

Pre-Consultation 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 1: Integrated Impact
Assessment**
Interim as at 19th September 2023

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 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 [NHS England service specification](#).

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 main consultation documents 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 patients, staff and communities.

Integrated Impact Assessment

Contents:

[Executive Summary](#)

[Section 1: an Equalities profile of the PTC population](#)

[Section 2: Equality and Health Inequalities Impact Assessment](#)

[Section 3: Impact on travel time \(Local Authority based\)](#)

[Section 4: Impact on environmental sustainability](#)

[Section 5: Wider impacts on other organisations](#)

IIA Executive Summary



Section 1: equalities profile

Childhood cancer incidence rates do not vary significantly between the different geographies within the catchment area South London. 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.

Section 2: Equality and Health Inequalities Impact Assessment

We found that future journeys by public transport to a future PTC location are likely to be shorter for those living in areas of higher deprivation and in rural areas, compared to the current situation. However, those living outside London and in particular, rural areas, would likely have a longer journey when driving. It was also thought that there would be additional impacts for some groups if their journey was more expensive or more complicated, or whether they felt uncertainty about the prospect of the service changing, for instance, concerns about how accessible the new location may be. However, there would likely be benefits for some groups because more children's services will be available in one place, with less travel between them required.

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 within South West London, Surrey and East Sussex see the largest difference in impacts on travel time when comparing the two potential PTC locations against 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, including air quality and greenhouse gases, will need to be conducted as part of the planning and implementation phase. Ensuring sustainability and reducing carbon emissions will be a key part of the design process.

Section 5: wider impacts on other organisations

NHS England London has identified potential impacts on wider services the final decision is to move the children's cancer Principal Treatment Centre. Consideration has been given within the Pre-Consultation Business Case to impacts on radiotherapy provision, the service for teenagers and young people at The Royal Marsden, and both the Evelina Children's Hospital and St George's children's specialist services. Also considered are impacts on social care, the South Thames Retrieval Service and other trusts and patient pathways outside of London. There is not expected to be significant impacts arising from the reconfiguration on these other trusts or wider services.



Section 1: Equalities Profile Report for the PTC catchment area

The full Equalities profile is in **Appendix 2 of the Pre-Consultation Business Case**.

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 (PTC).

It contains information on:

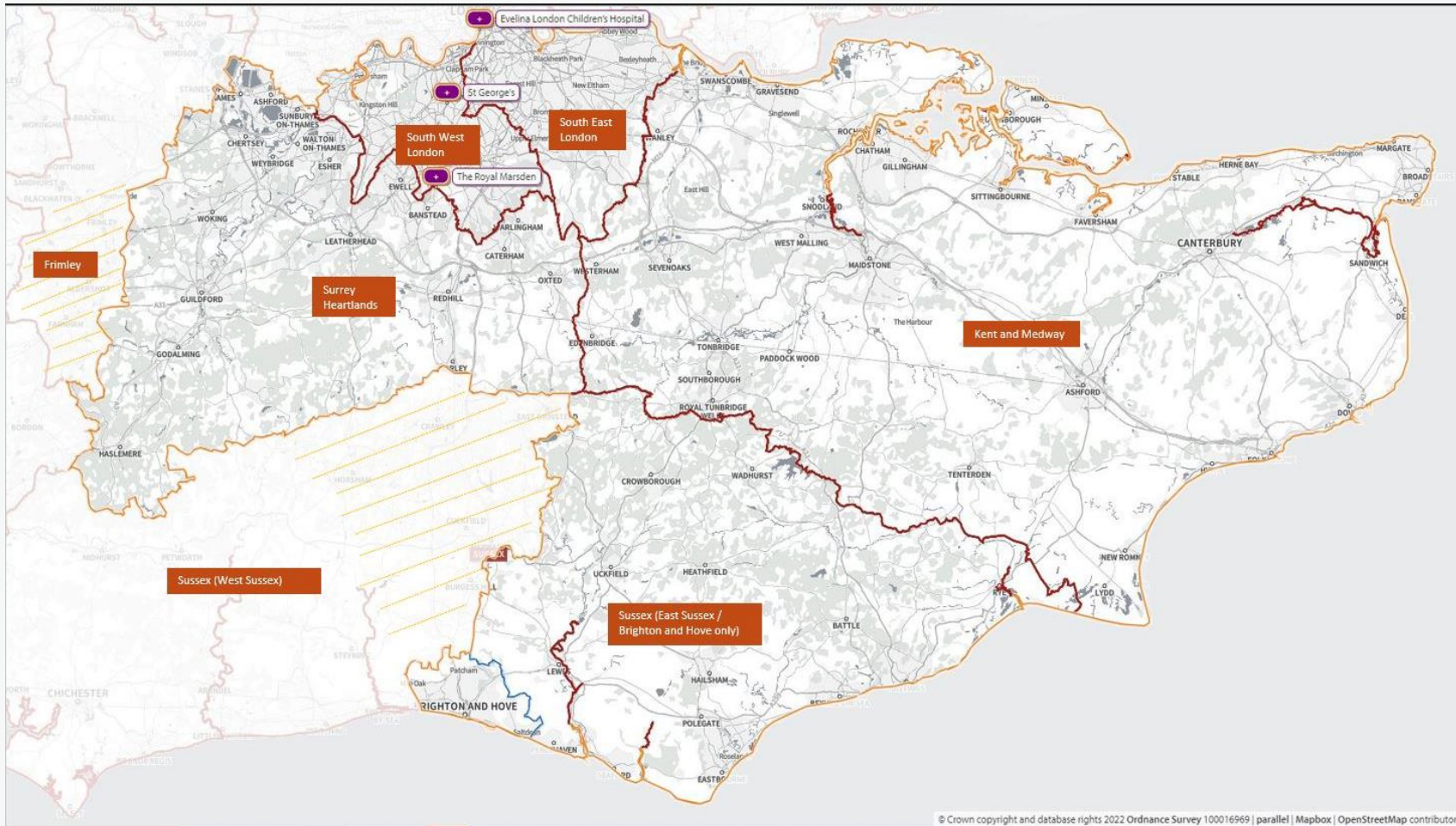
- the distribution of childhood cancer
- the socio-demographics of the PTC catchment, including groups with protected characteristics or other vulnerabilities

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

Defining the PTC 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 PTC who live outside of a defined catchment area, and not all children resident within a defined PTC catchment area, diagnosed with cancer, choose to attend that particular PTC 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 PTC catchment

The population aged one to 15 in the PTC catchment area is approximately 1.3 million and is distributed evenly across the age bands 1-5 year olds, 6-10 year olds and 11-15 year olds (see figure 1). Figure 2 below shows that the 0-14* year population is projected to decline over the next 20 years on average 7% across the PTC catchment area.

Figure 1: Proportion (and number in 1000s) of children by age-group and ICB

Source: ONS 2021 mid-year population estimates

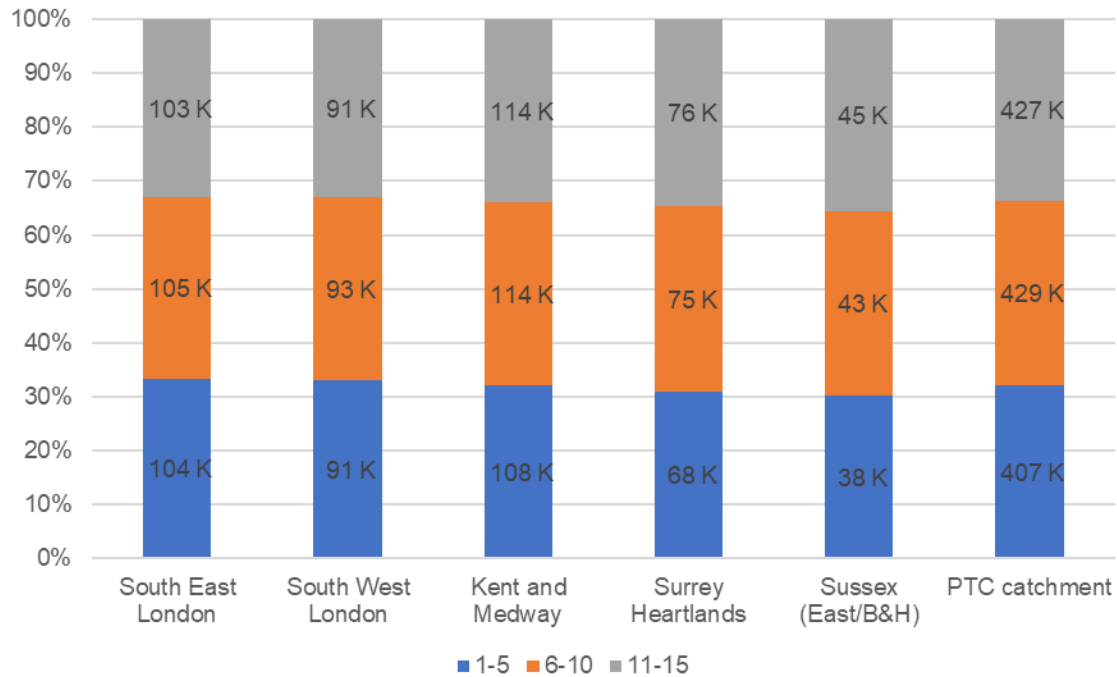
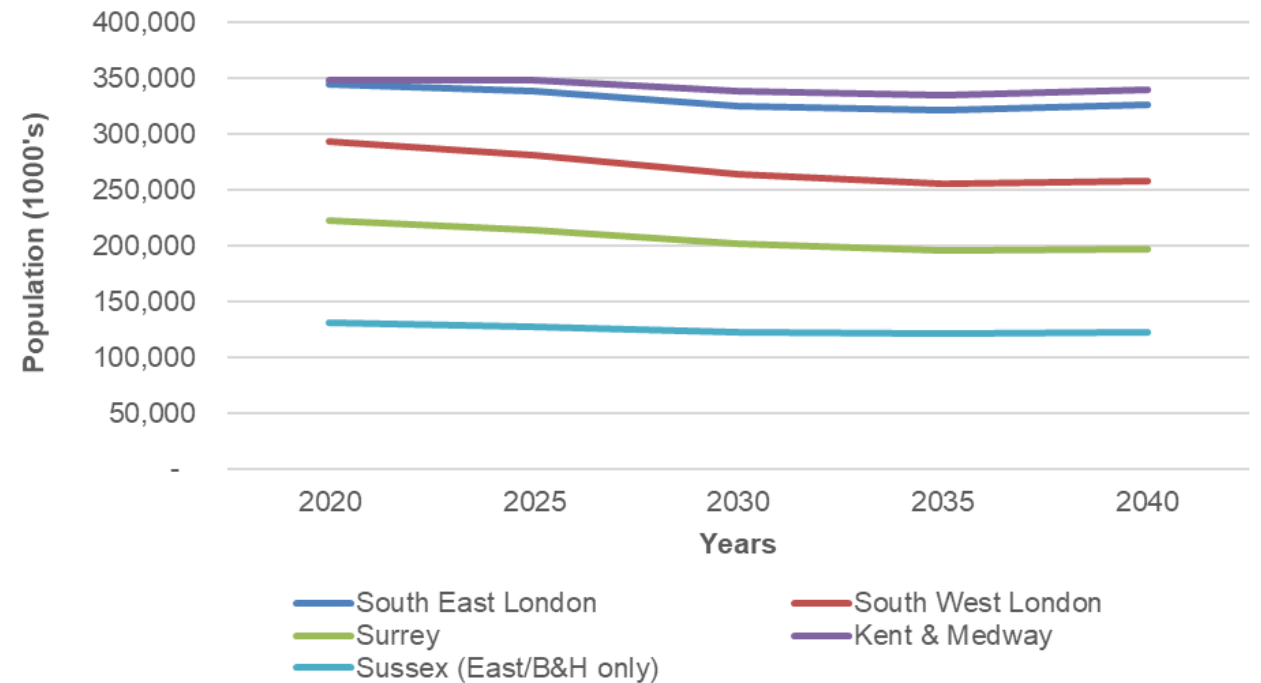


Figure 2: Population projections for ages 0-14 years

Source: ONS 2018-based subnational projections



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

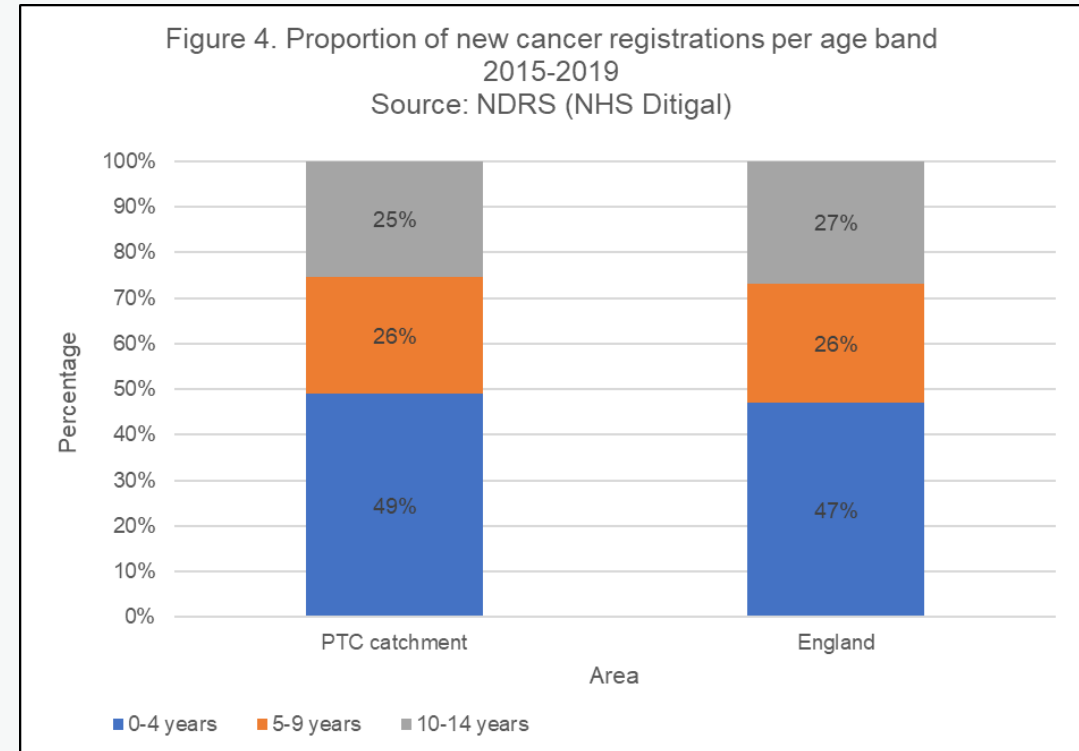
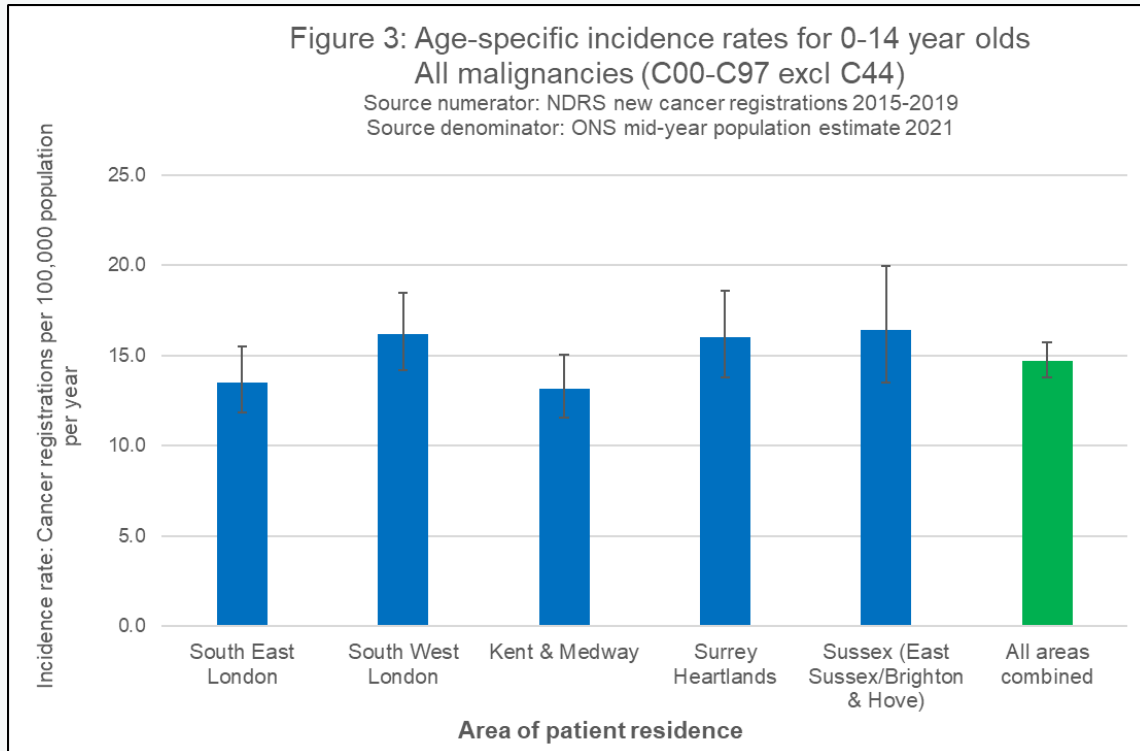
Incidence of childhood cancer



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 chart below).

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.

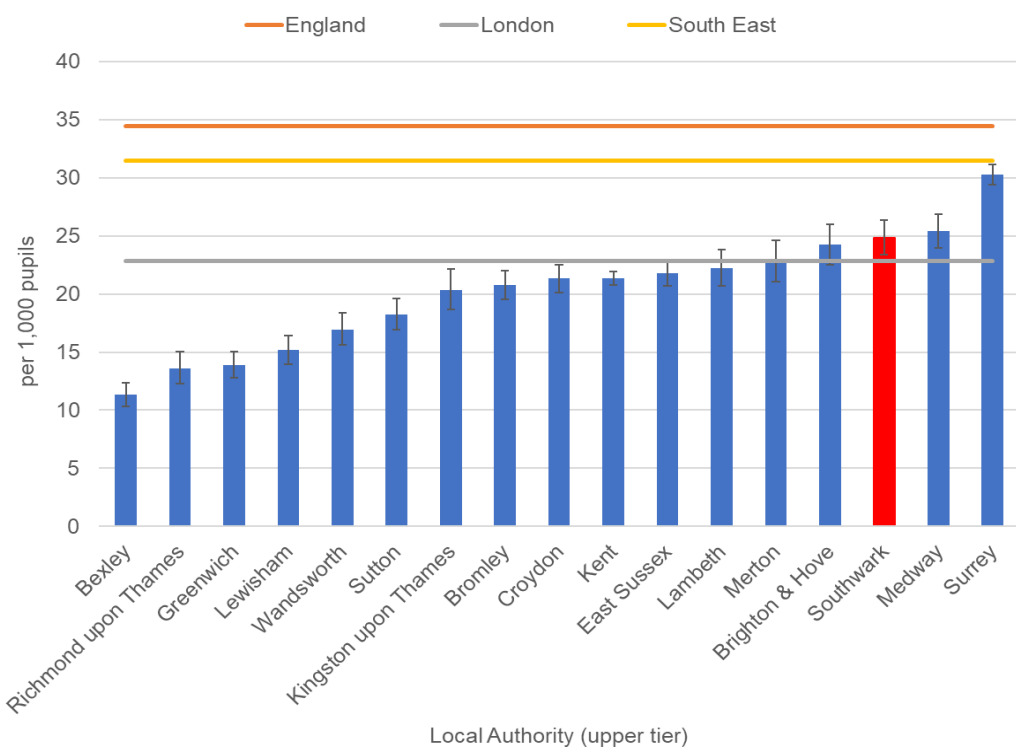
Leukaemia is the most common type of cancer, accounting for 31% of registrations, cancers of the central nervous system for 25% and lymphomas for 10%. The latest available data shows that 5-year survival was 84% for those diagnosed but survival rates differ by cancer type. (*Children, Teenagers and Young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



Disability

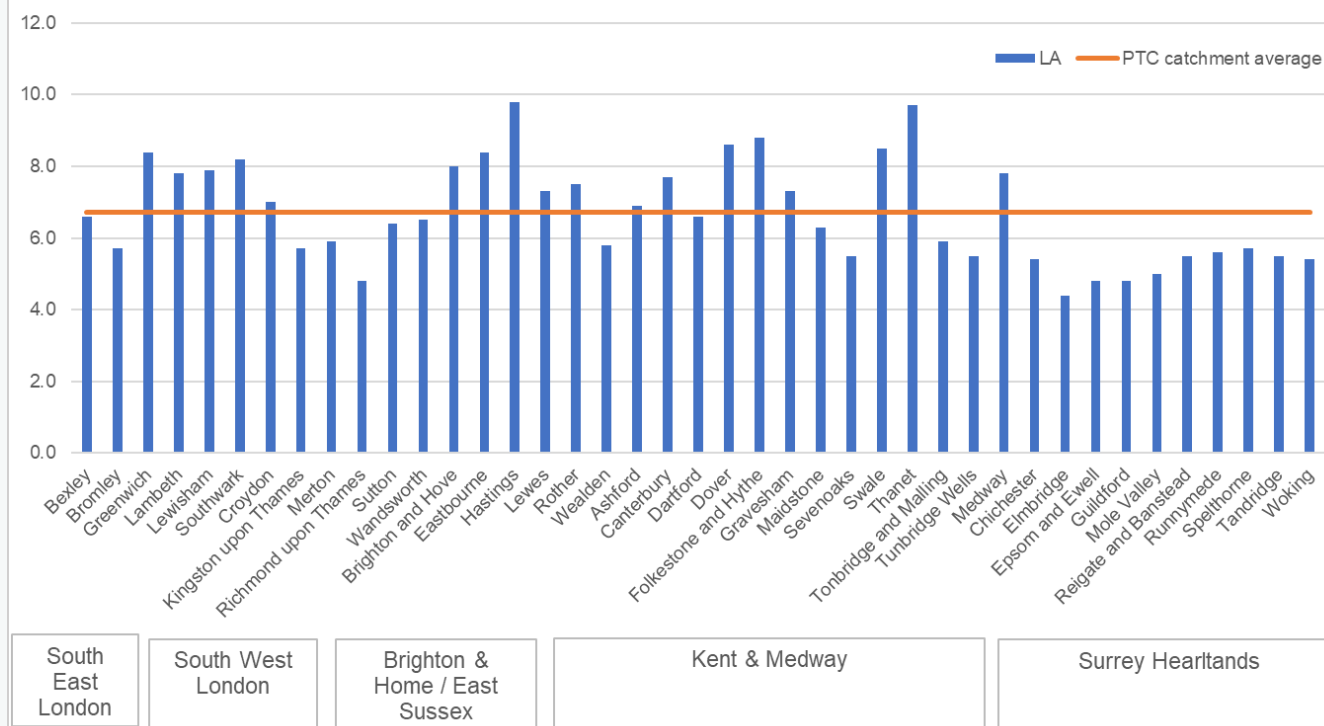
In England in 2020, there were 34 per 1,000 children with learning difficulties known to schools, with a lower rate in the south east (31/1,000) and London (23/1,000). None of the local authorities within the PTC catchment had rates higher than England.

Figure 5: Children with Learning Difficulties known to Schools, 2020
Source: OHID



The chart below shows the proportion of people of all ages living in the PTC 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.

Figure 6: Percentage of people who recorded as disabled under the Equality Act: Day-to-day activities limited a lot
Census 2021 (age-standardised)

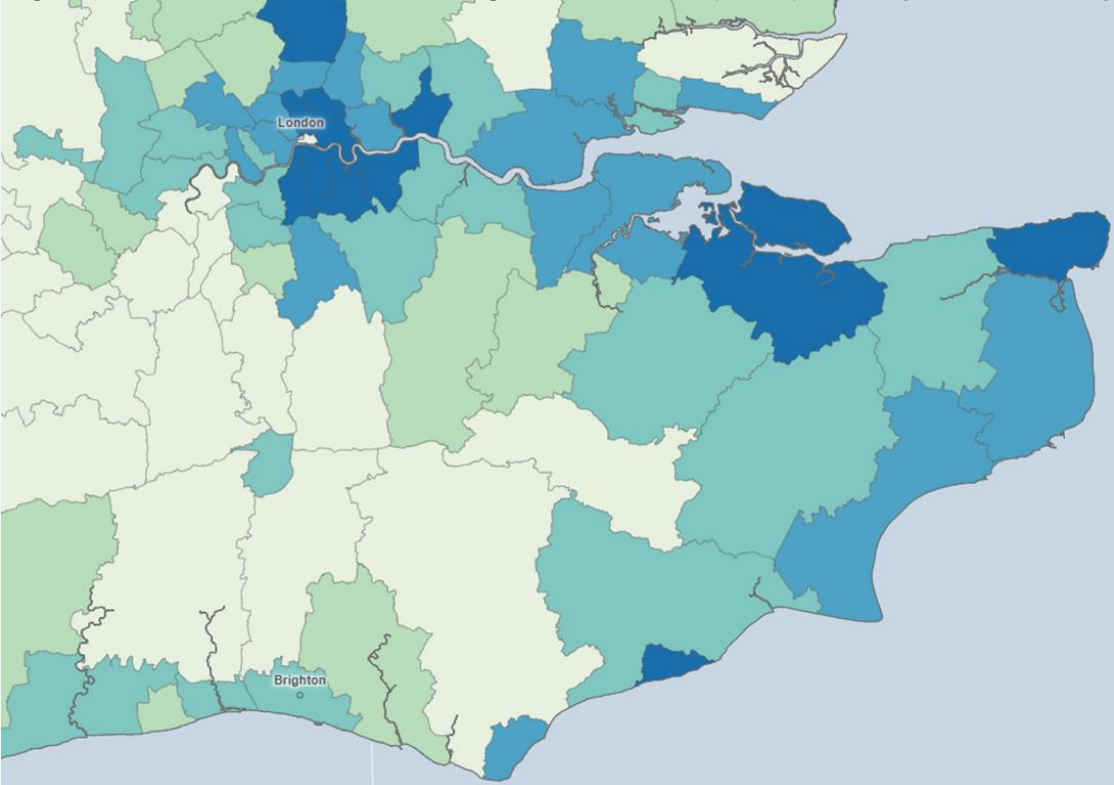


Deprivation

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

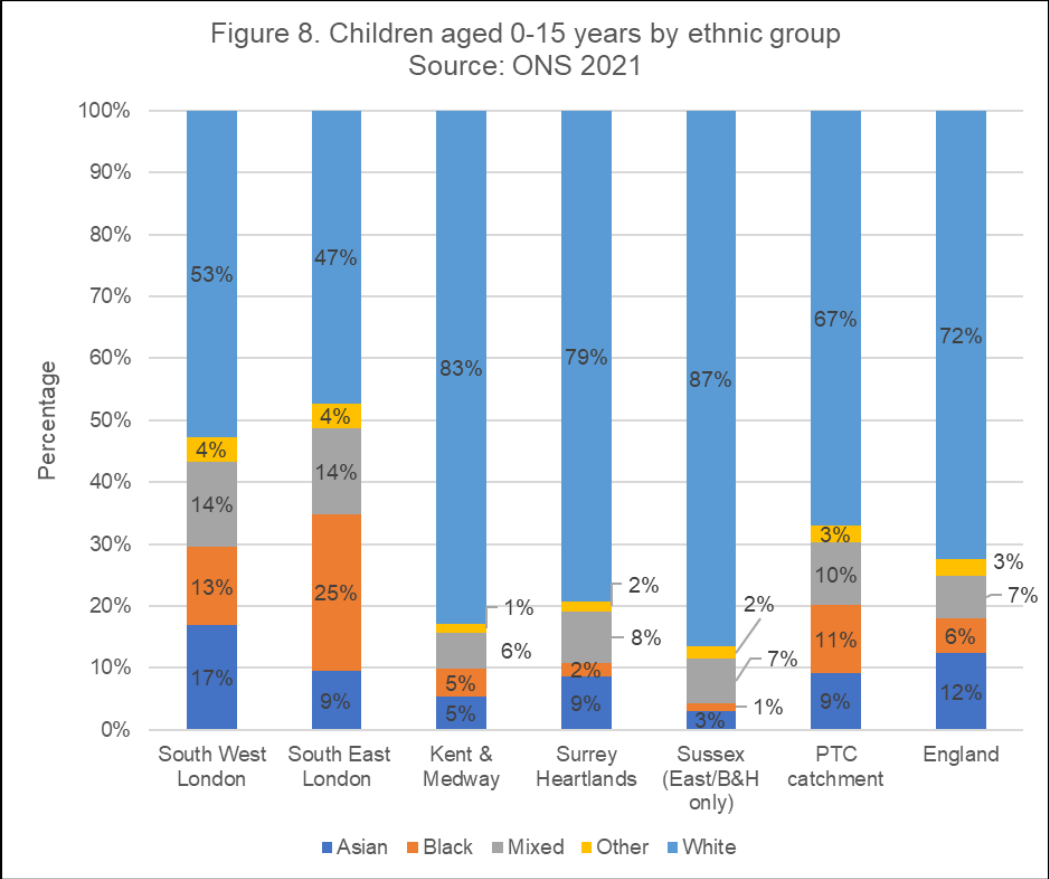
Please see [Appendix A](#) for further information on the metrics used to explore deprivation levels (the Index of Multiple Deprivation)

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



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. This is relative to 72% of children in England as a whole coming from a white ethnic group.





Section 2: Equality and Health Inequalities Impact Assessment

What is an Equality and Health Inequality Impact Assessment?

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

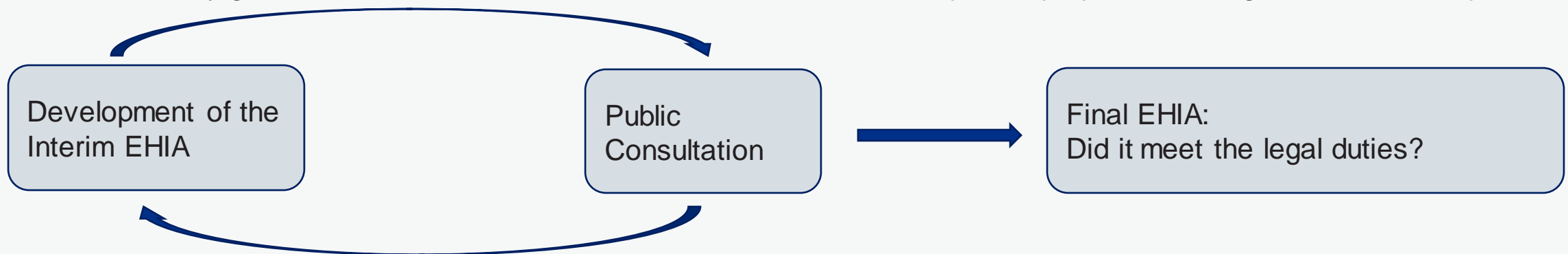
A. Equality Act 2010 : Public Sector Equality Duty (PSED)

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 Social Care Act 2022

have regard to the need to reduce inequalities between persons in access to, and outcomes from healthcare services

* Having “due regard” - 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 with 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 NHS England service specification for principal treatment centres.

A shortlisting and options appraisal process has resulted in two potential options for delivery of the future Principal Treatment Centre:

- St George's University Hospitals NHS Foundation Trust, or
- Evelina London Children's Hospital at Guy's and St Thomas' NHS Foundation Trust
- Plus radiotherapy services to be delivered at University College London Hospital NHS Foundation Trust

Both potential future locations

- are 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 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, including:
 - ending hospital transfers by ambulance of very sick children who need or might need intensive care
 - if children did need an intensive care bed, the intensive care unit would be very close.
 - more children getting the care they need on the specialist cancer ward instead of being moved to intensive care, thanks to the input of on site specialists
 - bringing together more specialist services for children with cancer on site, reducing distress and improving experience for many children and families
 - meeting the national requirements and being capable of offering cutting-edge treatments that need intensive care on site.
2. the prospect of the service change process itself and the uncertainty that may cause for patients and their families
3. the development of the future Principal Treatment Centre site and how it should meet recognised on-site access standards.

The EHIA process: key points

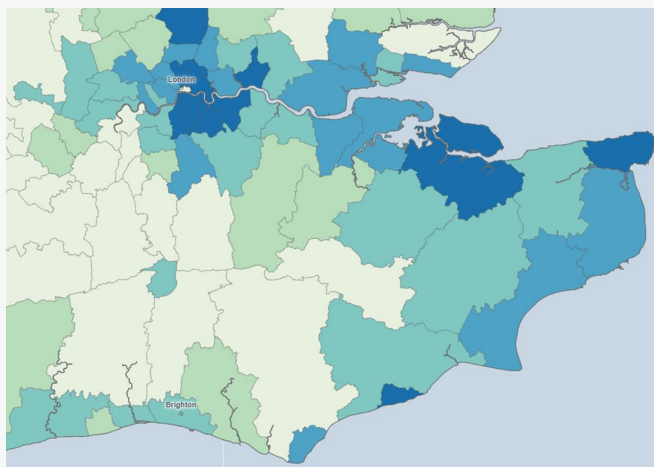
- The independent EHIA sub-group received the information described on the [next slide](#) and then met to discuss potential impacts for people with protected characteristics and groups known to experience health inequalities. The sub-group includes representatives from both London and the south east 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 (PTC). Representatives from both Trusts have also had opportunity to review and provide input.
- The EHIA takes a non-comparative, population-based approach. This means we consider the potential disproportional impacts for all groups (with protected characteristics or other vulnerabilities) who live in the PTC 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. It is not the objective of the EHIA to compare the potential future PTC providers with each other.
- For each population group, the EHIA sub-group discussed the following:
 - a. Is there **evidence of higher need** for cancer services among this group (that is, higher risk of cancer)?
 - b. Where data allows, what did the **travel time analysis** indicate for each group in terms of changes in journey time to the future PTC ?
 - c. Is it likely that this group could be **disproportionally impacted by the changes** under consideration, in terms of access to and outcomes of healthcare services?
 - d. What **mitigations** could be put in place to help counteract any negative impact?
- **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 [appendix A](#) 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 with disabilities may experience challenges accessing healthcare and so on.

Sources of information used in this interim EHIA

1) The “Equalities” profile, detailing:

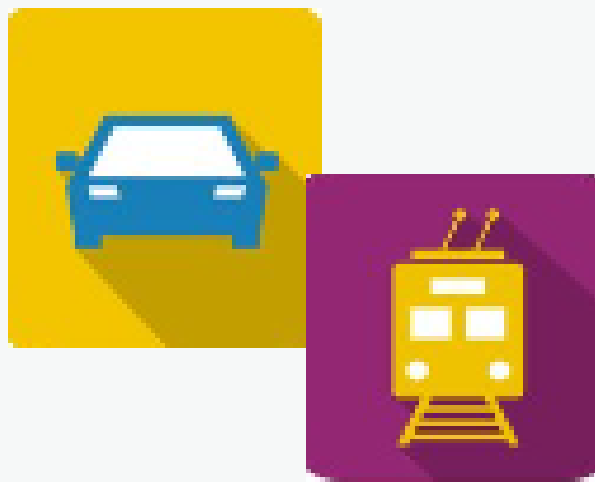
- The epidemiology of childhood cancer
- The socio-demographics of the catchment of the PTC area

Please see [previous section](#) and appendix 2 of the pre-consultation business case (PCBC) for the full report



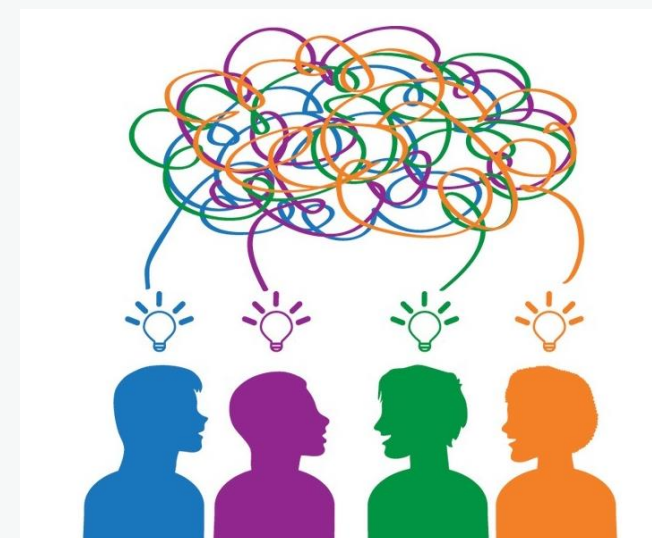
2) [Travel time analysis to support the EHIA](#)

Population-based travel time analysis for the PTC catchment area (starts on next page).



3) [Qualitative insight](#) collected so far from patients, families and professionals.

[\(slides 29-30\)](#)



Travel time 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 PTC providers.
- The travel time analysis was conducted by the Insights Team, NHS North East London Commissioning Support Unit. Please see [appendix B](#) for the underlying travel time methodology
- The analysis is population-based i.e., it considers the journeys of all residents within the PTC catchment, rather than a specific patient cohort.
- **Please note, this analysis is not the same as the patient cohort travel time analysis conducted as part of the options appraisal process.**

Summary of the section structure:

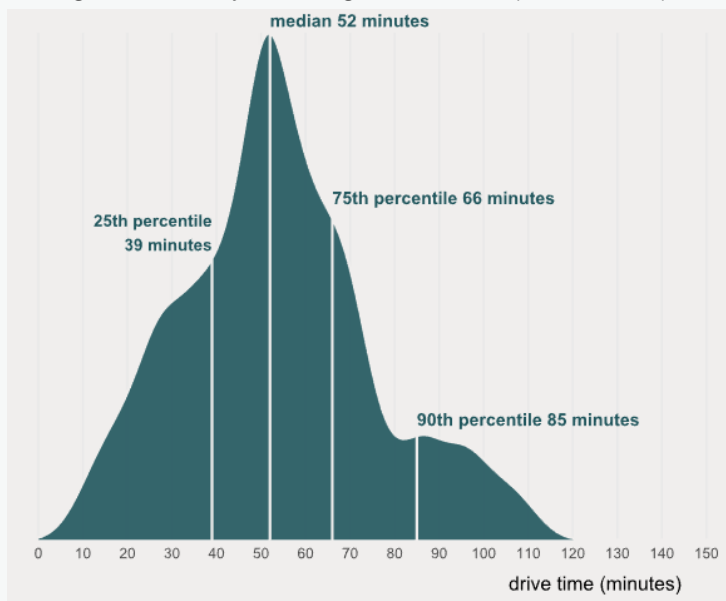
- This section begins with a description of travel times to The Royal Marsden site in Sutton.
- We then summarise the likely impact on median travel times for a change in the location of specialist children's cancer services currently provided at The Royal Marsden.
- The move of conventional radiotherapy, 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 radiotherapy services, currently provided at The Royal Marsden.
- We also use a summary metric that looks at the proportion of the PTC catchment population who live within defined travel cohorts (in 15-minute intervals) of either potential future PTC 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.



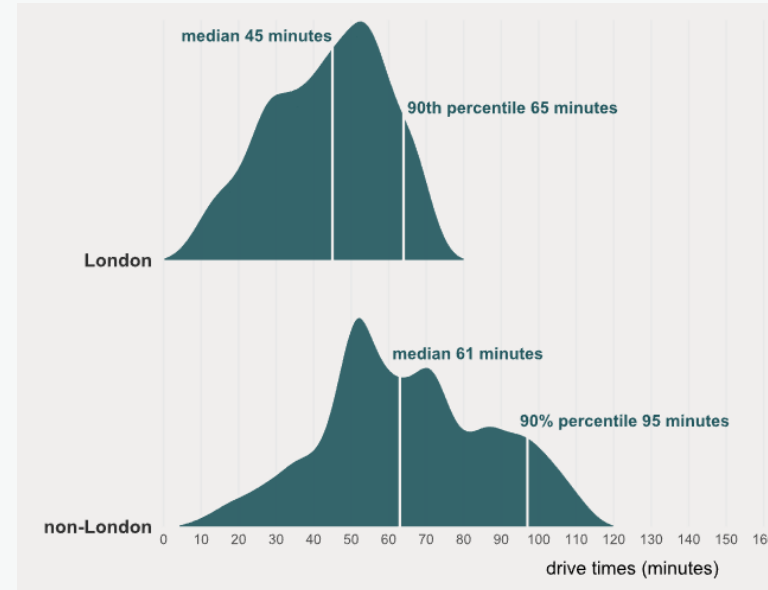
Current travel times to The Royal Marsden for children resident in the PTC catchment (**driving**)

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. For those non-London residents with the longest journeys, the travel time is 95 minutes**. Overall, 66% of the PTC 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.

Range and density of driving travel times (all residents)



Range and density of driving travel times (split London and non-London residents)



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

less than 15 mins	less than 30 mins	less than 45 mins	less than 60 mins	less than 75 mins	less than 90 mins	less than 105 mins	less than 120 mins
2.9%	15.4%	33.8%	66.2%	85.8%	92.7%	98.4%	100.0%

*The median is the middle value when all travel times are listed from shortest to longest. The median has been used for the analysis to mitigate against the impact of outliers (very low and very high values in the data).

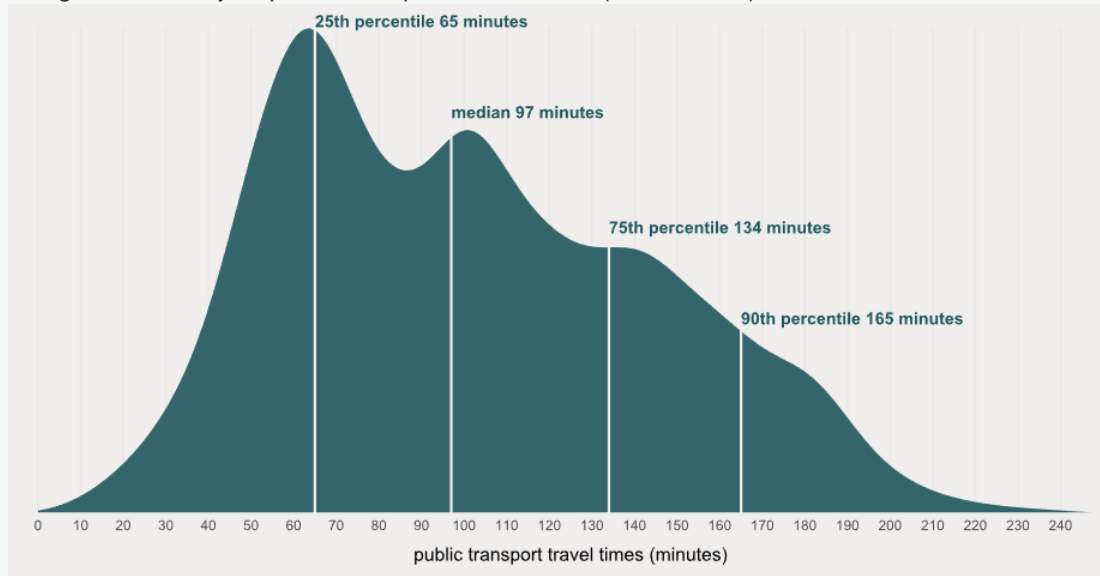
** the longest journeys are represented by the 90th percentile travel time, that is the travel time below which 90% of all other travel times lie. The purpose of choosing the 90th percentile, rather than the maximum, is to mitigate the impact of outliers and avoid drawing conclusions about journey time based on small numbers of children.



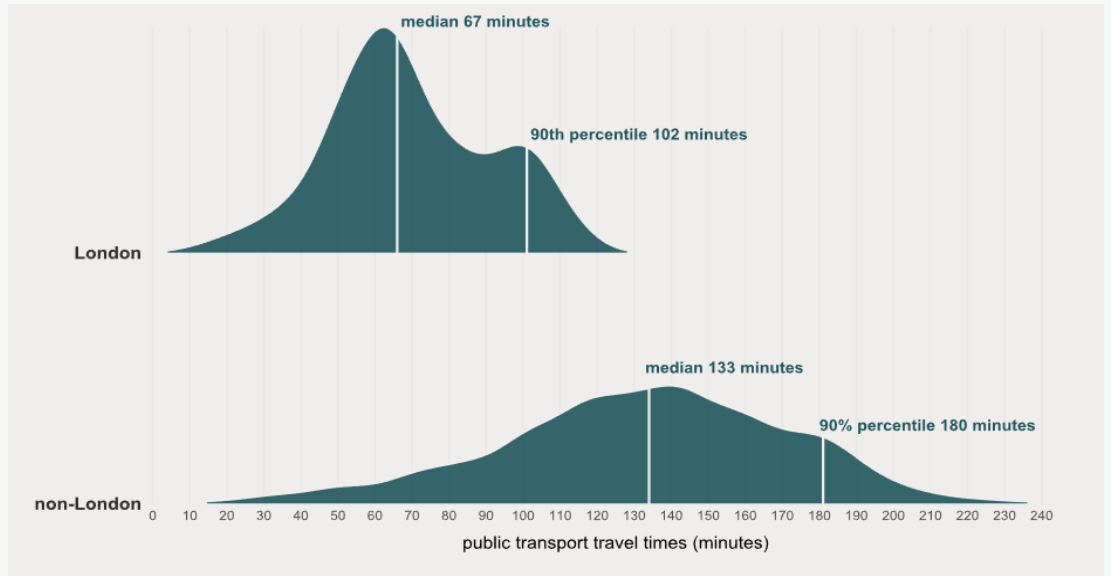
Current travel times to The Royal Marsden for children resident in the PTC catchment by **public transport**

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 non-London residents with the longest journeys** the travel time is 180 minutes. Overall, 20% of the PTC 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.

Range and density of public transport travel times (all residents)



Range and density of public transport travel times (split London and non-London residents)



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

less than 15 mins	less than 30 mins	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%	2.1%	7.3%	20.2%	35.5%	45.5%	57.6%	67.4%	75.5%	83.7%	90.0%	94.7%

*The median is the middle value when all travel times are listed from shortest to longest. 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 choosing the 90th percentile, rather than the 18 maximum, is to mitigate the impact of outliers and avoid drawing conclusions about journey time based on small numbers of children.



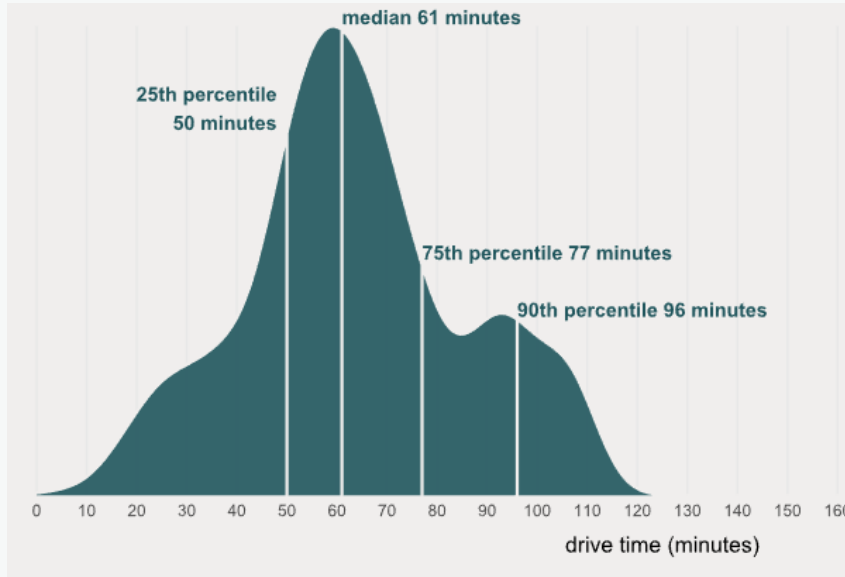
Current travel times to The Royal Marsden for children resident in the PTC catchment (**driving**)



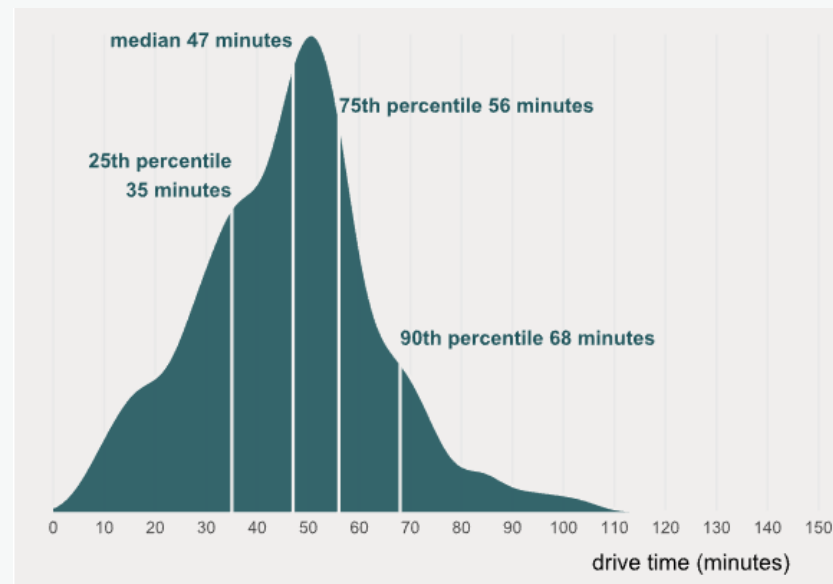
DEPRIVATION: Most deprived areas compared to least deprived

Children living in areas categorised as the most deprived within the PTC 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 most deprived areas (IMD quintile 1)



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



Cumulative proportion of PTC 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	less than 30 mins	less than 45 mins	less than 60 mins	less than 75 mins	less than 90 mins	less than 105 mins	less than 120 mins
0.6%	7.5%	17.7%	46.4%	72.7%	84.8%	95.4%	100.0%

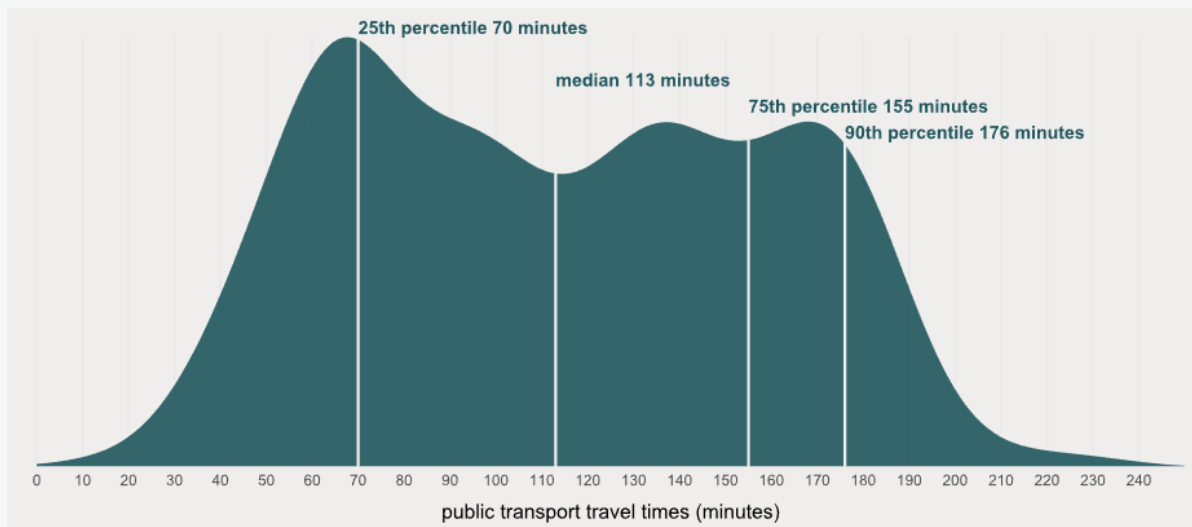


Current travel times to The Royal Marsden for children resident in the PTC catchment by **public transport**

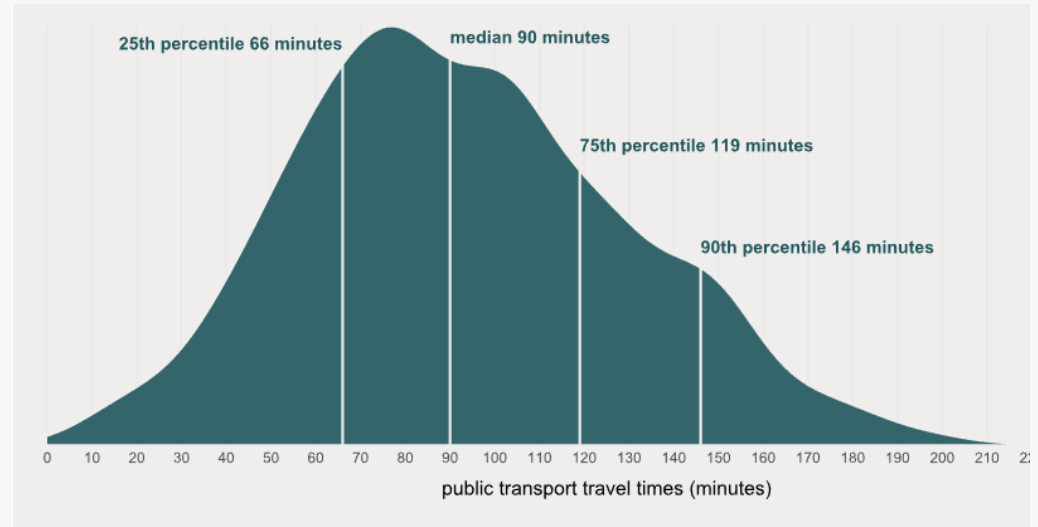
DEPRIVATION: Most deprived areas compared to whole population

Children living in areas categorised as the most deprived within the PTC 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 most deprived areas (IMD quintile 1)



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



Cumulative proportion of PTC 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	less than 30 mins	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
0.2%	0.4%	5.2%	13.5%	28.9%	36.2%	48.4%	55.3%	63.6%	73.6%	81.8%	92.8%

Further information on how patients currently travel to the Joint Principal Treatment Centre

Data on **how patients travel to the current PTC** is not routinely captured as part of standard datasets. However, as part of pre-consultation engagement programme, NHS England asked children, young people and their families, who have direct experience of the service, about 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. 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 to 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. Out of 88 respondents:

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

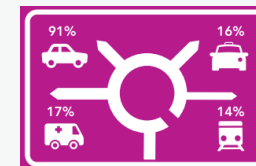
These survey results correlate well with the modelled estimates for driving shown on the [previous slide](#) (where it is estimated that 66% of the PTC catchment child population live within 60 minutes of The Royal Marsden site).

Data relating to children who use the **Non-Emergency Patient Transport service (NEPTS)** provided by The Royal Marsden shows that over 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 PTC 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 do not currently collect data that enables separation of claims made between the adult and paediatric service.

The charity Young Lives Versus 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 and in addition, the other forms of transport most utilised 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 PTC catchment under consideration here.



[Running-on-Empty-Report.pdf](#)
(younglivesvscancer.org.uk)

Travel time IMPACT: summary

When comparing travel times to The Royal Marsden to **either option for the future PTC**, travel time 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 travel times reduce by at least 25 minutes
 - Children living in rural areas would see their travel times reduce by at least 25 minutes
 - 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.



- there are negative 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.
 - Children living in rural areas would see their travel times increase by up to 30 minutes
 - 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.

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.

It is important to note that this analysis can only capture impacts in terms of travel time. It can not 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 include when considering 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 choosing the 90th percentile, rather than the maximum, is to mitigate the impact of outliers.



Travel time IMPACT: Current travel to The Royal Marsden compared to a future PTC location

DEPRIVATION: Most deprived areas compared to entire population

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 PTC compared to The Royal Marsden (in excess of 25 minutes reduced median travel time).

The chart shows that the percentage of children resident in the PTC catchment, living in the most deprived areas, who would have a journey time of less than 60 minutes by public transport to either option for the future PTC would be 33% (compared to 13% within 60 minutes of the current PTC (RM)).

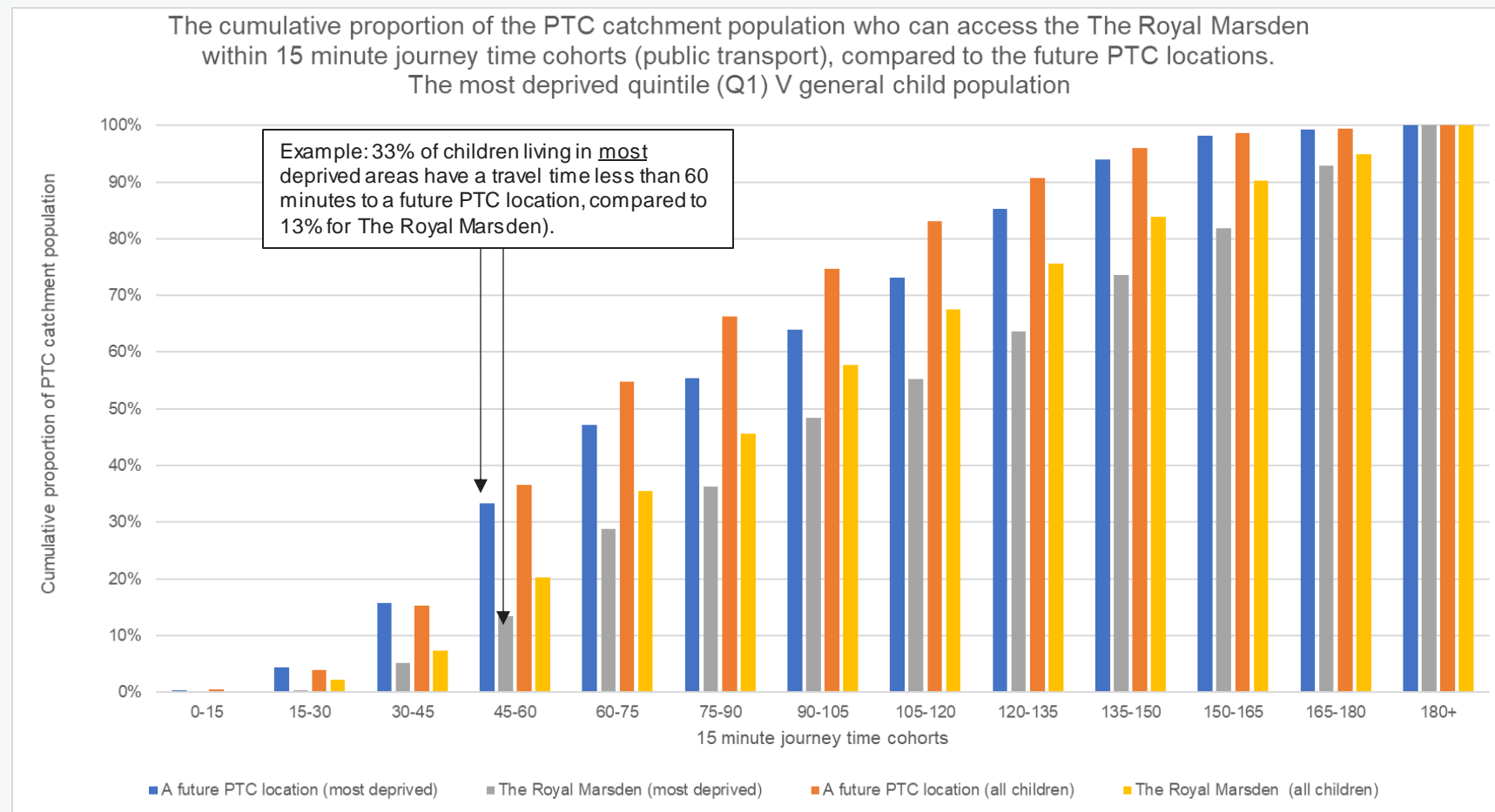
The relative benefit seen in terms of reduced travel time for children from the most deprived areas (33% vs 13%) is more than the relative benefit that would be seen for all children in the PTC catchment (37% vs 20%).

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

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

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

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





A comparison of current travel times to The Royal Marsden to a future PTC location

DEPRIVATION: Most deprived areas compared to entire population

Driving



Those living in areas categorised as the most deprived would have moderate increases in median travel time (driving) to a new PTC location compared to The Royal Marsden (an increase of up to 16 minutes).

The chart shows that the percentage of children resident in the PTC catchment, living in the most deprived areas, who would have a journey time of less than 60 minutes driving to a new PTC location, would be 40%, compared to 46% within 60 minutes of the current PTC (RM).

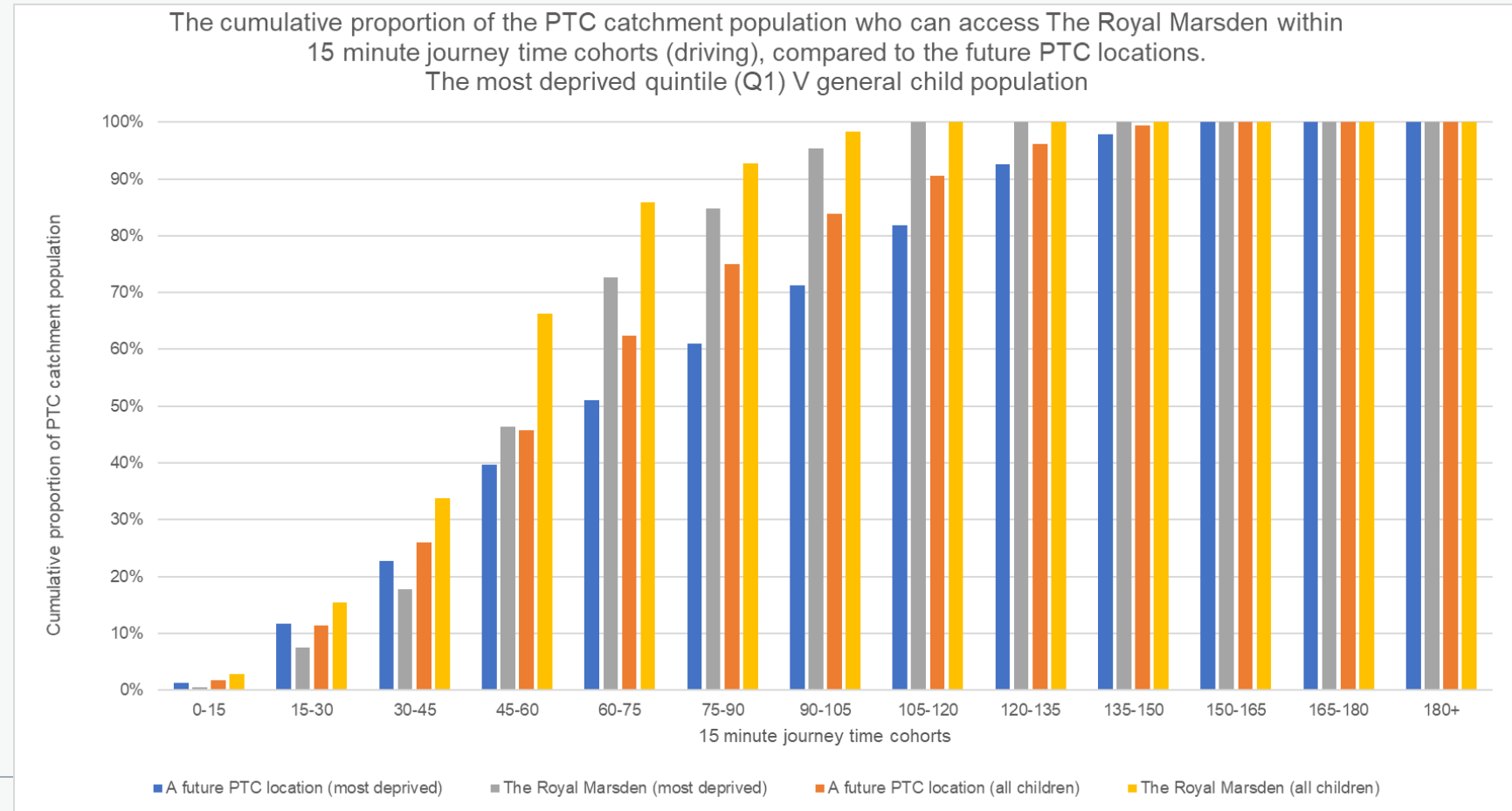
The relative adverse impact (in terms of increased travel time for children from the most deprived areas (40% vs 46%) is less than the relative adverse impact that would be seen for all children in the PTC catchment (46% vs 66%).

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 comparison of current travel times to The Royal Marsden to a future PTC location

Urban compared to Rural areas - Public Transport



Those living in areas categorised as being rural would have a reduction in median travel time (by public transport) to a new 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 PTC 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 current PTC (RM)).

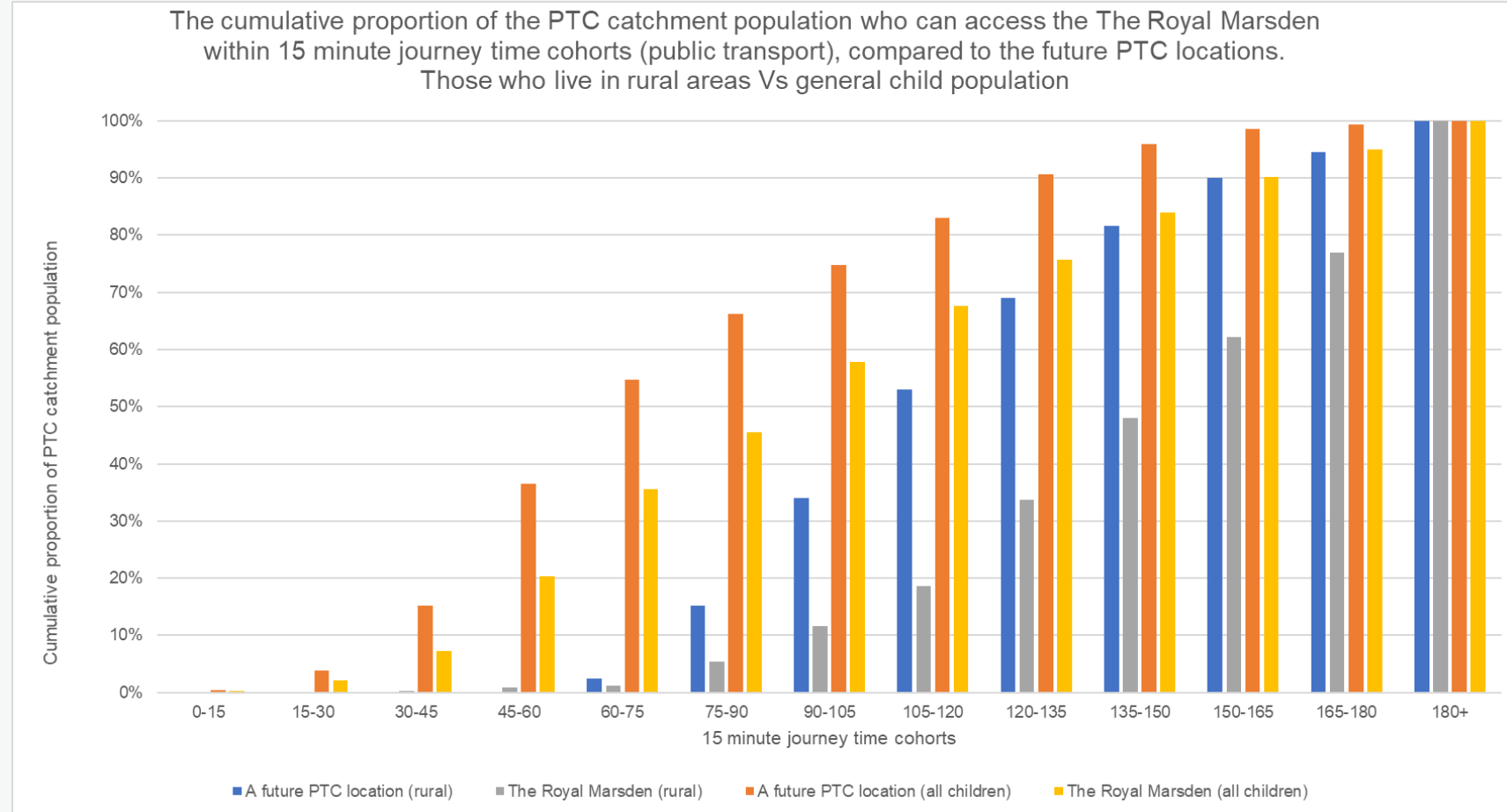
The relative benefit seen in terms of reduced travel time for children from rural areas (53% vs 19%) is more than the relative benefit that would be seen for all children in the PTC catchment (83% vs 68%).

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

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

Percentage of all children in the PTC catchment whose journey is within 120 mins:

- Either future PTC option : 83%
- The Royal Marsden: 68%



* 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.



A comparison of current travel times to The Royal Marsden to a future PTC location

Urban compared to Rural areas - Driving



Those living in areas categorised as being rural would have an increase in median travel time (driving) to a new 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 current PTC (RM)).

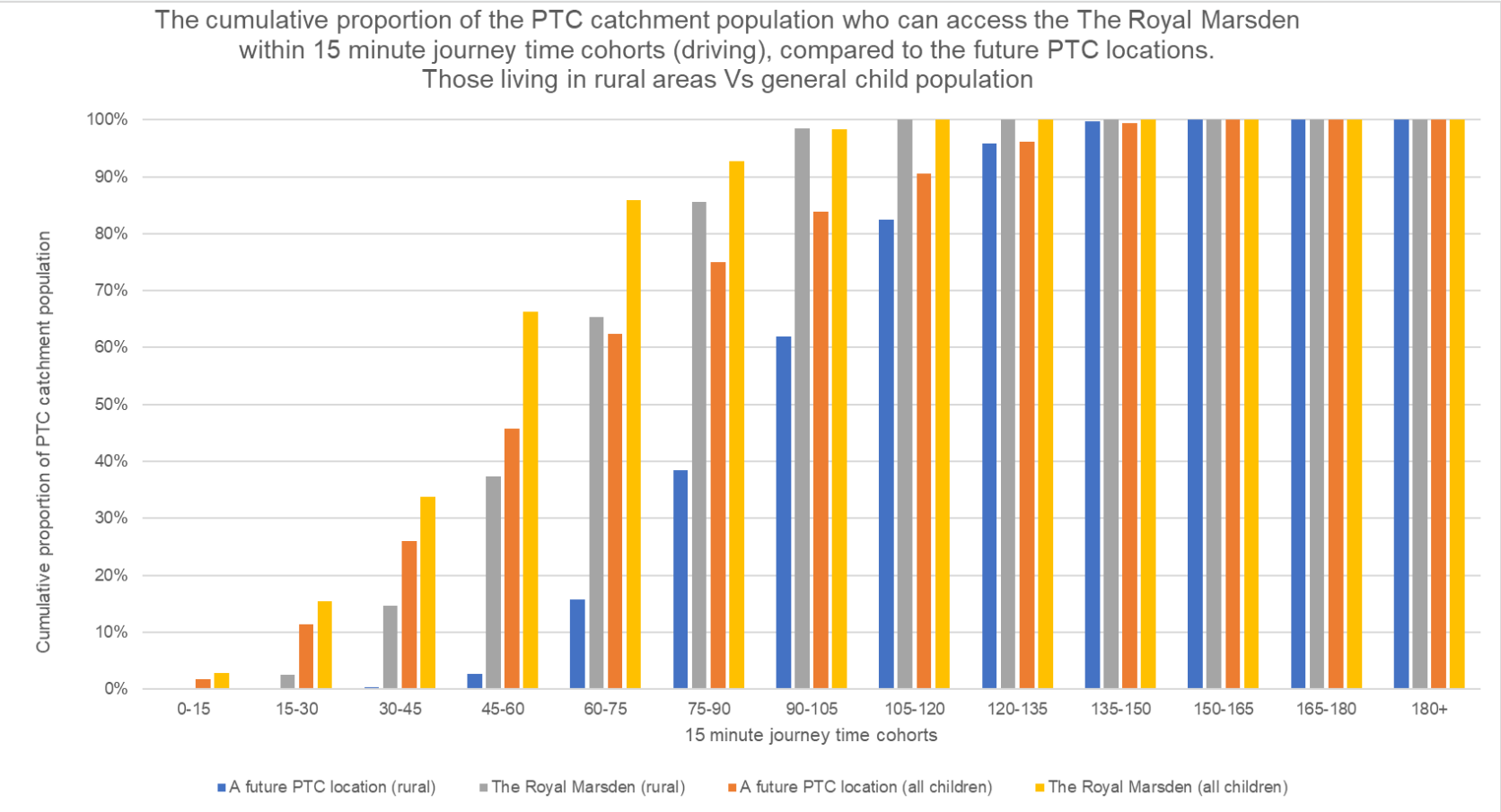
The relative adverse impact (in terms of increased travel time for children from rural areas (3% vs 37%) is more than the relative adverse impact that would be seen for all children in the PTC catchment (46% vs 66%).

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

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

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

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



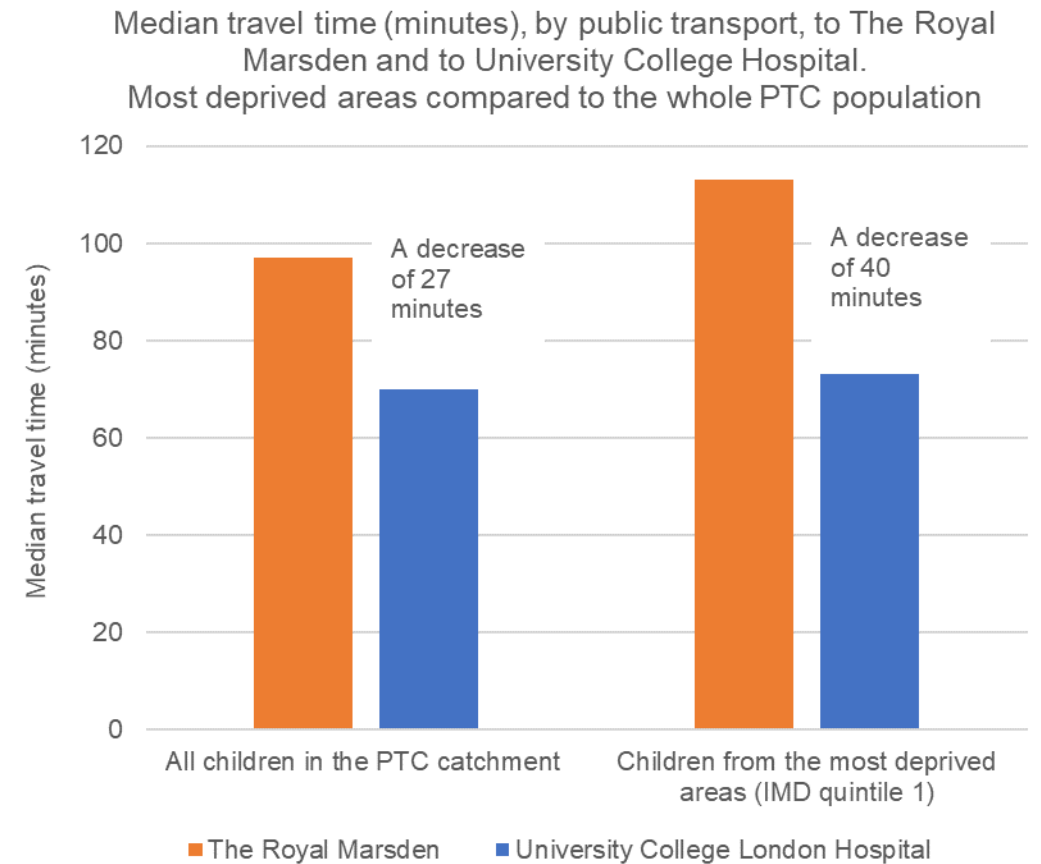
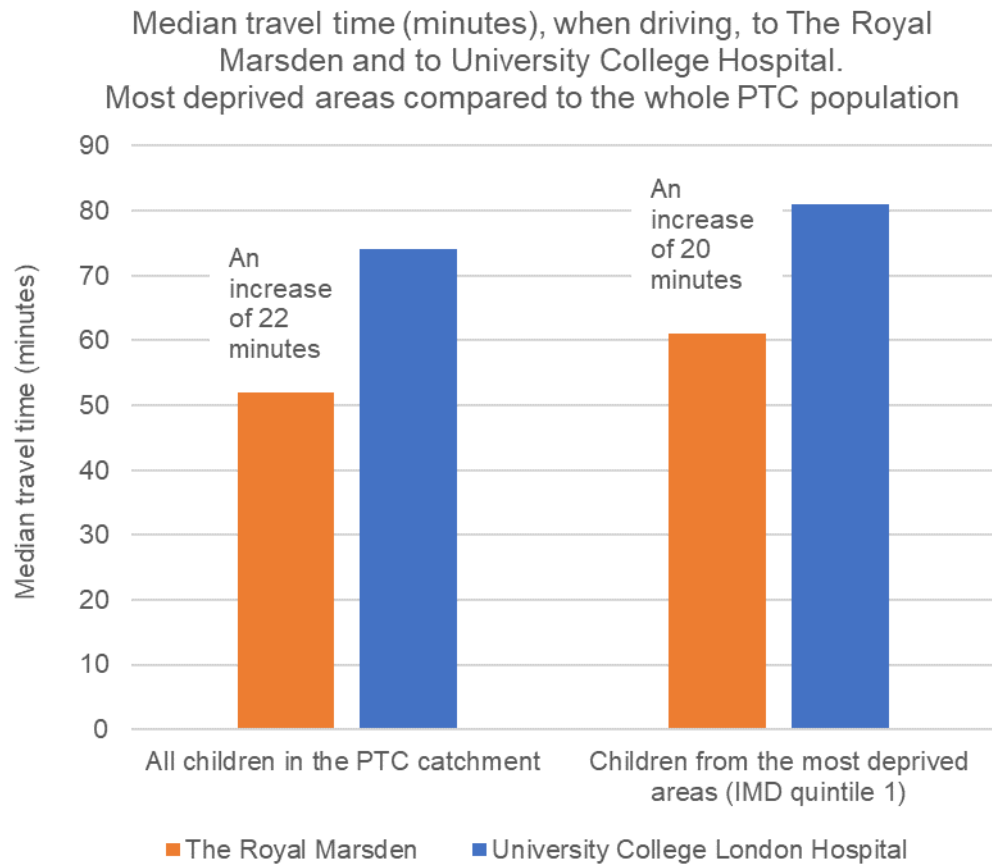
Radiotherapy: a comparison of current travel times to The Royal Marsden to University College Hospital



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 PTC catchment. The average increase for those living in areas categorised as being the most deprived in England is 20 minutes.



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.



Travel Poverty

As well as impact on overall time travel time, an important consideration is that of [travel poverty](#) (a difficulty or inability to make necessary journeys due to a combination of income, cost and service availability). A summary of income deprivation across the PTC catchment population is provided in [section 1](#) with further analysis at the Local Authority level in [section 3](#).

Travel costs

Conducting an analysis of the different costs of travelling to any of the three providers involved in this change programme would be complex, due to (but not limited to) the following reasons:

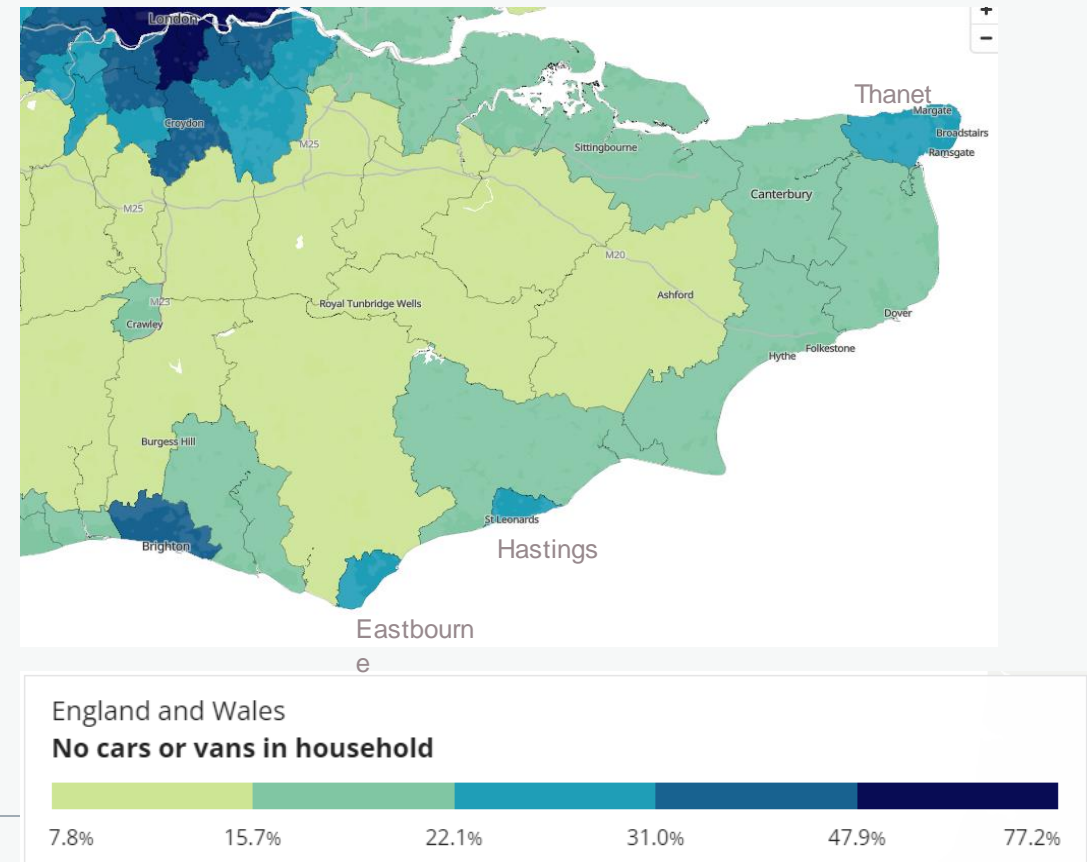
- All the different possible routes for train or road journeys from multiple locations across the PTC catchment
- Variable ticket pricing for public transport
- Lack of publicly available information on certain types of transport. For example, taxi fares from train stations to the hospitals
- Variation in fuel type, consumption and costs for road vehicles

As a result, we are unable to conduct a systematic analysis of travel associated cost. Nevertheless, we do recognise the importance of increased travel costs due to a longer or more complex journey. Qualitative insights from patients and families on the impact of additional costs associated with travel have will continue to be collated throughout the consultation period. These will feed into the development of recommendations for mitigating action.

In addition, the national research conducted by [Young Lives Versus Cancer](#) “[Running on Empty](#)” provides further useful information on the financial impacts of caring for a child diagnosed with cancer.

Car ownership

The map demonstrates the percentage of households across South London and the south east who have no access to a road vehicle (Census 2021). This proportion is highest in south London and Brighton and then to a lesser extent in Eastbourne, Hastings and Thanet. This is important to consider in the light of availability of public transport to the options for the future PTC.



England and Wales
No cars or vans in household

7.8% 15.7% 22.1% 31.0% 47.9% 77.2%

Source: [Number of cars or vans - Census Maps, ONS](#)

Summary of qualitative insights (relating to access) collated to date

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 important, as well as availability and cost of parking at the PTC 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 to date (continued)

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 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 PTC 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.

EHIA: Assessment of impact on groups with protected characteristics

The following slides represent the findings of the EHIA sub-group in relation to whether there could be a disproportional 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 PTC location?
3. Is it likely that this group could be disproportionately* 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 disproportional impact on groups with protected characteristics compared to the general population.

EHIA: Assessment of impact on groups with protected characteristics

	Is there evidence of disproportional need for childhood cancer services (i.e. higher rates of incidence)?	Is there evidence of disproportional impact on travel times for this group?	Did the EHIA sub-group think there could be a disproportional impact in terms of ability to access the service (travel/onsite access), experience of service change or outcomes ?
Age	Yes. Overall cancer incidence rates are higher among 0-5 year olds compared to older children.	There is no disproportional 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 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 disproportional 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 syndrome.	Travel time analysis for this characteristic not possible. 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 service 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.	Travel time analysis for this characteristic not possible.	Yes, although the underlying causes of additional challenges for travel could be due to interaction with socio-economic status and/or language barriers.
Pregnancy and maternity	No evidence found	Travel time analysis for this characteristic not possible.	Yes. Travel/onsite access during pregnancy or the maternity period may be more challenging.
Religion or belief	No evidence found	Travel time analysis for this characteristic not possible.	Not in this instance but ensuring a high level of cultural competence among staff, through high quality Equality, Diversity and Inclusion programmes will help to ensure that staff are aware of the specific needs of patients or families who are part of these groups.
Marriage / CP	No evidence found	Travel time analysis for this characteristic not possible.	
Gender reassignment	No evidence found	Travel time analysis for this characteristic not possible.	
Sexual orientation	No evidence found	Travel time analysis for this characteristic not possible.	

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

	Is there evidence of disproportional need for childhood cancer services (i.e. higher rates of incidence)?	Is there evidence of disproportional impact on travel times for this group?	Did the EHIA sub-group think there could be a disproportional impact in terms of ability to access the service (travel/onsite access), experience of change or the services being on site with intensive care?
Looked after and accommodated children and young people	No evidence found	Travel time analysis for this characteristic not possible.	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 disproportional 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 (Cancer costs - Young Lives vs Cancer). 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.	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 service 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.	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 disproportional 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 disproportional need for childhood cancer services (i.e. higher rates of incidence)?	Is there evidence of disproportional impact on travel times for this group?	Did the EHIA sub-group think there could be a disproportional impact in terms of ability to access the service (travel/onsite access), experience of change or the services being on site with intensive care?
Newly arrived groups: Refugees, asylum seekers (including unaccompanied children)	No evidence found	Travel time analysis for this characteristic not possible.	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.	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.	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 B&Bs	No evidence found	Travel time analysis for this characteristic not possible.	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.	Yes. Travel may pose challenges for this group.
Families experiencing digital exclusion	No evidence found	Travel time analysis for this characteristic not possible.	Yes. Travel may pose challenges for this group through ability to use online technology for travel planning.

EHIA: Mitigation of impacts



The following slides represent the interim recommendations from the NHS England Programme Team, based on the findings of the EHIA sub-group plus feedback from the patient stakeholder group and both potential future PTC providers as to how any adverse impacts of the change of PTC location can be mitigated (or positive impacts enhanced).

They will continue to be updated as more data, information and insight is collated throughout the life of the service change programme.

Once the future PTC location is known, these recommendations will be developed into action plans 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.

<p>1. Identification: as part of a multidisciplinary team (MDT) process, ensure that patients/families who might need help with transport are identified as early as possible in their care pathway. This would typically be with the family's named care coordinator (or key worker) and other members of the clinical team and should include an assessment of compounding factors where patients fall within more than one of the protected characteristic/inequalities groups (that is, where intersectionality is a factor). High quality Equality, Diversity and Inclusion training for staff will help to ensure that the specific needs of patients or families who are part of these groups are considered. 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.</p>	<p>2. Travel planning: Ensure that patients/carers know what their patient journey is likely to be, including which locations they will visit, details of any overnight stays and how many appointments they are likely to have. This would typically be through the dedicated care coordinator who will help families to coordinate appointments and admissions for their treatment pathway. This includes confirming the specific travel and transport needs of the family to ensure that transport is booked appropriately. It is recommended that families have a "single point of contact" for all aspects of travel and access planning.</p> <p>This information needs to be provided in inclusive formats, including visualisations of the routes, treatment areas and other facilities (see "communications" section for further detail).</p>
<p>3. Inclusive communications: Provide clear, inclusive information about all aspects of travel planning in a range of formats (including written and verbal) and languages. Information should be communicated through the family's care coordinator and in advance of appointments.</p>	<p>4. Translation/interpretation services: Ensure that assessment of language (or other communication) barriers is a routine part of care and facilitate access to translation/interpretation services to ensure children and families are fully able to communicate and understand travel options. All nursing teams should be trained in how to arrange translation services. This may include:</p> <ul style="list-style-type: none">• in person interpretation services• telephone interpreting (e.g. Language Line)• rapid access to British Sign Language interpreters• text relay services• translation of all written patient information (into different languages or formats)
<p>5. Patient transport services: 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 national guidance). This should include the option to customise the service together with families to meet the needs of children.</p>	<p>6. Accommodation: Provide good quality, overnight family accommodation (within a short walking distance), of sufficient capacity and with cooking facilities. This also including capacity to stay with the child on the ward. Consideration should be given to collaboration with local hotels if appropriate.</p>

Mitigation proposals (2)



Systems and processes aimed at reducing the financial impact of travel

7. Financial reimbursement: Families with children attending the PTC should be supported to access national reimbursement schemes for travel costs including the Congestion Charge, Ultra-Low Emission Zone (ULEZ) charges and the [Healthcare Travel Costs Scheme](#). Parents of children with Disability Living Allowance are eligible for [exemption to congestion/ULEZ charges](#).

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.

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.

8. 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 PTC. This would be in addition to the costs that family face already through caring for a child with cancer ([Cancer costs - Young Lives vs Cancer](#)).

Families should be supported to understand what financial aid they could access, or what benefits they may be entitled to, through partnerships with organisations who can offer this kind of service. This might include (but not limited to) hospital charities, Young Lives Versus Cancer, CCLG, Kids Cancer Charity, Macmillan Cancer Support or the Teenage Cancer Trust. Charities local to the family may also be considered. This is aimed at improving a family's financial situation which in turn, would help reduce the impact of a more costly journey.

Systems and processes aimed at providing good onsite accessibility

9. Onsite access standards: The future PTC 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 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.](#)

10. 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.

Please see section on Financial Reimbursement for recommendations on the financial aspects of parking.

Mitigation proposals (3)



Aspects of care planning that may help travel arrangements

13. 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 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.

14. 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 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.

15. Remote appointments: Where clinically appropriate, remote consultations (that could potentially be jointly run with POSCUs) could reduce the number of journeys required to the PTC.

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 [NHS Digital Inclusion Guide](#) and [NHS England guidance on virtual clinics for highly specialised services](#) should inform this process.

16. Shared care: Provide clear information on options for receiving care closer to home through Paediatric Oncology Shared Care Units (POSCUs). This can take the form of a dedicated session with families on support available in the community, including information about their local POSCU. The shared care system can help to reduce the number of journeys required to the PTC.

Ensure excellent communication between the PTC and POSCU (including shared patient clinical records) and between both services and patients/patient families.

The POSCU transformation programme underway across the North and South Thames Children's Cancer Network will be key to developing this mitigation proposal.

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

17. 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 PTC team 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.

18. 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 "[Core20Plus5](#)" approach to access.

Interim 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 are required. Whether the proposed changes will support the:

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

	Tackling discrimination	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 unlikely 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 is concerning 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?			

Interim assessment of compliance with the Health and Social 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. Additionally, the negative impact found for driving times is less for those living in the most deprived areas of the catchment, compared to the general population.	<p>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.</p> <p>Whilst this will benefit all children attending the PTC, the EHIA sub-group concluded that there may be a disproportional 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 or 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.</p>
The proposal may support?		
Uncertain if the proposal will support?		

Interim EHIA: next steps



The preceding slides constitute the Interim EHIA for the South London and Kent, Medway, Surrey and Sussex Children’s Cancer Network Principal Treatment Centre Review.

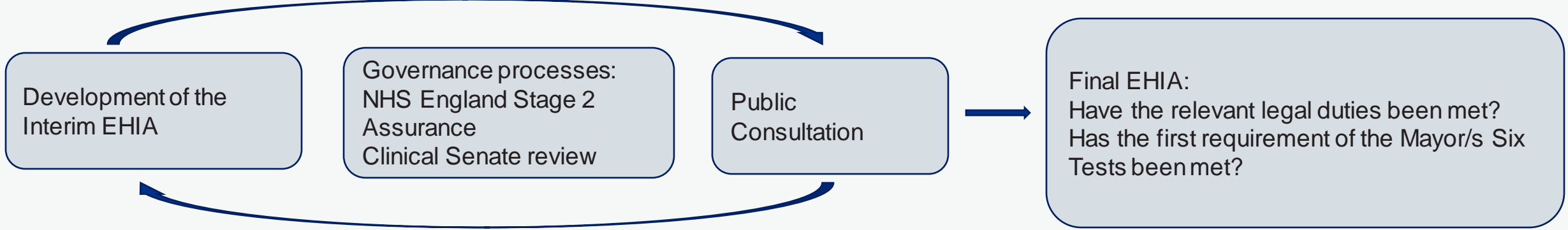
They will also support an assessment of how the programme meets the first requirement of the Mayor's Six Tests (six tests that are applied to major service reconfiguration programmes in London). A framework for the application of these tests can be found here.

Feedback from the NHS England Stage 2 Assurance process (June 2023) indicates the IIA is at a sufficient stage of development for this stage of the programme, recognising that further data and insights will be collected over the consultation period.

The London and South East Clinical Senate review recognised that the EHIA is, by its nature, a work in progress. The Senate made further recommendations for the next iteration of the EHIA including:

- articulating how the new service will meet Core20PLUS5 and the five strategic objectives for health inequalities in the NHS operating plan
- articulating how this new service could tackle the broader determinants of health and increase social value
- how care closer to home (through shared care arrangements) and remote care could reduce the requirement for travel
- gaining a better understanding of current modes of travel for patients and staff
- the development of quality metrics (in regard to patient access) to monitor the impact of the service change.

Insights and data collated throughout the review programme will be used to update the EHIA throughout.



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 change in median travel times for children resident in each of these areas is presented on the next slides. The source numbers for the charts are shown in [appendix D](#)

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

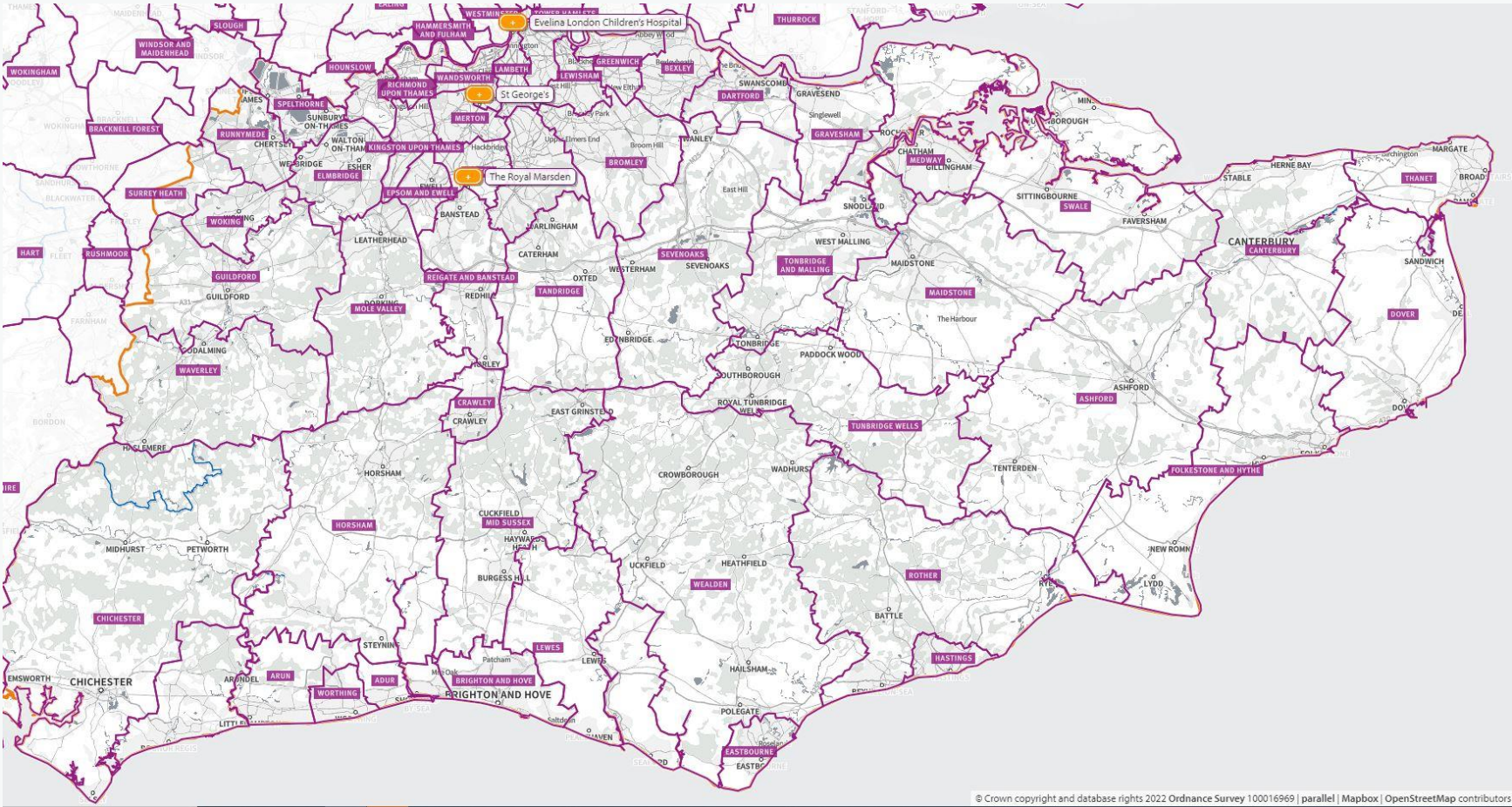
The methodology used is the same as in the travel analysis to support the EHIA (Section 2). Please see [appendix B](#) for methodology.

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 Local Authorities of the PTC catchment

The map below shows all of the lower tier Boroughs, Districts or Unitary Authorities across the PTC catchment (and surrounding areas). Please note that within West Sussex, only Crawley, Mid Sussex and Horsham 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 [previous slide on relationship between West Sussex and the formal definition of the PTC catchment area](#).





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

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



- Children in most local authority areas 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.



- When examining median travel times for driving, at a local authority level, children living in most local authority areas within the PTC catchment have an increase in travel time when driving to either option for the future PTC (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 PTC. 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 future PTC 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.

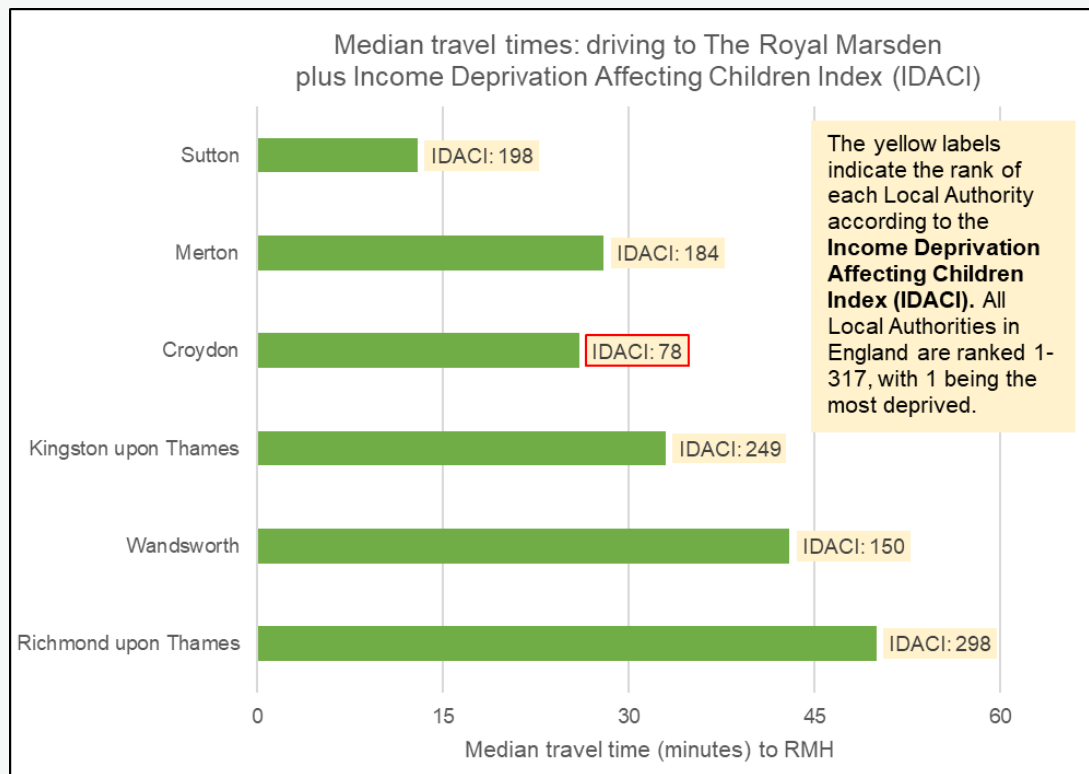
* It is acknowledged that patients also currently attend the St. George's Hospital site of the Principal Treatment Centre. An analysis of travel times for patients travelling to the Evelina London Childrens Hospital (as compared to current travel to St. George's Hospital) is shown in [appendix F](#)



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 [Appendix A](#))). 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 change the median travel times for driving to the two options for the future PTC, 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 8 minute increase in travel time to St. George's and a 28 minute increase to Evelina London Children's Hospital, highlighted because there is more than a 15 minutes between these two travel time impacts.

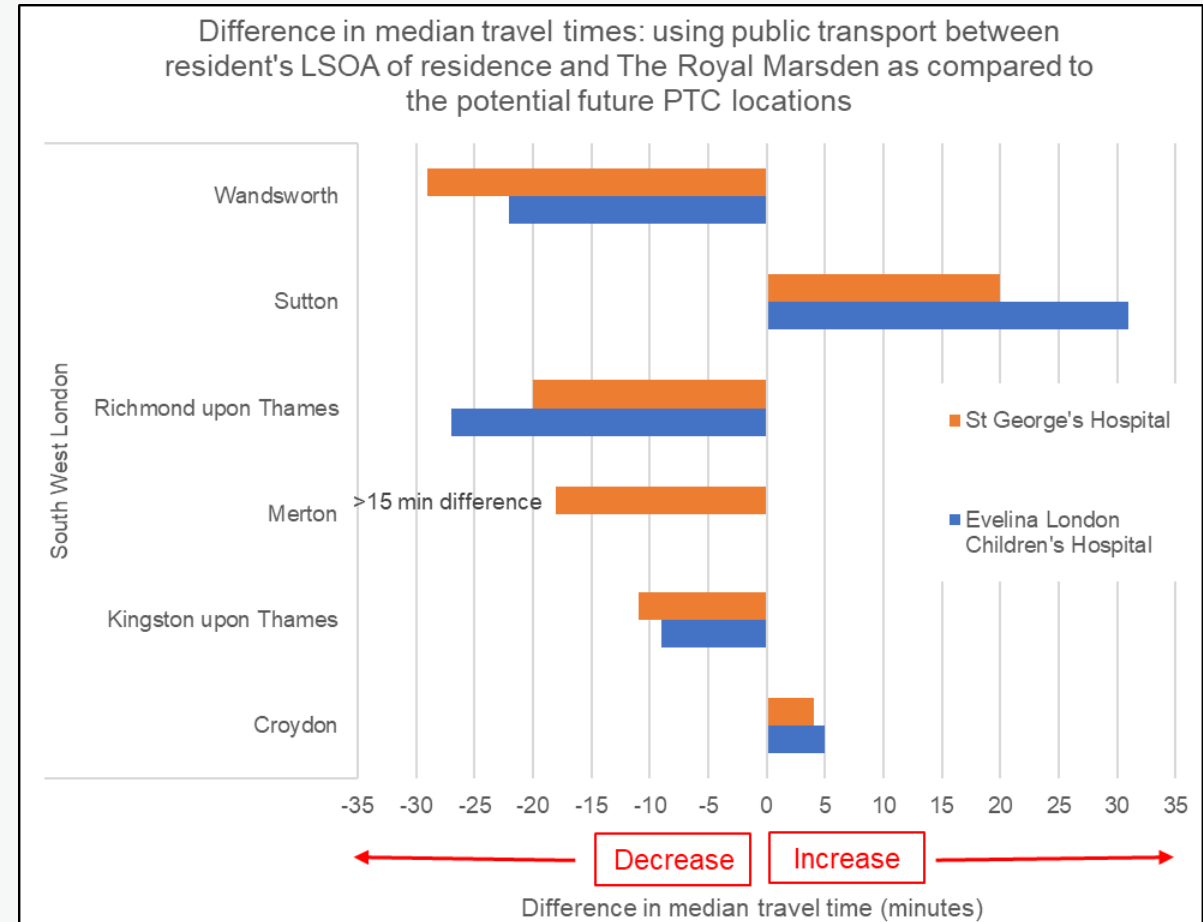
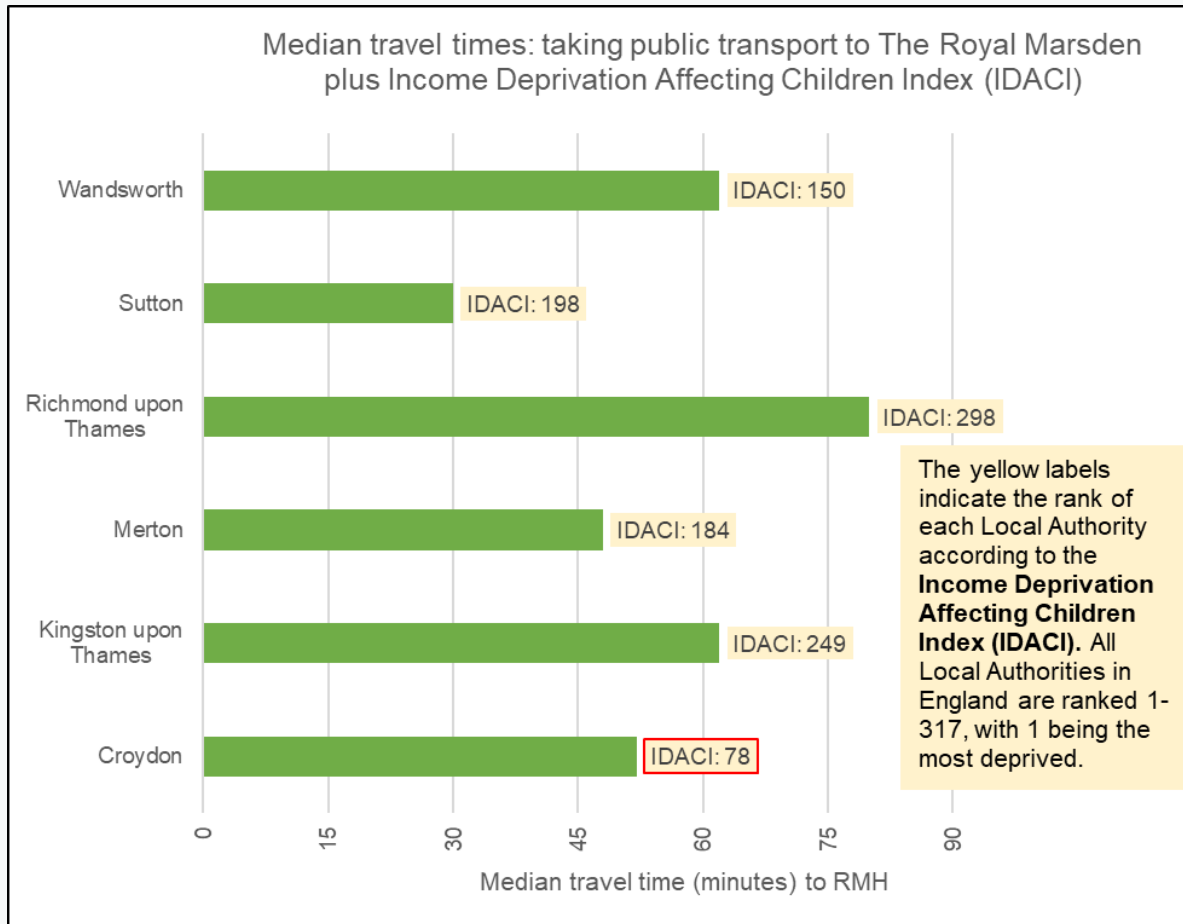




Local Authority Travel Time Analysis: South West London (public transport)



Please see [previous slide](#) for explanation of the layout of these charts



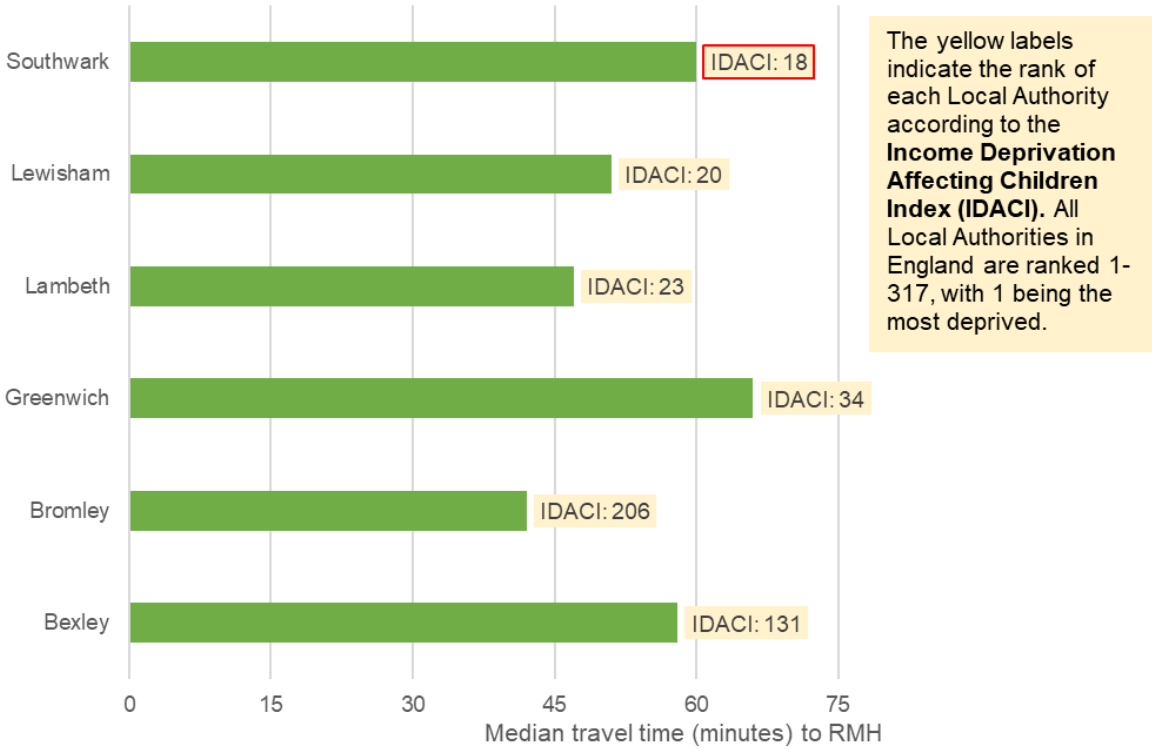


Local Authority Travel Time Analysis: South East London (driving)

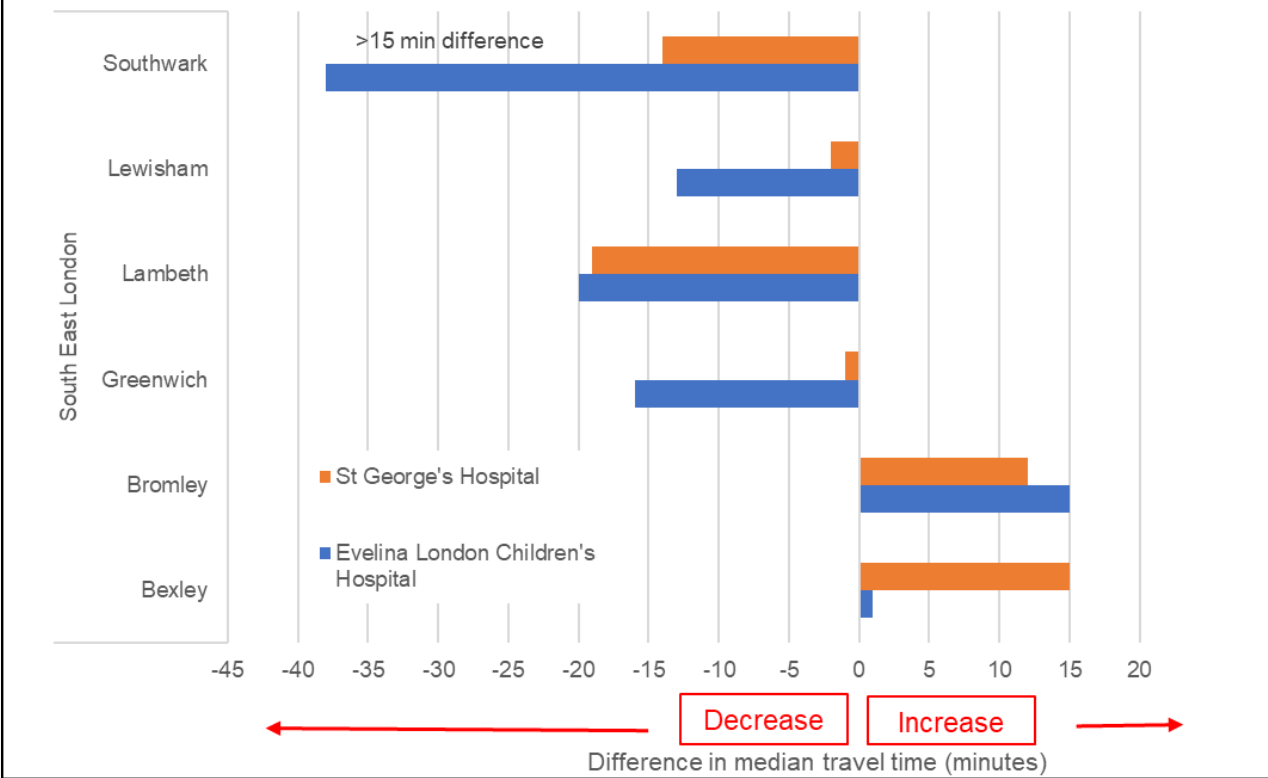


Please see [previous slide](#) for explanation of the layout of these charts

Median travel times: driving to The Royal Marsden plus Income Deprivation Affecting Children Index (IDACI)



Difference in median travel times: driving between resident's LSOA of residence and The Royal Marsden as compared to the future PTC locations



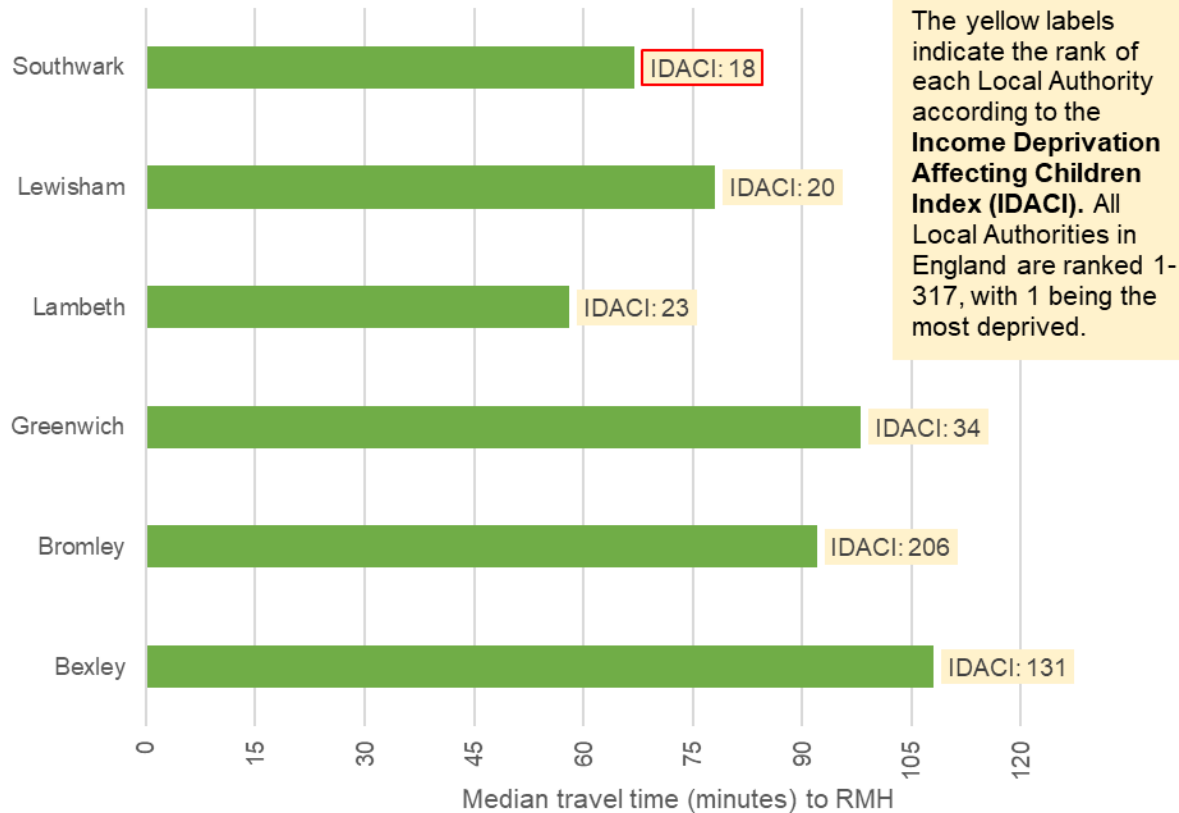


Local Authority Travel Time Analysis: South East London (public transport)

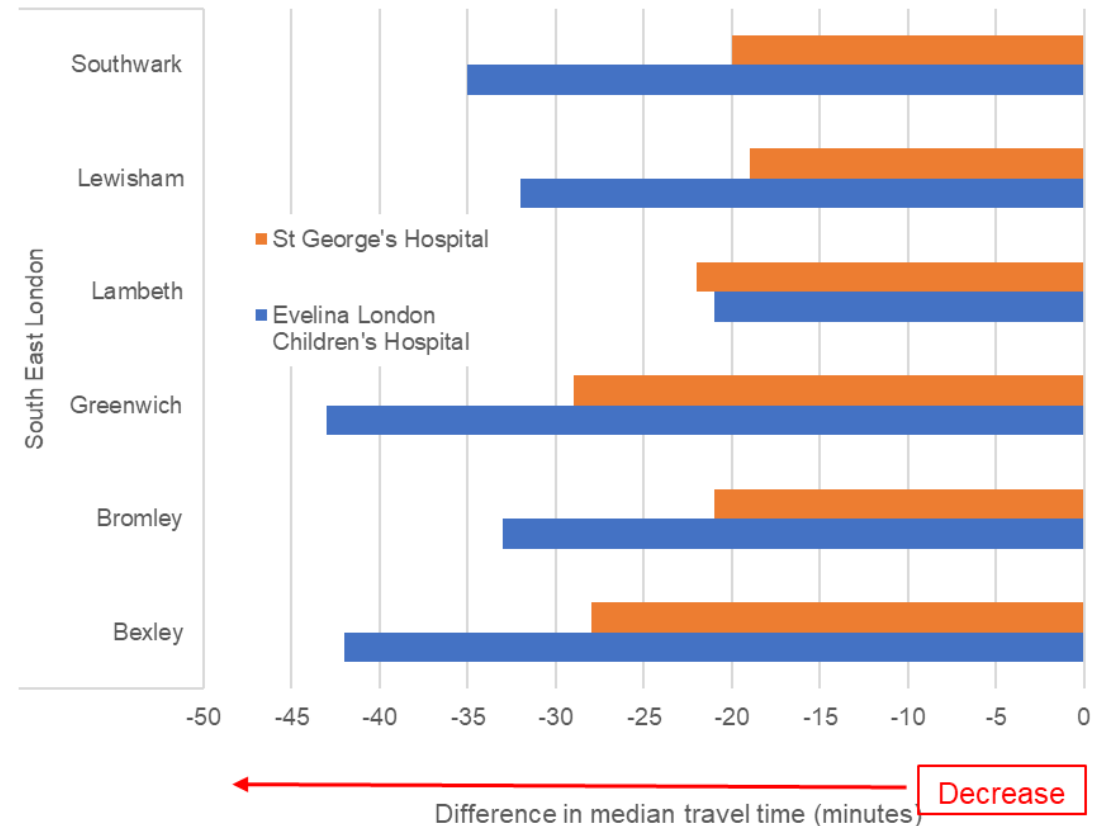


Please see [previous slide](#) for explanation of the layout of these charts

Median travel times: taking public transport to The Royal Marsden plus Income Deprivation Affecting Children Index (IDACI)



Difference in median travel times: using public transport between resident's LSOA of residence and The Royal Marsden as compared to the potential future PTC locations



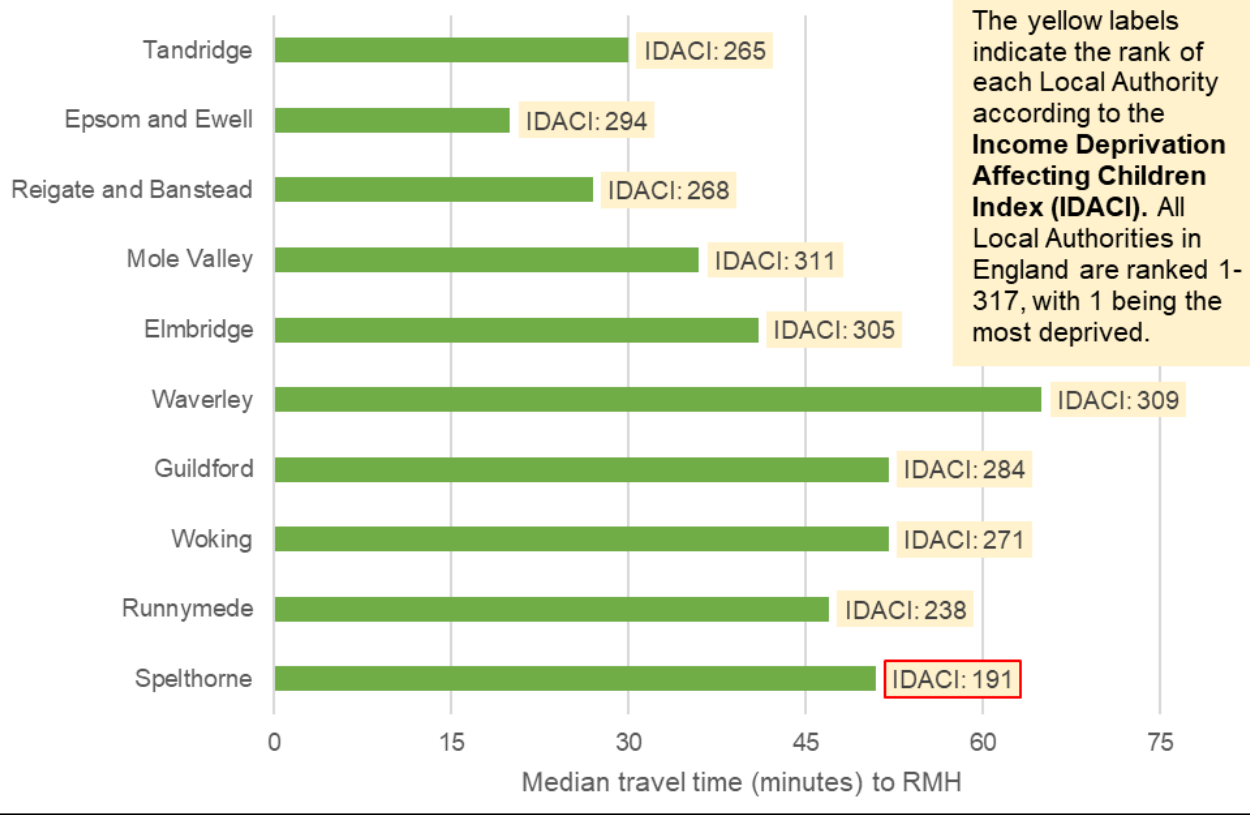


Local Authority Travel Time Analysis: Surrey Heartlands (driving)

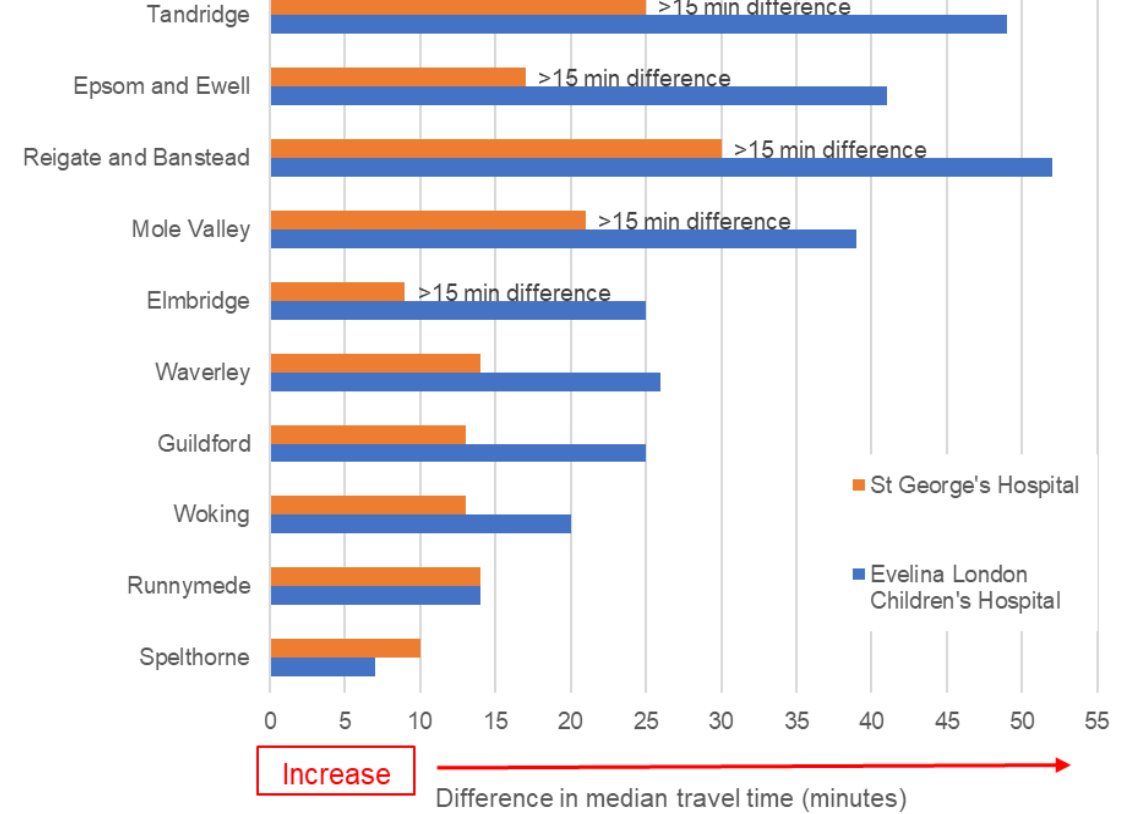


Please see [previous slide](#) for explanation of the layout of these charts

Median travel times: driving to The Royal Marsden plus Income Deprivation Affecting Children Index (IDACI)



Difference in median travel times: driving between resident's LSOA of residence and The Royal Marsden as compared to the future PTC locations

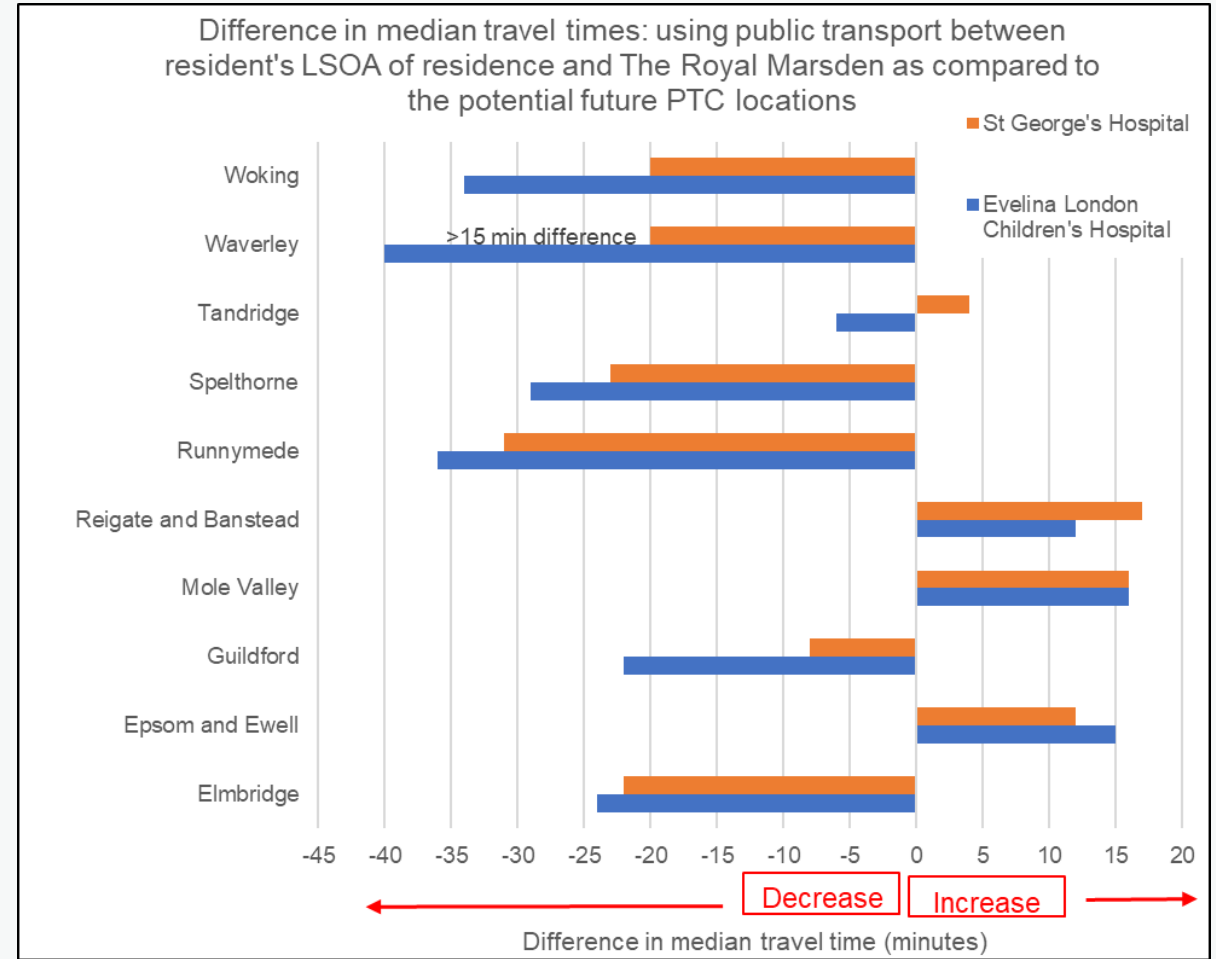
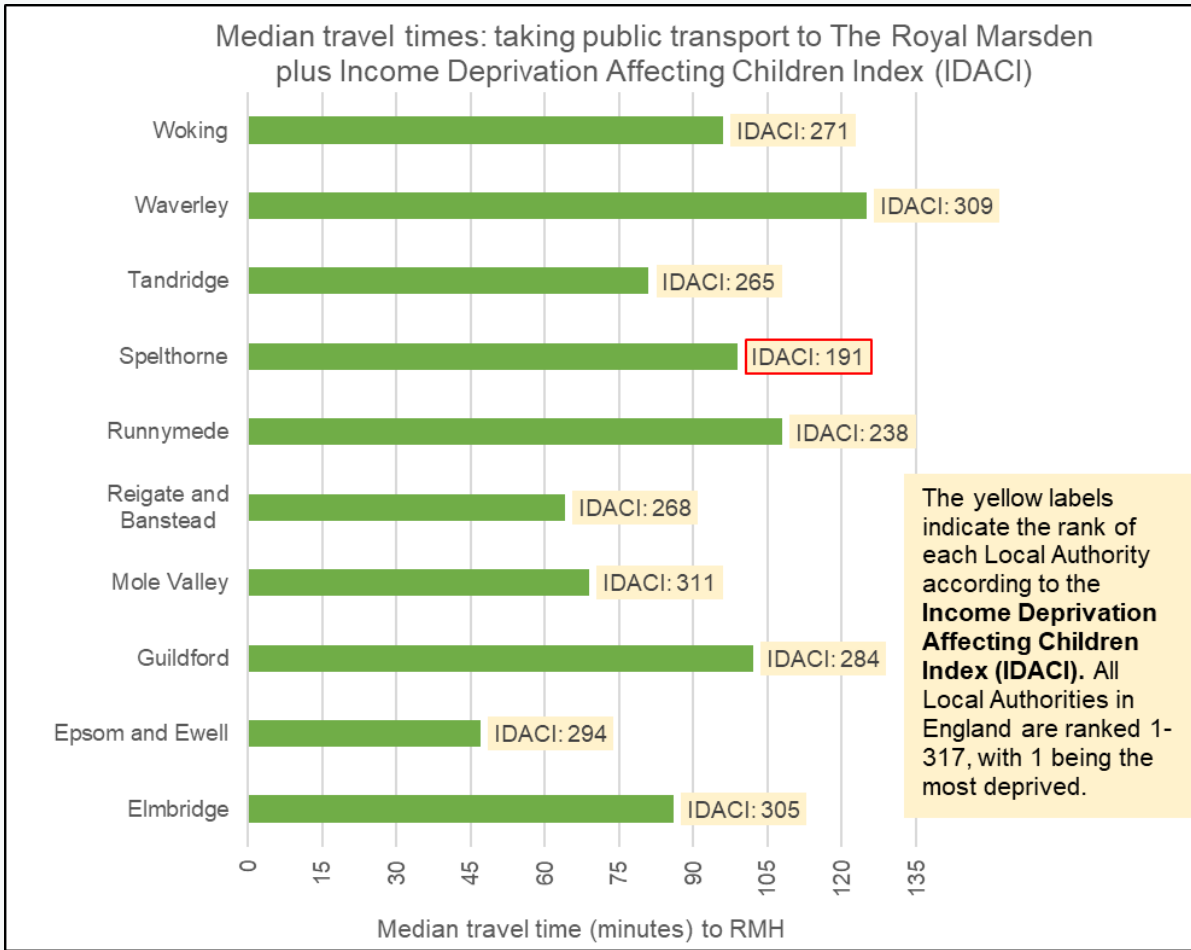




Local Authority Travel Time Analysis: Surrey Heartlands (public transport)



Please see [previous slide](#) for explanation of the layout of these charts

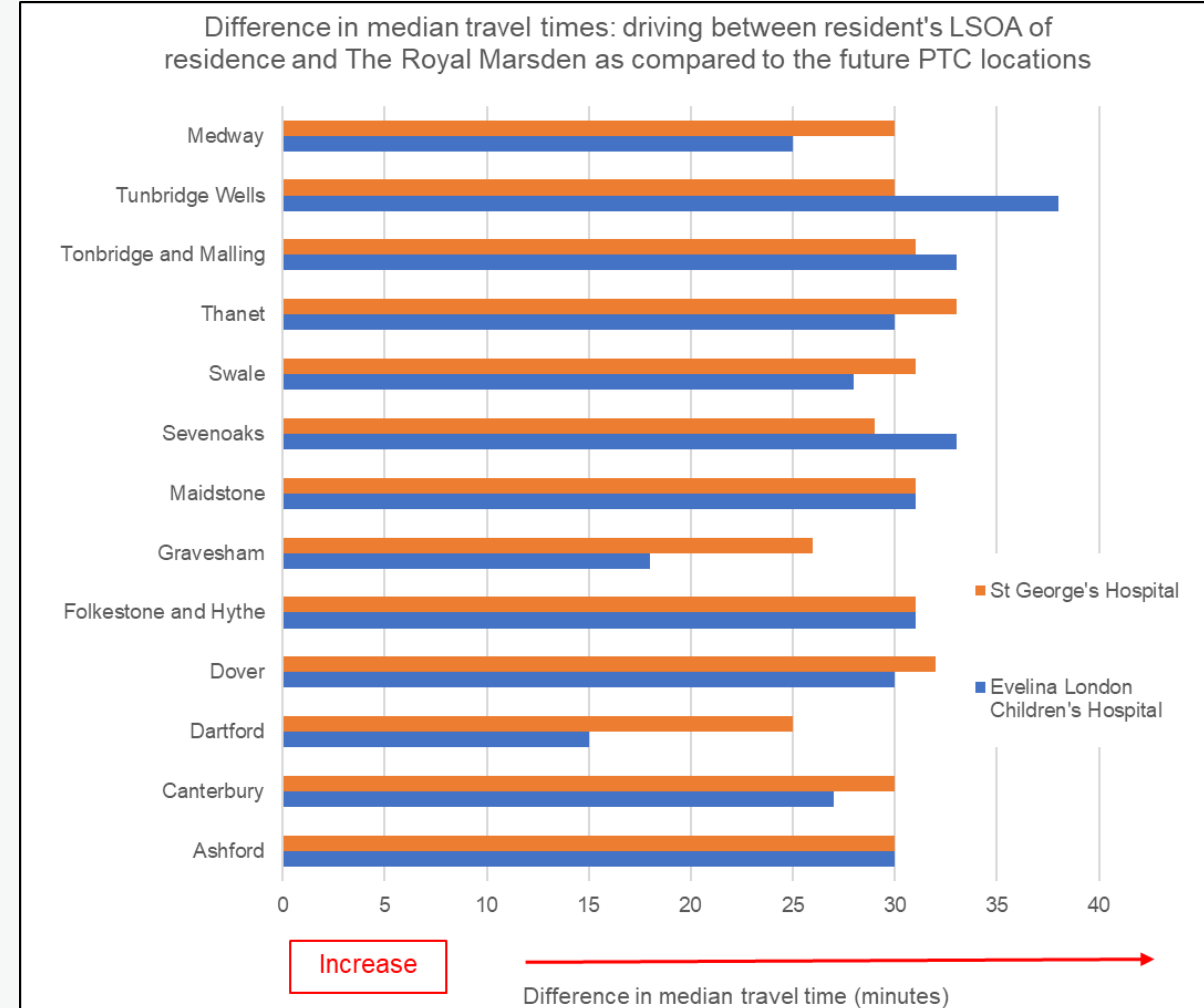
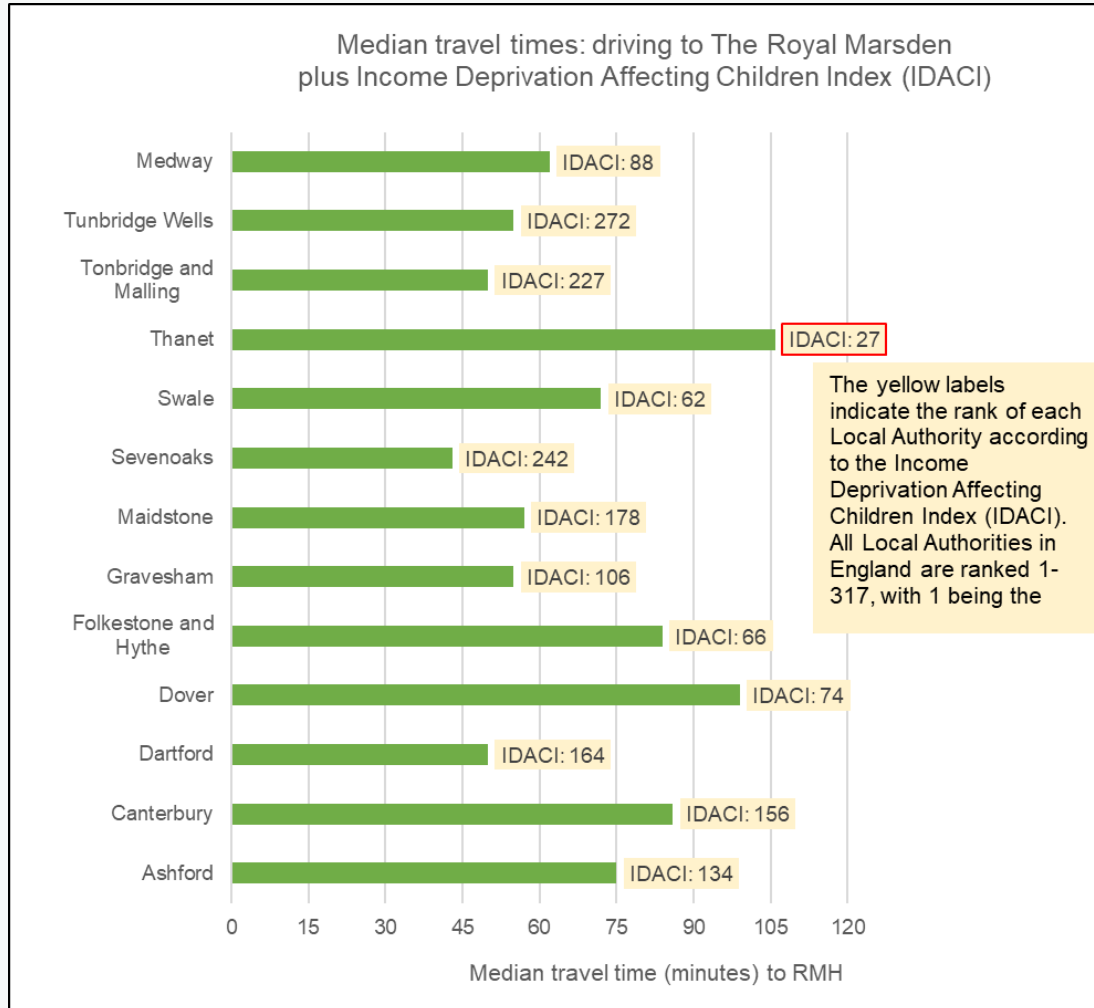




Local Authority Travel Time Analysis: Kent and Medway (driving)



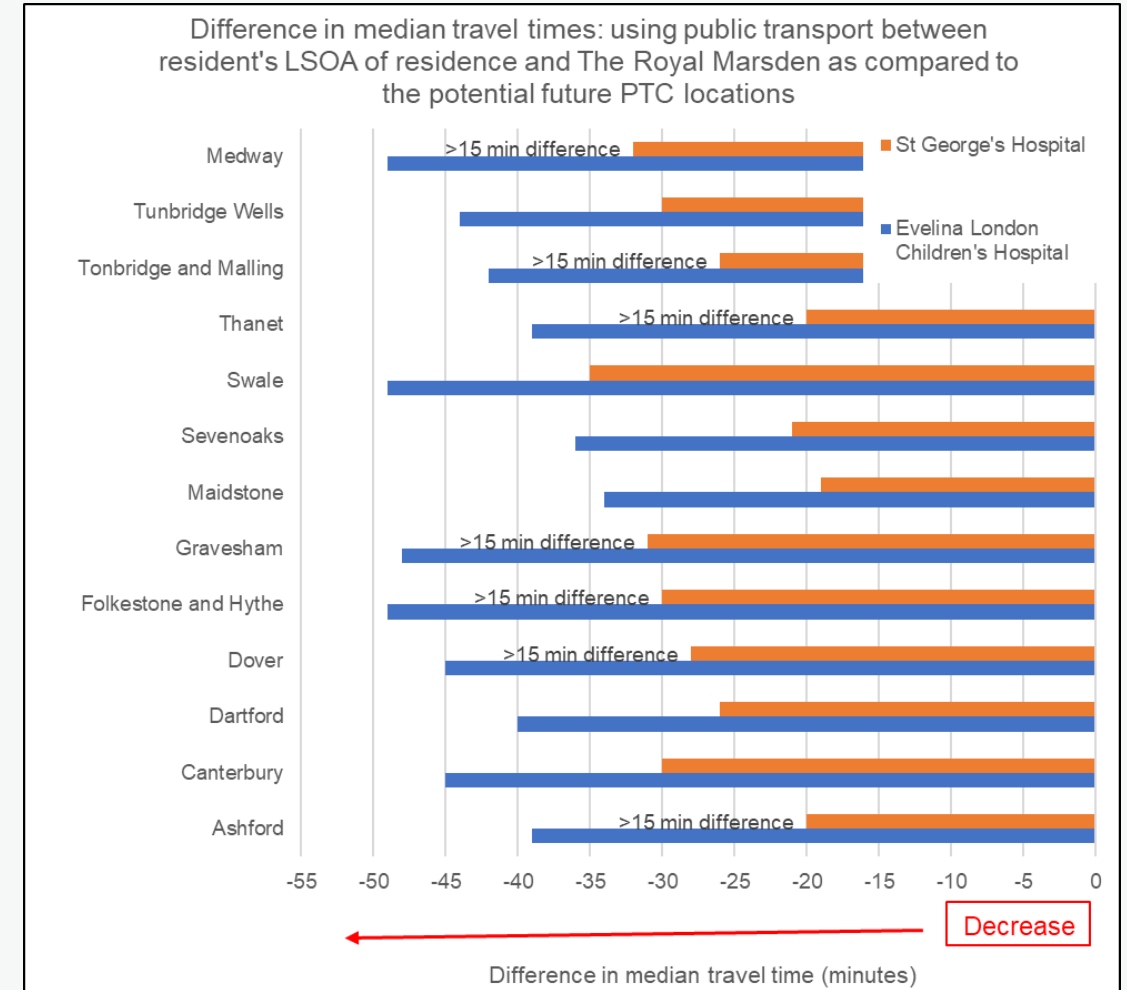
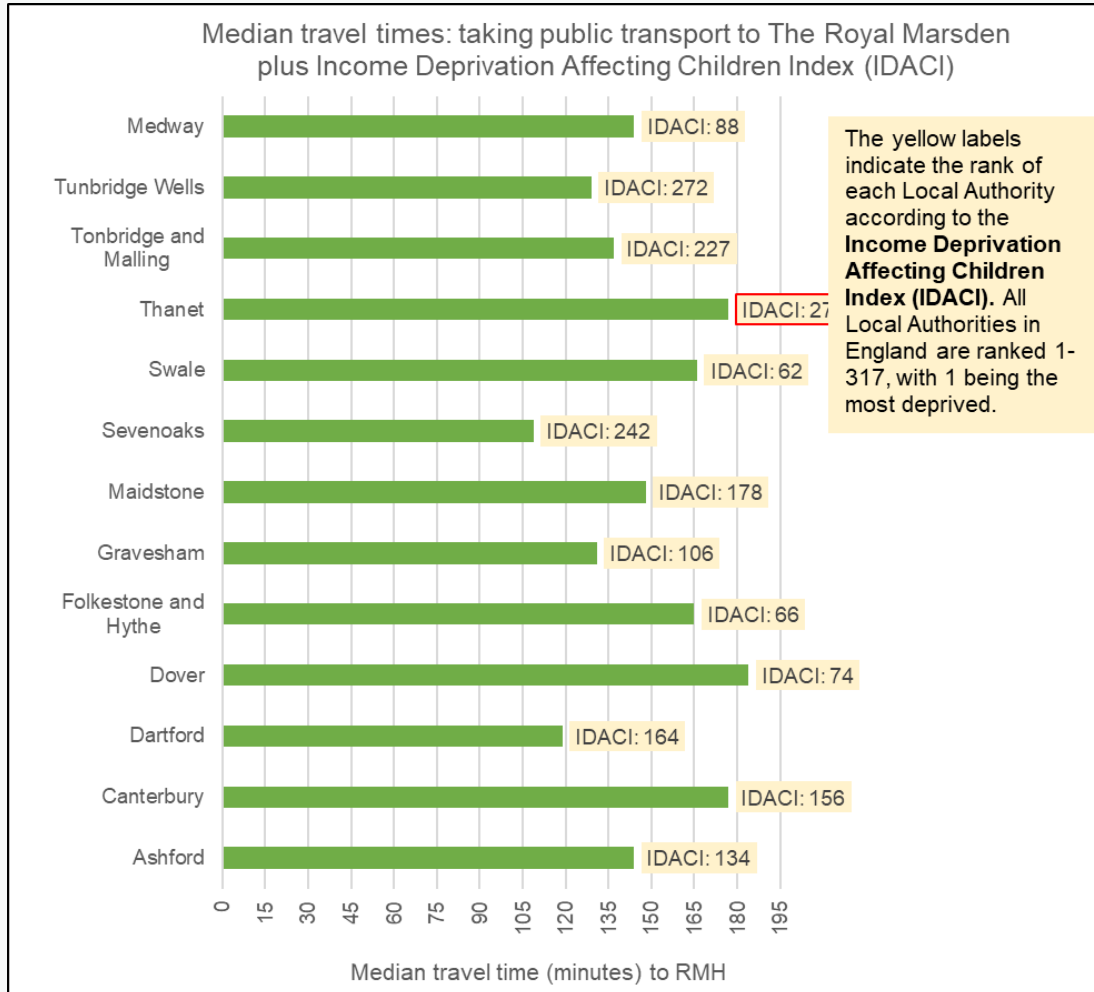
Please see [previous slide](#) for explanation of the layout of these charts





Local Authority Travel Time Analysis: Kent and Medway (public transport)

Please see [previous slide](#) for explanation of the layout of these charts

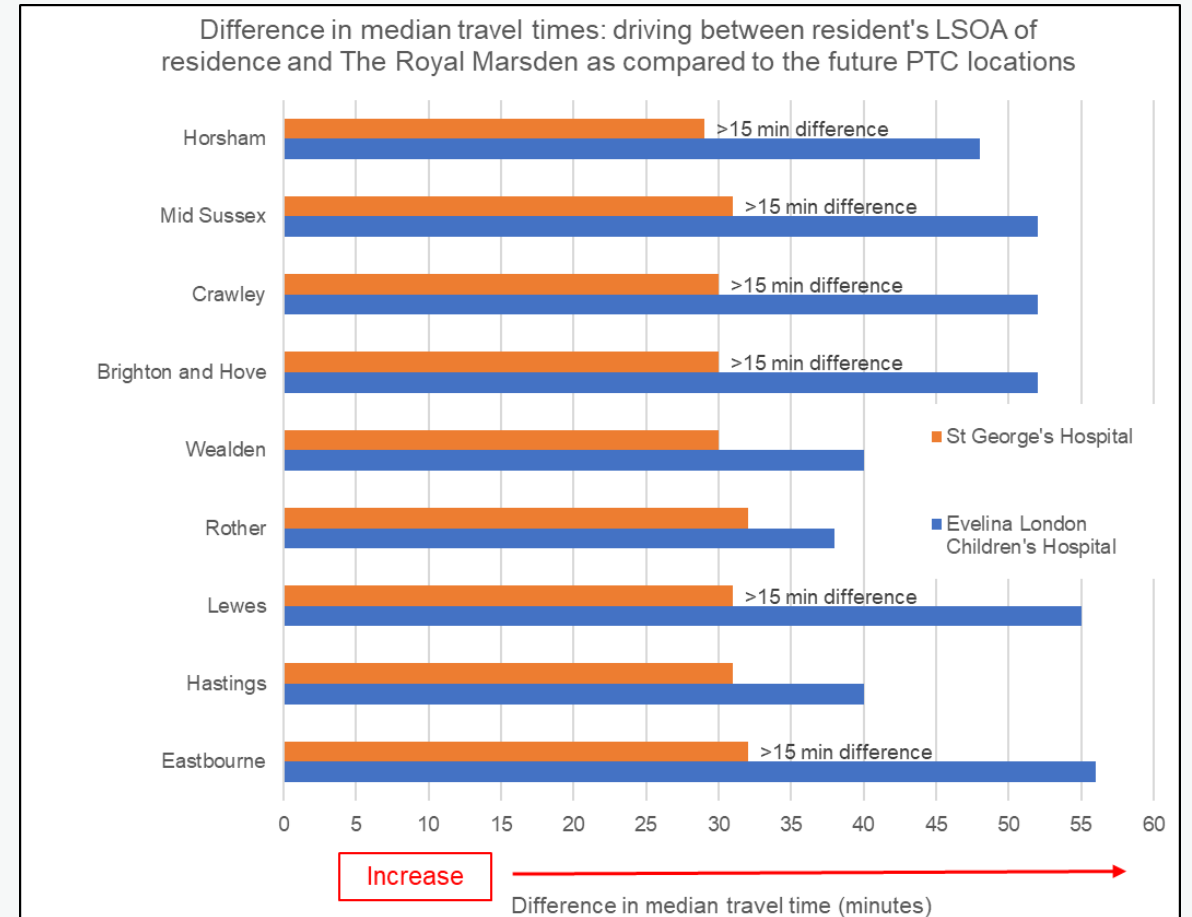
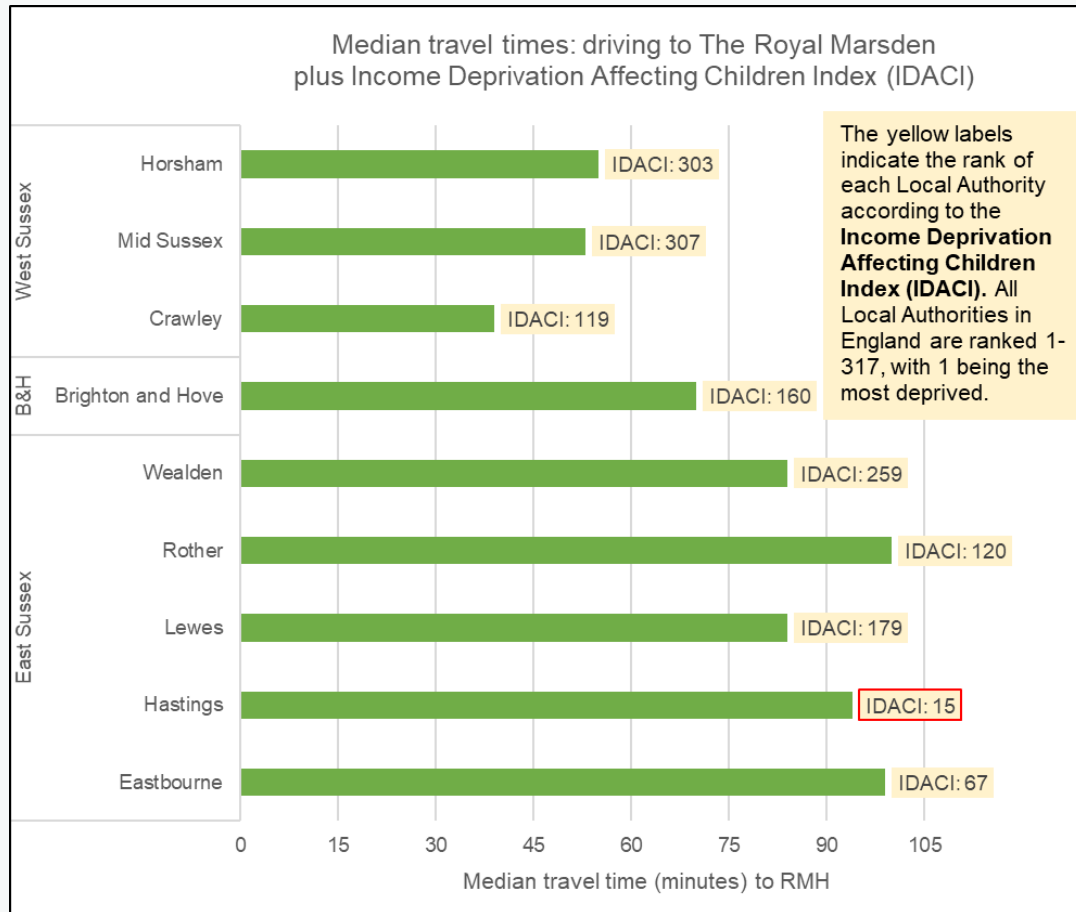




Local Authority Travel Time Analysis: Sussex, Brighton & Hove (driving)



Please see [previous slide](#) for explanation of the layout of these charts

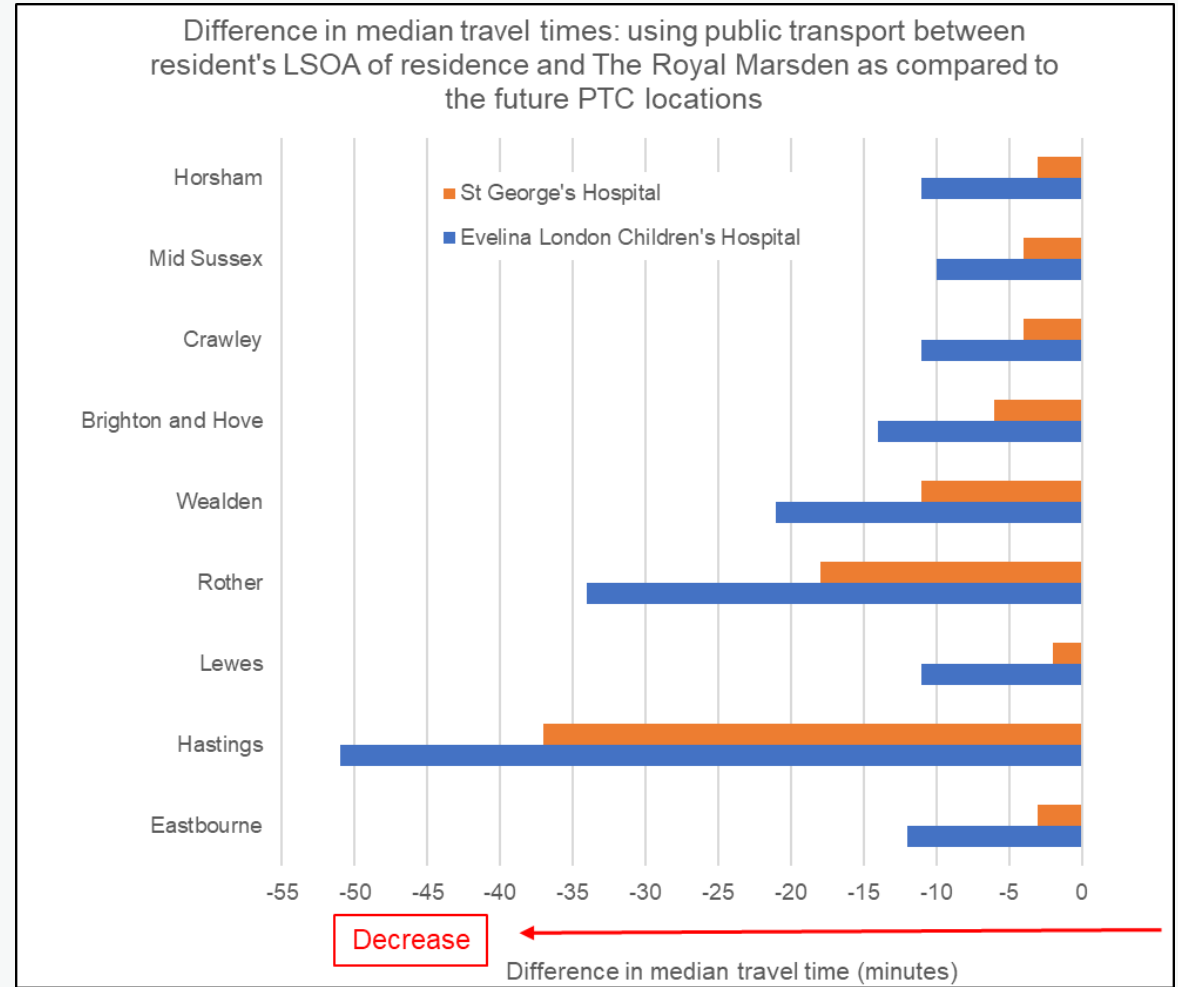
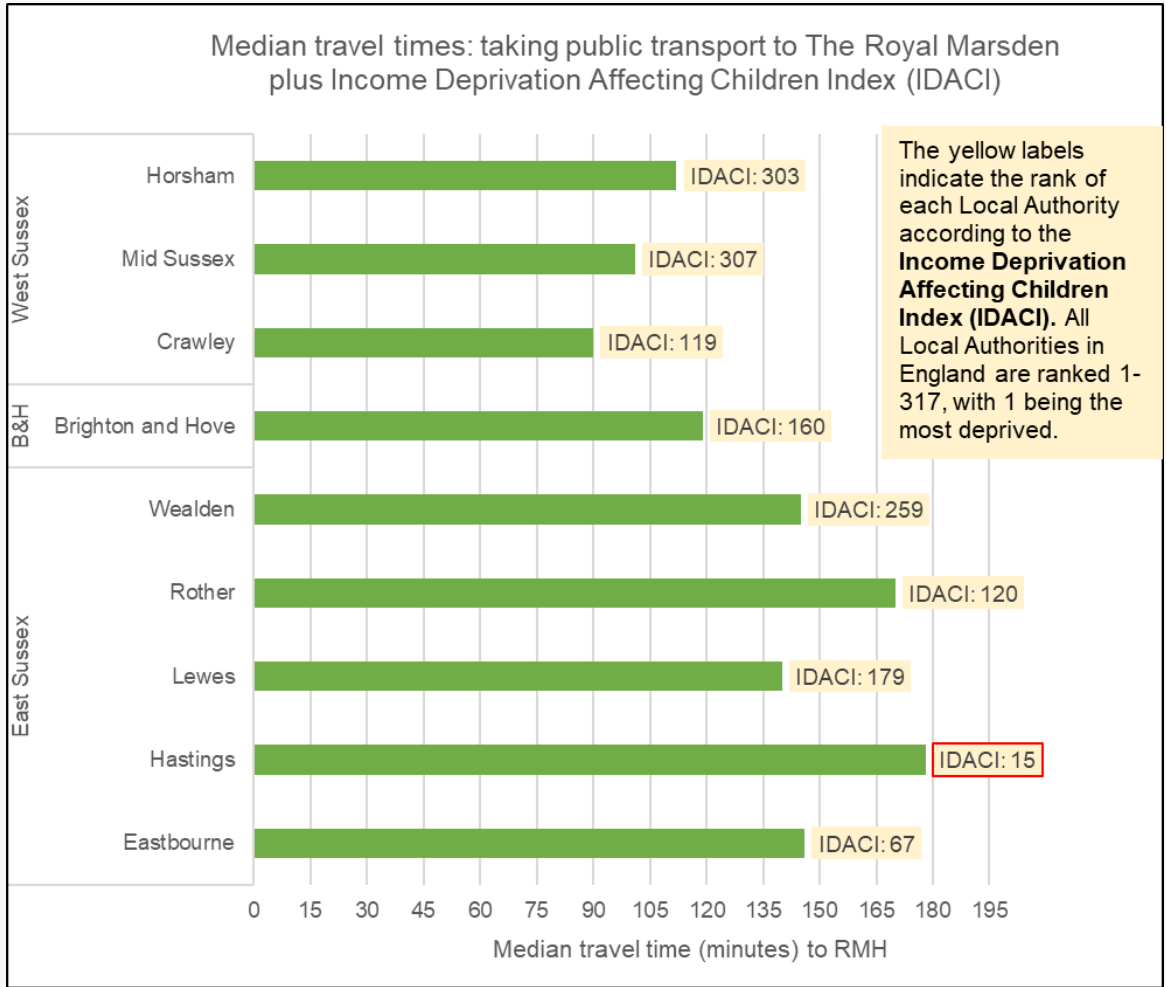




Local Authority Travel Time Analysis: Sussex, Brighton & Hove (public transport)



Please see [previous slide](#) for explanation of the layout of these charts



Section 4: Environmental Sustainability Impact

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 Social 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.

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 right.

Both organisations 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' have an established [Environmental Sustainability Strategy](#) for 2021-2031 which sets out a path forward, in line with NHS commitments to reach net zero direct carbon emissions by 2040 and net zero indirect carbon emissions by 2045.
- St George's has a [Green Plan](#) which describes their commitment to delivering their 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.

A detailed environmental impact assessment, including air quality and greenhouse gases, will need to be conducted as part of the planning and implementation phase. Ensuring sustainability and reducing carbon emissions will be a key part of the design process.

Models of care: The future PTC will have a lead role with regard to the transformation of POSCU (shared care) services and peripheral diagnostic services. This will increase the opportunity for care closer to home, improving patient experience (by reducing travel requirements) and reduce transport emissions

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.

Travel and transport: The vision for the future of the service is that travel to the specialist centre will reduce, with enhanced paediatric oncology shared care units able to provide a wider range of care, closer to many children's homes. However, the Principal Treatment Centre is a specialised service, and by definition covers a wide geography.

Both organisations have developed Green Travel Plans which cover conversion of fleet vehicles (including patient transport) to electric vehicles, supporting use of public transport patients (for those who are able) and active travel plans for staff.

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

NHS England London has identified the following potential impacts on wider services. These are:

- A. Impacts on services directly related to children's cancer care and/or services delivered by the Evelina London Children's Hospital or St George's, including:
- radiotherapy
 - young people's cancer services at The Royal Marsden
 - the disruption caused to St George's children's services if the final decision is to move the future Principal Treatment Centre to Evelina London
 - Evelina London Children's Hospital through lost opportunities to develop clinical synergies in line with other children's hospitals of its size which do offer cancer care if the final decision is to move the future Principal Treatment Centre to St George's

Section 6.2.1 to 6.2.4 of the PCBC provides a full description of these impacts.

B. Impacts on other services

- Social care
- South Thames Retrieval Service
- Other trusts and patient pathways outside of London

These impacts are also described in the PCBC but they are also summarised on the following slides.

Section 5: Wider impacts on other organisations

Social care and the patient pathway

Young Lives Versus Cancer provide a social work support service to the Principal Treatment Centre (as they do with a number of Principal Treatment Centres). The charity is represented on the stakeholder group (and more recently on the Programme Board) for this service change (through their CEO), they are aware of the proposed changes. It is anticipated that they will work with either future Principal Treatment Centre to transfer their services across.

Both proposals articulate plans for providing a wide range of support to patients and their families, including through dedicated staff resource, referrals to psychology and social worker teams or specialist charities.

More widely, it is not anticipated that there will be changes to individual county or borough social care service demand. Integrated Care Boards with Local Authorities will continue to have a role in social care engagement with responsibility to patients who live in their postcode area.

South Thames Retrieval Service (STRS)

The service (which is hosted by Guy's and St Thomas') already works collaboratively with The Royal Marsden team to ensure that children at the Sutton site who are at risk of becoming critically ill are proactively moved to a tertiary paediatric centre. STRS works on a strict protocol basis across the geography and the impact on the service of a relocation of the current Principal Treatment Centre is considered minimal. Specific details of the emergency retrieval pathway will be determined with the future Principal Treatment Centre.

Wider impact on other NHS trusts (continued)



Impact on other trusts, including patient pathways beyond London

There is not expected to be any significant changes arising from the reconfiguration on other trusts:

- Paediatric Oncology Shared Care Unit and Neurosurgery services at St. George's
- Supra-regional services including referral pathways to Stanmore (sarcomas), Barts (retinoblastomas), Hammersmith and Oxford (fertility), GOSH (under 1s) will continue as is.
- Other Principal Treatment Centres: There will be no change to the catchment area so there will be minimal impact on the Principal Treatment Centres at Southampton or GOSH (which would be as the result of patient choice only).
- Trusts across the South East Region: There is no perceived change from any of the other Trusts arising from the reconfiguration of the Principal Treatment Centre.
- Primary and community care/out of hospital: Minimal impact is anticipated with respect to primary and community care provision as a result of the service reconfiguration of the Principal Treatment Centre.
- King's: Kings will continue to provide neuro-oncology services as part of its paediatric neurosurgery provision (approximately 59% of all neuro-oncology inpatient spells in the catchment area and 66% of patients in 2019/20). There is the opportunity to support King's to become an enhanced level B POSCU and deliver more chemotherapy on site. King's, through its CEO and Site Managing Director have been involved in the Programme Board throughout.

End of report
Please see [slide 4](#) for summary

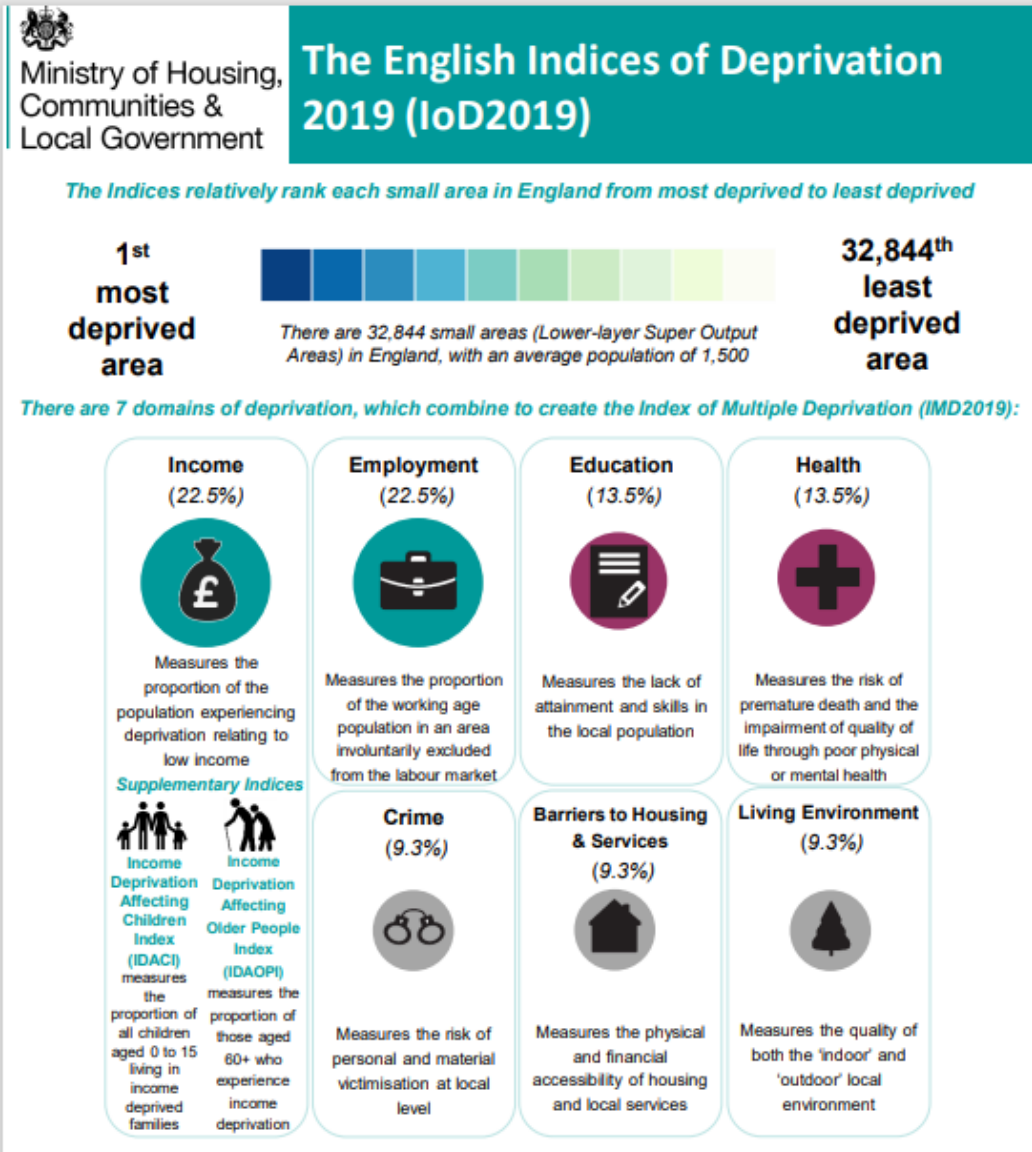
Appendix A: Index of Multiple Deprivation

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. For the Income Deprivation domain and the Employment Deprivation domain in the IoD2019, the data relates to the tax year 2015/16.

Combining information from the seven domains produces an overall relative measure of deprivation, the Index of Multiple Deprivation (IMD). In addition to the seven domain-level indices above, there are two supplementary indices: the Income Deprivation Affecting Children Index (IDACI) and the Income Deprivation Affecting Older People Index (IDAOPi). These are created as subsets from the Income Deprivation domain.

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%.



Appendix B: Travel time analysis: methodology



Travel time modelling software 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. 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).

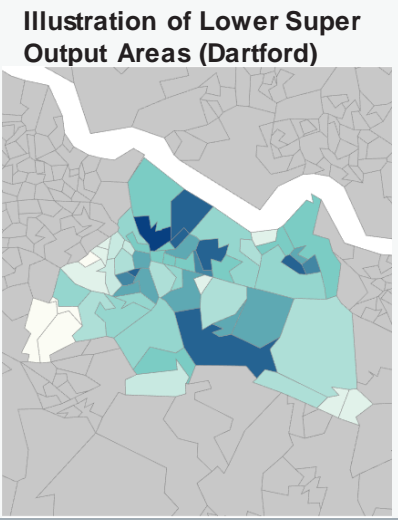
The modelled travel measures are intended to provide a typical indication of the quickest journey from origin to destination. It cannot take account of differences in performance of different forms of public transport and individual experiences may not completely align with the estimated times.

Further information on all the travel time analysis conducted throughout the programme is given in the fact sheet: *How travel times were assessed and scored 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 are available at LSOA level and each LSOA is assigned an [Index of Multiple Deprivation \(IMD\)](#) score and an [urban/rural classification](#). This allows for travel time analysis by these classifications. More information on the IMD is in [Appendix A](#)





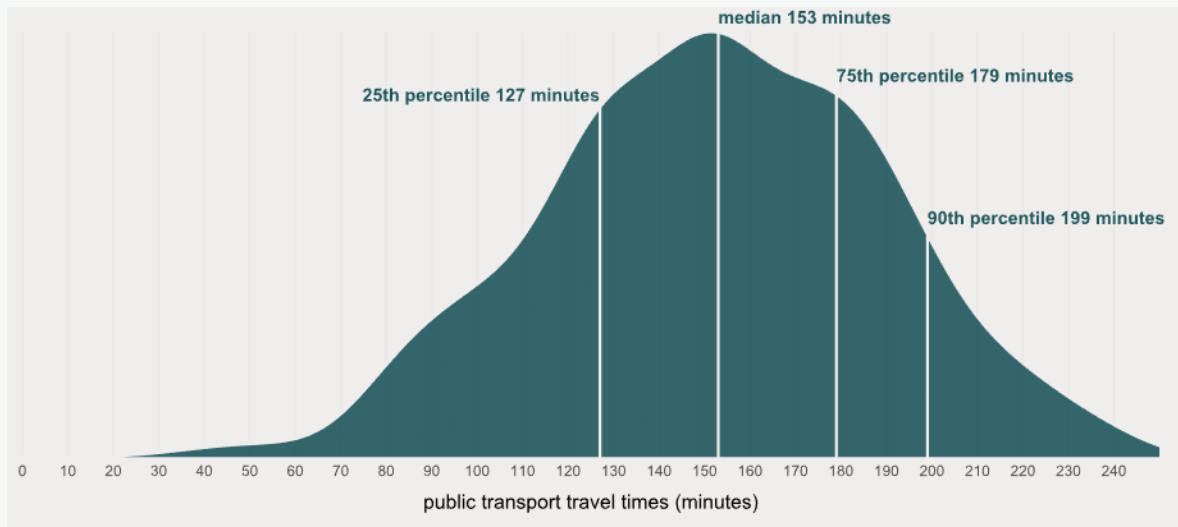
Appendix C: Further travel time analysis

Current travel times to The Royal Marsden for children resident in the PTC catchment by public transport Urban-Rural

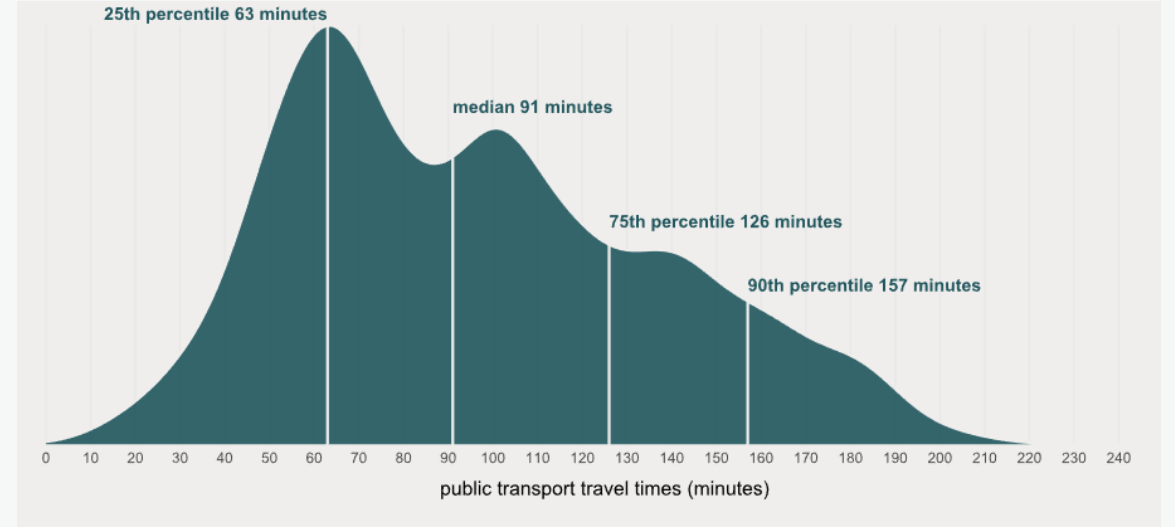


Children living in areas living in areas categorised as being rural had a median travel time of 153 minutes, compared to a median of 91 minutes for those living in urban areas. 1% of children living in rural areas have a travel time of less than an hour (compared to 70% for those in urban areas).

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



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



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

less than 15 mins	less than 30 mins	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%



Appendix C: Further travel time analysis

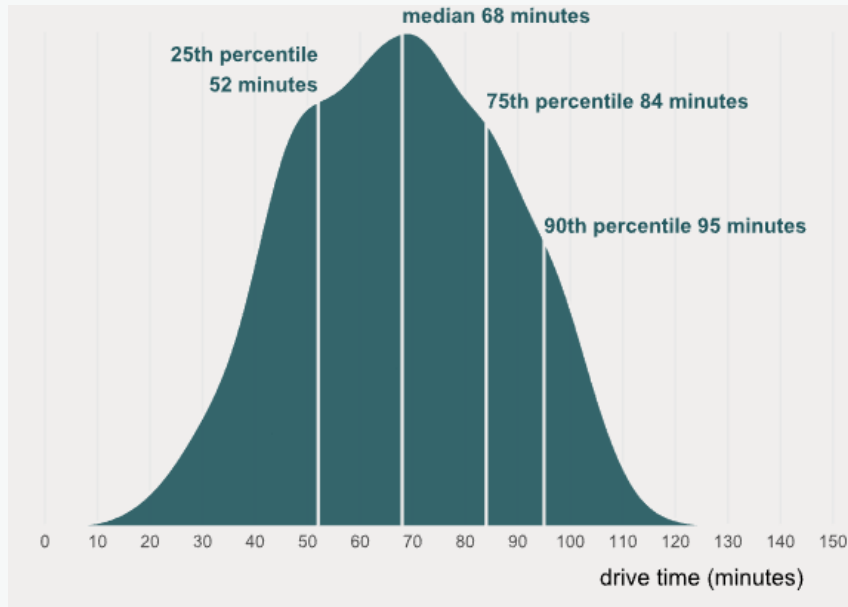
Current travel times to The Royal Marsden for children resident in the PTC catchment (driving)

Urban-Rural

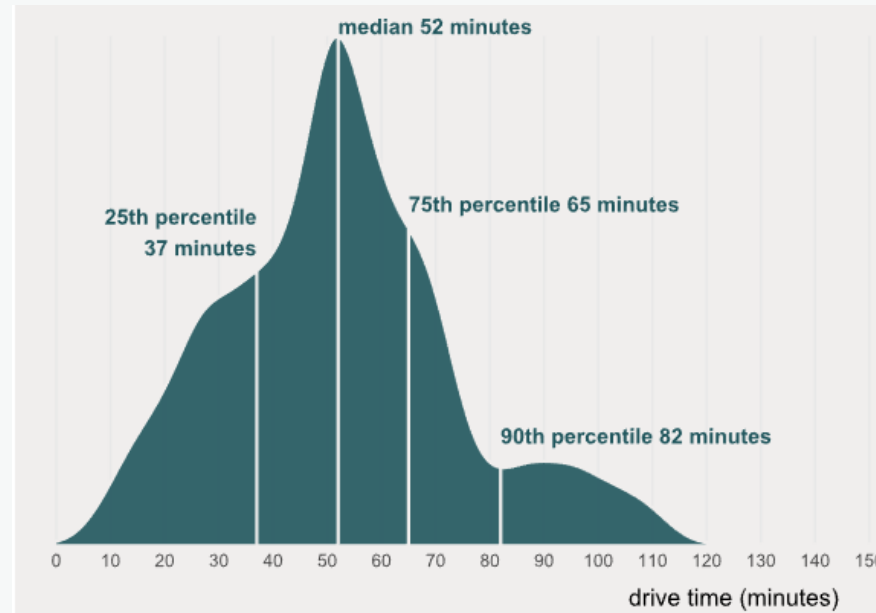


Children living in areas living in areas categorised as being rural had a median travel time of 68 minutes, compared to a median of 52 minutes for those living in the urban areas. 37% of children living in rural areas have a travel time of less than an hour (compared to 70% for those in urban areas).

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



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



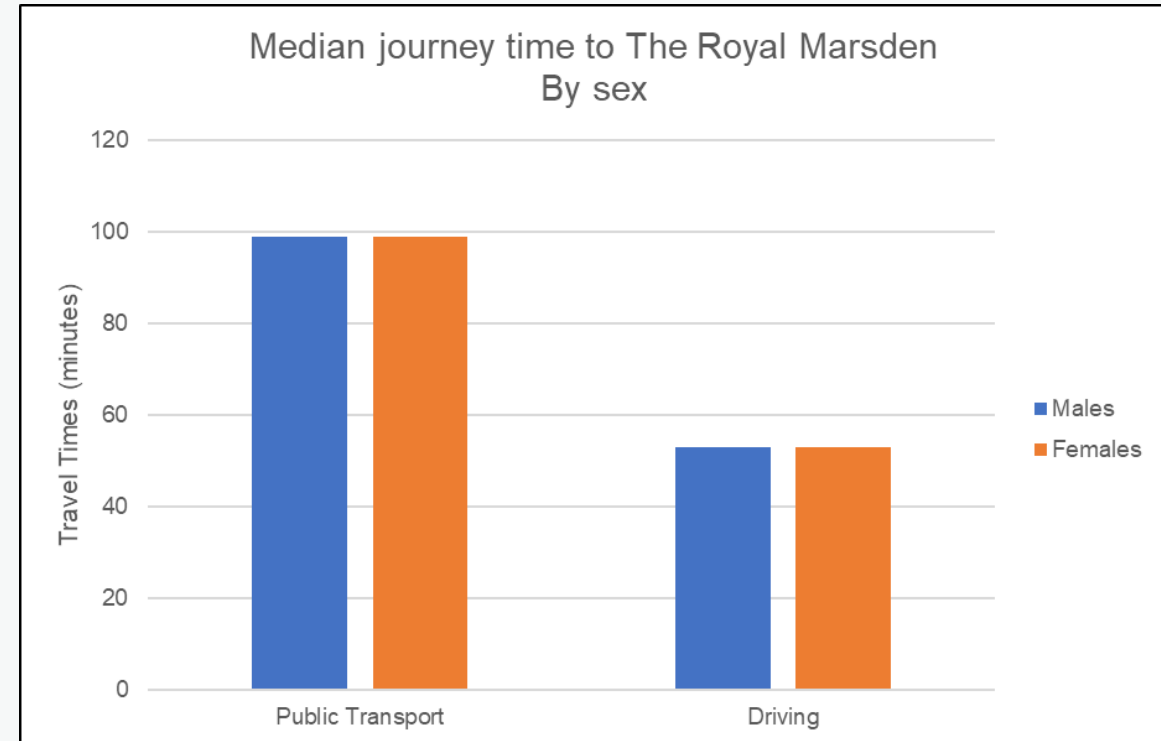
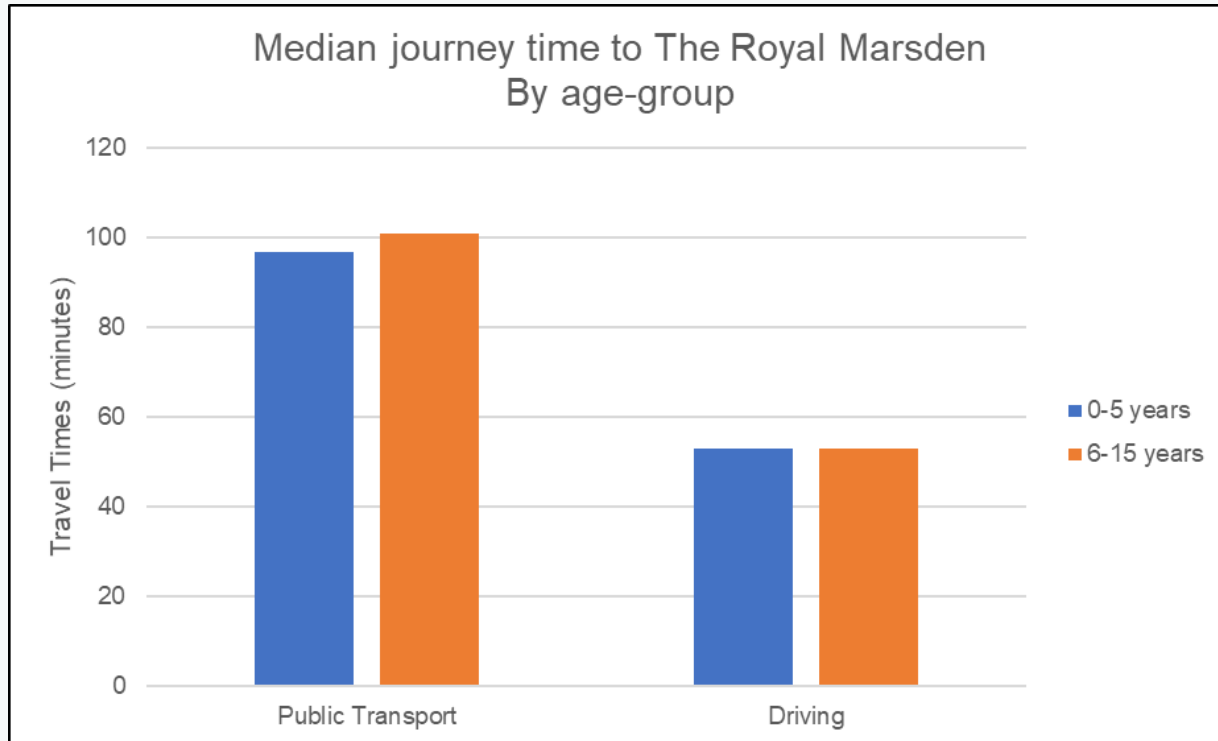
Cumulative proportion of PTC catchment population (who live in rural areas) who can access The Royal Marsden by road vehicle (driving) in 15 minute cohorts

	less than 15 mins	less than 30 mins	less than 45 mins	less than 60 mins	less than 75 mins	less than 90 mins	less than 105 mins	less than 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 PTC catchment 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 PTC catchment area, this means we would not expect any disproportional impact of a change in PTC location (in terms of travel times) between these groups.



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

ICB	Borough/LA of residence	Median travel time to (mins):			Difference in median travel time (mins)			Difference of more than 15 mins between Evelina and St. Georges
		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	
South East London	Bexley	58	59	73	1	15	-14	
	Bromley	42	57	54	15	12	3	
	Greenwich	66	50	65	-16	-1	-15	
	Lambeth	47	27	28	-20	-19	-1	
	Lewisham	51	38	49	-13	-2	-11	
	Southwark	60	22	46	-38	-14	-24	
South West London	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
	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	
Kent and Medway	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	
	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		
Surrey Heartlands	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
	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		
Sussex (East Sussex / Brighton & Hove)	Brighton and Hove	70	122	100	52	30	22	>15 min
	Eastbourne	99	155	131	56	32	24	>15 min
	Hastings	94	134	125	40	31	9	
	Lewes	84	139	115	55	31	24	>15 min
	Rother	100	138	132	38	32	6	
West Sussex	Wealden	84	124	114	40	30	10	
	Crawley	39	91	69	52	30	22	>15 min
	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

ICB	Borough/LA of residence	Median travel time to (mins)			Difference in median travel time (mins)			Difference of more than 15 mins between Evelina and St. Georges
		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	
South East London	Bexley	108	66	80	-42	-28	-14	
	Bromley	92	59	71	-33	-21	-12	
	Greenwich	98	55	69	-43	-29	-14	
	Lambeth	58	37	36	-21	-22	1	
	Lewisham	78	46	59	-32	-19	-13	
	Southwark	67	32	47	-35	-20	-15	
South West London	Croydon	52	57	56	5	4	1	
	Kingston upon Thames	62	53	51	-9	-11	2	
	Merton	48	48	30	0	-18	18	>15 min
	Richmond upon Thames	80	53	60	-27	-20	-7	
	Sutton	30	61	50	31	20	11	
	Wandsworth	62	40	33	-22	-29	7	
Kent and Medway	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
	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	
	Surrey Heartlands	Elmbridge	86	62	64	-24	-22	-2
Epsom and Ewell		47	62	59	15	12	3	
Guildford		102	80	94	-22	-8	-14	
Mole Valley		69	85	85	16	16	0	
Reigate and Banstead		64	76	81	12	17	-5	
Runnymede		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
Woking	96	62	76	-34	-20	-14		
Sussex (East Sussex / Brighton & Hove)	Brighton and Hove	119	105	113	-14	-6	-8	
	Eastbourne	146	134	143	-12	-3	-9	
	Hastings	178	127	141	-51	-37	-14	
	Lewes	140	129	138	-11	-2	-9	
	Rother	170	136	152	-34	-18	-16	>15 min
West Sussex	Wealden	145	124	134	-21	-11	-10	
	Crawley	90	79	86	-11	-4	-7	
	Mid Sussex	101	91	97	-10	-4	-6	
	Horsham	112	101	109	-11	-3	-8	

Appendix E: Difference in the longest 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.

ICB	Borough/LA of residence	Longest travel time to (mins):			Difference for those with the longest travel time (mins)			
		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
South East London	Bexley	72	69	83	-3	11	-14	
	Bromley	54	76	70	22	16	6	
	Greenwich	74	64	80	-10	6	-16	
	Lambeth	72	46	50	-26	-22	-4	
	Lewisham	66	51	59	-15	-7	-8	
	Southwark	74	38	61	-36	-13	-23	
South West London	Croydon	40	76	53	36	13	23	>15 min
	Kingston upon Thames	46	60	43	14	-3	17	>15 min
	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	
Kent and Medway	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	
	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	
Surrey Heartlands	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
	Reigate and Banstead	39	89	68	50	29	21	>15 min
	Runnymede	54	68	67	14	13	1	
	Spelthorne	55	69	68	14	13	1	
Sussex (East Sussex / Brighton & Hove)	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
	Hastings	99	139	131	40	32	8	
	Lewes	96	154	128	58	32	26	>15 min
	Rother	109	150	143	41	34	7	
West Sussex	Wealden	107	158	139	51	32	19	>15 min
	Crawley	41	94	71	53	30	23	>15 min
	Mid Sussex	60	112	90	52	30	22	>15 min
	Horsham	72	121	103	49	31	18	>15 min

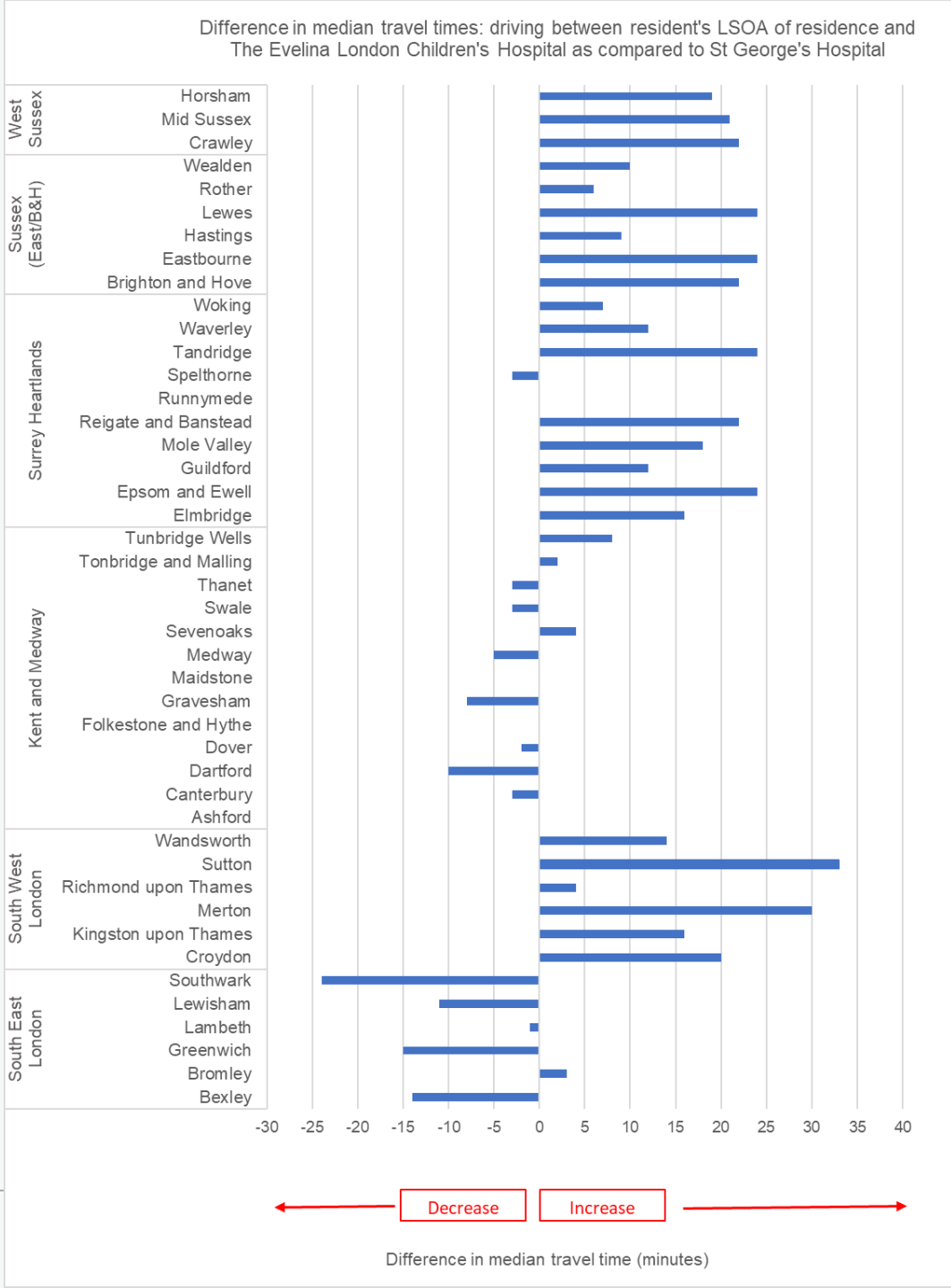
Appendix E: Difference in the longest travel times (public transport) by local authority

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.

ICB	Borough/LA of residence	Longest travel time to (mins):			Difference for those with the longest travel time (mins)			
		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
South East London	Bexley	122	79	92	-43	-30	-13	
	Bromley	121	90	104	-31	-17	-14	
	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	
South West London	Croydon	82	76	88	-6	6	-12	
	Kingston upon Thames	80	62	61	-18	-19	1	
	Merton	64	61	45	-3	-19	16	>15 min
	Richmond upon Thames	99	75	76	-24	-23	-1	
	Sutton	50	79	71	29	21	8	
	Wandsworth	81	58	56	-23	-25	2	
Kent and Medway	Ashford	232	159	220	-73	-12	-61	
	Canterbury	228	160	203	-68	-25	-43	
	Dartford	158	120	132	-38	-26	-12	
	Dover	240	211	228	-29	-12	-17	
	Folkestone and Hythe	226	163	223	-63	-3	-60	
	Gravesham	167	117	134	-50	-33	-17	
	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	
	Tonbridge and Malling	216	146	194	-70	-22	-48	
Tunbridge Wells	213	159	183	-54	-30	-24		
Surrey Heartlands	Elmbridge	113	82	91	-31	-22	-9	
	Epsom and Ewell	64	79	79	15	15	0	
	Guildford	130	112	124	-18	-6	-12	
	Mole Valley	133	139	158	6	25	-19	
	Reigate and Banstead	94	94	100	0	6	-6	
	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		
Sussex (East Sussex / Brighton & Hove)	Brighton and Hove	145	133	140	-12	-5	-7	
	Eastbourne	168	154	163	-14	-5	-9	
	Hastings	193	150	164	-43	-29	-14	
	Lewes	156	170	156	14	0	14	
	Rother	200	204	185	4	-15	19	>15 min
West Sussex	Wealden	224	188	202	-36	-22	-14	
	Crawley	98	89	97	-9	-1	-8	
	Mid Sussex	122	109	116	-13	-6	-7	
	Horsham	149	134	145	-15	-4	-11	

Appendix F: Difference in median travel times (driving) by local authority.

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



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

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

