

Travel times and distances to nearest radiotherapy centre for head and neck cancer patients in England 2006 – 2008

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Introduction

Between 2006 and 2008, there were 48 radiotherapy centres in England providing treatment for head and neck cancer patients. Almost half (47.4%) of head and neck cancer patients, diagnosed between 2006 and 2008, received radiotherapy. Specialised radiotherapy for head and neck cancer has been centralised to improve quality of care. As a result, some patients may have to travel long distances to access radiotherapy. The National Radiotherapy Advisory Group has recommended a maximum travel time of 45 minutes for accessing radiotherapy.

This work was commissioned by the National Cancer Intelligence Network (NCIN) Head and Neck Cancer Site Specific Reference Group to identify areas with long travel times and distances.

Methods

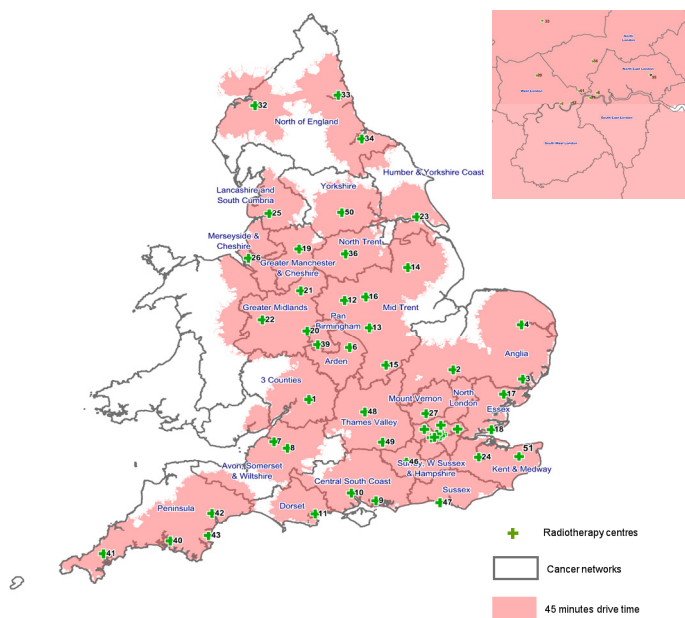
Residents in England with head and neck cancer (excluding thyroid cancer), diagnosed between 2006 and 2008 were identified from the National Cancer Data Repository. Their home postcodes were used to measure off-peak travel time by private transport and distances to nearest radiotherapy centres using GeoExploit software. Travel times and distances for public transport and those for peak hour travel by private transport could not be ascertained using GeoExploit.

Results

1. Radiotherapy centres in England and areas within 45 minutes drive by private transport during off peak period

(A) England

(B) London



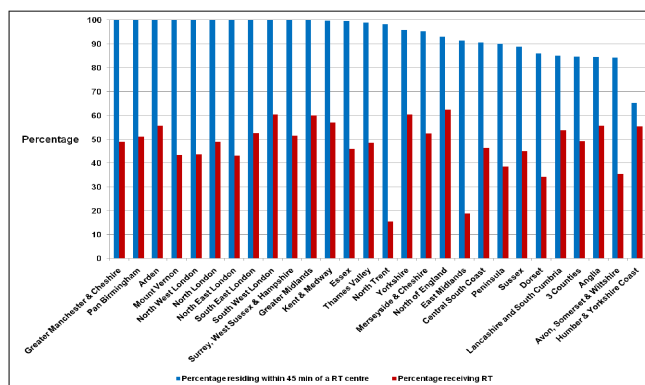
2. New radiotherapy centres opened since 2008 (year of opening within brackets)

- Taunton (2009)

New satellite centres

- Oldham (2010)
- Peterborough (2011)
- Aintree (2011)
- Salford (2011)
- Bracknell (2011)

3. Percentage of head and neck cancer patients living within 45 min. travel distance from a specialised radiotherapy centre and percentage who received radiotherapy by cancer network



4. Median and maximum travel distances to nearest radiotherapy centre (sorted by maximum distance)

(A) England

	Median distance (miles)	Maximum distance (miles)
England	11.8	71.1

(B) Five cancer networks with shortest distances

Cancer networks	Median distance (miles)	Maximum distance (miles)
North East London	4.2	8.2
North West London	3.7	12.7
South East London	7.1	20.2
South West London	9.2	21.4
Pan Birmingham	7.1	23.4

(C) Five cancer networks with longest distances

Cancer networks	Median distances (miles)	Maximum distances (miles)
Lancashire and South Cumbria	19.6	71.1
North of England	11.9	68.8
East Midlands	10.2	56.5
Peninsula	11.8	56.2
Three Counties	20.3	55.4

Summary

- In line with National Radiotherapy Advisory Group recommendation, 92.4% of head and neck cancer patients in England lived within 45 minutes travel time of a specialised radiotherapy centre
- As this analysis was based on off peak travel times, the actual experience of patients may be less favourable.
- Median travel distance to a radiotherapy centre in England was 11.8 miles
- Travel times and distances were shorter in London and longer in the east and north of England
- No relationship between travel distance and the likelihood of receiving radiotherapy was demonstrated in this analysis
- Since 2008, additional radiotherapy centres have been established to reduce travel times in areas that were less well served
- For head and neck cancer patients requiring long courses of radiotherapy, perhaps daily for more than 6 weeks, longer travel times may be a discouraging factor when considering the choice of radiotherapy over surgery, particularly if both treatment modalities provide similar benefits. Alongside the establishment of satellite centres, providers have been looking at other ways of minimising the impact of travel times on patients e.g. by organising hostel/hotel accommodation for patients near to the radiotherapy centre.