Public Health England

NHS

Median pathway analysis by patient demographics, cancer stage and route to diagnosis, for prostate cancer (2013-2017)

Lancashire and South Cumbria

Produced by the Cancer Alliance Data, Evidence and Analysis Service, a partnership between NHS England and NHS Improvement & Public Health England

May 2019

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Purpose of work

Aim: to provide Cancer Alliances with in-depth analysis of the median time taken for different intervals of the patient pathway (referral, first seen in secondary care, diagnosis, first MDT meeting and treatment start).

What does it tell a Cancer Alliance?

The analysis informs Cancer Alliances of variation in time from referral to first treatment by socio-demographic factors, routes to diagnosis and geography for patients diagnosed with prostate cancer (2013-2017). Cancer Alliances are provided with pathway data for all 19 Cancer Alliances with an England benchmark, and for their respective CCGs and trusts.

How should a Cancer Alliance use the data?

Cancer Alliances can use the data to identify variation, investigate differences as appropriate and develop local strategies to address health inequalities. Cancer Alliances can also use the analysis to identify best practice that can be shared for faster diagnosis and to improve patient experience. Analysis from this project should be considered in conjunction with other related analyses (see below).

Link to strategic priorities in cancer programme

This work supports the strategic priorities outlined in the NHS Long Term Plan (3.57) of faster diagnosis and reducing health inequalities.

Purpose of work (cont.)

Related work

This is one of two strategic projects the Cancer Alliance Data, Evidence and Analysis Service (CADEAS) has undertaken on pathway lengths. The first project **'Analysis of 62-day pathways using 2017/2018 Cancer Waiting Times data for colorectal, lung and prostate cancers'** was published in December 2018. Both projects look at the time taken from referral to first treatment for those diagnosed with colorectal, lung and prostate cancers. The first project used the Cancer Waiting Times dataset only. This project covers all incidence of cancer and provides granular demographic data by linking the Cancer Waiting Times dataset to the Cancer Registry. The data are therefore more comprehensive but less timely and includes cases diagnosed up to 31 Dec 2017.

Other related work:

Routes to diagnosis

Acknowledgements

This work is produced by CADEAS, a partnership between NHS England and NHS Improvement & Public Health England. It builds on work previously carried out by the NCRAS-TCST (National Cancer Registration and Analysis Service - Transforming Cancer Services Team for London) Partnership.

We would like to thank patients and clinicians who provide the information that is collected by the NHS as part of patients' cancer care.

Methodology

This analysis uses linked Cancer Registry, Cancer Care Plan and Cancer Waiting Times (CWT) datasets for patients aged twenty years or older, diagnosed with prostate (C61) cancer.

The median time taken between the different intervals in the pathway has been calculated and segmented by the following:

- Year of diagnosis
- Sex
- Stage at diagnosis
- Age at diagnosis
- Ethnicity
- Income domain quintile

Cancer cases diagnosed until the end of 2016 can now be linked to the route to diagnosis. Further analysis can therefore be carried out on the median pathways for those diagnosed with cancer through the 62-day pathway and other routes.

A supplementary report will be provided with analysis of the median pathways for patients diagnosed through a Two Week Wait referral (TWW) compared with all other routes to diagnosis.

As outlined in the National Cancer Waiting Times Monitoring Dataset Guidance, the two CWT adjustments; first seen adjustment (2.4) and treatment adjustment (4.19), have been included in the median time taken calculations, in line with CWT official statistics.

Methodology (cont.)

Cancer Alliances will receive reports presented at the following geographical levels:

- England
- Cancer Alliance
- Resident CCG
- Diagnosis Trust

Caveats:

1. Figures for Cancer Alliances as a whole are derived from their respective CCGs.
2. Caution should be taken when interpreting results with small cohorts as small numbers can lead to variation and unreliability of data. In cases where there are less than six patients, the patient number is recorded as <6.
3. Please note that the median pathway length from referral to first treatment may not be the same as the sum of the median lengths for each pathway interval.

Data completeness: prostate cancer - Lancashire and South Cumbria (2013-2017)

Variable	Sources used	2013		2014		2015		2016		2017	
		Patient count (N)	Completeness (%)	Patient count (N)	Completeness (%)	Patient count (N)	Completeness (%)	Patient count (N)	Completeness (%)	Patient count (N)	Completeness (%)
Analysis cohort	PHE national cancer registration data	1,255	*100.0*	1,261	*100.0*	1,252	*100.0*	1,314	*100.0*	1,196	*100.0*
Referral date	Cancer Waiting Times database	905	*72.1*	948	*75.2*	1,058	*84.5*	1,150	*87.5*	1,086	*90.8*
First seen date	Cancer Waiting Times database	906	*72.2*	949	*75.3*	1,054	*84.2*	1,116	*84.9*	1,067	*89.2*
Diagnosis date	Derived from PHE's national cancer registration data[1]	1,255	*100.0*	1,261	*100.0*	1,252	*100.0*	1,314	*100.0*	1,196	*100.0*
MDT date	Cancer Waiting Times database, Cancer Care Plan database	1,093	*87.1*	1,100	*87.2*	1,135	*90.7*	1,191	*90.6*	1,114	*93.1*
Treatment start date	Cancer Waiting Times database	1,078	*85.9*	1,101	*87.3*	1,136	*90.7*	1,191	*90.6*	1,118	*93.5*

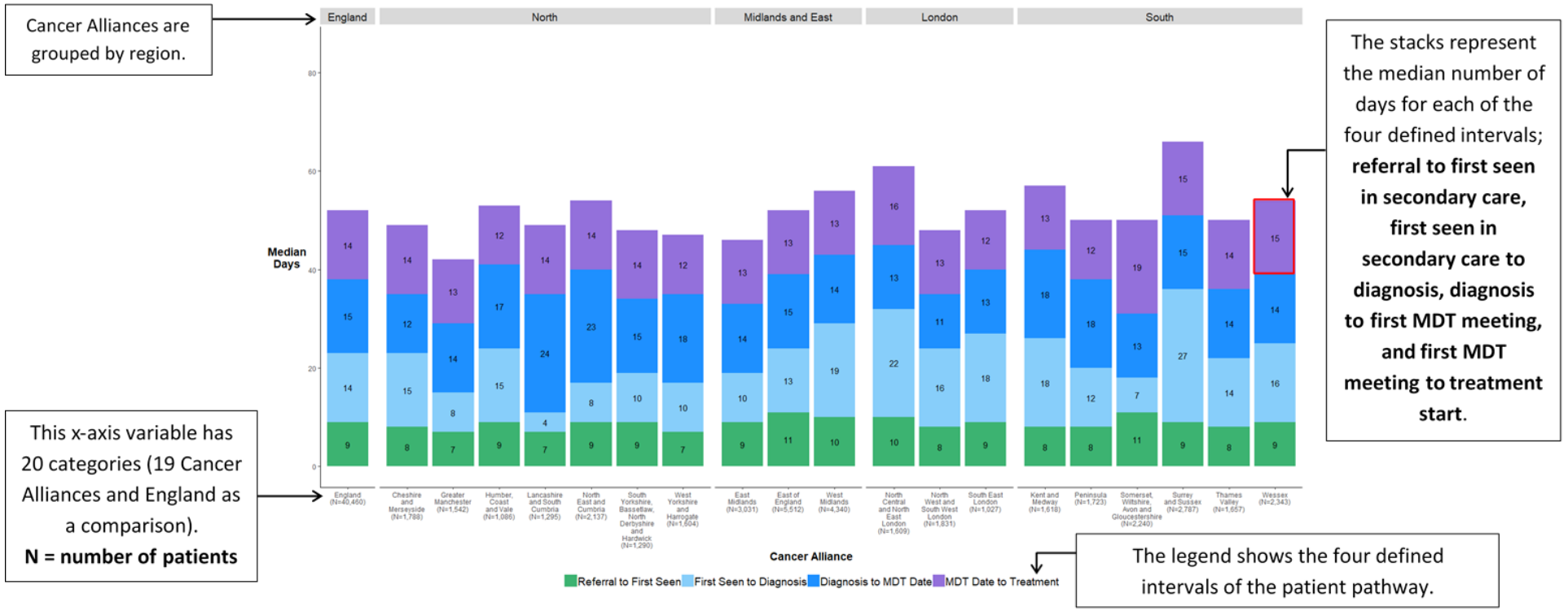
1. The cancer registry derives the diagnosis date from the following events in order of prioritisation: first histological/ cytological confirmation of the malignancy, the first admission to hospital because of the malignancy, and when a patient is evaluated in outpatient clinic.

- Records identified as **Death Certificate Only** are not included in this analysis - figures will therefore not reflect those publised in National Statistics.
- Due to data completeness, the count of patients will differ in any given interval of the patient pathway and therefore, any labels detailing patient counts are those for the pathway as a whole i.e. patients diagnosed.

How to interpret the graphs

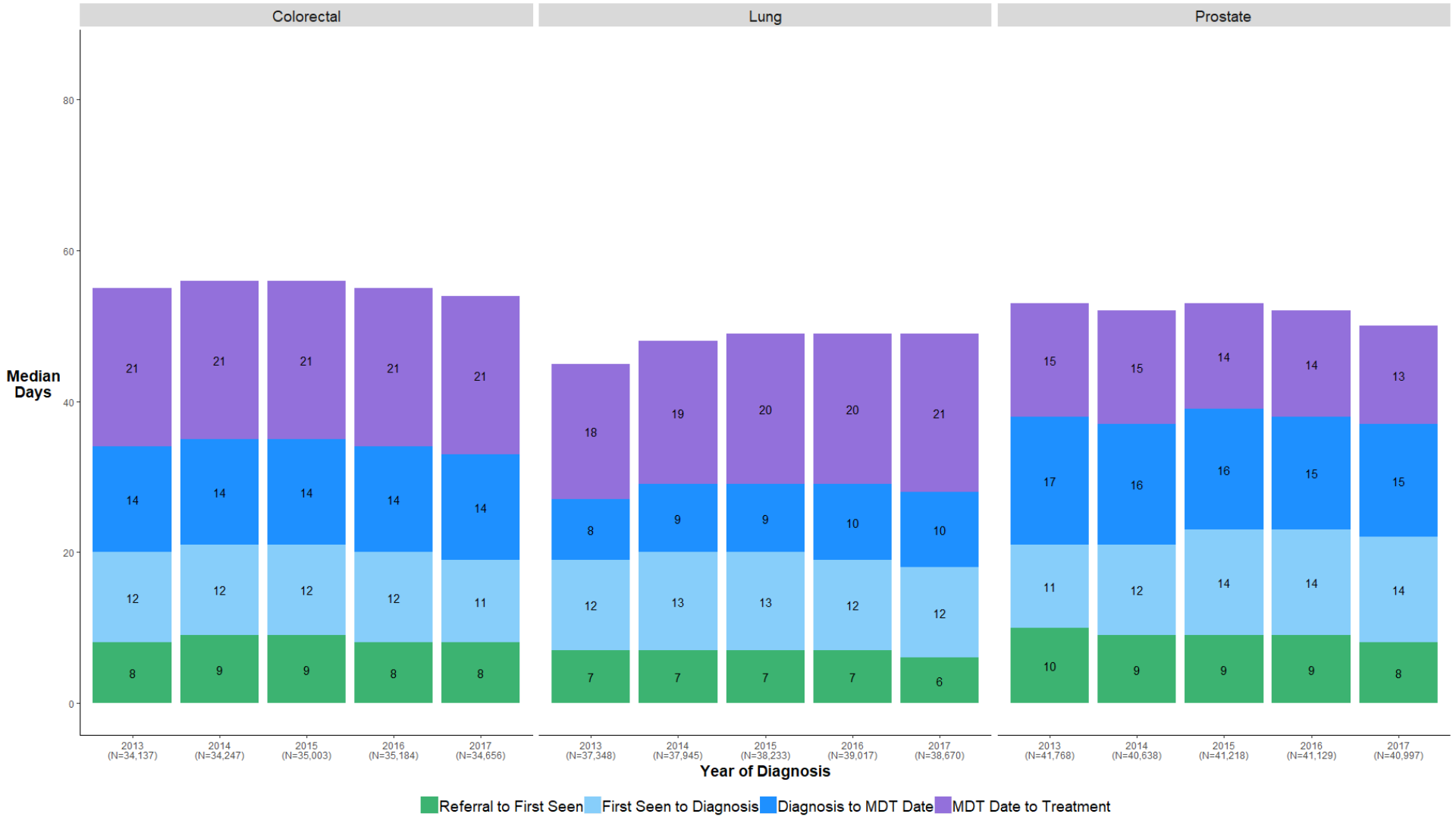
The patient pathway has been stratified into four intervals; **referral to first seen in secondary care, first seen in secondary care to diagnosis, diagnosis to first MDT meeting, and first MDT meeting to treatment start** - each graph is presented as stacked column bar charts and the figures within the bars show the median number of days for each interval of the pathway.

Below is an example graph displaying variation in the median number of days taken from referral to first treatment received for prostate cancer, stratified by the defined intervals of the pathway and Cancer Alliances in 2016.

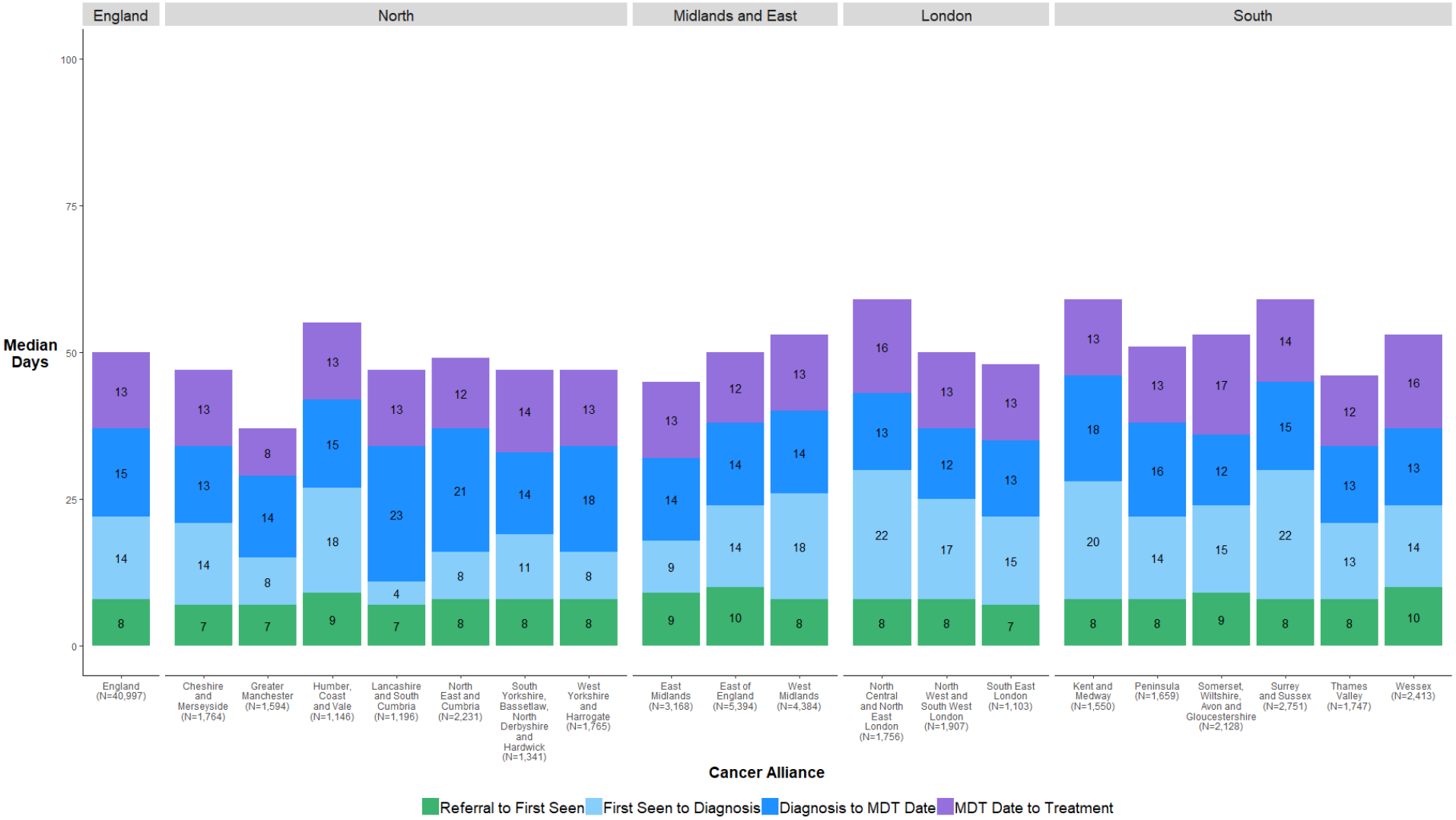


Overview

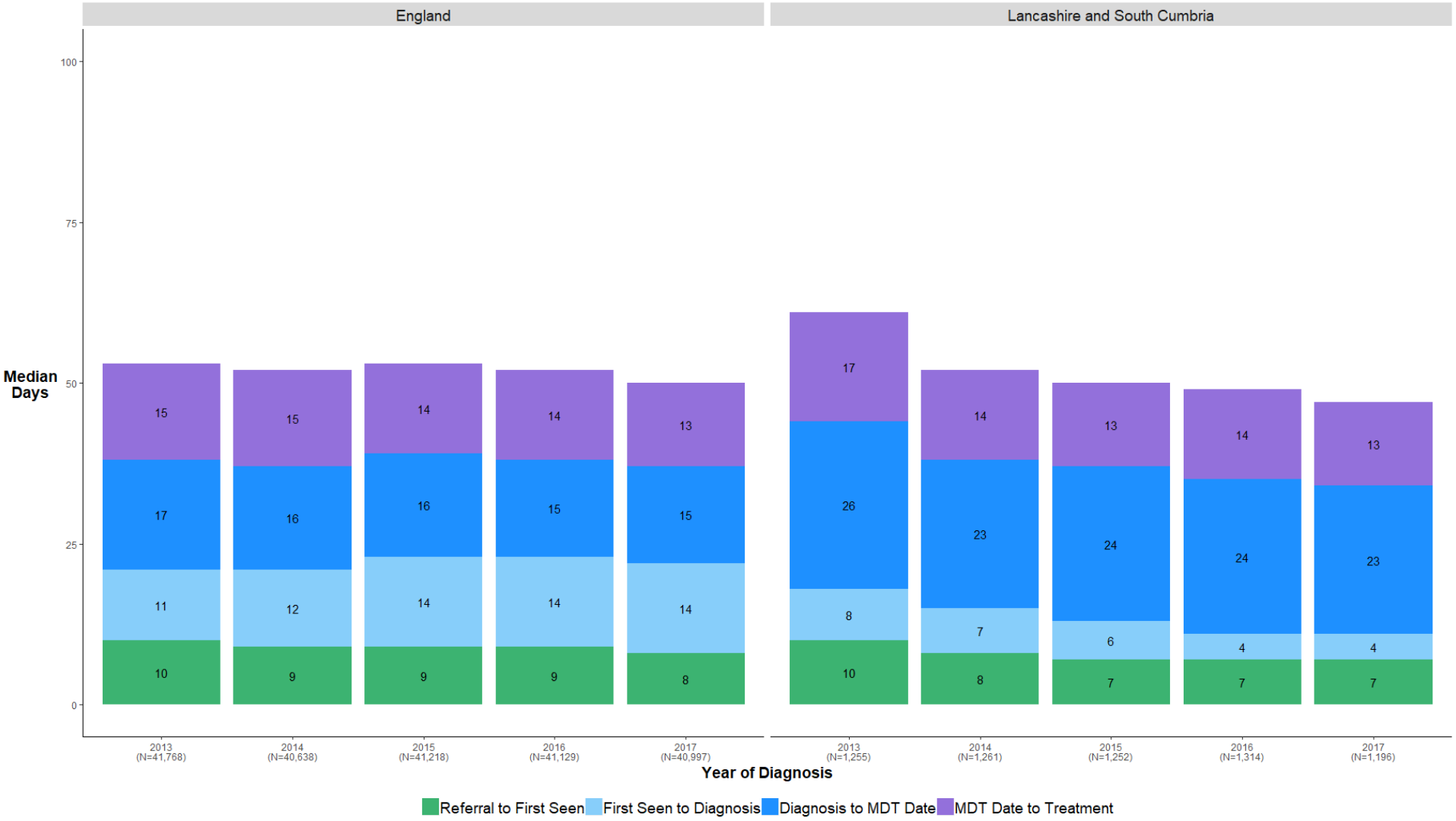
National Overview: median days from referral to treatment, for colorectal, lung and prostate cancers, by year of diagnosis (2013-2017)



Prostate cancer: median days from referral to treatment, by Cancer Alliance (2017)

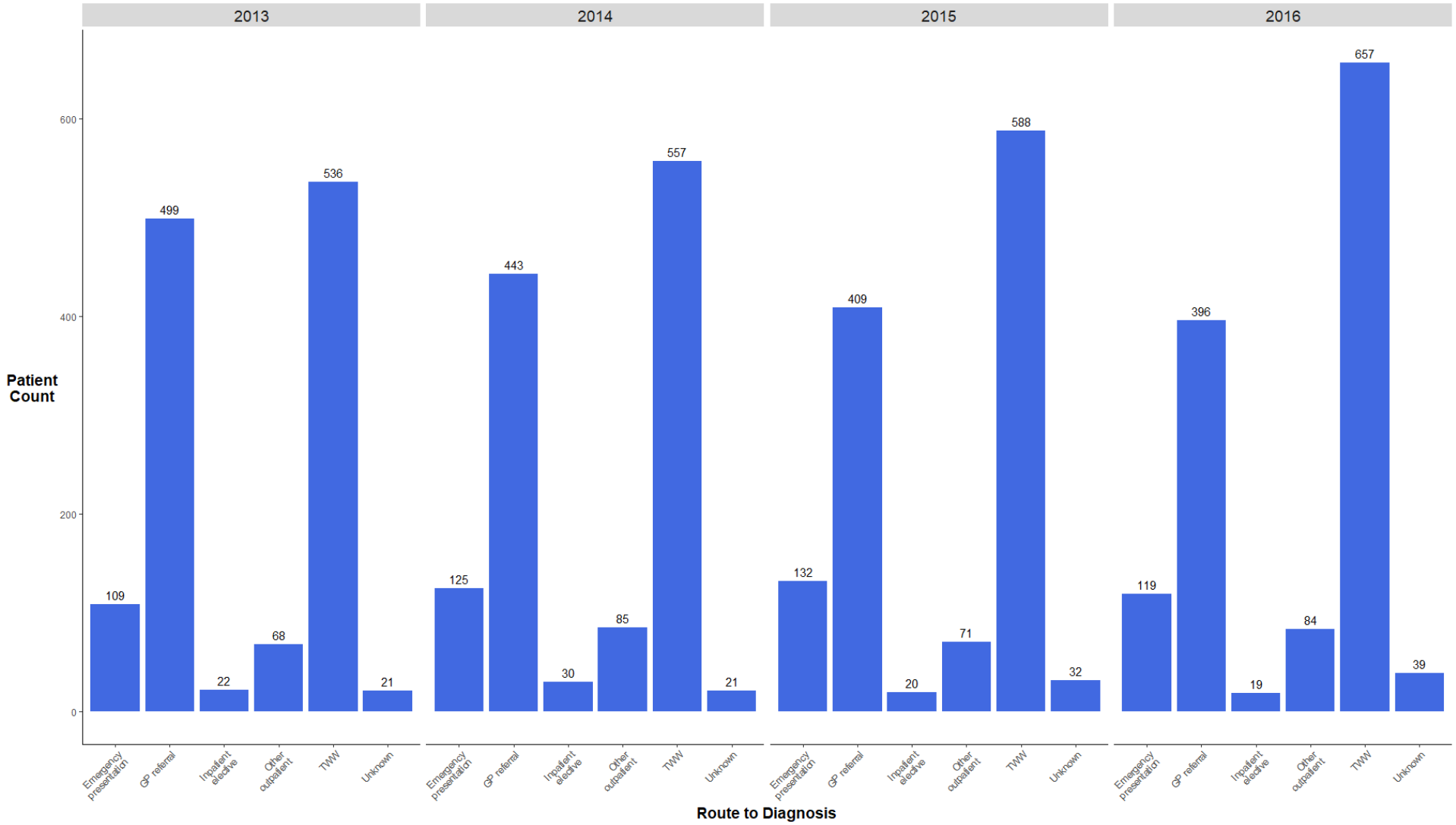


Prostate cancer: median days from referral to treatment, by year of diagnosis (2013-2017)

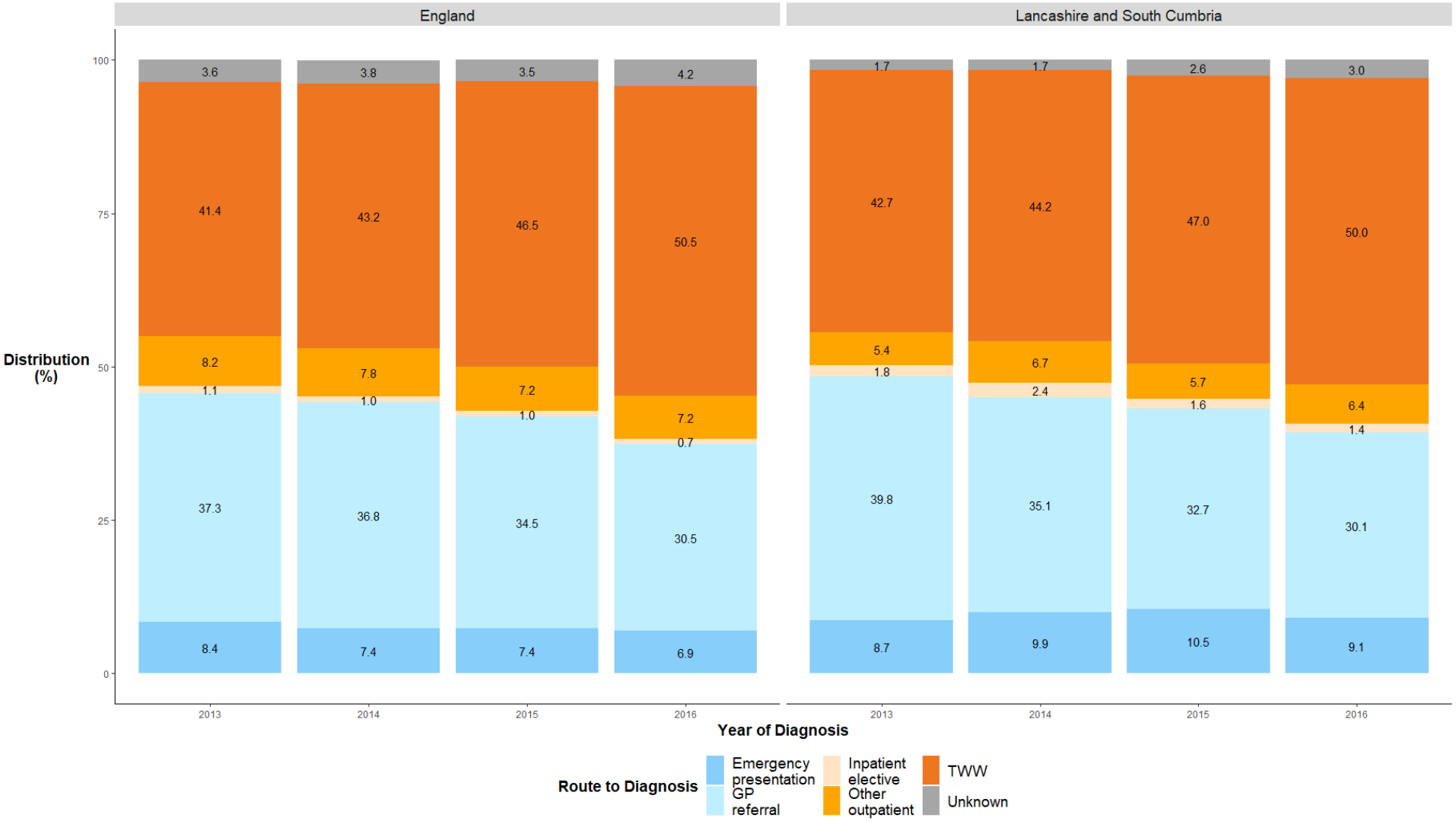


Route to diagnosis

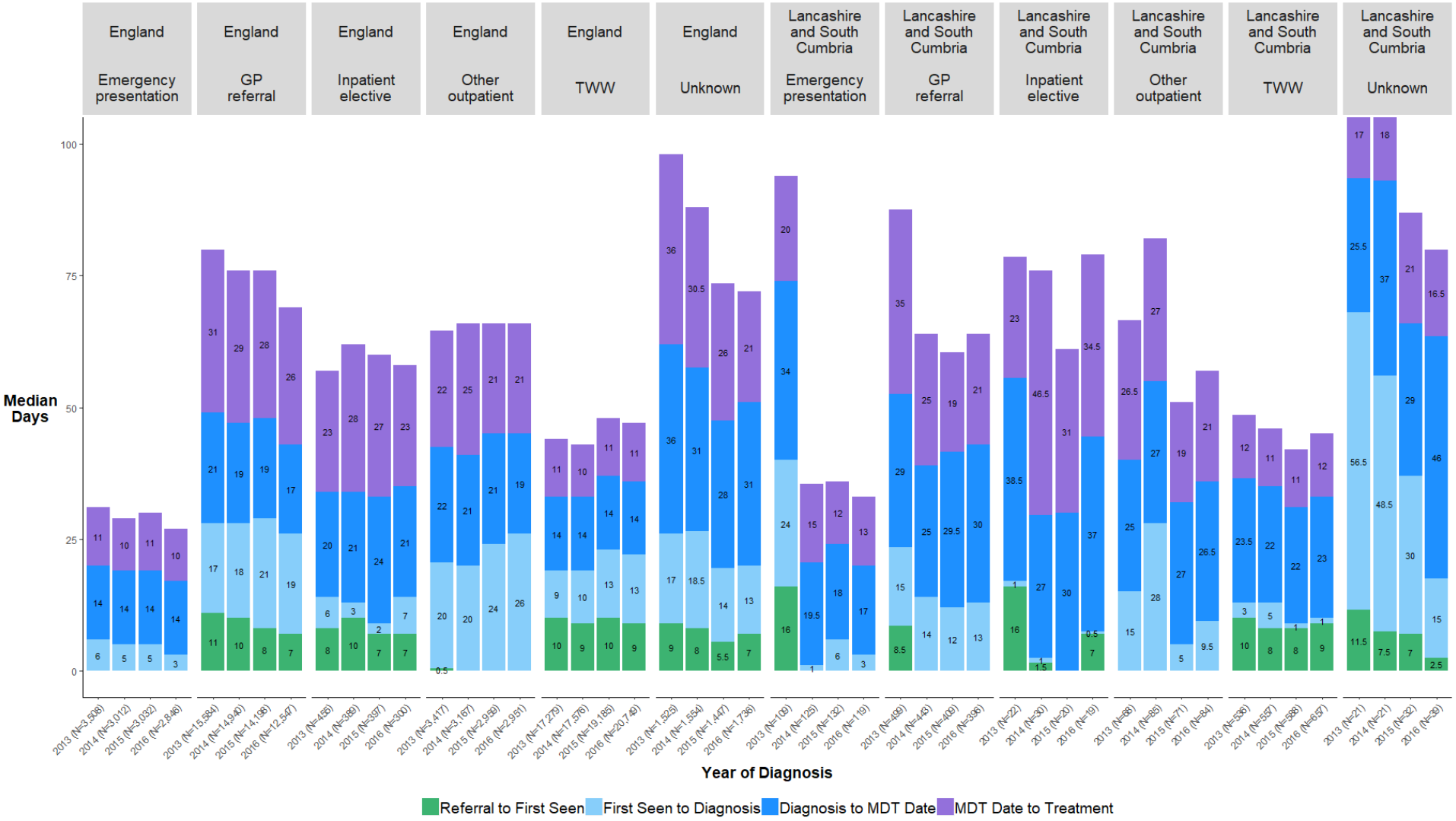
Prostate cancer: patient counts, by route to diagnosis (2013-2016)



Prostate cancer: distribution of patients, by route to diagnosis (2013-2016)

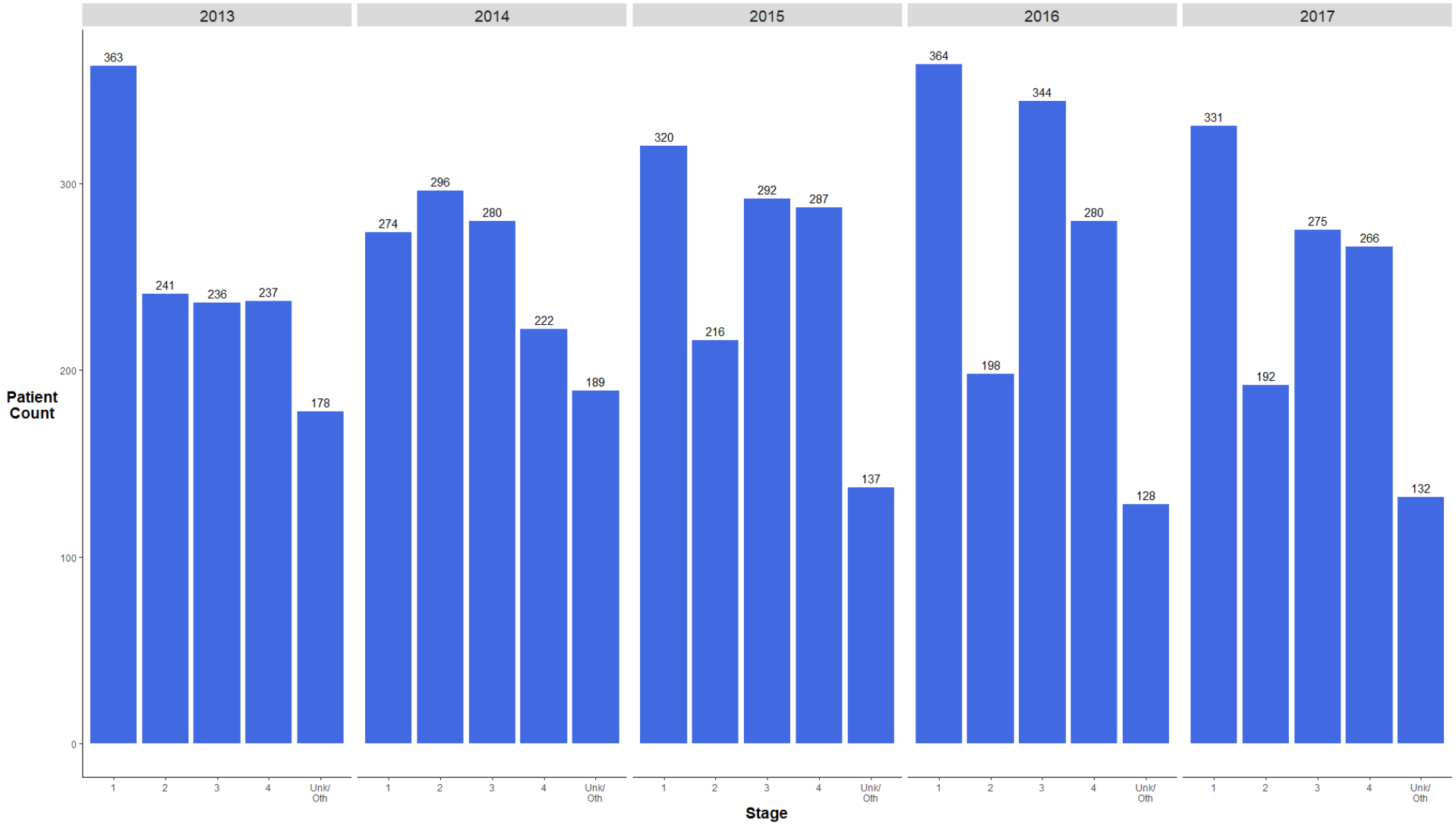


Prostate cancer: median days from referral to treatment, by route to diagnosis (2013-2016)

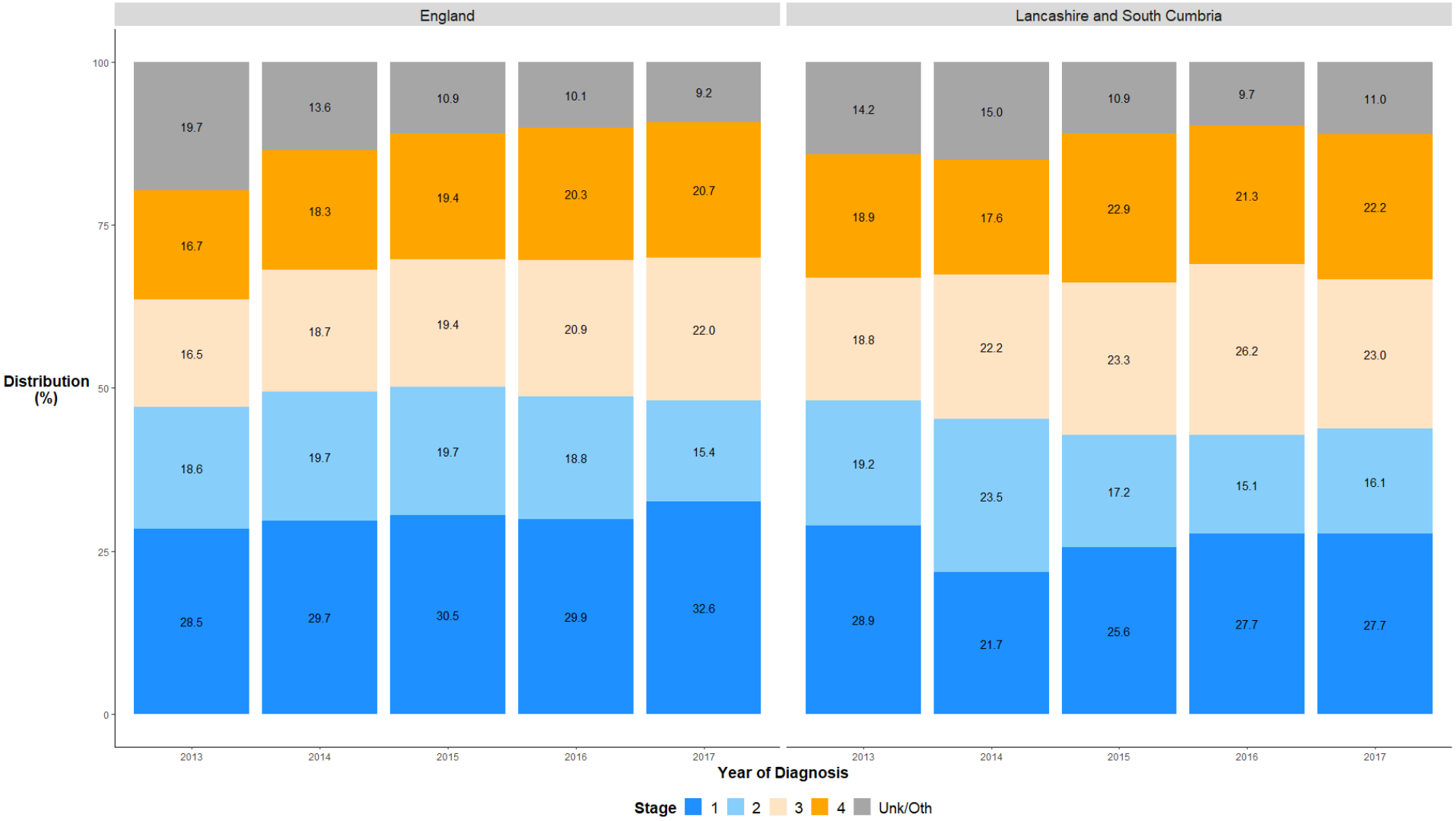


Stage at diagnosis

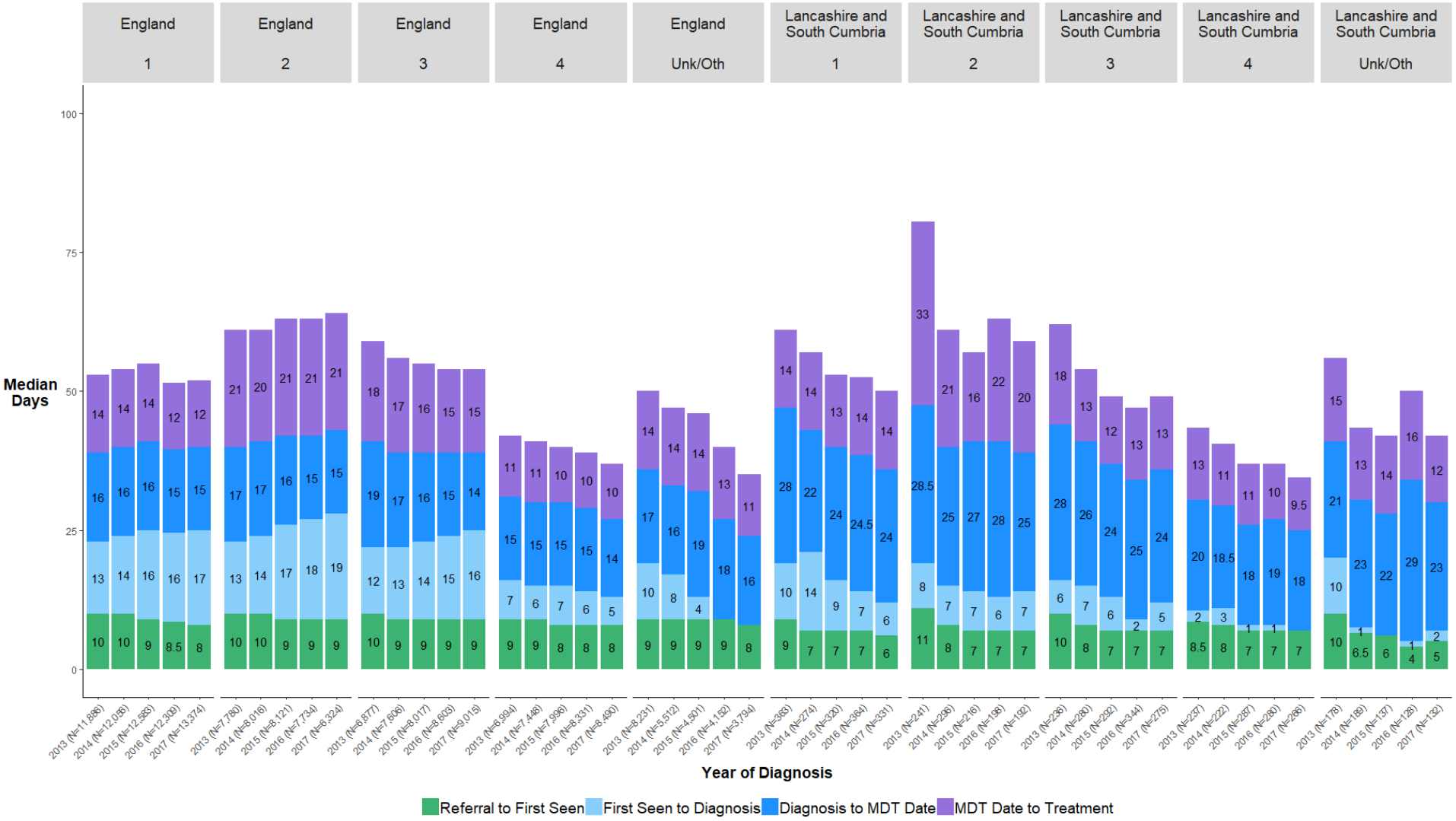
Prostate cancer: patient counts, by stage at diagnosis (2013-2017)



Prostate cancer: distribution of patients, by stage at diagnosis (2013-2017)

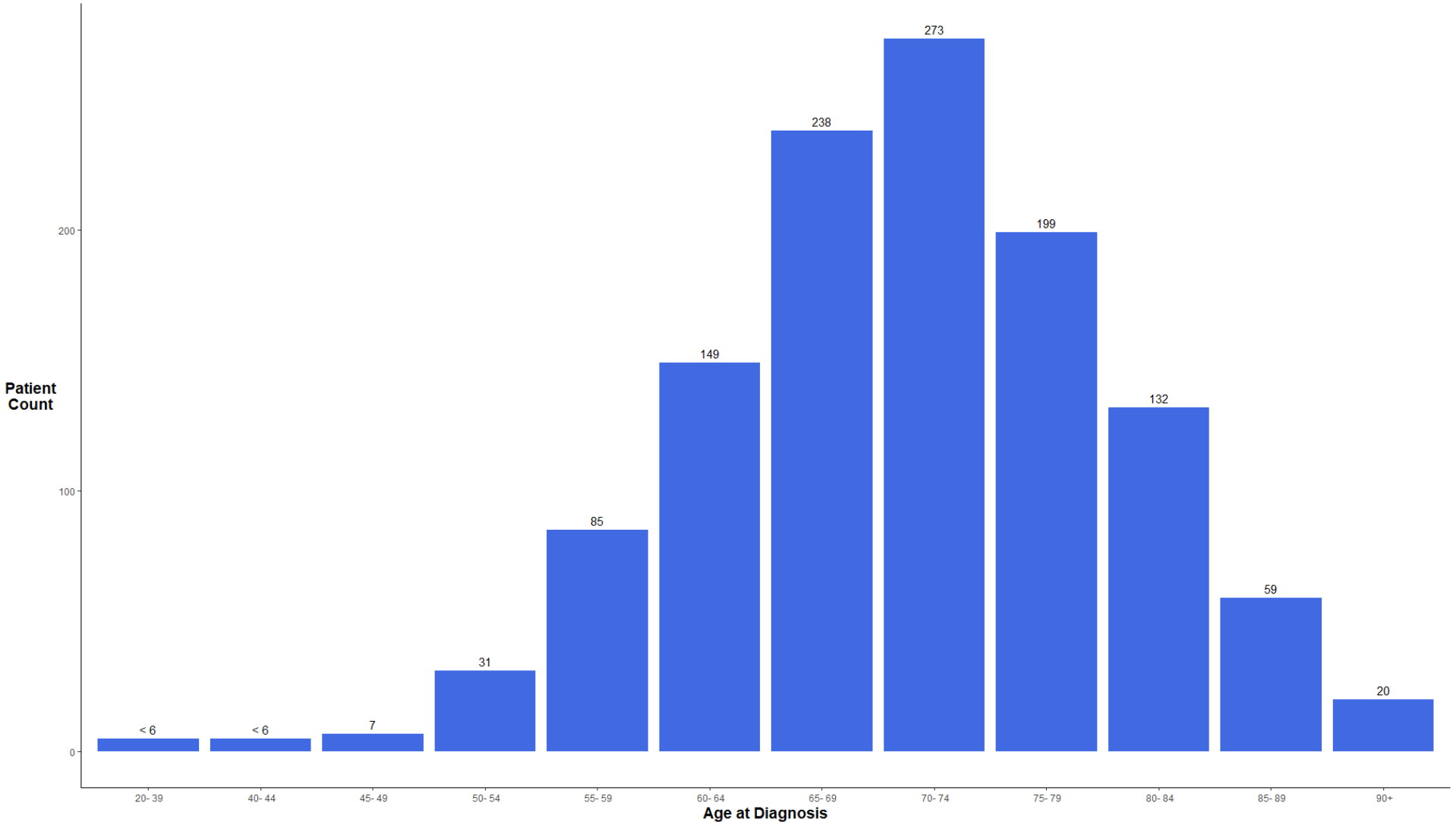


Prostate cancer: median days from referral to treatment, by stage at diagnosis (2013-2017)

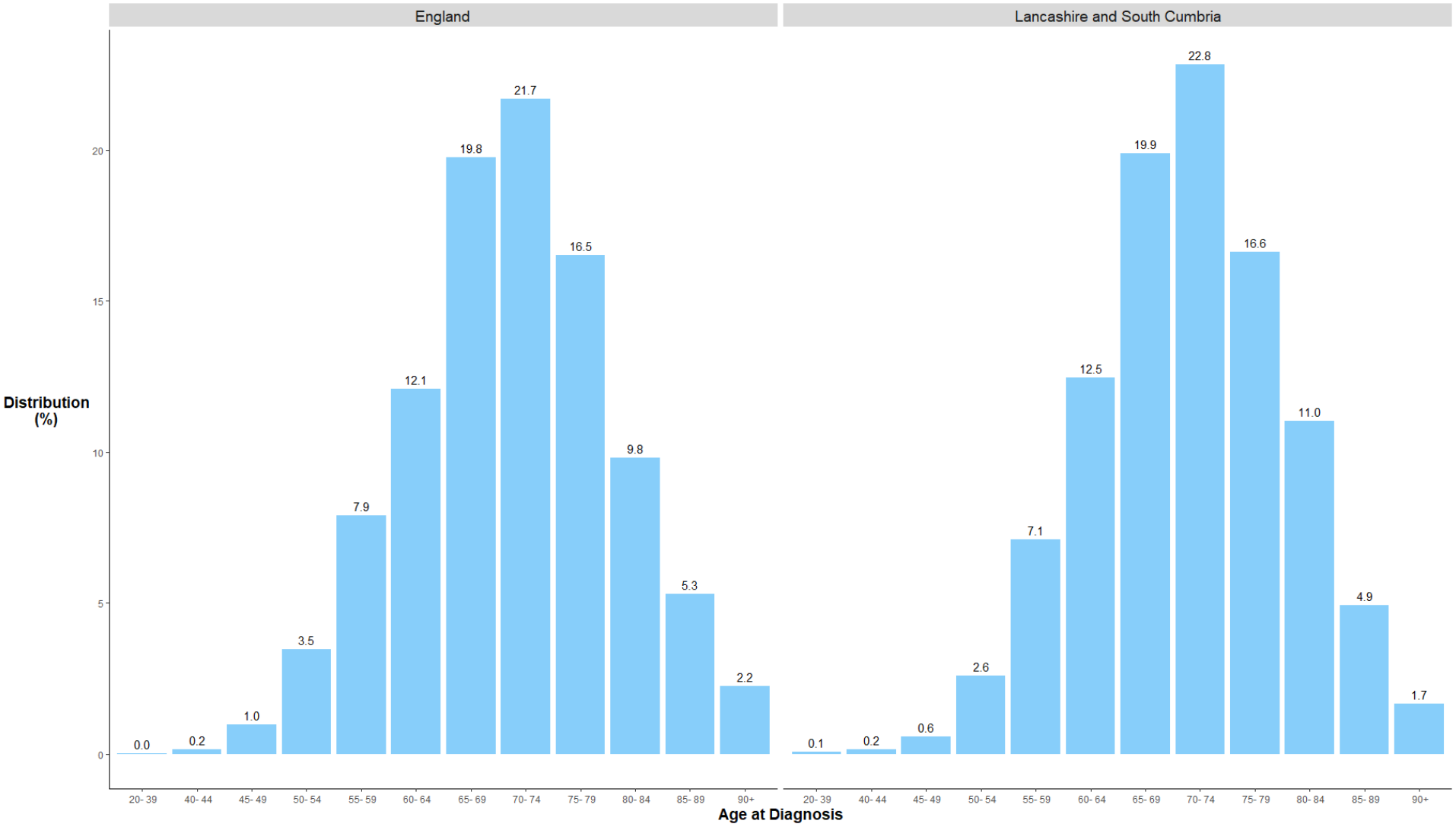


Age at diagnosis

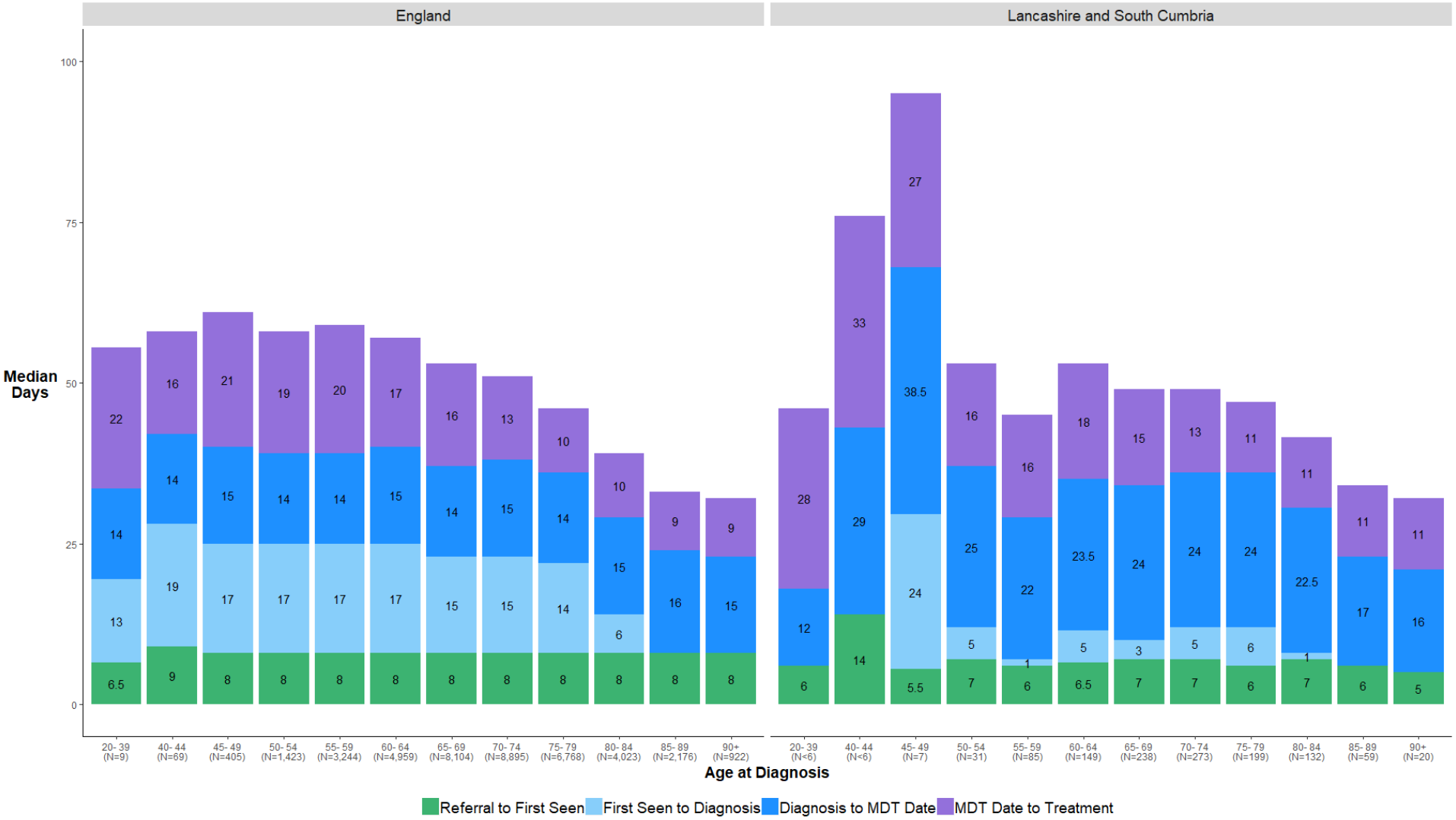
Prostate cancer: patient counts, by age at diagnosis (2017)



Prostate cancer: distribution of patients, by age at diagnosis (2017)

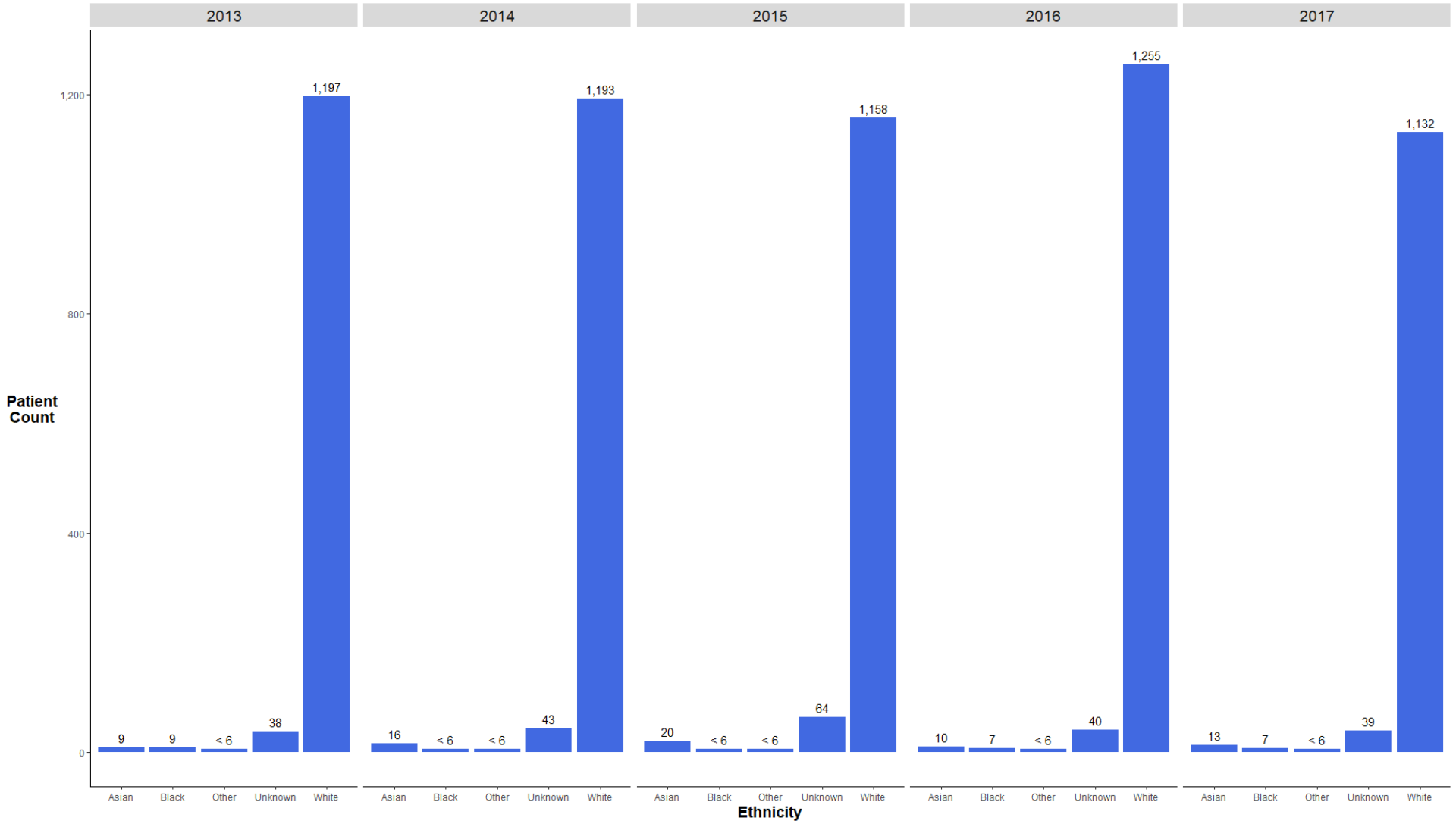


Prostate cancer: median days from referral to treatment, by age at diagnosis (2017)

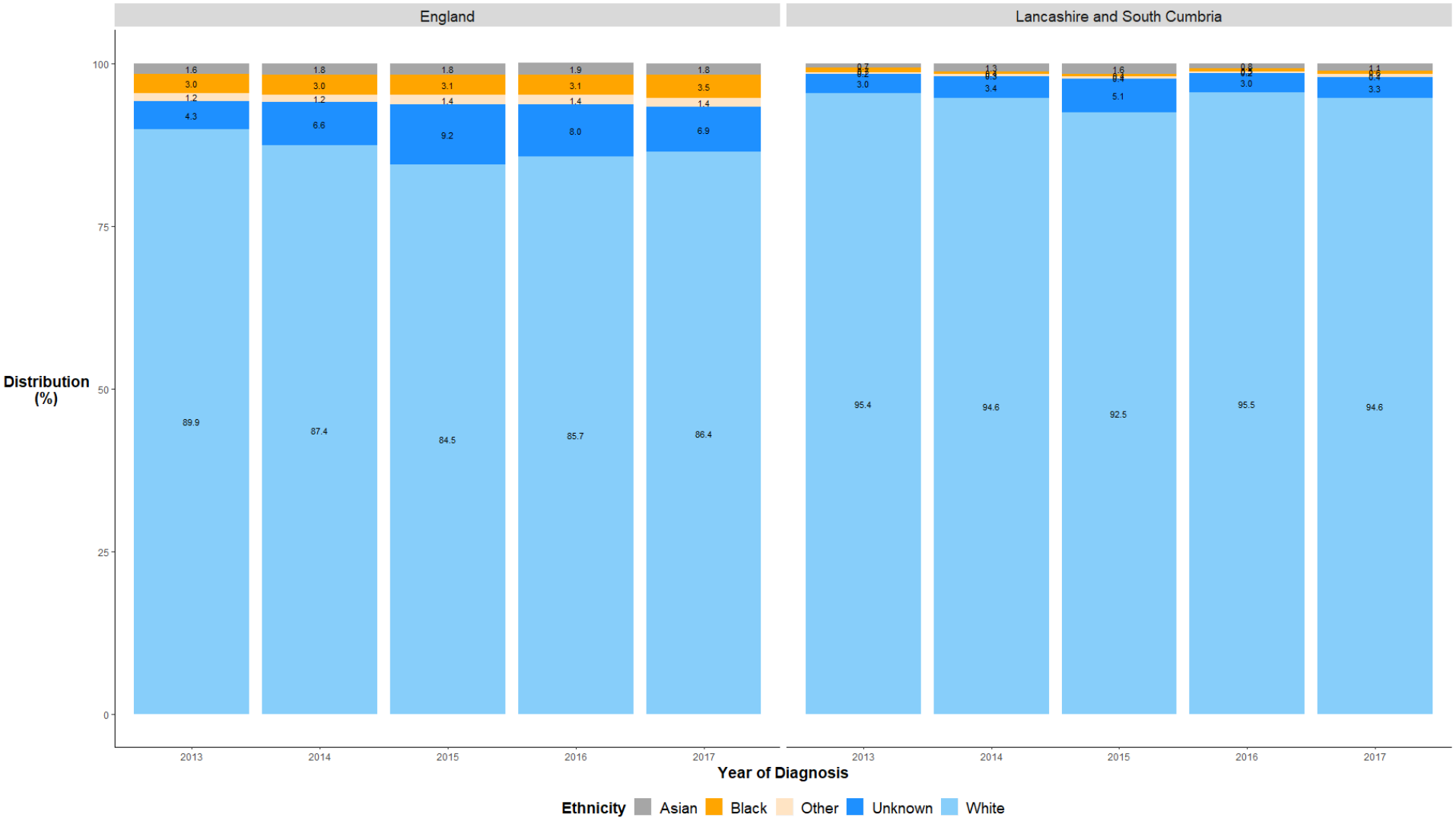


Ethnicity

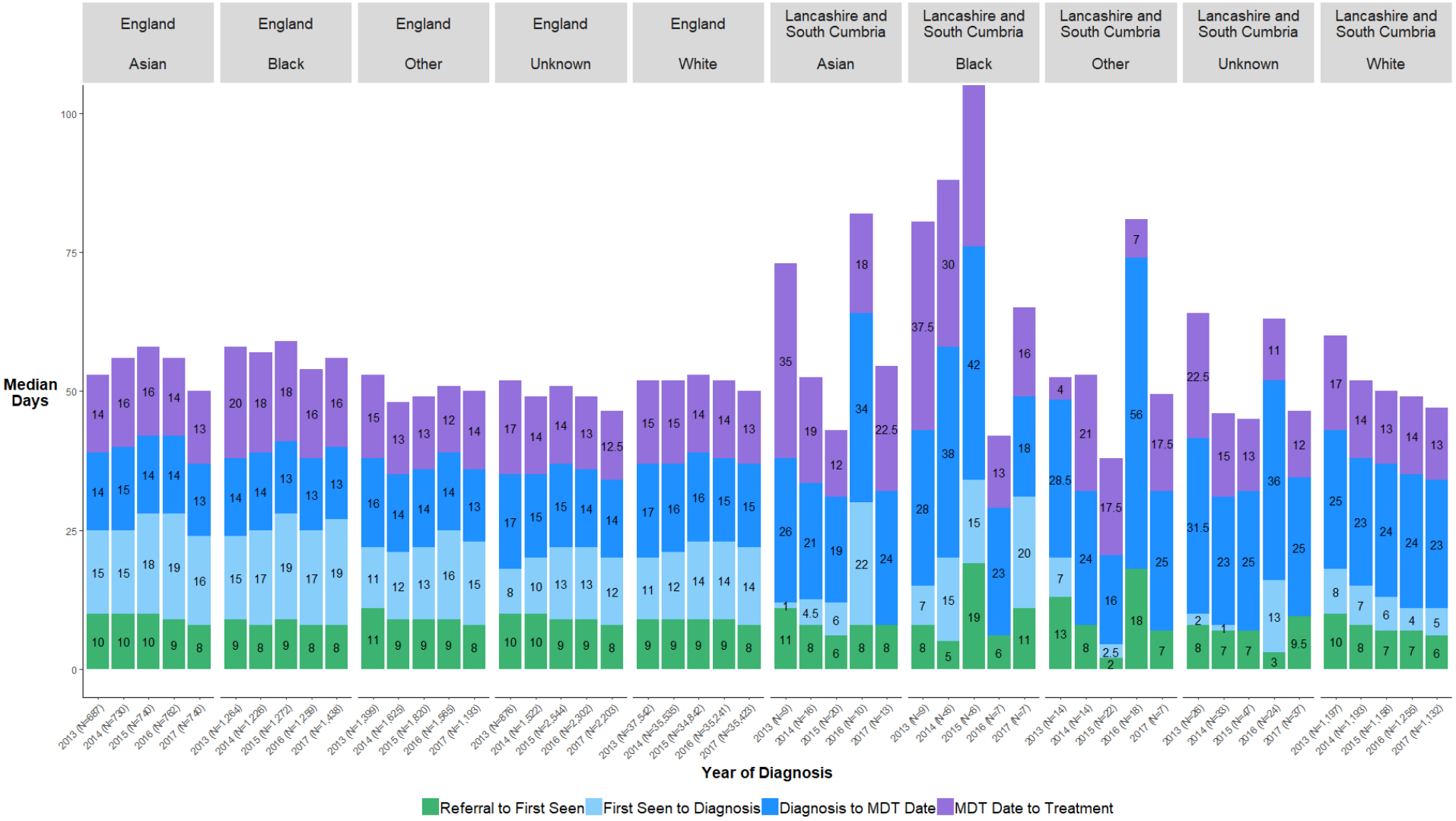
Prostate cancer: patient counts, by ethnicity (2013-2017)



Prostate cancer: distribution of patients, by ethnicity (2013-2017)

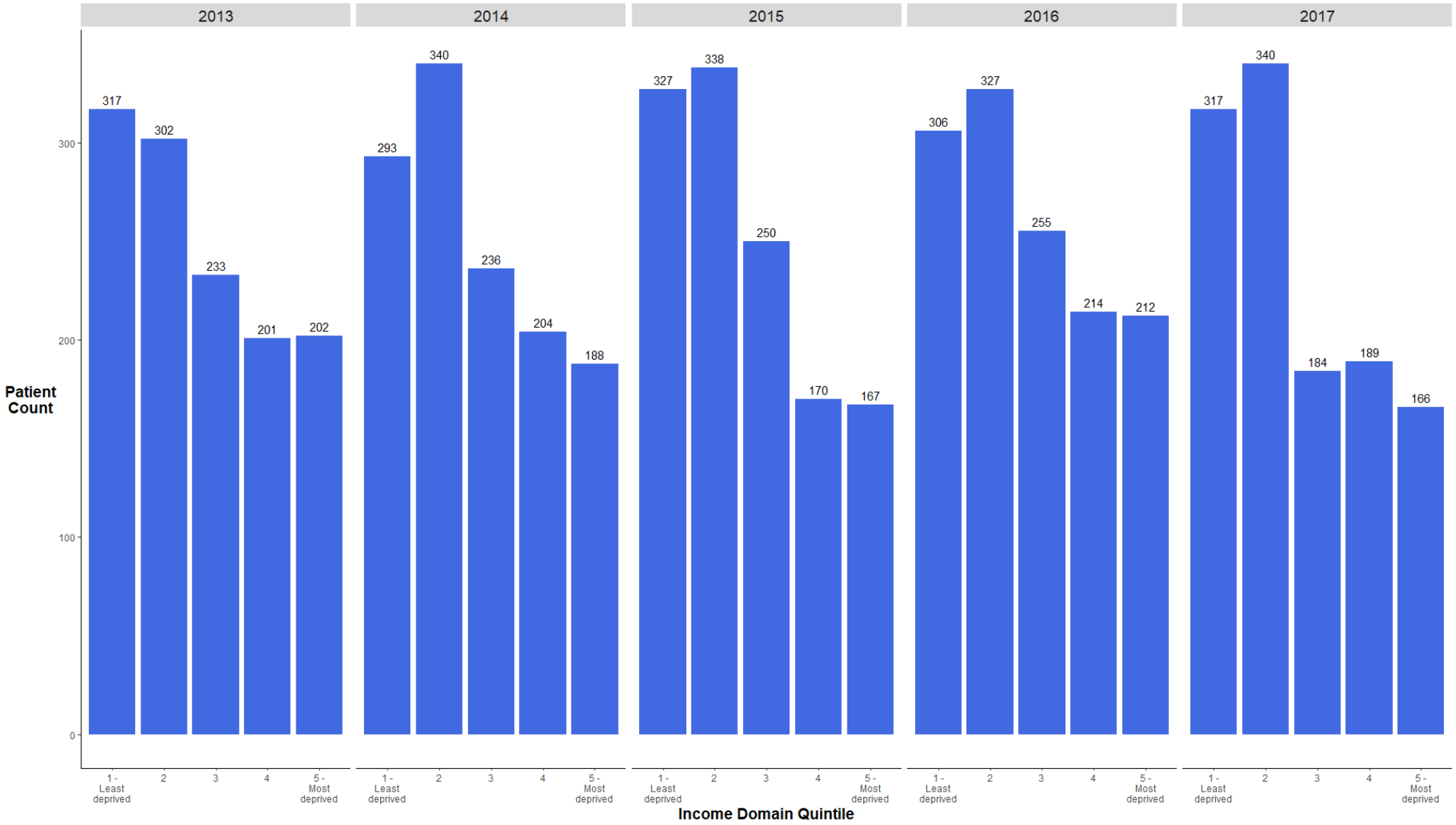


Prostate cancer: median days from referral to treatment, by ethnicity (2013-2017)

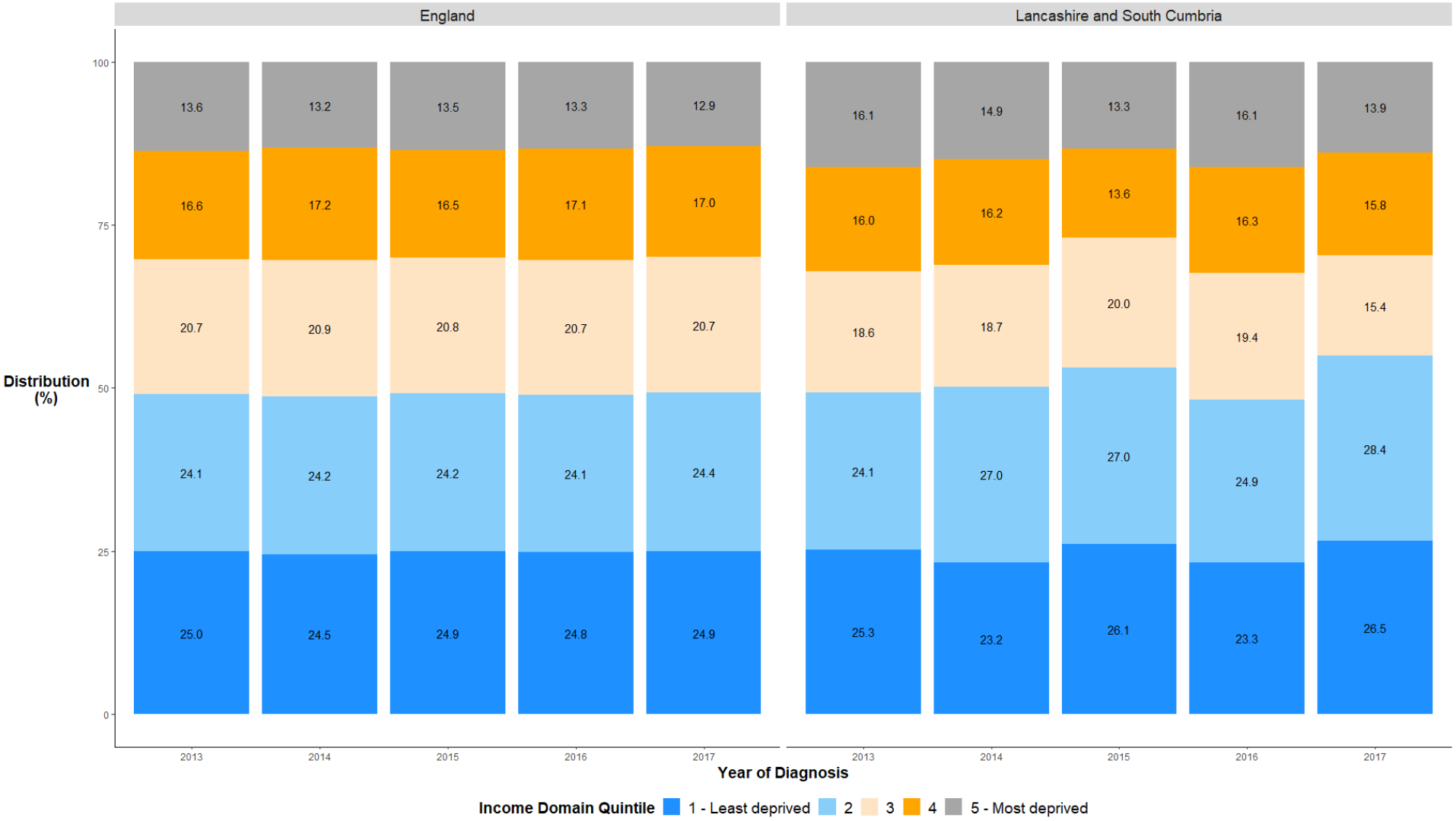


Income Domain Quintile

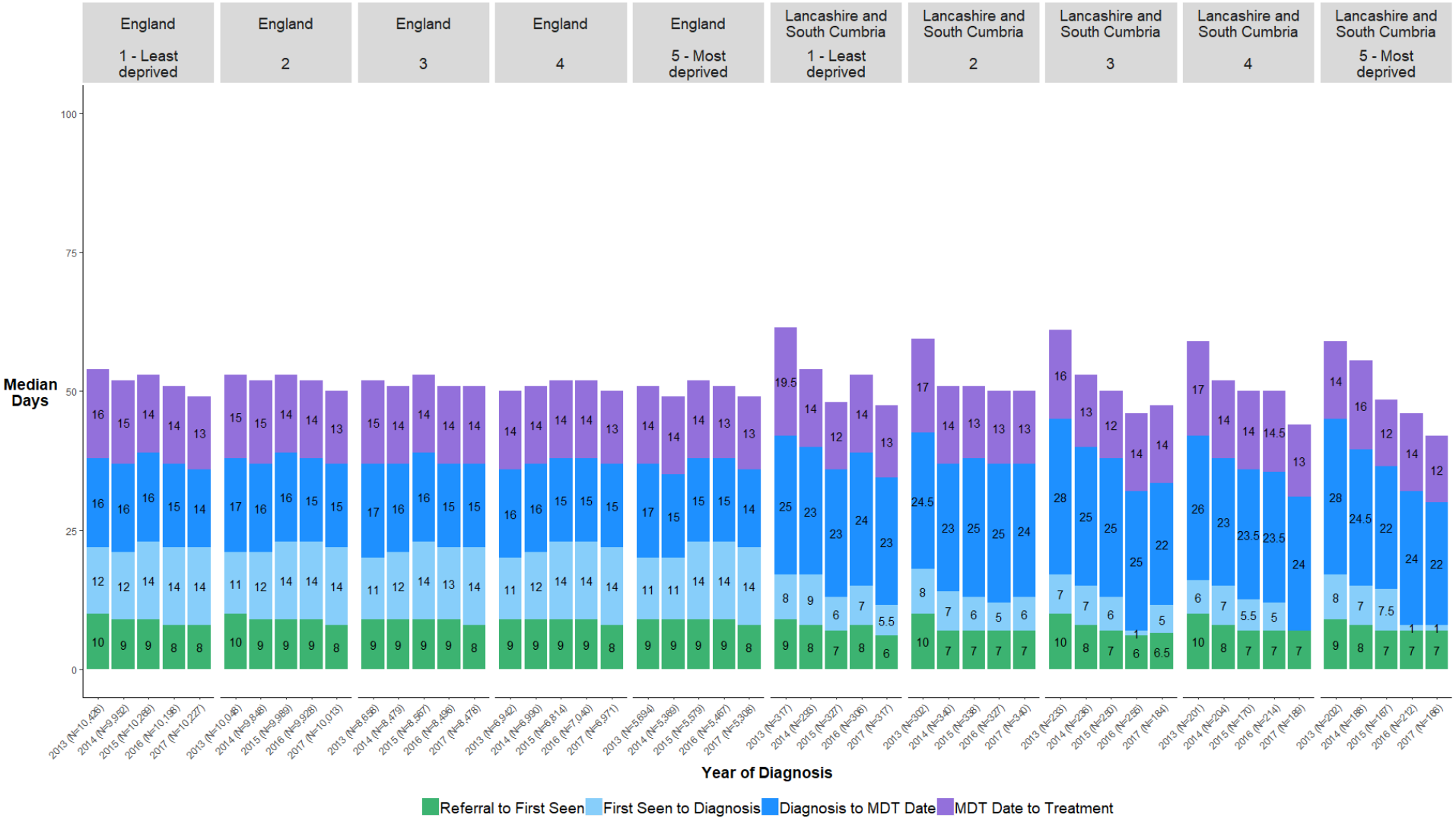
Prostate cancer: patient counts, by income domain quintile (2013-2017)



Prostate cancer: distribution of patients, by income domain quintile (2013-2017)

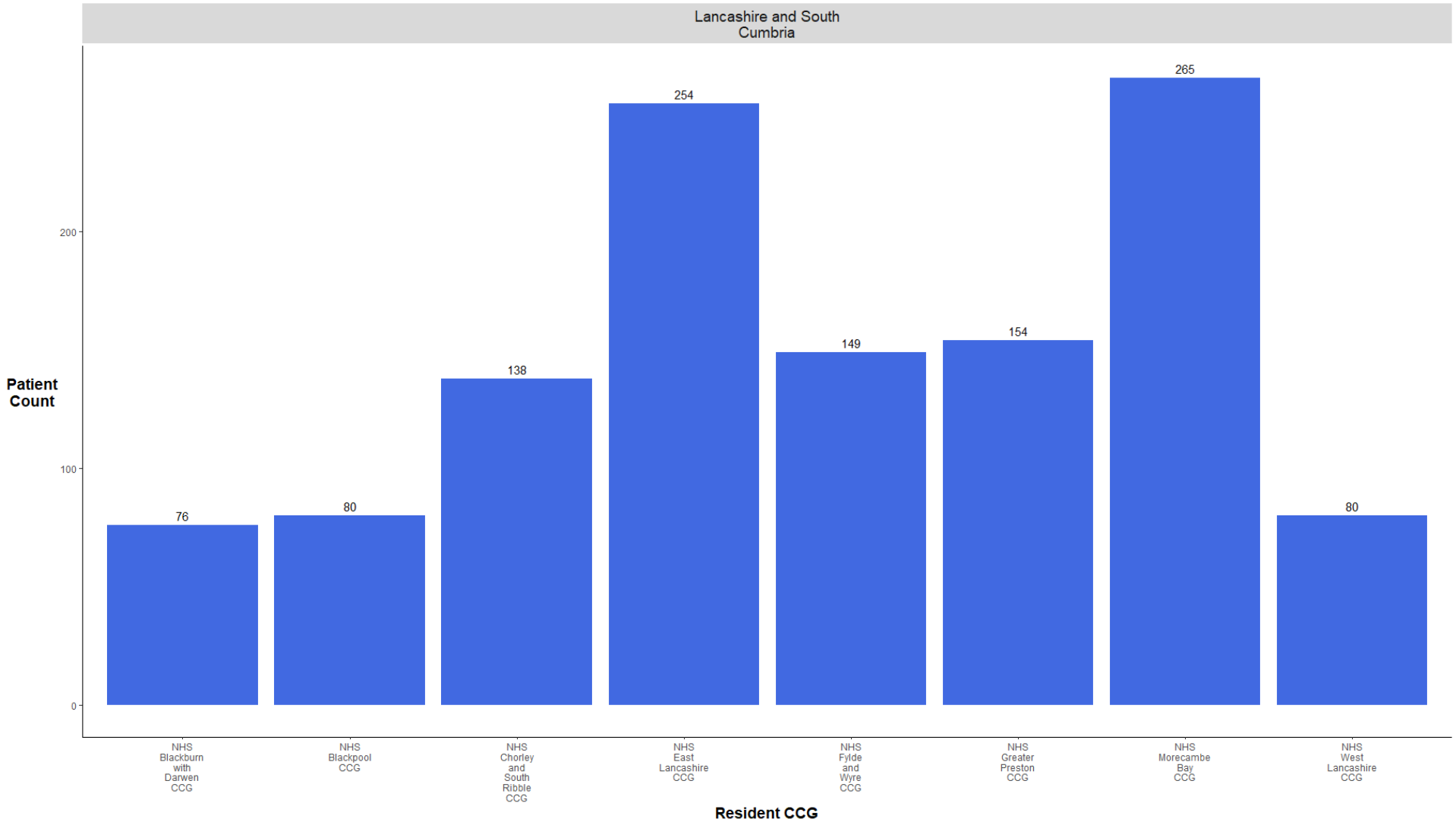


Prostate cancer: median days from referral to treatment, by income domain quintile (2013-2017)

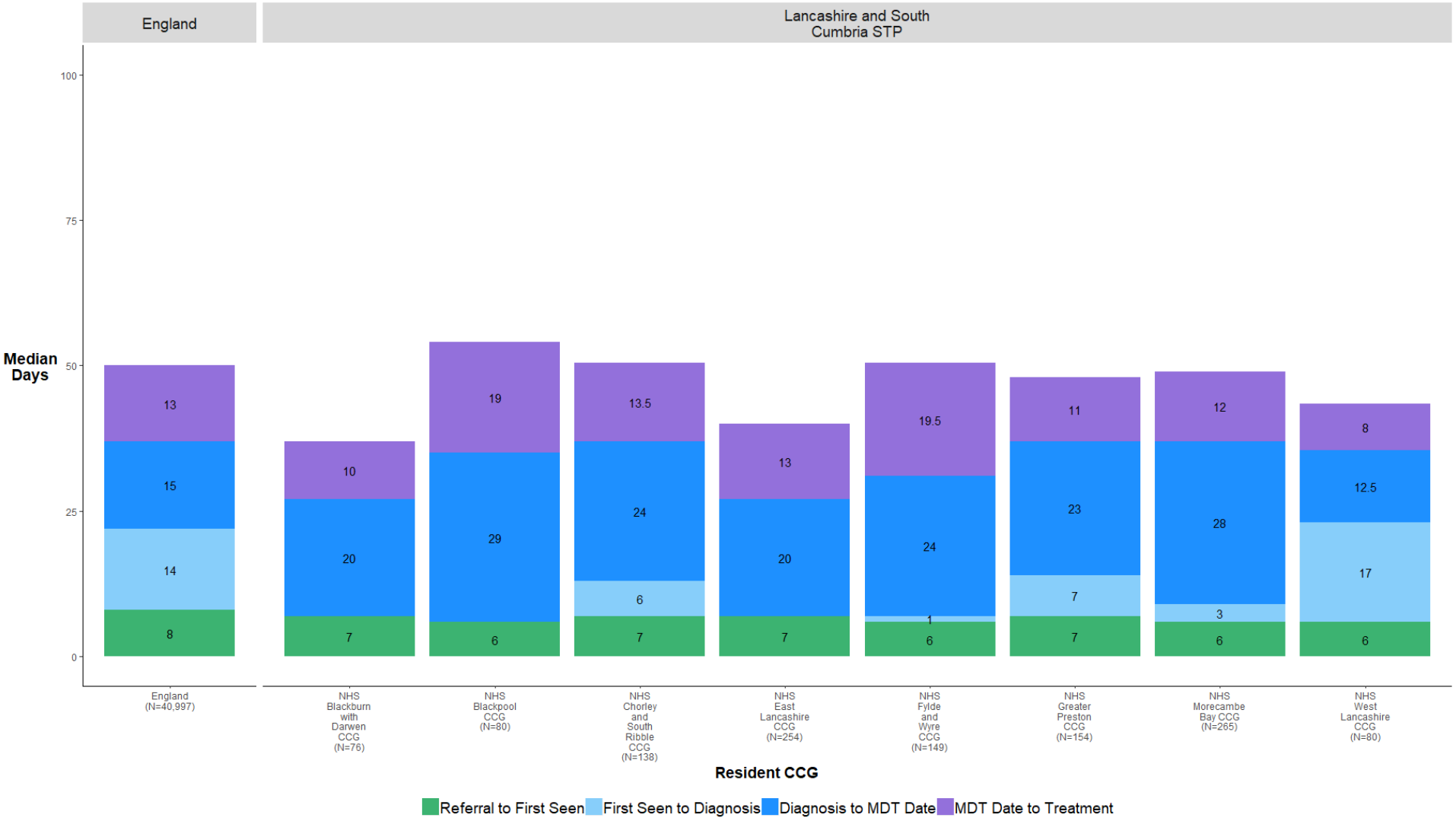


Resident CCG

Prostate cancer: patient counts, by resident CCG (2017)



Prostate cancer: median days from referral to treatment, by resident CCG (2017)



Prostate cancer: median days from referral to treatment, by resident CCG and STP (2013-2017)

