarily with friends/family; in hostels or bed and breakfasts	No evidence found	Travel time analysis for this characteristic not possible due to availability of data for those with this characteristic.	Yes. Travel and experience of change may pose challenges for this group.
Family structure: single parents/carers	No evidence found	Travel time analysis for this characteristic not possible due to availability of data for those with this characteristic.	Yes. Travel may pose challenges for this group.
Families experiencing digital exclusion	No evidence found	Travel time analysis for this characteristic not possible due to availability of data for those with this characteristic.	Yes. Travel may pose challenges for this group through inability to use online technology for travel planning.

EHIA: Mitigation of impacts

The following slides represent the recommendations from the NHS England Programme Team for how any adverse impacts of the change of Principal Treatment Centre location can be mitigated (or positive impacts enhanced).

They are based on:

- The findings of the EHIA sub-group
- Pre-consultation engagement feedback from patients, families and other stakeholder groups
- Information provided by teams at the current Principal Treatment Centre at The Royal Marsden and St George's Hospital, both potential future Principal Treatment Centre providers, and University College Hospital.
- The findings of the public consultation
- The findings of two workshops held with a travel and access theme.

Once the future Principal Treatment Centre location is known, these recommendations will be developed into <u>action plans</u> as part of the implementation phase. This will include articulating what systems and processes are already in place, what needs further enhancement and the associated resource implications (including funding requirements). To support this, a dedicated Travel and Access Working Group will be convened, during the implementation phase, to oversee the development and delivery of mitigations.

Mitigation proposals (1)

Systems and processes aimed at helping patients and families plan their journeys to hospital.

1. Identification: as part of a multidisciplinary team (MDT) process, ensure that	2. Travel planning: Ensure that patients/carers know what their patient journey		
patients/families who might need help with transport are identified as early as	is likely to be, including which locations they will visit, details of any overnight		
possible in their care pathway. This would typically be with the family's named	stays and how many appointments they are likely to have. This would typically		
care coordinator (or key worker) and other members of the clinical team and	be through the dedicated care coordinator who will help families to		
should include an assessment of compounding factors where patients fall within	coordinate appointments and admissions for their treatment pathway. This		
more than one of the protected characteristics/equality groups (that is, where	includes confirming the specific travel and transport needs of the family to		
intersectionality is a factor). High quality Equality, Diversity and Inclusion training	ensure that transport is booked appropriately. It is recommended that families		
for staff will help to ensure that the specific needs of patients or families who are	have a "single point of contact" for all aspects of travel and access planning.		
part of these groups are considered. Of note is learning disability (given the	This information needs to be provided in inclusive formats including		
potentially increased risk of cancer within this group). Any child with learning	visualisations of the routes, treatment areas and other facilities (see		
disabilities and requiring treatment for cancer, should have an individualised care	"communications" section for further detail)		
plan, with input from a Learning Disability specialist nurse.			
Once any transport needs are identified, families will be directed to transport support			
services and any other support services required. See also "financial reimbursement"			
section on next slide.			
3. Inclusive communications: Provide clear, inclusive information about all aspects	4. Translation/interpretation services: Ensure that assessment of language		
of travel planning in a range of formats (including written and verbal) and languages.	(or other communication) barriers is a routine part of care and facilitate access		
Information should be communicated through the family's care coordinator and in	to translation/interpretation services to ensure children and families are fully		
advance of appointments.	able to communicate and understand travel options. All nursing teams should		
	be trained in how to arrange translation services. This may include:		
	• in person interpretation somicos		
	 Telephone and video interpreting (e.g. Language Line) 		
	 rapid access to British Sign Language interpreters 		
	 text relay services 		
	 translation of written patient information (into commonly requested 		
	languages or formats) as well as ability to commission ad hoc translation to		
	other languages in a timely manner.		

Mitigation proposals (2)

Systems and processes aimed at helping patients and families plan their journeys to hospital (continued).

5. Non-emergency patient transport services (NEPTS): Offer transport schemes (of sufficient capacity) for patients otherwise unable to attend hospital appointments. The service should have clear eligibility criteria that considers both medical need or financial circumstances (based on the <u>national guidance</u>). This should include the option to customise the service together with families to meet the needs of children. Alternative methods of hospital transport (in addition to NEPTS), such as volunteering schemes could also be considered. Further information can be found in appendix K.

In addition, the future Principal Treatment Centre should ensure that adequate monitoring and evaluation of the non-emergency transport service is place, with clear plans for occasions where it was not possible for the transport service to get the patient to their appointment on time. **6. Accommodation:** Provide good quality, overnight family accommodation (within a short walking distance) of sufficient capacity and with amenities such as laundry, cooking facilities, play areas for siblings as well as areas where parents/carers could work remotely. There should also be capacity for a parent or carer to stay with the child on the ward (or nearby if in intensive care). Consideration should be given to collaboration with local hotels if appropriate. The referral and booking of accommodation should be supported by a family's named care coordinator (or key worker).

Gaining a clear understanding of likely future demand and capacity requirements for family accommodation will need to be a key part of the implementation phase. The future Principal Treatment Centre provider will also need to set out clear eligibility criteria for family accommodation.

Systems and processes aimed at providing good onsite accessibility						
7. Onsite access standards: The future Principal Treatment Centre provider should meet all onsite access standards, informed by patient engagement and feedback. In particular, facilities to support families with very young children and babies, and families	 8. Parking: Of key importance is the availability of parking bays / drop off zones (for all) and those reserved for families with access requirements such as disability. Parking allocation should be at least equivalent to the current provision. Parking arrangements should include consideration of dedicated, free parking for families with children who are immunosuppressed, meet disability eligibility criteria, and/or are too unwell to travel via public transport. Also recommended would be the employment of hospital volunteer/assistant schemes, where families can be helped to get from the car park to the hospital and vice versa. 					
where a member is disabled. Specific guidance and standards to be considered are:						
Health Building Note 00-01. General design guidance for healthcare buildings						
BS 8300-1:2018 Design of an accessible and inclusive built environment - External environment. Code of practice						
BS 8300-2:2018 Design of an accessible and inclusive built environment - Buildings. Code of practice.	Please see section on Financial Reimbursement for recommendations on the financial aspects of parking.					

Mitigation proposals (3)

Systems and processes aimed at reducing the financial impact of travel

9. Financial reimbursement: Families with children attending the Principal Treatment Centre should be supported to access national reimbursement schemes for travel costs including the Congestion Charge, Ultra-Low Emission Zone (ULEZ) charges and the <u>Healthcare Travel Costs Scheme</u>. Parents of children with Disability Living Allowance are eligible for <u>exemption to congestion/ULEZ charges</u>. It is acknowledged that reimbursement for ULEZ charges (applicable to both potential PTC providers, University College Hospital and The Royal Marsden) and congestion zone charges (applicable to Evelina London and University College Hospital) is not available for friends or family visiting a child in hospital.

They should also be supported to access timely reimbursements for parking costs in line with hospital policies. Consideration should be given to provision of free parking for those on long-term treatment plans which involve regular visits to the hospital. Consideration should also be given to Automatic Number Plate Recognition so that reimbursement is not necessary.

Support available should be clearly communicated by the family's dedicated care coordinator, as well as being available in a range of formats and languages (see previous "communications" section).

There can be an adverse impact for a family of incurring out of pocket costs for travel, even if they can be recovered later. Consideration should be given to the development of prospective funding systems, travel voucher schemes for example, to ease this financial burden.

Current national systems for financial reimbursement

<u>National Healthcare Travel Costs Scheme</u> for the reimbursement of travel costs to eligible patients. Covers public transport fares (for one parent/carer and child), fuel costs, parking, tolls. Payment in advance may be available.

Patients who have been clinically assessed as needing to travel by car, have a compromised immune system, require regular therapy or assessment, or require recurrent surgical intervention, are **eligible to** <u>reclaim congestion charges and ULEZ fees</u>. The expectation is that this will **apply** to all patients under care of the Principal Treatment Centre.

NHS Hospitals are **registered with TfL** to allow reimbursement of ULEZ or congestion zone charges. This happens through the **online payment system.** Reimbursement usually happens on the **same day** as incurring the charge.

Mitigation proposals (4)

Systems and processes aimed at reducing the financial impact of travel (continued)

10. Other financial support: 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. As well as costs associated with travel, these could also include wider costs such as having to put additional childcare in place for siblings or taking time off from paid employment. These costs could be in addition to those that families already face through caring for a child with cancer (<u>Cancer costs - Young Lives vs Cancer</u>).

Families with children diagnosed with cancer are eligible to apply for <u>Disability Living Allowance</u>. There are certain requirements for application, including having care needs for a three-month time period after diagnosis.

Families should be supported to understand what financial aid they could access, or what benefits they may be entitled to, through partnerships with organisations which can offer this kind of service. This might include (but is not limited to) hospital charities. This is aimed at improving a family's financial situation which, in turn, would help reduce the impact of a more costly journey.

The charity Young Lives vs Cancer currently provides several different types of financial assistancesuch as:

- Small grants made available to patients (or families of patients) aged 0-24 years and their families on diagnosis of a new cancer, or when they experience a relapse or secondary diagnosis. These are not means tested.
- A compassionate grant, available for families following the death of a child who is under the age of 18. Again, this grant is not means tested.
- A Financial Hardship grant, based on a needs assessment completed by a Young Lives vs Cancer Social Worker; in line with criteria set out in Young Lives vs Cancer Grant Standards. In exceptional circumstances the amount of the Financial Hardship grant can be increased, or a second grant can be issued.
- In addition, Young Lives vs Cancer may facilitate one or more restricted grants funded by third party organisations. These will have specific criteria relating to diagnosis, location or objectives. Their availability is dependent on the availability of funds of the charity partner.

Young Lives vs Cancer social care staff also regularly signpost or refer families to grants available for children and young people with cancer from the following national / UK-wide providers (links are to grants information specifically):

Macmillan Cancer Support . Turn 2 Us . Family Fund . Tom Bowdidge Youth Cancer Foundation . Rob George Foundation . Molly Olly's . Henry Allen Trust (referrals currently on hold) . Leukaemia Care (referrals currently on hold) . Cancer is a Drag (referrals currently on hold). Together for Short Lives (referrals closed but reopening for bereavement grant in 2024).

In addition, regional grant-providing charities are utilised by local social work teams.

At the time of writing, the charity Young Lives vs Cancer is developing a model for a Young Cancer Patient Travel Fund across the UK, details of this model will be available spring 2024.

Mitigation proposals (3)

Aspects of care planning that may help travel arrangements					
11. Appointment planning: Where possible, considering service operational restraints, offer patients appointments that help them avoid travelling at peak times when journeys may be more expensive and/or congested. This can be combined with the offer of overnight	12. Remote appointments: Where clinically appropriate, remote consultations (that could potentially be jointly run with children's cancer shared care units) could reduce the number of journeys required to the Principal Treatment Centre.				
accommodation, for occasions when families need to be onsite very early. The care coordinator would support families in this process, liaising with outpatient booking teams to avoid appointments that require travelling at peak travel times, where this is practicable. Enabling access to a patient portal, in which appointments and care records can be reviewed, and patients/parents can communicate directly with clinicians, would also be beneficial.	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 by care coordinators. National guidance such as the <u>NHS Digital Inclusion Guide</u> and <u>NHS England guidance on virtual clinics for highly specialised services</u> should inform this process.				
	As part of mitigating against digital exclusion, the future Principal Treatment Centre should ensure that adequate data collection is carried out, to identify who is accessing face-to-face, telephone, or video consultations, broken down by relevant protected characteristic and health inclusion groups. Services should implement the <u>NHS England</u> <u>Digital Inclusion Framework</u> .				
	Partnerships with organisations such as <u>Sim Pal,</u> who offer free sim cards to people living with cancer, disadvantaged by poor health or digital poverty, can also be explored.				
13. Inter-service communications: dedicated care coordinators can support families to navigate different pathways and access clinical, psychological, and social support as needed. Good communication with external services such as Health Inclusion teams (who support vulnerable groups such as refugees, asylum seekers, homeless people, people with substance misuse), children's social care or young carers services can help to ensure that these teams	14. Shared care: Provide clear information on options for receiving care closer to home through children's cancer shared care units. This can take the form of a dedicated session with families on support available in the community, including information about their local shared care unit. The shared care system can help to reduce the number of journeys required to the Principal Treatment Centre.				
can also support children and families with travel arrangements. The provider's own safeguarding teams would also be a key part of this communication stream. With all vulnerable groups, additional support needs to be provided such as 1:1 support, tailored directions, accompanying during travel etc.	Ensure excellent communication between the Principal Treatment Centre and shared care unit (including shared patient clinical records) and between both services and patients/patient families.				
	The children's cancer shared care unit transformation programme underway across the North and South Thames Children's Cancer Network will be key to developing this mitigation proposal. See Appendix G for further information on this programme.				

Mitigation proposals (4)

System or process that may support patients in their experience of the service change process

15. Monitoring and evaluation: Development of key access, quality and outcome metrics by socio-demographic groups to enable monitoring and evaluation of progress towards improvements in equity i.e. taking a "<u>Core20PLUS5</u>" approach to access.

Below are recommendations for future monitoring and evaluation of equity of access, experience and outcomes.

Benchmark quality and outcome metrics against other Principal Treatment Centres. Ensure Serious Incident review is a core element of service monitoring	Conduct regular Health Equity Audit of access to the service	Develop and implement a mechanism for monitoring uptake (by socio-economic group) of mitigating actions and processes	Use patient experience metrics to monitor experience between demographic groups.	Consider use of <u>Schedule 2N</u> within the NHS Standard Contract
There are a range of quality and outcome metrics that will enable monitoring of the performance of the future Principal Treatment Centre against the new service specification. The release of data against these metrics is expected to be summer 2024, enabling the establishment of a baseline for the current Principal Treatment Centre. These metrics can be viewed in <u>appendix H</u> .	A Health Equity Audit (HEA) is a tool used to examine whether resources are distributed fairly, relative to the health needs of different groups. The new service should assess whether the children being seen in the service reflect the structure of the catchment population and what is known about risk of cancer between different groups.	 Monitoring mechanisms for: Travel cost reimbursement Hospital provided patient transport Family accommodation Language translation / interpretation services Referral to benefits advice services and/or third sector organisations for financial advice and support. At a minimum, socio- demographic variables should be Integrated Care Board of residence, age, sex, ethnic group and socio-economic status (via the Index of Multiple Deprivation) 	Surveys include: Under 16 Cancer Patient Experience Survey Children and Young People's Experience Survey	Schedule 2N (a non- mandatory element) can be used to set out specific actions which the Commissioner and/or Provider will take, aimed at reducing inequalities in access to, experience of, and outcomes from care and treatment, with specific relation to the Services being provided under the Agreement.

Mitigation proposals (5)

System or process that may support patients in their experience of the service change process

16. Implementation: The development of a robust implementation plan that includes support for patients and their families through the change period with high quality continuity of care. Key to ensuring this continuity of care is that each child and family has a named care coordinator who will provide ongoing support throughout their treatment journey and the service change.

The Implementation Plan will be developed with the existing experience, expertise and insight from the current Principal Treatment Centre teams at The Royal Marsden and St George's, patients and their families, and the children's cancer network. It will include clear governance and will be overseen by a dedicated transition team and board, with detailed project plans, risk management plans and progress reports. Strong public and stakeholder engagement will support communication, via a variety of channels, of the transitional and new arrangements.

Some of the feedback received through the consultation will be valuable in planning how to help reduce uncertainty associated with the service change:

- · Understanding about which staff will be transferring
- Videos as well as written information (translated into other languages where necessary) regarding the service change
- Offer of visits to the future Principal Treatment Centre to meet staff and familiarise people with the environment
- · Dedicated point of contact
- · Inclusive communication training for staff to help them explain the service change
- · Information about how to travel to the site
- Patients and families being involved in development of the new Principal Treatment Centre.

Respondents were asked on a score of 1-5 where 1 is not at all important and 5 is very important, how important certain types of support and information to make the move easier were.



Wider health inequalities

In 2021, NHS England set out five strategic objectives for health inequalities, as part of the <u>NHS</u> <u>operating plan</u>. Below are recommendations as to how the future Children's Principal Treatment Centre (or the organisation and system it will be part of) can help to meet these objectives:



Priority 1: Restore NHS services inclusively

This priority relates to the recovery of NHS services post-COVID-19 as, for some services, pre-existing disparities in access, experience, and outcomes were exacerbated by the pandemic. There are currently no routinely available metrics to evaluate the impact of COVID-19 on children's cancer services. Nevertheless, improving equity of access, experience and outcomes to the service has been, and will remain a high priority for the future Principal Treatment Centre and network. Clinical quality and outcome metrics, alongside patient experience survey data, will provide the mechanism for monitoring this.

Priority 2: Mitigate against digital exclusion

Digital exclusion has been considered within this EHIA, both in terms of helping families plan their travel for care, and with regard to offering remote appointments to help reduce the need to travel to the Principal Treatment Centre. Recommendations for mitigating digital exclusion have been made in the previous section.

Priority 3: Ensure datasets are complete and timely

The future Principal Treatment Centre should continue to improve the collection and recording of ethnicity data for both admitted and outpatient care, alongside improvements in coding for key fields for monitoring equity such as patient postcode, shared care unit coding, diagnoses and procedure coding etc. As recommended in the previous section, development of key access, quality and outcome metrics by socio-demographic groups will enable monitoring and evaluation of progress towards improvements in equity i.e. taking a "Core20Plus5" approach to access.

Priority 4: Accelerate preventative programmes that proactively engage those at greatest risk of poor health outcomes.

In relation to children's services, it is recommended to use the <u>Core20PLUS5 For Children and Young People</u> approach to support the reduction of health inequalities. Both potential future Principal Treatment Centres have good evidence of embedding such approaches within their work, for example through the <u>CHILDs Framework</u>, developed by the Children and Young People's Health Partnership in south east London, or within the <u>St George's</u>, <u>Epsom and St Helier University Hospitals Group's strategy</u>. Both organisations have also confirmed that they are committed to the recommended <u>actions</u> contained within the <u>NHS Providers programme for Reducing Health Inequalities</u> Faced By Children and Young People.

Priority 5: Strengthen leadership and accountability

Both potential future Principal Treatment Centre providers have a named executive board-level lead for tackling health inequalities, as required within the NHS Operating Plan.

Wider health inequalities (continued)

Anchor Institutions and social value

NHS organisations can play an active role in supporting partner organisations and communities to address the physical, social and environmental factors which can cause ill health; sometimes called the wider determinants of health. Some of the ways the NHS can deliver their role as an anchor institution are shown in the infographic below from The Health Foundation.

Both Guy's and St Thomas' and St. George's have firm commitments to developing their role as anchor institutions within their communities. Commissioners will work with providers to ensure that Net Zero, health equity, and social value are duly considered in the procurement of goods and services (outlined in Procurement Policy Note 06/20. NHS England, 2022) which involves weighting at least 10% of a procurement towards broader social value delivery beyond the specific scope of the contract.

Structural Racism

The London Health and Care Partnership (LARCH) is committed to tackling structural racism and supporting organisations to become more inclusive. It strives to bring about tangible change, and build trust and confidence within communities across the capital.

LARCH has established a strategic framework with partners from across the London health and care network asking for commitment at all levels to tackle ethnic health inequalities through an anti-racist approach.

Both potential future Principal Treatment Centre providers have confirmed that they are committed partners in London's strategic approach to anti-racism.

A Strategic Framework to Tackling Ethnic Health Inequalities through an Anti-Racist approach



What makes the NHS an anchor institution?

NHS organisations are rooted in their communities. Through its size and scale, the NHS can positively contribute to local areas in many ways beyond providing health care. The NHS can make a difference to local people by:



The NHS occupies 8,253

Purchasing more locally and for social benefit In England alone, the NHS spends £27bn every year on goods and services.



6.500 hectares of land.

Widening access to quality work The NHS is the UK's biggest employer, with 1.6 million staff

Reducing its environmental impact The NHS is responsible for 40% of the public sector's carbon footprint.

Working more closely

with local partners

The NHS can learn from

model civic responsibility

others, spread good ideas and

As an anchor institution, the NHS influences the health and wellbeing of communities simply by being there. But by choosing to invest in and work with others locally and responsibly, the NHS can have an even greater impact on the wider factors that make us healthy.
Assessment of compliance with Public Sector Equality Duty

As well as considering each population group in turn, as part of the NHS England Stage 2 Assurance checkpoint*, consideration of the following questions was required. Will the proposed changes support the:

- a) elimination of discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Equality Act 2010?
- b) advancing of equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it?
- c) fostering of good relations between persons who share a relevant protected characteristic and persons who do not share it?

	Tacklingdiscrimination	Advancing equality of opportunity	Fostering good relations
The proposal will support?			
The proposal may support?	The proposal is concerning a change in location and the associated travel challenges this may pose. Mitigation actions may help to avoid any indirect discrimination but are unlikely to be strongly related to tackling direct discrimination. Nevertheless, ensuring that programme change plans include Equality, Diversity and Inclusion (EDI) training, diverse patient participation and workforce recruitment best practice can address this.	There is potential for reducing health inequalities through improved public transport for those in more deprived areas. Also potential for advancing equality of outcomes through service specification compliance as the EHIA sub-group considered that certain vulnerable groups may stand to benefit more from a service with more co-located paediatric specialties.	The proposal concerns a change in location and the associated travel challenges this may pose. This is unlikely to be directly related to fostering good relations between groups. Nevertheless, ensuring that programme change plans include EDI training, diverse patient participation and workforce recruitment best practice can address this.
Uncertain whether the proposal will support?			

Assessment of compliance with the Health and Care Act 2012

NHS England must have regard to the need to reduce inequalities between patients in access to health services and the outcomes achieved.

	Reducing inequalities in access to health care	Reducing inequalities in health outcomes
The proposal will support?	There is potential for reducing health inequalities through improved public transport for those in more deprived areas and for those from ethnicities other than white. Additionally, the negative impact found for driving times is less for both groups, compared to the general population.	Compliance with the service specification will mean that healthcare related outcomes (in terms of patient experience and safety) are likely to be enhanced through receipt of coordinated, holistic care with a reduced requirement for treatment transfers at a time of crisis and the risk that certain types of transfers involve. Whilst this will benefit all children attending the Principal Treatment Centre, the EHIA sub-group concluded that there may be a disproportionate 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.
The proposal may support?		
Uncertain if the proposal will support?		

Section 3: Local Authority based travel time analysis

The following section aims to support discussions with Local Authority partners and other stakeholders as part of the Health Overview and Scrutiny process and other engagement activities.

An analysis of the <u>change in median travel times</u> for children resident in each of these areas is presented on the next slides. The source numbers for the charts are shown in <u>appendix D</u>

An analysis of the change in journey time for those living within each local authority who have the <u>longest journey times</u> (as represented by the 90th percentile) is also shown in <u>appendix E</u>

The methodology used is the same as in the travel analysis to support the EHIA (Section 2). Please see <u>appendix B</u> for methodology.

We do not present a separate set of recommendations for mitigation as they would not be different from those outlined in the EHIA section.

Please note, this travel time analysis by Local Authority is not the same as the patient cohort travel time analysis conducted as part of the options appraisal process. The options appraisal modelled travel times for actual patients in 2019/20, using anonymised data. The analysis by local authority areas modelled travel times for all children living in the catchment area whether they have cancer or not. This was supplemented by analysis for children living in areas where the nearest children's cancer shared care unit is in the catchment area, even if their homes are not (West Sussex, Crawley and Horsham).

The local authorities of the Principal Treatment Centre catchment

The map below shows all of the lower tier boroughs, districts and unitary authorities across the Principal Treatment Centre catchment (and surrounding areas). Please note that within West Sussex, only <u>Crawley</u>, <u>Mid Sussex</u> and <u>Horsham</u> analysis is presented, due to their proximity to the shared care unit (POSCU) at East Surrey Hospital, Redhill (in Reigate and Banstead borough). For further explanation see <u>previous slide on relationship between West Sussex and the formal definition of the Principal Treatment Centre catchment area</u>.



Summary of travel time impacts for children living in different local authorities across the Principal Treatment Centre catchment (and West Sussex border areas)

When comparing travel times to The Royal Marsden* to either option for the future Principal Treatment Centre, travel time analysis shows:



 Children in most local authority areas in the Principal Treatment Centre catchment would experience a reduction in travel times by public transport. There are four local authority areas in Surrey (Reigate and Banstead, Mole Valley, Epsom and Ewell, Tandridge) and two local authorities in south west London (Sutton and Croydon) where the median travel time by public transport increases rather than decreases, due to proximity to The Royal Marsden.



Children in most local authority areas in the catchment would have an increase in travel time when driving to either option, compared to driving to The Royal Marsden. Median travel times for those living in Sussex, Surrey and south west London have the greatest difference (in change of travel time) between the two potential locations for the future Principal Treatment Centre. There is little difference between the two locations for those living in Kent and Medway. Children living in parts of south east London would be likely to see a decrease in median travel times, with clear differences between the two potential locations.

It is important to note that this analysis can only capture impacts in terms of travel time. It cannot describe impact in terms of complexity of journey and costs. Therefore, qualitative insights from patients, families and other stakeholders are important to include when considering mitigation actions.

* It is acknowledged that patients also currently attend St George's Hospital, which provides the current Principal Treatment Centre in partnership with The Royal Marsden. An analysis of travel times for patients travelling to Evelina London Children's Hospital (as compared to current travel to St George's Hospital) is shown in <u>appendix F</u>.

Local authority travel time analysis: south west London (driving)

The chart below shows the median travel times for driving to The Royal Marsden. This is shown alongside a measure of deprivation for each local authority, the Income Deprivation Affecting Children Index (see <u>Appendix A</u>). The lower the score, the more deprived the area. The most deprived local authority (according to the IDACI) is highlighted in red.



The chart below compares <u>change</u> to the median travel times for driving to the two options for the future Principal Treatment Centre, compared to driving to The Royal Marsden. Where there is more than a 15 minute difference in the travel time impact between each location, this is highlighted. For example, residents of Croydon would see on average an eight minute increase in travel time to St George's Hospital and a 28 minute increase to Evelina London, highlighted because there is more than a 15 minute difference between these two travel time impacts.



Local authority travel time analysis: south west London (public transport)





Local authority travel time analysis: south east London (driving)



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Local authority travel time analysis: south east London (public transport)



Local authority travel time analysis: Surrey Heartlands (driving)



Local authority travel time analysis: Surrey Heartlands (public transport)





Local authority travel time analysis: Kent and Medway (driving)





Local authority travel time analysis: Kent and Medway (public transport)





Local authority travel time analysis: Sussex, Brighton and Hove (driving)





Local authority travel time analysis: Sussex, Brighton and Hove (public transport)



Section 4: Environmental sustainability impact (1 of 2)

The section has been reviewed by the national Greener NHS team and assessed as providing sufficient evidence that due regard of duties to contribute towards. Net Zero has been given, as appropriate for this stage of the programme.

Sustainability duties and analysis

Sustainability analysis looks at the potential environmental impacts of changes to service provision and possible refurbishment or construction of new sites. Such analysis supports meeting the duties of the Health and Care Act 2022 which places a duty on NHS bodies to have regard to wider effect of decisions on the sustainable and efficient use of resources. It also supports the duty to have regard to the need to contribute towards compliance with the UK net zero emissions target, and other air quality and species abundance targets under that Act.

In considering the proposals from both organisations, the environmental impact in relation to capital build and transport access has been initially assessed and summarised on the next slide.

At this stage of the programme, it is not necessary to conduct analysis of carbon emissions related to travel or emissions related to potential estates work for this specific reconfiguration beyond the travel analysis already undertaken.

A detailed environmental impact assessment, including air quality and greenhouse gases, will need to be conducted as part of the Outline Business Case and implementation phase of the programme. The analysis should utilize the following resource: <u>activity-based emissions</u> factors for greenhouse gas modelling in the NHS. Consideration should also be made of potential changes to the catchment population.

Organisation strategies related to sustainability

Both potential future Principal Treatment Centre locations have published environmental strategies which detail how they will support the national NHS commitment to delivering a 'Net Zero' Health Service:

- Guy's and St Thomas' has an established <u>Environmental Sustainability</u> <u>Strategy</u> 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 has a <u>Green Plan</u> which describes its commitment to delivering its contribution to the Net Zero plan and to adopt the broader principles of sustainable development.

Both strategies outline plans to reduce emissions from all sources, contribute to improving local air quality, develop sustainable use of resources, and enhance green spaces. Both strategies have been assessed by NHS England as meeting required standards at this stage in their development.

- University College Hospital has launched '<u>Critical Care For Our Climate</u>'. The new strategy aims to build sustainability in key areas such as clinical care, procurement and supply chain, estates, technology, transport, education and engagement.
- The respective Integrated Care Systems that both locations are part of have published their Green Plan policies (<u>South East London</u>, <u>South West</u> <u>London</u>).

Section 4: Environmental sustainability impact (2 of 2)

Initial assessment of potential environment impact

Models of care: The future Principal Treatment Centre will host the Children's Cancer Operational Delivery Network which will lead transformation of shared care services and peripheral diagnostic services. This will increase the opportunity for care closer to home, improving patient experience (by reducing travel requirements).

Estates and facilities: 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, complying with the <u>NHS Net Zero Building Standard</u>.

Travel and transport: The Principal Treatment Centre is a specialised service, and by definition, covers a wide geography. Based on the fact that population densities are higher in proximity of potential Principal Treatment Centre locations, compared to the current location, it could reasonably be predicted that there could be an overall reduction in emissions related to travel, and that there could be a beneficial environmental impact of either potential Principal Treatment Centre location. This potential benefit could be enhanced if the proportion of families (or staff) using public transport rises. However, a detailed carbon emissions assessment will need to be conducted as part of the Outline Business Case and implementation phase of the programme.

The transformation programme associated with the delivery of the national service specification for POSCUs includes the development of enhanced children's cancer service shared care units able to provide a wider range of care, closer to home, for many children.

Both organisations have developed Green Travel Plans which cover conversion of fleet vehicles (including patient transport) to electric vehicles, supporting use of public transport by patients (for those who are able to use it) and active travel plans for staff. Implementation plans should take account of the national <u>Net Zero travel and transport strategy</u> and build on the trusts' existing Green Plans to align with the ambition and actions included within this strategy.

Environmental resilience: Both organisations are developing plans to improve operational resilience regarding climate change (in particular, extreme warm weather). As part of the NHS England Emergency Preparedness, Resilience and Response (EPRR) Framework, providers must show they can effectively respond to major, critical and business continuity incidents whilst maintaining services to patients. Both organisations were rated as being fully compliant in recent EPRR assurance process.

Section 5: Wider impacts on other organisations

Please see section 8.6 of the Decision Making Business Case for a full description of the potential wider impacts of this service change on wider services and organisations.

NHS England (London and South East regions) has identified the following potential impacts on wider services. NHS England is committed to working with these organisations to ensure impact is either avoided or impacts are minimised and/or mitigated through the transition and implementation phases. These services are:

- The Royal Marsden: Teenage and Young Adult (TYA), Radiotherapy and other/wider cancer services
- Services at St George's hospital: including paediatric surgery and pathology (if the final decision is to move the future Principal Treatment Centre to Evelina London)
- Services at Evelina London: including capacity concerns and also lost opportunities (if the final decision is to move the future Principal Treatment Centre to St. George's Hospital)

- University College London Hospitals NHS Foundation Trust: capacity and organisational resilience concerns
- Great Ormond Street Hospital for Children NHS Foundation Trust in terms of staff recruitment and potential changes in patient choice
- The Principal Treatment Centre at University Hospital Southampton: potential changes in patient choice
- Community and voluntary services: regarding social workers employed by voluntary organisations
- South Thames Retrieval Service

End of report Please see <u>slide 4</u> for summary



Appendix A: Index of Multiple Deprivation

The Indices of Deprivation are a unique measure of relative deprivation at a small local area level (Lower-layer Super Output Areas) across England. The IMD ranks every LSOA in England from 1 (most deprived area) to 32,844 (least deprived area). Lower-Layer Super Output Areas (LSOAs) are a standard statistical geography designed to be of a similar population size, with an average of approximately 1,500 residents or 650 households.

Deprivation is measured in a broad way to encompass a wide range of aspects of an individual's living conditions. Each of the domains is constructed from a basket

of different data datasets, or indicators. As far as is possible, each indicator is based on data from the most recent time point available.

Combining information from the seven domains produces an overall relative measure of deprivation, the Index of Multiple Deprivation (IMD).

The IMD and supplementary indices can then be ranked and split into groups (e.g. deciles or quintiles) for analysis. Within this EHIA we have used quintiles – 20% bands. Each LSOA is assigned to a quintile (based on its ranked IMD score) ranging from the most deprived 20% to the least deprived 20%.



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Appendix B: Travel time analysis: methodology

Travel time modelling software (<u>TravelTime</u> API) was used to generate public transport and car journey travel times for all children living in the PTC catchment to each of the three provider locations, from their "origin" (based on their Lower Super Output Area* (LSOA) of residence). There are 4,000 LSOAs within the PTC catchment area.

Travel times are for the fastest trip departing from resident origin for arrival at midday on a Wednesday. We also conducted sensitivity analysis for arrival at 9.30am on a Wednesday (see next slide). Metrics used in the population-based analysis are the median and longest travel times (minutes) and the proportion of the population within 15-minute journey time cohorts of each provider.

The modelling uses both road networks and timetabled transport networks. The potential combination of travel modes for each journey by public transport are national rail, tram, light rail, tube, bus, coach, ferry, and walking to and from stops and interchange, and walking alone if quicker. A public transport journey was only measured if a station or stop was reachable within an initial 20-minute walking time (only 0.2% of LSOAs did not meet this criteria).

In December 2023 (after this travel time analysis was conducted) TravelTime updated their algorithm. We conducted sensitivity testing which revealed that this update would extend the driving journey times shown in this IIA by approximately 15 minutes. There was no differential impact of this update on times to individual provider locations, or between London and non-London populations. As a result, we have not updated all the analysis as the overall differential impact between potential locations remains the same. However, to aid understanding of the impact of the new algorithm, travel time maps using the update are provided in <u>appendix I.</u>

The modelled travel measures are intended to provide a typical indication of the quickest journey from origin to destination. It cannot take account of differences in performance of different forms of public transport and individual experiences may not completely align with the estimated times.

Further information on all the travel time analysis conducted throughout the programme is given in the fact sheet: <u>How travel times were assessed and scored</u> for this consultation



* Note: Lower Super Output Areas (LSOAs) are a small area 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.

Population estimates (including ethnicity according to the 2021 Census) are available at LSOA level and each LSOA is assigned an <u>Index of Multiple</u> <u>Deprivation (IMD)</u> score and an <u>urban/rural</u> <u>classification</u>. This allows for travel time analysis by these classifications. More information on the IMD is in <u>Appendix</u> A



Appendix B: Peak and off-peak times sensitivity testing

We conducted sensitivity testing for the child population living in the Principal Treatment Centre catchment, comparing driving and public transport times when travelling in "peak" and "off-peak" times.

- Peak travel times are journeys calculated to arrive by 9.30 a.m. on a Wednesday¹
- · Off peak travel times are journeys calculated to arrive midday on a Wednesday

The results are such that there is very little difference in peak and off-peak travel times for the catchment population. For driving, arrival at the destination for 9.30am requires a journey start time before peak traffic densities have built up. This allows a faster drive time at the start of the journey, resulting in an overall drive time similar to off-peak (within 1 minute's difference). Similarly, availability of more frequent and faster public transport options during peak hours also means that peak and off-peak travel times are not very different (within 1 to 2 minutes difference).

The charts here illustrate how similar peak and off-peak drive times are for the catchment population. Those with longer journeys (from 90 minutes or longer) will see longer peak-time journeys (hence a smaller proportion of the population achieve certain travel times for peak periods) but this is not a differentiating factor between the potential Principal Treatment Centre locations.

Cumulative proportion of population accessing Royal Marsden (Surrey) by car in 15 minute cohorts



Cumulative proportion of population accessing GSTT (St Thomas' site) by car in 15 minute cohorts

PCN catchment population age 0 to 15 Cumulative % of population **drive** times to **GSTT (St Thomas' site)** by travel period





PCN catchment population age 0 to 15 Cumulative % of population drive times to St George's Hospital by travel period





Appendix C: Further travel time analysis



Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment by public transport **Urban-Rural**

Children living in areas living in areas categorised as being rural had a median travel time of 153 minutes, compared to a median of 91 minutes for those living in urban areas. 1% of children living in rural areas have a travel time of less than an hour (compared to 70% for those in urban areas).

Range and density of public transport travel times for children living rural areas







Cumulative proportion of Principal Treatment Centre catchment population (who live in rural areas) who can access The Royal Marsden by public transport in 15 minute cohorts

| less than |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 15 mins | 30 mins | 45 mins | 60 mins | 75 mins | 90 mins | 105 mins | 120 mins | 135 mins | 150 mins | 165 mins | 180 mins |
| | | 0.3% | 0.9% | 1.3% | 5.4% | 11.6% | 18.6% | 33.6% | 48.0% | 62.2% | 76.9% |



Appendix C: Further travel time analysis



Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment (driving) **Urban-Rural**

Children living in areas living in areas categorised as being rural had a median travel time of 68 minutes, compared to a median of 52 minutes for those living in the urban areas. 37% of children living in rural areas have a travel time of less than an hour (compared to 70% for those in urban areas).

Range and density of driving travel times for children living rural areas





Range and density of driving travel times for children living urban areas

Cumulative proportion of Principal Treatment Centre catchment population (who live in rural areas) who can access The Royal Marsden by road vehicle (driving) in 15 minute cohorts

less than								
15 mins	30 mins	45 mins	60 mins	75 mins	90 mins	105 mins	120 mins	
	2.5%	14.7%	37.3%	65.3%	85.6%	98.5%	100.0%	

Appendix C: Further travel time analysis

Current travel times to The Royal Marsden for children resident in the Principal Treatment Centre catchment by AGE and SEX

The charts below indicate that there is no significant difference in median travel times between children of different age-groups or between boys and girls. As the distribution of children of different age-groups, or that of boys compared to girls, is consistent across the Principal Treatment Centre catchment area, this means we would not expect any disproportionate impact of a change in Principal Treatment Centre location (in terms of travel times) between these groups.



Appendix D: Difference in <u>median</u> travel times (driving) by local authority

		Median travel time to (mins):			Difference in me			
ICB	Borough/LA of residence	The Royal Marsden	Evelina London Children's Hospital	St George's Hospital	Evelina London Children's Hospital	St George's Hospital	Difference Evelina V St. Georges	Difference of more than 15 mins between Evelina and St. Georges
	Bexley	58	59	73	1	15	-14	
	Bromley	42	57	54	15	12	3	
	Greenwich	66	50	65	-16	-1	-15	
South East London	Lambeth	47	27	28	-20	-19	-1	
	Lewisham	51	38	49	-13	-2	-11	
	Southwark	60	22	46	-38	-14	-24	
	Croydon	26	54	34	28	8	20	>15 min
	Kingston upon Thames	33	52	36	19	3	16	>15 min
	Merton	28	48	18	20	-10	30	>15 min
South West London	Richmond upon Thames	50	51	47	1	-3	4	
	Sutton	13	61	28	48	15	33	>15 min
	Wandsworth	43	35	21	-8	-22	14	
	Ashford	75	105	105	30	30	0	
	Canterbury	86	113	116	27	30	-3	
	Dartford	50	65	75	15	25	-10	
	Dover	99	129	131	30	32	-2	
	Folkestone and Hythe	84	115	115	31	31	0	
	Gravesham	55	73	81	18	26	-8	
Kent and Medway	Maidstone	57	88	88	31	31	0	
	Medway	62	87	92	25	30	-5	
	Sevenoaks	43	76	72	33	29	4	
	Swale	72	100	103	28	31	-3	
	Thanet	106	136	139	30	33	-3	
	Tonbridge and Malling	50	83	81	33	31	2	
	Tunbridge Wells	55	93	85	38	30	8	
	Elmbridge	41	66	50	25	9	16	>15 min
	Epsom and Ewell	20	61	37	41	17	24	>15 min
	Guildford	52	77	65	25	13	12	
	Mole Valley	36	75	57	39	21	18	>15 min
	Reigate and Banstead	27	79	57	52	30	22	>15 min
Surrey Heartiands	Runnymede	47	61	61	14	14	0	
	Spelthorne	51	58	61	7	10	-3	
	Tandridge	30	79	55	49	25	24	>15 min
	Waverley	65	91	79	26	14	12	
	Woking	52	72	65	20	13	7	
	Brighton and Hove	70	122	100	52	30	22	>15 min
	Eastbourne	99	155	131	56	32	24	>15 min
Sussex (East Sussex	Hastings	94	134	125	40	31	9	
/ Brighton & Hove)	Lewes	84	139	115	55	31	24	>15 min
	Rother	100	138	132	38	32	6	
	Wealden	84	124	114	40	30	10	
	Crawley	39	91	69	52	30	22	>15 min
West Sussex	Mid Sussex	53	105	84	52	31	21	>15 min
	Horsham	55	103	84	48	29	19	>15 min

Appendix D: Difference in median travel times (public transport) by local authority

		Median travel time to (mins):			Difference in me			
ICB	Borough/I A of residence	The Royal Marsden	Evelina London Children's Hospital	St George's Hospital	Evelina London Children's Hospital	St George's Hospital	Difference Evelina V St. Georges	Difference of more than 15 mins between Evelina and St. Georges
	Berley	108	66	80	-42	-28		
	Bromlov	100	50	71	-42	-20	-14	
	Croopwich	92	59	60	-33	-21	-12	
South East London	Greenwich	90 50	30	09	-43	-29	-14	
	Lambern	00 70	31	50	-21	-22	12	
	Lewisnam	10	40	59	-32	-19	-13	
	Southwark	67	32	47	-35	-20	-15	
		52	57	56	5	4	1	
	Kingston upon Thames	62	53	51	-9	-11	2	45.1
South West London	Merton	48	48	30	0	-18	18	>15 min
	Richmond upon Thames	80	53	60	-27	-20	-/	
	Sutton	30	61	50	31	20	11	
	Wandsworth	62	40	33	-22	-29	7	
	Ashford	144	105	124	-39	-20	-19	>15 min
	Canterbury	177	132	147	-45	-30	-15	
	Dartford	119	79	93	-40	-26	-14	
	Dover	184	139	156	-45	-28	-17	>15 min
	Folkestone and Hythe	165	116	135	-49	-30	-19	>15 min
	Gravesham	131	83	100	-48	-31	-17	>15 min
Kent and Medway	Maidstone	148	114	129	-34	-19	-15	
	Medway	144	95	112	-49	-32	-17	>15 min
	Sevenoaks	109	73	88	-36	-21	-15	
	Swale	166	117	131	-49	-35	-14	
	Thanet	177	138	157	-39	-20	-19	>15 min
	Tonbridge and Malling	137	95	111	-42	-26	-16	>15 min
	Tunbridge Wells	129	85	99	-44	-30	-14	
	Elmbridge	86	62	64	-24	-22	-2	
	Epsom and Ewell	47	62	59	15	12	3	
	Guildford	102	80	94	-22	-8	-14	
	Mole Vallev	69	85	85	16	16	0	
	Reigate and Banstead	64	76	81	12	17	-5	
Surrey Heartlands	Runnvmede	108	72	77	-36	-31	-5	
	Spelthorne	99	70	76	-29	-23	-6	
	Tandridge	81	75	85	-6	4	-10	
	Waverley	125	85	105	-40	-20	-20	>15 min
	Watency	96	62	76	-34	-20	-14	21011111
	Brighton and Hove	110	105	113		-6	-8	
	Fasthourne	1/6	13/	1/3	_12	-3	0- ۵_	
SUSSEX (Fast Sussex	Hastings	179	104	1/1	-12		-9	
/ Brighton & Hove)		1/0	120	138	-31	-37	-14	
/ Brighton & Hove)	Rother	170	129	150	-11	-2	-9	>15 min
	Moaldon	1/0	130	102	-34	-10	-10	>1311111
	Crowlov	140	70	134	-21	-11	-10	
West Sussey		90	79	80	-11	-4	-7	
west Sussex		101	91	97	-10	-4	-6	
	Horsham	112	101	109	-11	-3	-8	

Appendix E: Difference in the <u>longest</u> travel times (driving) by local authority

The longest journeys are represented by the 90th percentile travel time, that is the travel time below which 90% of all other travel times lie. The purpose of choosing the 90th 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.

			Evelina	, í				Difference of more
10.5			London	St	Evelina London		Difference	than 15 mins
ICB		The Royal	Children's	George's	Children's	St George's	Evelina V St.	between Evelina and
	Borough/LA of residence	Marsden	Hospital	Hospital	Hospital	Hospital	Georges	St. Georges
	Bexley	72	69	83	-3	11	-14	
	Bromley	54	76	70	22	16	6	
South East London	Greenwich	74	64	80	-10	6	-16	
Codin East Eondon	Lambeth	72	46	50	-26	-22	-4	
	Lewisham	66	51	59	-15	-7	-8	
	Southwark	74	38	61	-36	-13	-23	
	Croydon	40	76	53	36	13	23	>15 min
	Kingston upon Thames	46	60	43	14	-3	17	>15 min
South West London	Merton	38	60	31	22	-7	29	>15 min
	Richmond upon Thames	59	63	57	4	-2	6	
	Sutton	20	72	43	52	23	29	>15 min
	Wandsworth	61	43	36	-18	-25	7	
	Ashford	98	134	130	36	32	4	
	Canterbury	99	126	130	27	31	-4	
	Dartford	53	70	78	17	25	-8	
	Dover	116	148	150	32	34	-2	
	Folkestone and Hythe	107	140	140	33	33	0	
	Gravesham	61	80	88	19	27	-8	
Kent and Medway	Maidstone	74	105	105	31	31	0	
	Medway	86	104	112	18	26	-8	
	Sevenoaks	57	96	86	39	29	10	
	Swale	88	116	118	28	30	-2	
	Thanet	115	146	150	31	35	-4	
	Tonbridge and Malling	58	91	89	33	31	2	
	Tunbridge Wells	79	117	109	38	30	8	
	Elmbridge	52	73	61	21	9	12	
	Epsom and Ewell	27	70	44	43	17	26	>15 min
	Guildford	70	91	82	21	12	9	
	Mole Valley	50	91	74	41	24	17	>15 min
Surrey Heartlands	Reigate and Banstead	39	89	68	50	29	21	>15 min
Ourrey ricardando	Runnymede	54	68	67	14	13	1	
	Spelthorne	55	69	68	14	13	1	
	Tandridge	42	94	72	52	30	22	>15 min
	Waverley	77	104	92	27	15	12	
	Woking	60	78	73	18	13	5	
	Brighton and Hove	83	138	113	55	30	25	>15 min
	Eastbourne	106	164	140	58	34	24	>15 min
Sussex (East Sussex	Hastings	99	139	131	40	32	8	
/ Brighton & Hove)	Lewes	96	154	128	58	32	26	>15 min
	Rother	109	150	143	41	34	7	
	Wealden	107	158	139	51	32	19	>15 min
	Crawley	41	94	71	53	30	23	>15 min
West Sussex	Mid Sussex	60	112	90	52	30	22	>15 min
	Horsham	72	121	103	49	31	18	>15 min

Longest travel time to (mins):

Difference for those with the longest travel time (mins)

Appendix E: Difference in the <u>longest</u> travel times (public transport) by local authority

The longest journeys are represented by the 90th percentile travel time, that is the travel time below which 90% of all other travel times lie. The purpose of choosing the 90th 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.

			Evelina					Difference of more
ICB			London	St	Evelina London		Difference	than 15 mins
		The Royal	Children's	George's	Children's	St George's	Evelina V St.	between Evelina and
	Borough/LA of residence	Marsden	Hospital	Hospital	Hospital	Hospital	Georges	St. Georges
	Bexley	122	79	92	-43	-30	-13	
	Bromley	121	90	104	-31	-17	-14	-
South Fast London	Greenwich	110	66	81	-44	-29	-15	
	Lambeth	72	58	48	-14	-24	10)
	Lewisham	95	58	73	-37	-22	-15	
	Southwark	84	52	66	-32	-18	-14	
	Croydon	82	76	88	-6	6	-12	
	Kingston upon Thames	80	62	61	-18	-19	1	
South West London	Merton	64	61	45	-3	-19	16	>15 min
Could West London	Richmond upon Thames	99	75	76	-24	-23	-1	
	Sutton	50	79	71	29	21	8	8
	Wandsworth	81	58	56	-23	-25	2	
	Ashford	232	159	220	-73	-12	-61	
	Canterbury	228	160	203	-68	-25	-43	5
	Dartford	158	120	132	-38	-26	-12	
	Dover	240	211	228	-29	-12	-17	r
	Folkestone and Hythe	226	163	223	-63	-3	-60)
	Gravesham	167	117	134	-50	-33	-17	•
Kent and Medway	Maidstone	237	202	206	-35	-31	-4	
	Medway	199	162	201	-37	2	-39)
	Sevenoaks	196	143	133	-53	-63	10)
	Swale	232	226	238	-6	6	-12	
	Thanet	197	154	172	-43	-25	-18	5
	Tonbridge and Malling	216	146	194	-70	-22	-48	5
	Tunbridge Wells	213	159	183	-54	-30	-24	ŀ
	Elmbridge	113	82	91	-31	-22	-9)
	Epsom and Ewell	64	79	79	15	15	C)
	Guildford	130	112	124	-18	-6	-12	
	Mole Valley	133	139	158	6	25	-19)
Our second se	Reigate and Banstead	94	94	100	0	6	-6	5
Surrey Heartlands	Runnymede	135	99	104	-36	-31	-5	;
	Spelthorne	124	85	95	-39	-29	-10)
	Tandridge	117	100	109	-17	-8	-9)
	Waverley	162	117	137	-45	-25	-20)
	Woking	110	75	87	-35	-23	-12	2
	Brighton and Hove	145	133	140	-12	-5	-7	,
	Eastbourne	168	154	163	-14	-5	-9)
Sussex (East Sussex	Hastings	193	150	164	-43	-29	-14	-
/ Brighton & Hove)	Lewes	156	170	156	14	0	14	ŀ
	Rother	200	204	185	4	-15	19	>15 min
	Wealden	224	188	202	-36	-22	-14	
	Crawlev	98	89		-9	-1	-8	3
West Sussex	Mid Sussex	122	109	116	-13	-6	-7	,
WOOL OUSGON			100		10			

Longest travel time to (mins):

Difference for those with the longest travel time (mins)

Appendix F: Difference in <u>median</u> travel times (driving) by local authority.

Travel to Evelina London (from area of residence) compared to travel to St George's Hospital



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Appendix F: Difference in <u>median</u> travel times (public transport) by local authority.

Travel to Evelina London (from area of residence) compared to travel to St George's Hospital



Appendix G: Shared care and the transformation programme for children's cancer shared care units

Each child with suspected cancer is referred to a Principal Treatment Centre which will make the diagnosis and direct the provision of treatment. In London, the current Principal Treatment Centres are at The Royal Marsden/St George's Hospital, and Great Ormond Street for children under 13, and Great Ormond Street/University College Hospital for children aged 13-15. There are other Principal Treatment Centres in the South East and East of England regions as well as farther afield in other parts of the country.

Principal Treatment Centres work in partnership with Paediatric Care Oncology Shared Units (POSCUs – which are usually local hospitals) so that children with cancer can receive supportive care and some specified cancer treatments, as close to home as possible.

In 2021, NHS England published changes to the national service specifications for both aspects of care. There will be changes in London so that in future, the Principal Treatment Centres are located on sites which also have access to a children's intensive care units as in most other parts of the country. For shared care hospitals, there will be three new levels of care which will mean changes for some of our current POSCU care units. In future, there will be:

- Standard POSCUs which will provide the full range of supportive care but will <u>not</u> provide chemotherapy services
- Level A Enhanced POSCUs which will also provide outpatient and day case chemotherapy bolus and infusional chemotherapy
- Level B Enhanced POSCUs which will provide inpatient chemotherapy (and intrathecal chemotherapy in some agreed cases)

NHS England teams in London, the South East and East of England are working together to consider how to implement these changes. We will consider how existing services will need to be supported to make changes, for example, in relation to staffing requirements, training and education and with the management of clinical trials. We are reviewing information from our hospitals to determine how to implement the new care levels with good geographical coverage so that all children and young people and their families have the same experience of care, delivered close to home (within POSCUs), wherever this is possible.

Appendix H: Specialised Services Quality Dashboards metrics: Children's Principal Treatment Centre Service Specification. Please visit this <u>site</u> for further detail

Metric Code	Metric
PTC01	Proportion of patients aged 0-15 with a solid tumour with a recorded stage of 1 or 2 at diagnosis
PTC02	Proportion of patients aged 0-15 with metastatic disease at diagnosis
PTC03	Median time from onset of symptoms to diagnosis
PTC04	Proportion of patients with leukaemia who progress or relapse
PTC05	Proportion of patents with CNS tumours who progress or relapse
PTC06	Proportion of patients with non-CNS tumours who progress or relapse
PTC07	Number of deaths within 30 days of chemotherapy
PTC08	Proportion of eligible patients aged 0-15 recruited to a nationally available trial
PTC09	Proportion of patients aged 0-15 completing treatment, who receive an end of treatment summary within 6 months of the end of treatment
PTC10	Proportion of patients aged 0-15 offered the opportunity to tumour bank
PTC11	Proportion of patients aged 0-15 who have had tumour samples banked
PTC12	Proportion of patients aged 0-15 admitted into ICU within 30 days of end of chemotherapy cycle
PTC13	1 year survival
PTC14	5 year survival
PTC15	Proportion of patients aged 0-15 discussed at an age appropriate MDT
PTC16	Median time from onset of fever to administration of antibiotics in neutropenic fever in patients aged 0-15

Appendix I: Driving travel time area to The Royal Marsden



The map shows modelled travel time to the stated location for a weekday morning, using the updated January 2024 algorithm within the TravelTime API.

Driving travel time area to St George's Hospital



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The map shows modelled travel time to the stated location for a weekday morning, using the updated January 2024 algorithm within the TravelTime API.

Driving travel time area to Evelina London Children's Hospital



The map shows modelled travel time to the stated location for a weekday morning, using the updated January 2024 algorithm within the TravelTime API.
Driving travel time areas to University College Hospital



Public transport travel time areas to The Royal Marsden



Public transport travel time areas to St George's Hospital



Public transport travel time areas to the Evelina London Children's Hospital



The map shows modelled travel time to the stated location for a weekday morning, using the updated January 2024 algorithm within the TravelTime API.

Public transport travel time areas to University College Hospital



The map shows modelled travel time to the stated location for a weekday morning, using the updated January 2024 algorithm within the TravelTime API.

Appendix J:Summary of qualitative insights (relating to access) collated in the pre-consultation period

The points below are a summary of the qualitative insights, that relate to travel and accessing services, collated so far through a variety of groups, including:

- South London and South East England's Children's Cancer Services Stakeholder Group
- Patient and Carer Experience Panel Validation Session
- Survey/focus group conducted by Association for Young People's Health
- The EHIA sub-group
- Pre-Consultation Engagement with children, families and carers (including ward visits at the hospitals involved in the service change programme)
- Some stakeholders have expressed the view that families taking children with cancer to appointments or for treatment prefer travelling in a private car rather than by public transport and that most journeys, in reality, would be by car because of concerns about the vulnerability of their children to infection on public transport, as well as the difficulties of being very unwell whilst in public.
- However, counter to this was anecdotal information from national charities, suggesting that many parents didn't have access to cars, and that some parents have said they sometimes choose public transport to be able to look after their child(ren) while travelling more easily than when driving.
- > The view was expressed that there is a need to ensure that hospital (or commissioner) provided patient transport is improved to aid access.
- > All of the complexities of travel for a future option: parking, cost, time taken, overnight stays, and support available need to be taken into consideration
- > Young people taking part in the Association for Young People's Health survey, thought that the distance to travel (especially in an emergency situation) and availability of public transport were important factors.
- Parents surveyed, in the Association for Young People's Health survey, also thought distance was important, as well as availability and cost of parking at the Principal Treatment Centre location.
- > Other concerns expressed were about travelling into London (for those who live outside London) and the challenges of travelling with an unwell child.
- > The EHIA sub-group highlighted the importance of shared-care, good communication between health and social care teams and making the process of obtaining exemptions/reimbursement for travel costs as easy as possible for patients and families.

Summary of qualitative insights (relating to access) collated in the pre-consultation period

The points below are a summary of the qualitative insights, that relate to travel and accessing services, collated so far through a variety of groups (see previous slide)

As part of pre-consultation engagement, children, families and carers said they need to know:

• how to travel to the service safely (i.e. if having to travel on public transport how they can be safe).

The Royal Marsden, in collaboration with Great Ormond Street Hospital and University College London Hospital (who also provide specialist cancer services) have guidance which advises children and families that it is safe to travel on public transport for children with cancer, even with a weakened immune system. The guidance says that for some patients, it might not always be appropriate to be in crowded areas, depending on the treatment they are receiving. It says that clinicians should assess patients on a case by-case basis. For instance, staff at Great Ormond Street give specific advice to bone marrow transplant patients and advise, if possible, not to travel at peak times. The guidance is reviewed on a regular basis with clinicians across all three Trusts to ensure the best interests of children and their families are considered at all stages of their treatment journey.

- where to park
- how travel costs will be reimbursed and who is eligible

NHS England - London and South East also heard concerns about

- A negative impact on travel times and access to parking, if having to travel to a site further away (counterbalanced by a potential benefit of a shorter journey for some).
- A perception that moving services further into London could make them feel crowded and busy, which may have a negative impact on patient experience.
- Asylum seeking children and their families may have difficulties accessing reliable transport to get to or from appointments or in emergencies.
- Additional cost to travel i.e. congestion charge, ULEZ and parking costs.
- Potentially longer journeys impacting carbon footprint.
- Potentially having to use a different, less reliable transport method to get to appointments and fear of being late as a result of being unable to park close by
 or due to unreliable public transport.
- Parents and carers will continue to need to juggle childcare, their own jobs and taking time off to support their child through treatment.
- Travelling into town (London) makes it an entire day out, meaning children may miss more school.

Families were also asked about how they travel to the current Principal Treatment Centre location. The findings are described on a previous slide.

As the programme moves forward to implementation, it will be vital for mitigating actions to be put into place to address these concerns. The EHIA sub-group have put forward an initial set of recommendations, which will be further developed throughout public consultation and beyond.