

Diagnostic Imaging Dataset: Standardised ICB rates 2022/23

Version 1, 28 November 2023

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1 Introduction

Imaging activity from the Diagnostic Imaging Dataset (DID) is presented by Integrated Care Board (ICB) in Tables 7 and 8 of the annual 2022/23 report¹. This Annex to the report expresses ICB activity as a rate per population, for each modality and for early diagnosis of cancer (EDOC) tests², standardised by age, sex and deprivation. It additionally shows the impact of age, sex and deprivation on the rates using Rates Ratios.

2 ICB Standardised Rates

2.1 Method

In 2022/23, the ICB of patients in the DID was derived from either their GP Practice code or, where this was missing, the Lower Super Output Area (LSOA) of their postcode. Rates per 10,000 population were calculated by dividing 2022/23 DID activity for ICBs by October 2022 (i.e. mid-year) GP Practice-registered ICB populations. Both sources were available by age and sex, with Index of Multiple Deprivation (IMD) quintile information added based on Lower Super Output Area (LSOA³).

Counts of imaging activity by ICB, sex, 5-year age band, imputed IMD quintile and modality or EDOC were extracted from DID. Cases that did not have full completeness for all these fields were removed: approximately 594,000 (1.3%) cases in 2022/23, compared with 792,000 (1.8%) cases in 2021/22.

Rates were indirectly standardised by applying the national rate by modality or EDOC for each IMD/Sex/Age breakdown to the local ICB population, to obtain an expected rate for each ICB based on their demography. The extent to which the observed rate differed from the expected rate indicated the extent to which the ICB differed from the standard, national rate. A standardised rate for each ICB by modality or EDOC was calculated as:

$$\text{Standardised Rate}_{\text{ICB}} = \left(\frac{\text{Observed Rate}_{\text{ICB}}}{\text{Expected Rate}_{\text{ICB}}} \right) \times \text{National Rate}$$

Indirect standardisation allows each rate to be compared with the national average but does not allow direct comparison between ICBs. Nevertheless, it can demonstrate regional patterns and indicate the extent of variation.

¹ Diagnostic Imaging Dataset Annual Statistical Release 2022/23, NHS England and NHS Improvement, 23rd November 2023.. Available (with tables by ICB) from <https://www.england.nhs.uk/statistics/statistical-work-areas/diagnostic-imaging-dataset/diagnostic-imaging-dataset-2022-23-data/>

² See above publication for definitions of each modality and further details on the collection.

³ The 2022/23 DID has 2011 LSOA derived from patient postcode, which was matched to 2015 IMD quintiles.

2.2 Results

The national rates⁴ of diagnostic imaging tests in 2022/23 per 10,000 people are shown in Tables 1 & 2 below.

Table 1. National Imaging Rates per 10,000 by modality, 2022/23

	X-ray	Ultrasound	CT Scan	MRI	Fluoro-scropy	Nuclear Medicine	PET Scan	SPECT Scan	Medical Photography
Rate per 10,000 people	3,506	1,633	1,129	652	142	51	41	8	9

Table 2. National Imaging Rates per 10,000 by Early Diagnosis of Cancer⁵, 2022/23

	Brain MRI	Chest X-ray	Chest CT	Kidney or Bladder Ultrasound	Abdomen or Pelvis Ultrasound
Rate per 10,000 people	141	1,287	119	34	193

Most of these rates are higher than in 2021/22.

The rates for some ICBs were impacted by missing data, as outlined in Section 4.1. Rates for some ICBs, especially at the lowest end of the distribution across all modalities, may therefore have shortfalls.

For most ICBs the standardised rate was within 10% of the crude rate, but there are bigger differences particularly in areas with predominantly younger or older populations. The impact of age, sex and deprivation on imaging rates is explored in Section 3.

Standardised 2022/23 rates by ICB are available in Annex B (separate Excel file). The following sections summarise the distribution of rates for each modality or EDOC and illustrate these on a map.

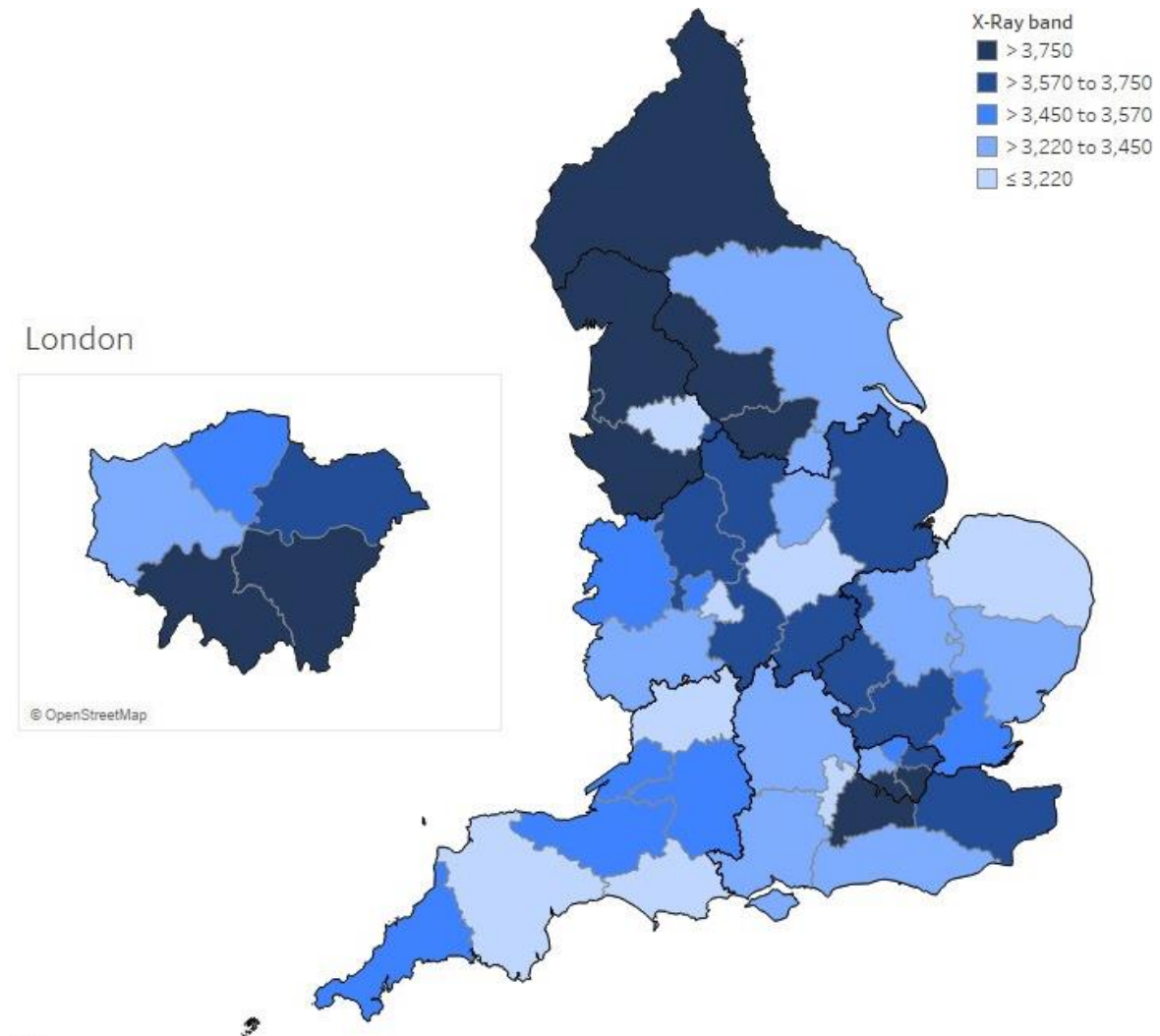
⁴ These national rates exclude activity with missing age, sex, deprivation or ICB (1.3% of overall imaging tests).

⁵ Brain MRI may be used to diagnose brain cancer; Chest X-ray and Chest CT to diagnose lung cancer, Kidney or Bladder ultrasound to diagnose kidney or bladder cancer and Abdomen and/or pelvis ultrasound to diagnose ovarian cancer (but this test, and the rates given here, are not restricted to females). Although these tests may be used to diagnose cancer, many have wider clinical uses and it is not possible to distinguish between the different uses of these tests.

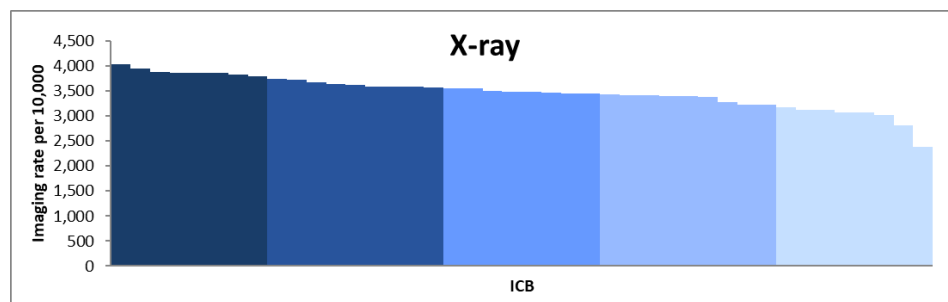
2.2.1 X-ray

There was some regional variation in X-ray rates, see Map 1 and Graph 1, with rates generally higher than average in ICBs in the North East and Yorkshire, North West and Midlands regions. The national rate was 3,506 X-rays per 10,000 registered population and 64% ICBs were within one standard deviation of the mean, that is between 3,148 and 3,791 tests per 10,000 population.

Map 1. Standardised X-ray rates by ICB, 2022/23



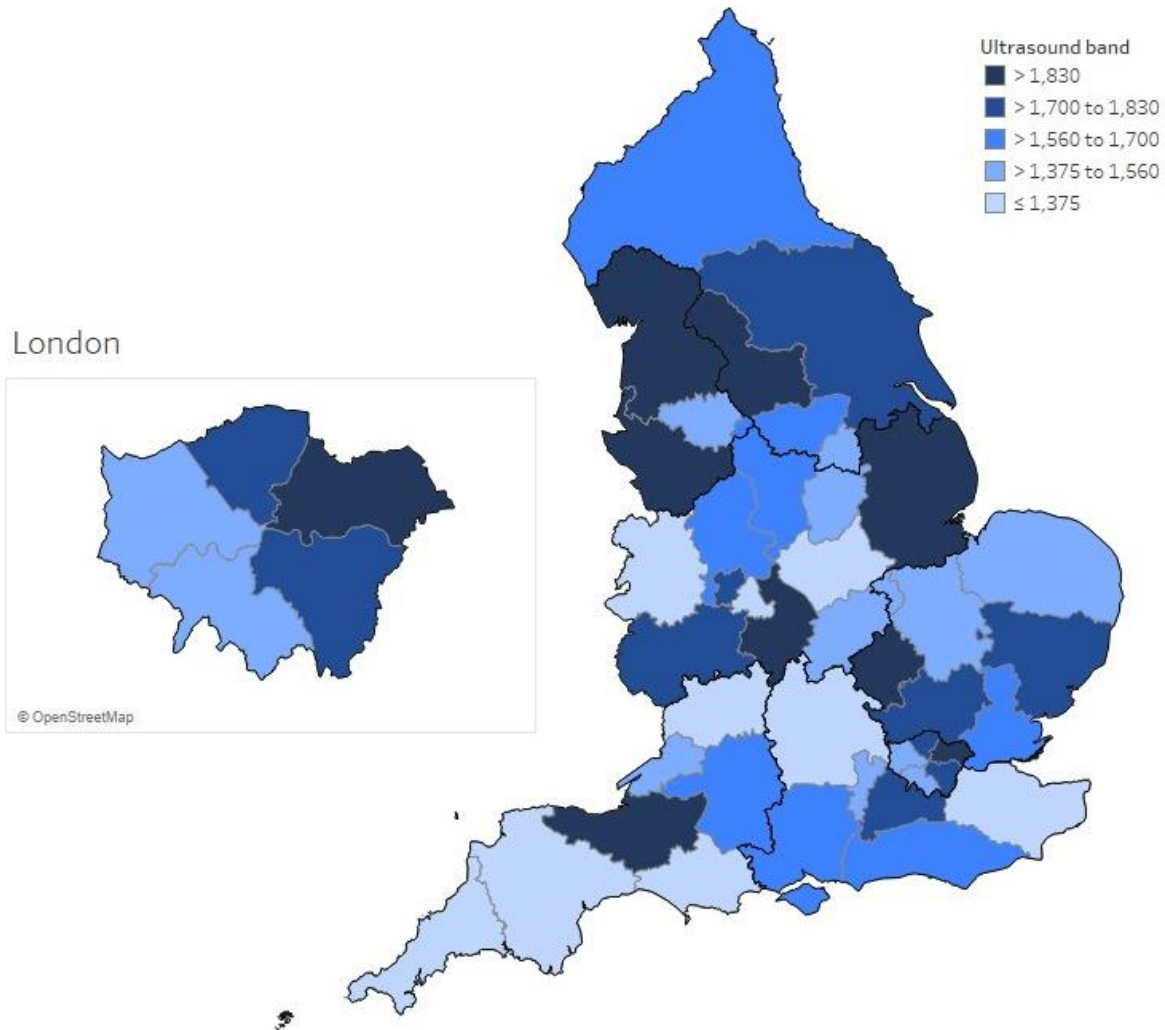
Graph 1. Standardised X-ray rates by ICB, 2022/23



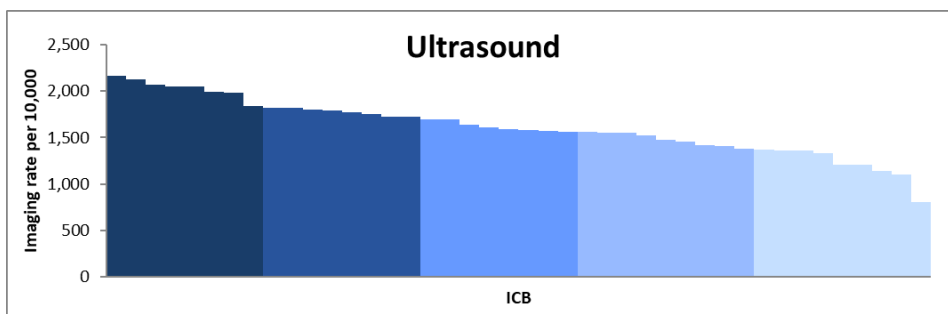
2.2.2 Ultrasound

As with X-ray, Ultrasound showed a concentration of higher rates in ICBs in the North West region (Map 2). Ultrasound does not rise as steeply with age as some of the other modalities (see Section 3), so most ICBs have similar standardised rates and crude rates per 10,000 population. Nevertheless, the ICB rates varied more than the other major modalities, probably because of differences in the extent to which all ultrasound activity (especially obstetric) is recorded in hospitals' radiological information systems. The national rate was 1,633 ultrasounds per 10,000 population.

Map 2. Standardised Ultrasound rates by ICB, 2022/23



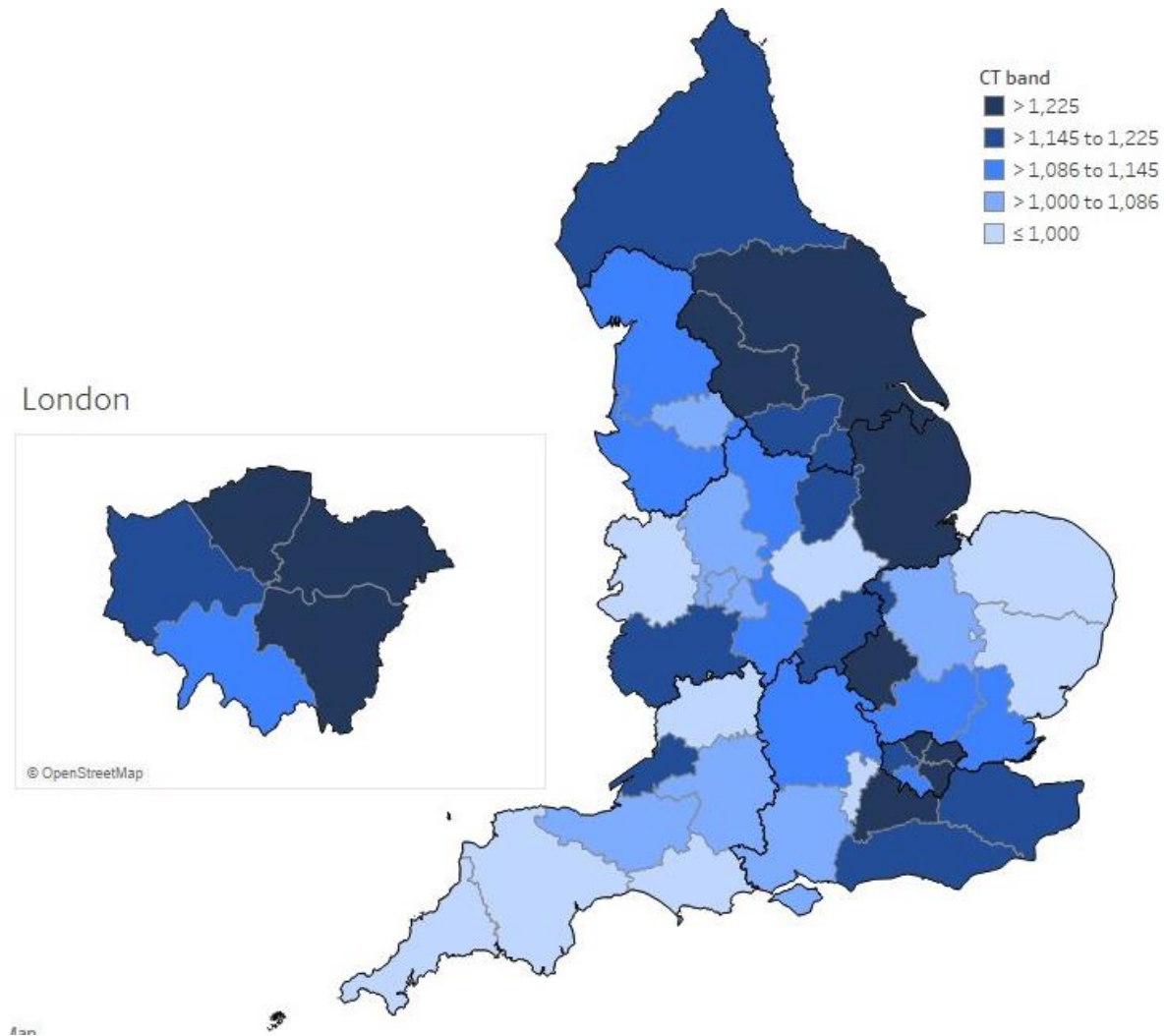
Graph 2. Standardised Ultrasound rates by ICB, 2022/23



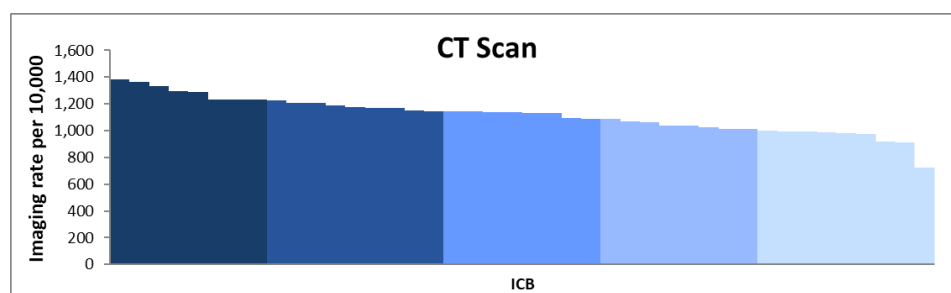
2.2.3 CT Scans

The rate of CT scanning tended to be lower in the South West region, but there were areas of both high and lower rates across England (Map 3), with rates particularly high across the North East and Yorkshire region. Demographics had a large effect on CT scan rates, with only 55% of ICBs having a standardised rate within 10% of their crude rate. The national rate was 1,129 CT scans per 10,000 registered population and 74% of ICBs were within one standard deviation of the mean, that is between around 985 and 1,245 tests per 10,000 population.

Map 3. Standardised CT rates by ICB, 2022/23



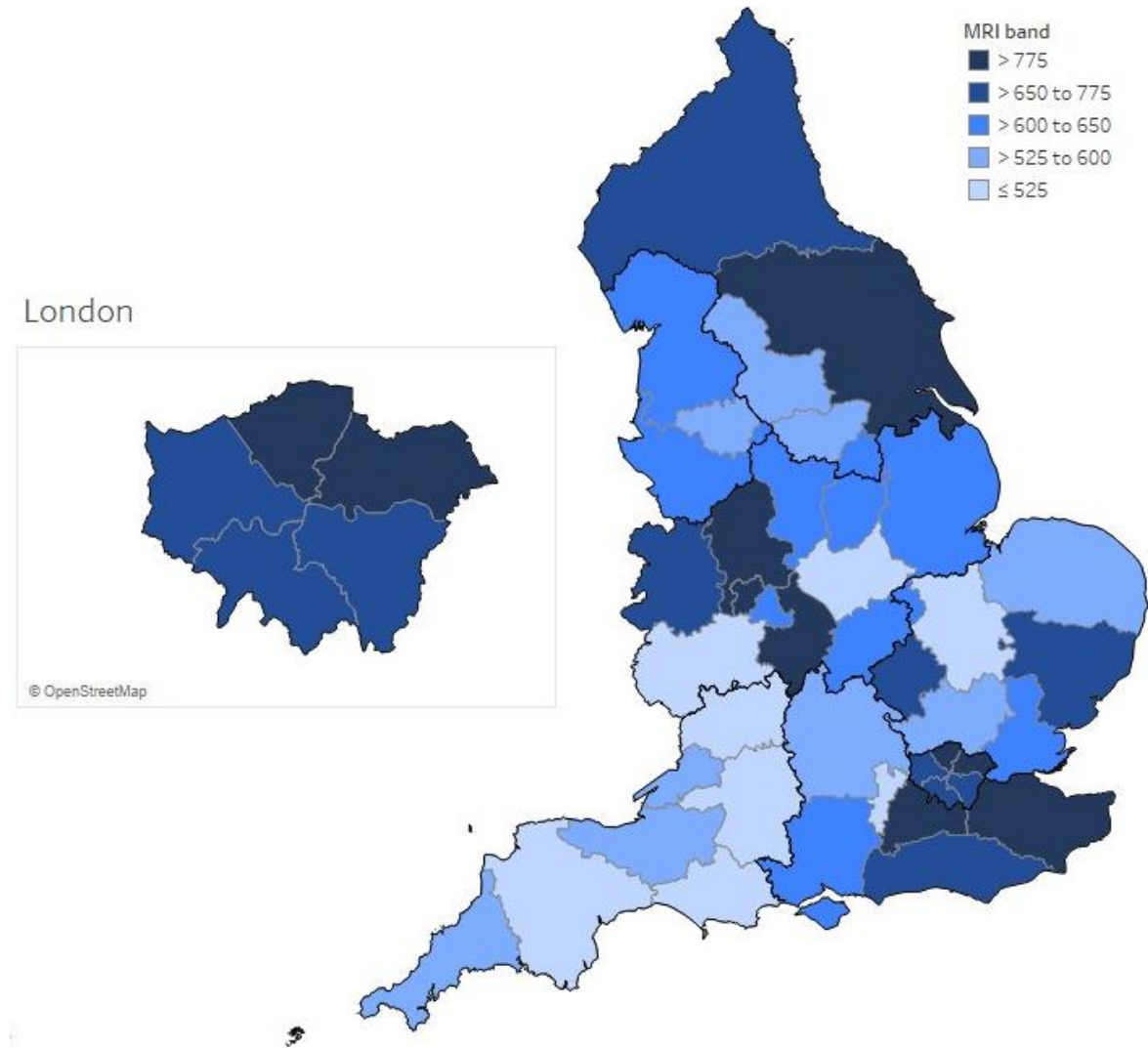
Graph 3. Standardised CT rates by ICB, 2022/23



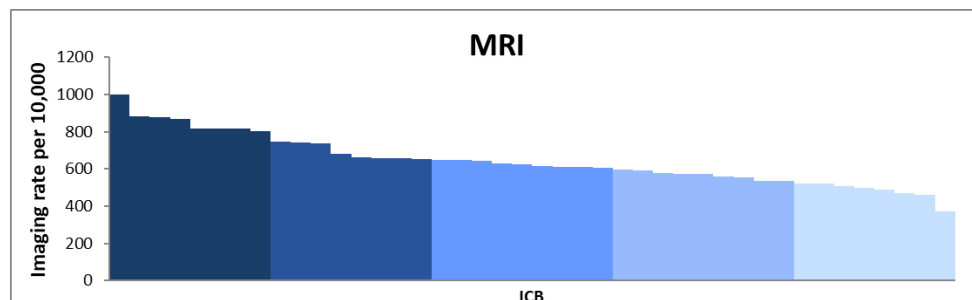
2.2.4 MRI Scans

MRI showed some regional pattern, with lower rates observed throughout the South West Region and a slight concentration of high rates in parts of North East and Yorkshire, the Midlands and the South East (Map 4). The national rate was 652 MRI scans per 10,000 registered population.

Map 4. Standardised MRI rates by ICB, 2022/23



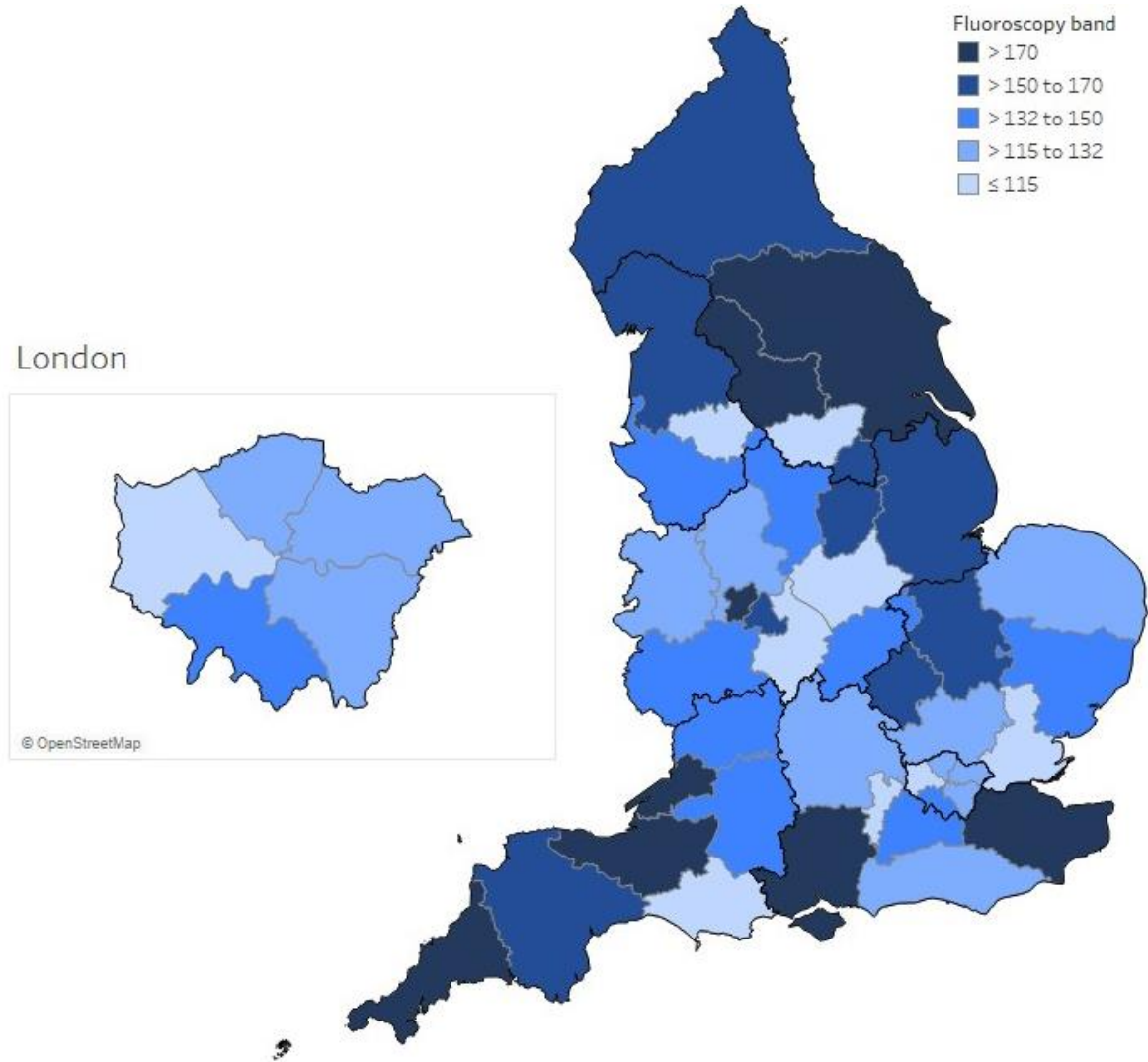
Graph 4. Standardised MRI rates by ICB, 2022/23



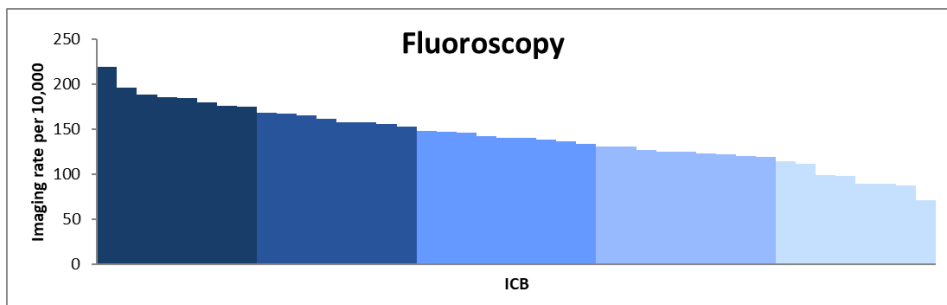
2.2.5 Fluoroscopy

Rates of Fluoroscopy tended to be lower in London (Map 5) but were quite variable across England. The national rate was 142 Fluoroscopy scans per 10,000 registered population.

Map 5. Standardised Fluoroscopy rates by ICB, 2022/23



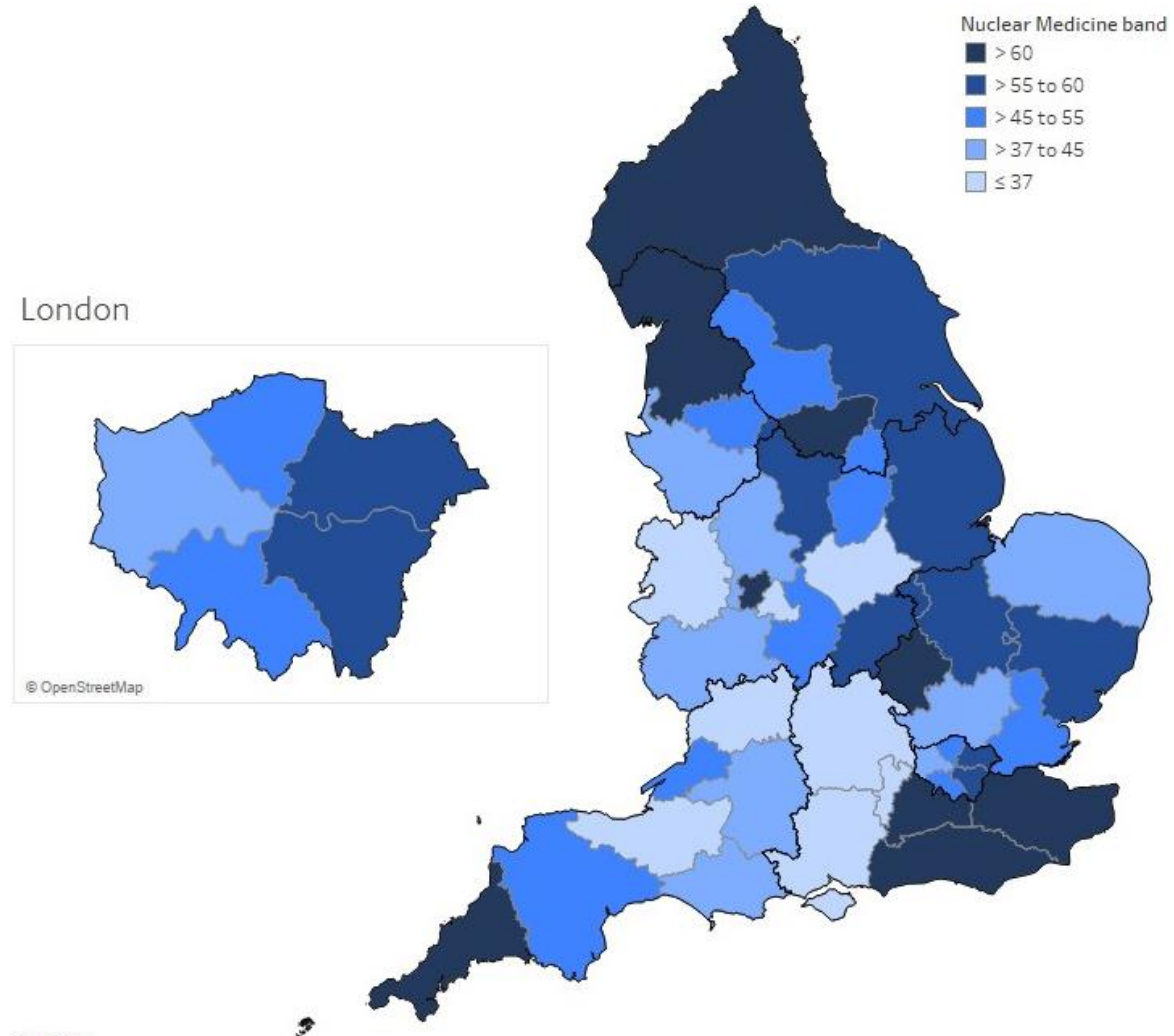
Graph 5. Standardised Fluoroscopy rates by ICB, 2022/23



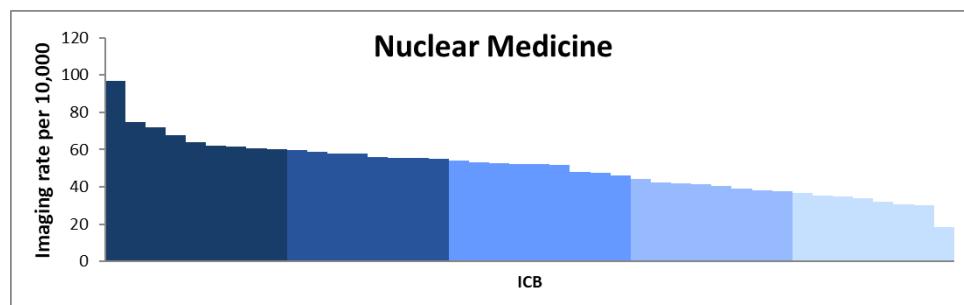
2.2.6 Nuclear Medicine

Nuclear Medicine showed little consistent regional variation but had higher rates in parts of the South East and lower rates in other parts of the South and Midlands (Map 6). The national rate was 51 Nuclear Medicine exams per 10,000 registered population.

Map 6. Standardised Nuclear Medicine rates by ICB, 2022/23



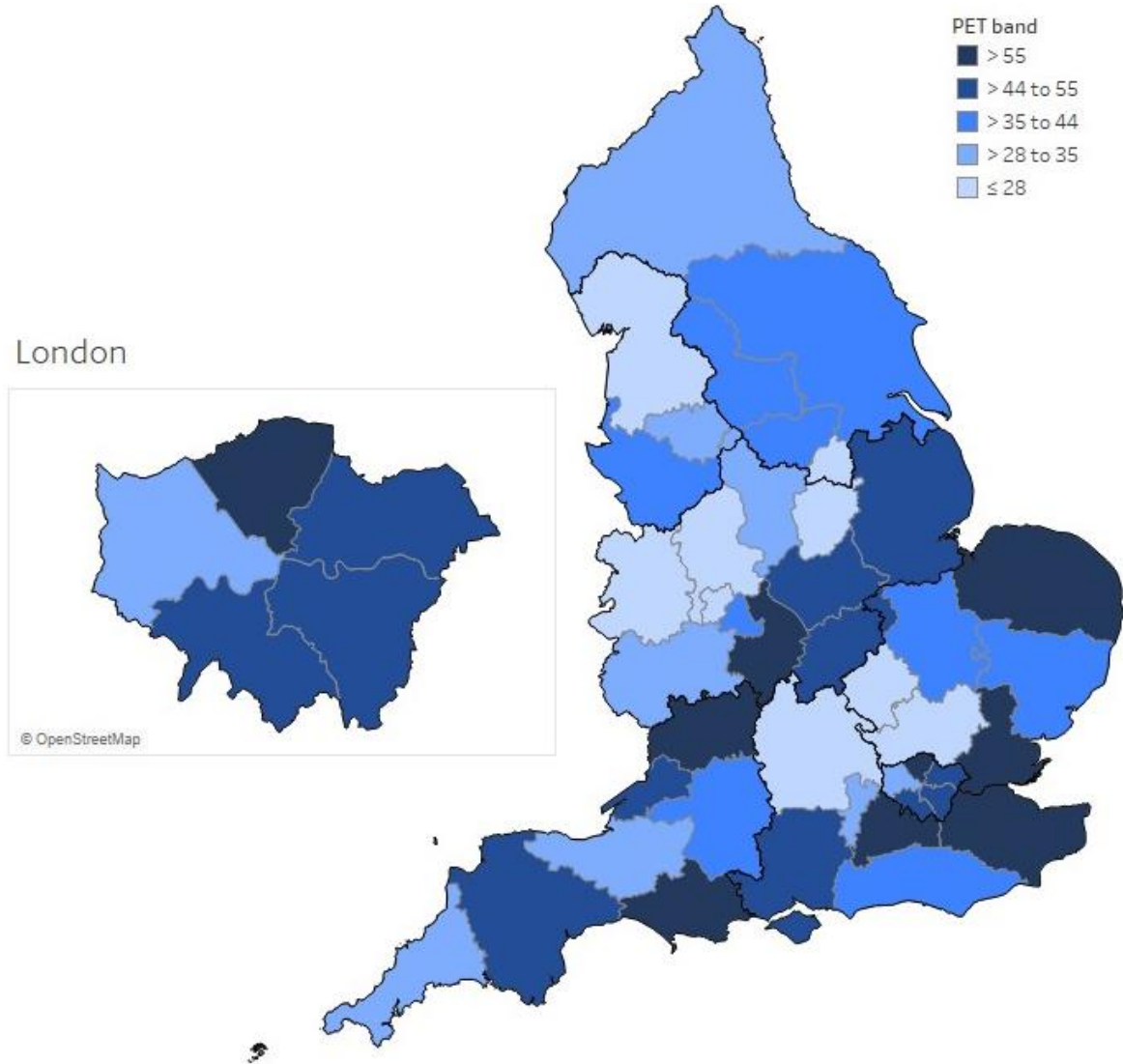
Graph 6. Standardised Nuclear Medicine rates by ICB, 2022/23



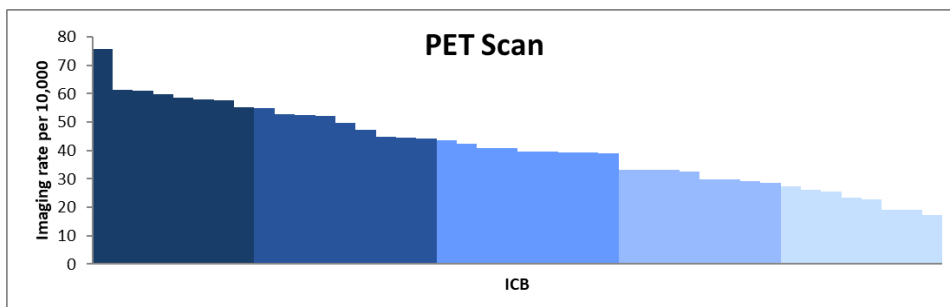
2.2.7 PET Scan

PET scan showed some regional variation, with several clusters of higher rates (Map 7). Some of the variability arose from the relatively small numbers: the national rate was 41 PET scans per 10,000 registered population and 60% of ICBs were within one standard deviation of the mean between 27 and 55 tests per 10,000 population.

Map 7. Standardised PET Scan rates by ICB, 2022/23



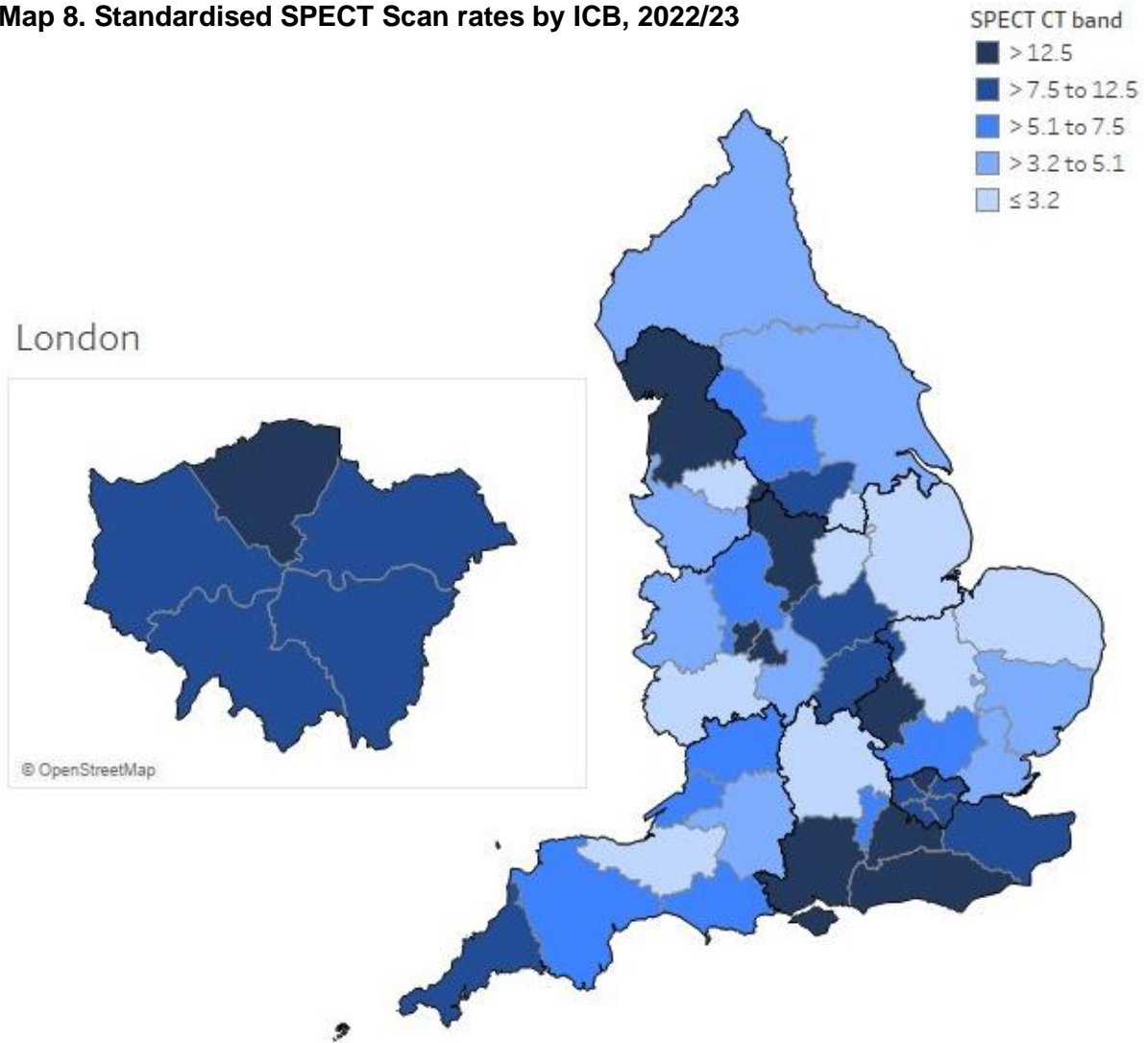
Graph 7. Standardised PET Scan rates by ICB, 2022/23



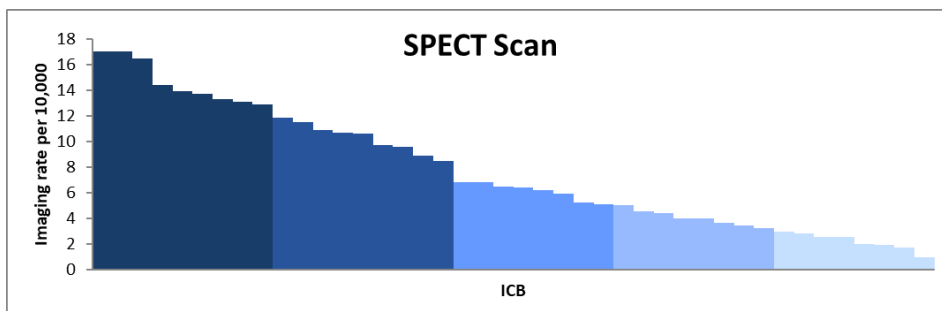
2.2.8 SPECT Scan

SPECT scan showed clusters of high rates in London and the South East, but with relatively low rates for many ICBs (Map 8). The biggest volume providers of SPECT were NHS Surrey Heartlands and NHS North Central London ICBs, both with rates over double the national rate. The national rate was 8 SPECT scans per 10,000 registered population but the variance was wide and one standard deviation of the mean extended from 3 to 12 tests per 10,000 population (with 60% of ICBs within this range).

Map 8. Standardised SPECT Scan rates by ICB, 2022/23



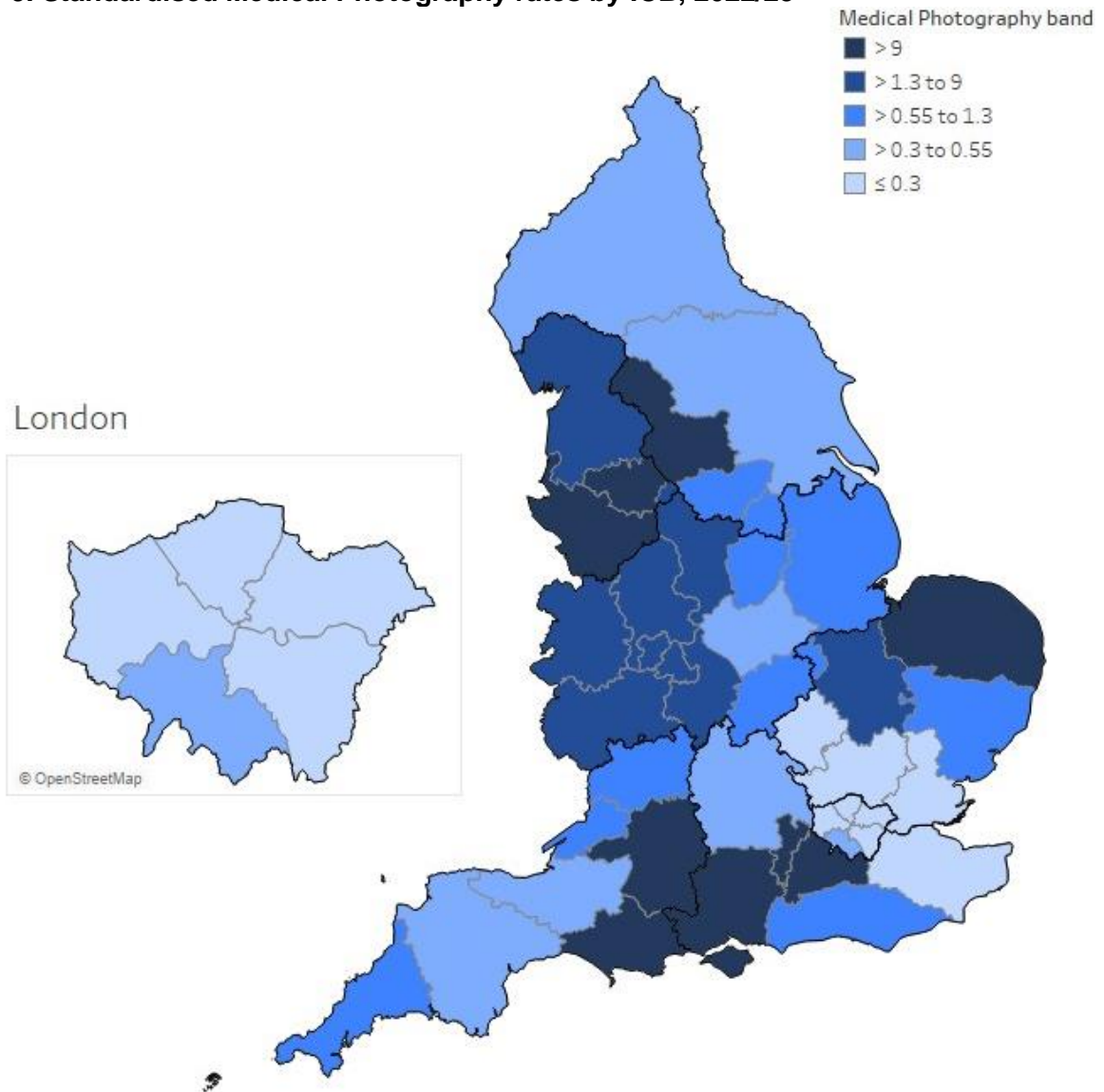
Graph 8. Standardised SPECT Scan rates by ICB, 2022/23



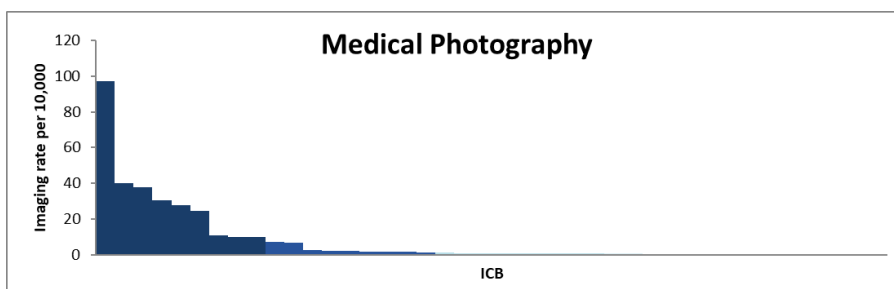
2.2.9 Medical Photography

Medical Photography showed a marked cluster of high rates, particularly in the North West of England and around Surrey, Hampshire and Norfolk and Waveney. (Map 9). However, only 11 providers nationally reported a rate of more than a few Medical Photography images in the DID, the biggest being James Paget University Hospitals NHS Foundation Trust, Liverpool University Hospitals NHS Foundation Trust, Northern Care Alliance NHS Foundation Trust and Calderdale and Huddersfield NHS Foundation Trust. Most ICBs had very little reported Medical Photography (Map 9).

Map 9. Standardised Medical Photography rates by ICB, 2022/23



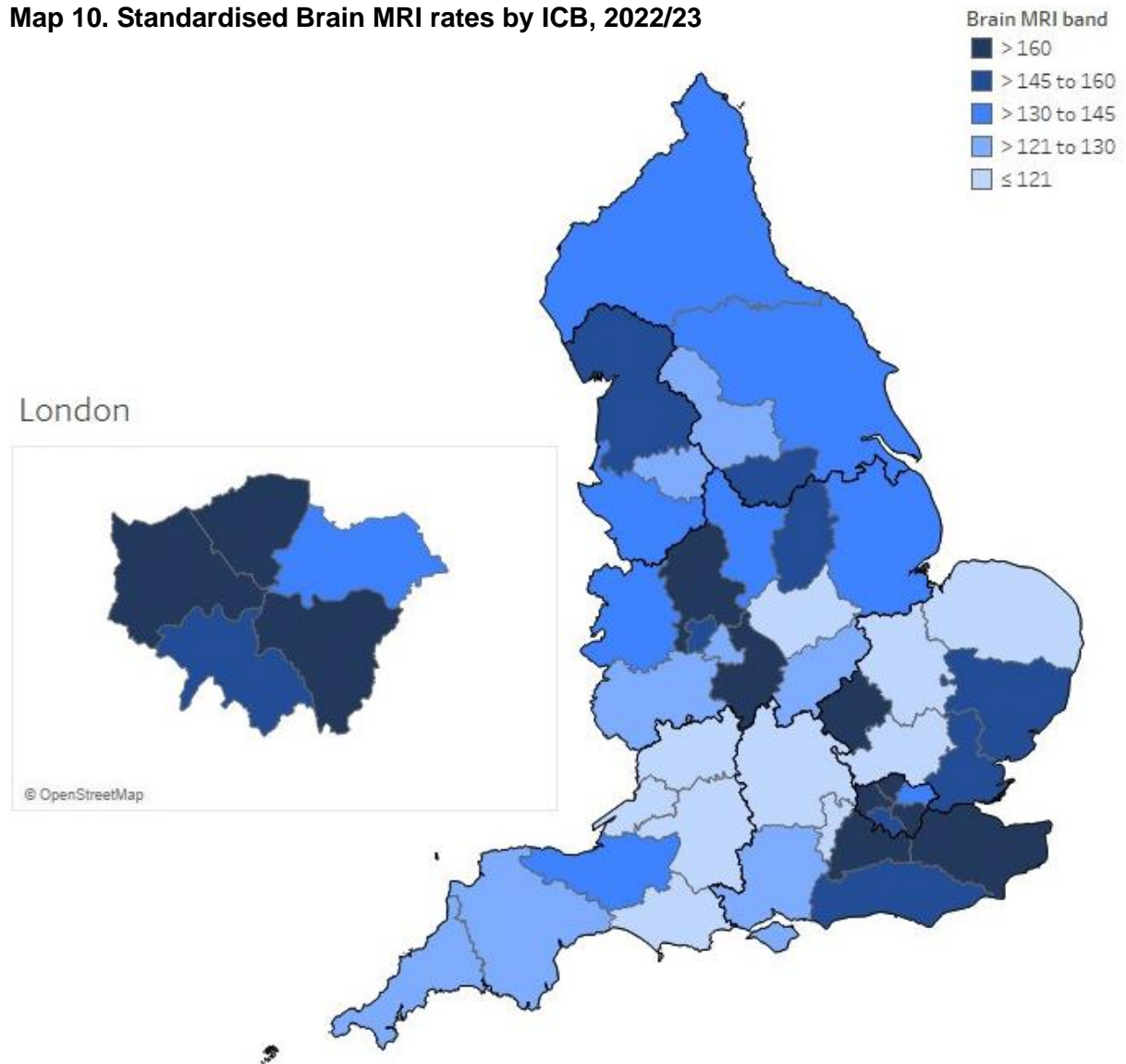
Graph 9. Standardised Medical Photography rates by ICB, 2022/23



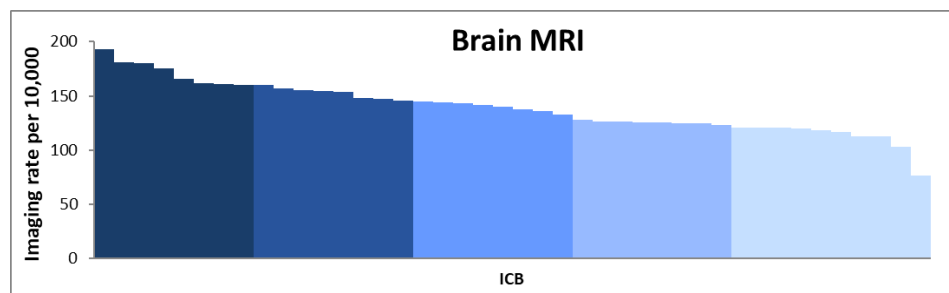
2.2.10 Brain MRI

Brain MRI showed relatively little regional pattern (Map 10) but with high rates in parts of the South East and Midlands, as for all MRI (see section 2.2.4). High rates tended to cluster around neighbouring ICBs and many of these areas had at least one high-volume provider, although there were a wide variety of providers of different levels of activity. The national rate was 141 Brain MRIs per 10,000 registered population.

Map 10. Standardised Brain MRI rates by ICB, 2022/23



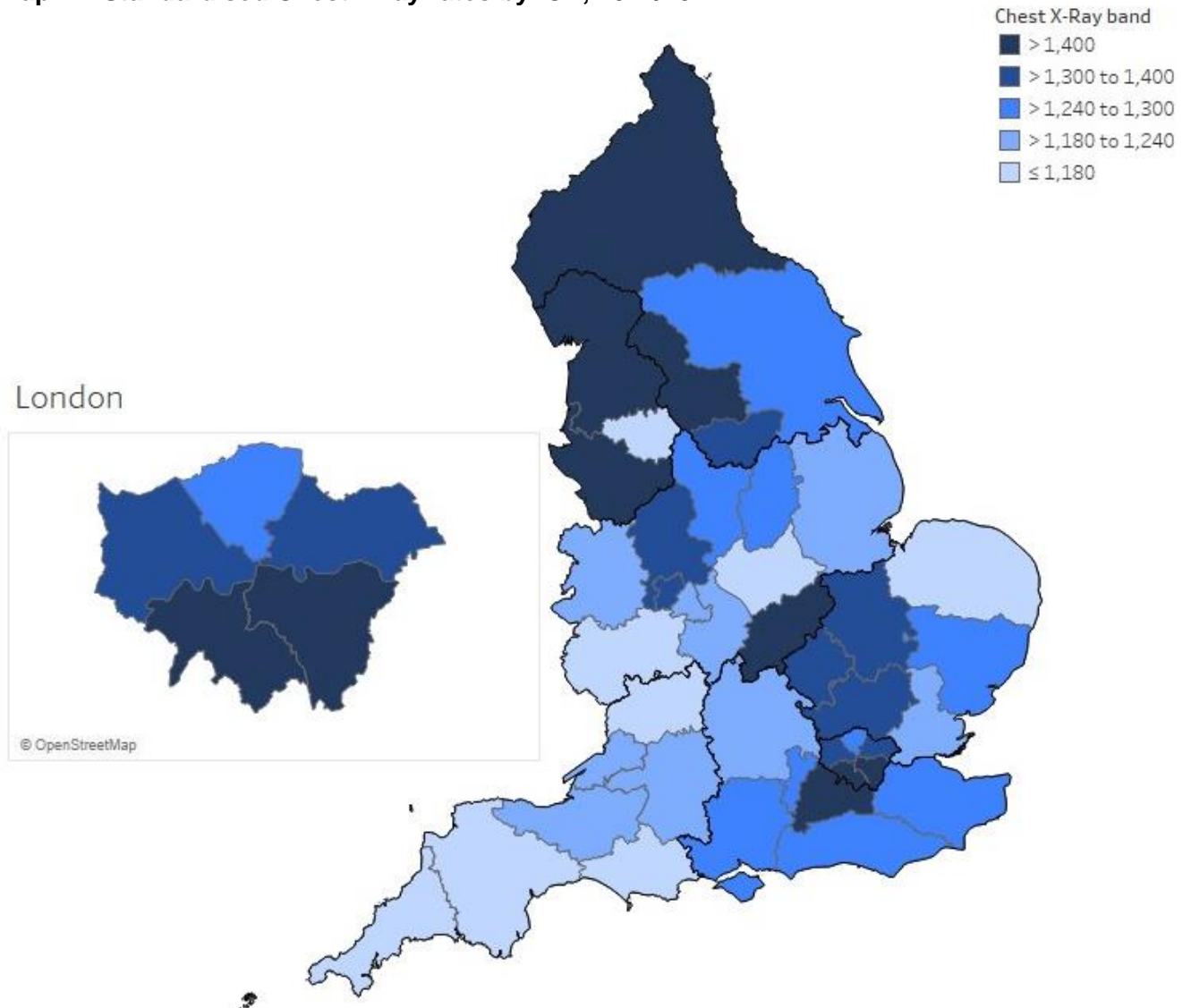
Graph 10. Standardised Brain MRI rates by ICB, 2022/23



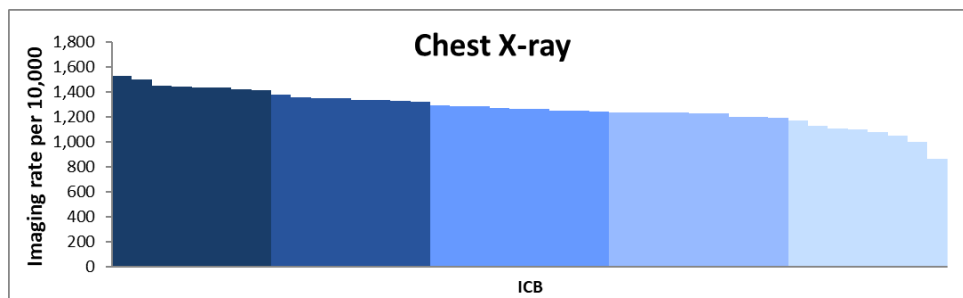
2.2.11 Chest X-ray

Chest X-ray showed less variation across CCGs than the other tests for potential early diagnosis of cancer, with much bigger numbers of tests (Map 11). The national rate was 1,287 Chest X-rays per 10,000 registered population.

Map 11. Standardised Chest X-ray rates by ICB, 2022/23



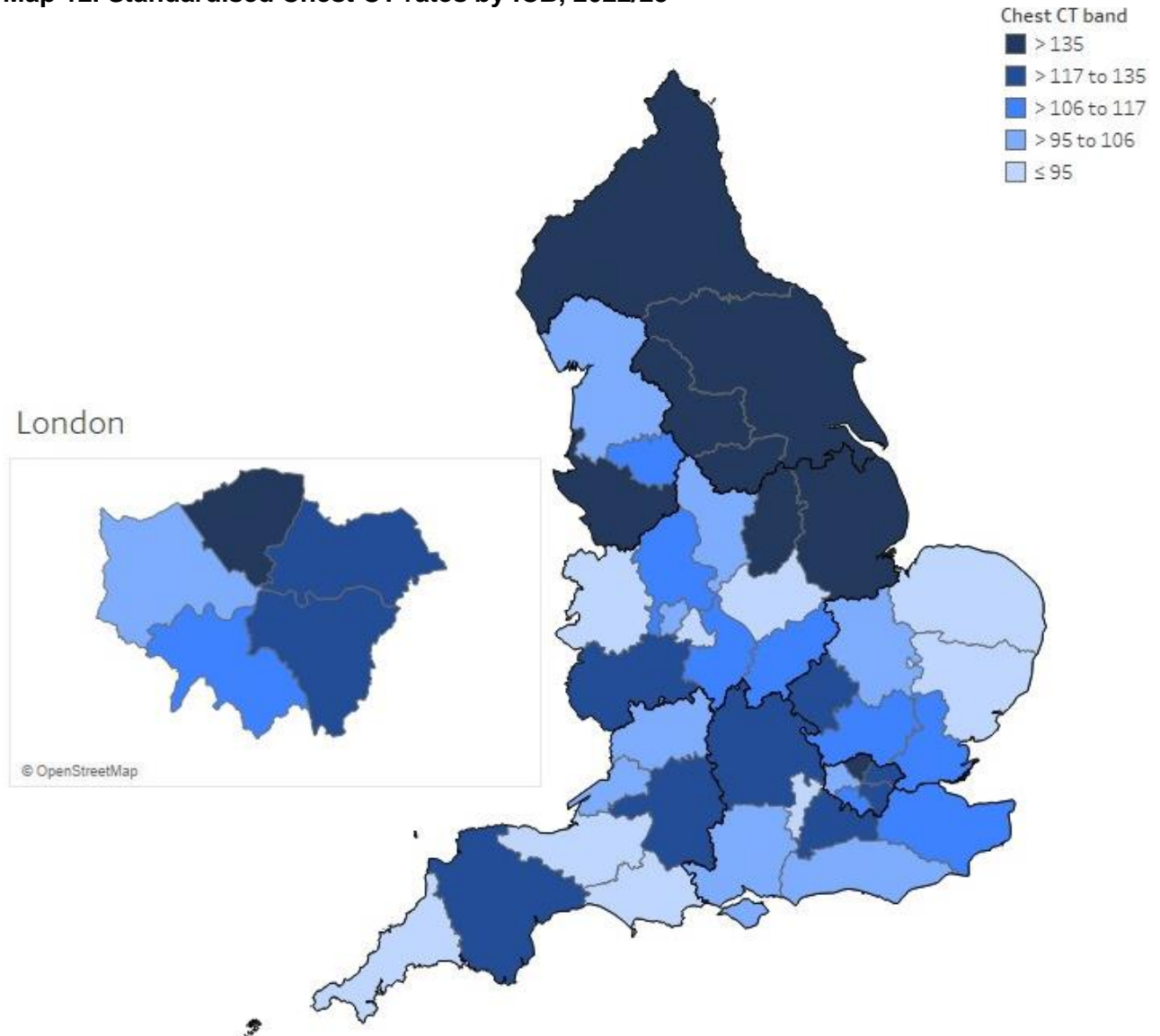
Graph 11. Standardised Chest X-ray rates by ICB, 2022/23



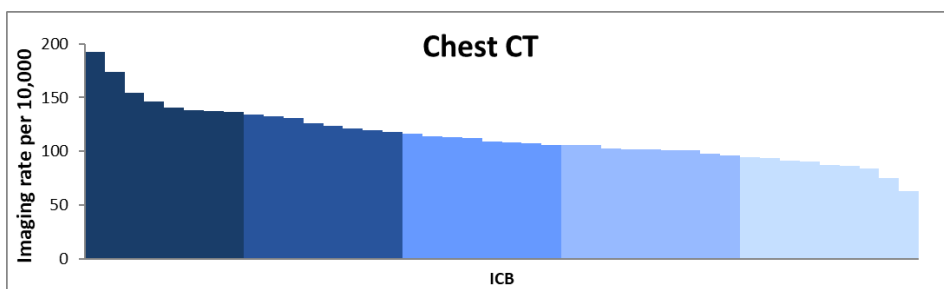
2.2.12 Chest CT

Chest CT showed some regional variation with the highest rates clustered around the North East and Yorkshire region, Lincolnshire and Nottinghamshire (Map 12). The national rate was 119 Chest CTs per 10,000 registered population and 76% of ICBs were within one standard deviation of the mean, between 93 and 143 tests per 10,000 population.

Map 12. Standardised Chest CT rates by ICB, 2022/23



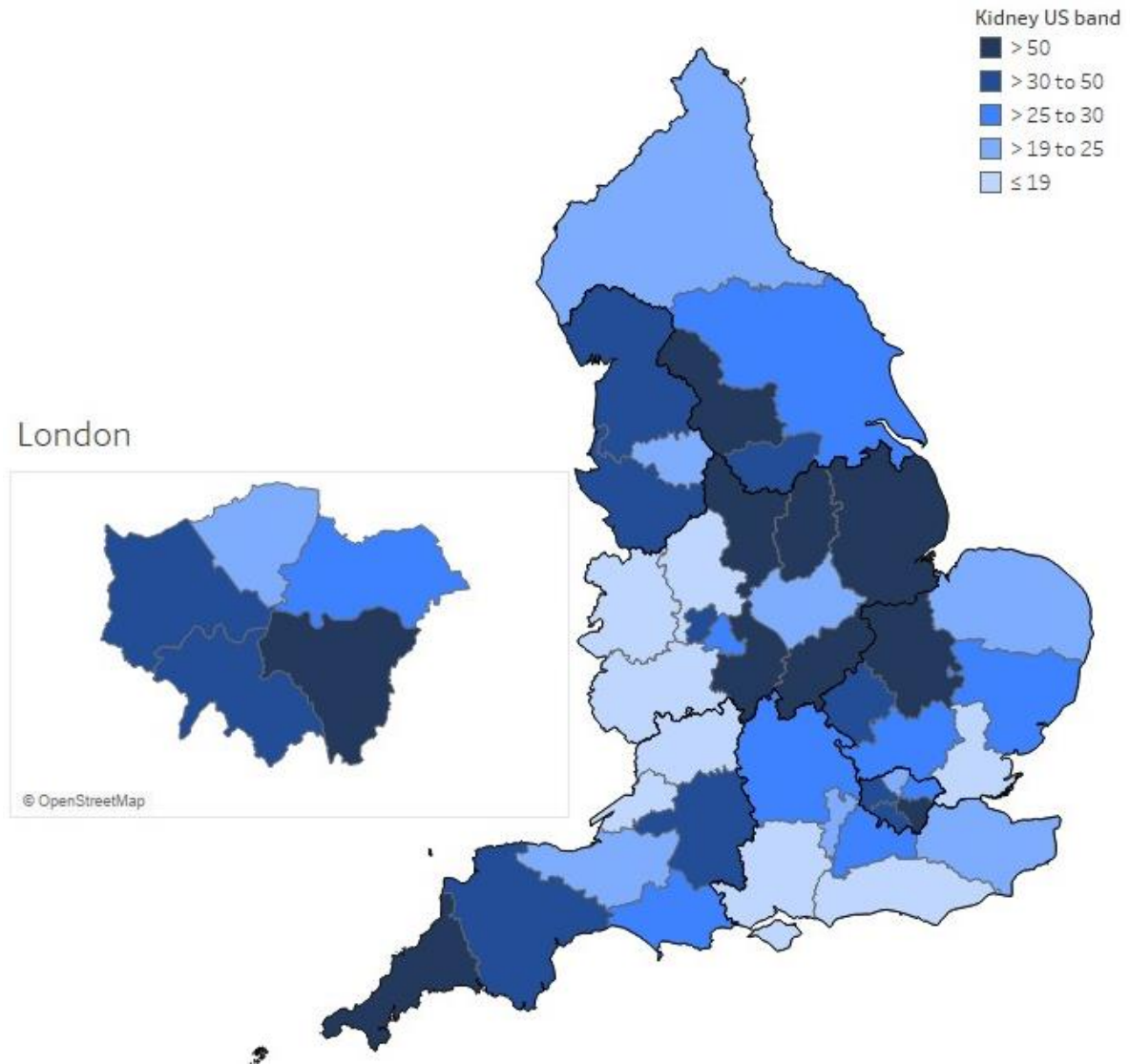
Graph 12. Standardised Chest CT rates by ICB, 2022/23



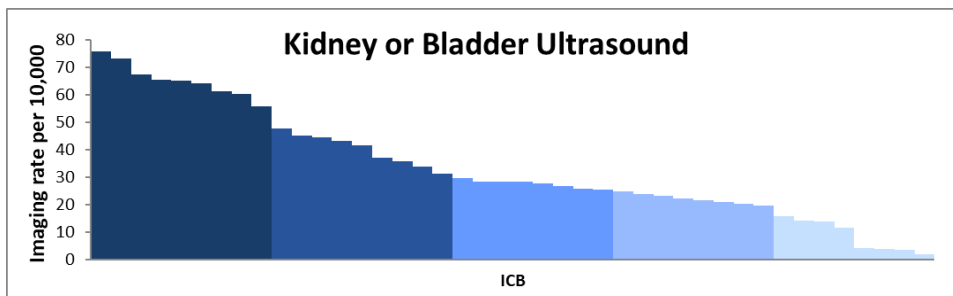
2.2.13 Kidney & Bladder Ultrasound

There was a wider range of rates of Kidney & Bladder Ultrasound than other Early Diagnosis of Cancer (EDOC) tests, with both the lowest and highest rates grouped together in clusters of ICBs (Map 13). The national rate was 34 Kidney & Bladder ultrasounds per 10,000 registered population.

Map 13. Standardised Kidney & Bladder Ultrasound rates by ICB, 2022/23



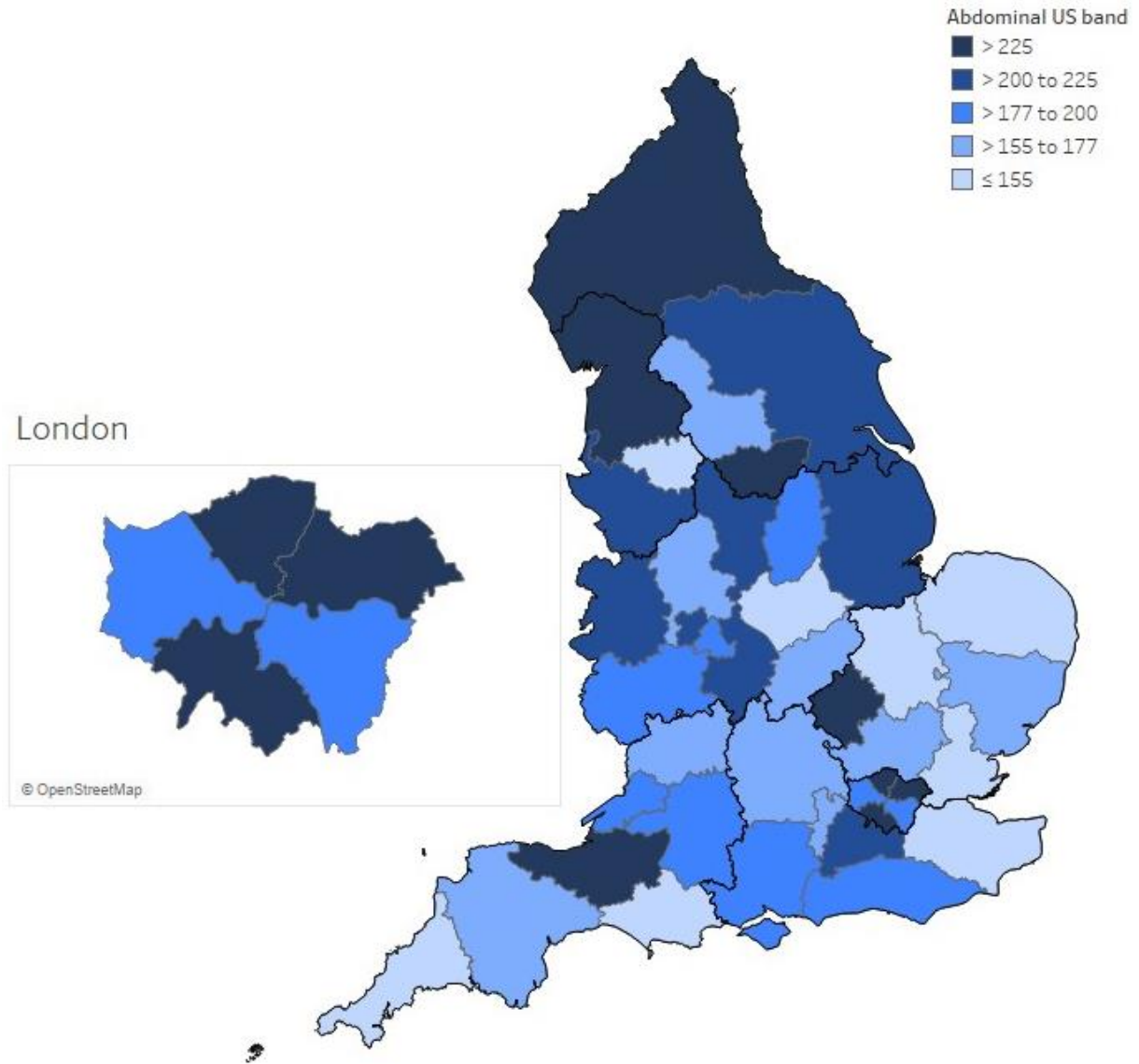
Graph 13. Standardised Kidney & Bladder Ultrasound rates by ICB, 2022/23



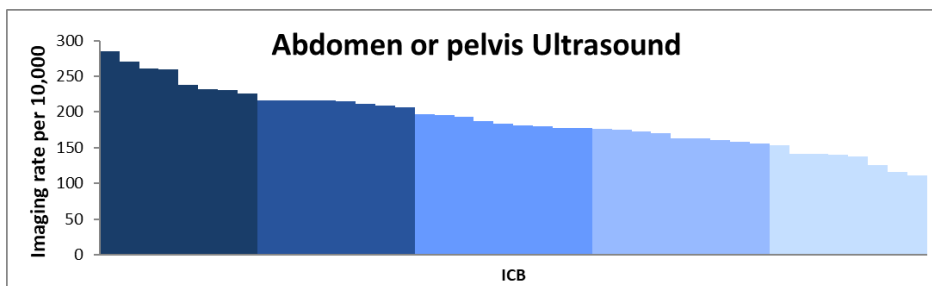
2.2.14 Abdomen & Pelvis Ultrasound

The highest rates of Abdomen & Pelvis Ultrasound were in the North East and North West, especially NHS North East and North Cumbria ICB, with lower rates in the East of England (Map 14). The national rate was 193 Abdomen & Pelvis ultrasounds per 10,000 registered population.

Map 14. Standardised Abdomen & Pelvis Ultrasound rates by ICB, 2022/23



Graph 14. Standardised Abdomen & Pelvis Ultrasound rates by ICB, 2022/23



3 Rates Ratios

3.1 Method

Three factors were considered that could have an impact on the rate of diagnostic testing: age (five-year age bands⁶), sex (male and female) and deprivation (quintiles of the Index of Multiple Deprivation). Differences in the distribution of these factors across ICBs might be partially responsible for the differences in crude observed rates between ICBs. Rates ratios were used to demonstrate the impact of each factor on the rate of diagnostic testing, whilst controlling for the others. Significant differences between the rates ratios for each factor suggest that it was worth standardising for these.

National rates of diagnostic testing activity were calculated by two of the three factors at a time, in order to estimate expected values for the third factor (IMD, Sex or Age). For example, if rates ratios were being calculated for IMD, rates were standardised by Sex and Age. This resulted in three sets of standardised rates per 10,000 population. Rates ratios were calculated using the following formula:

$$\text{Ratio} = \frac{r_2}{r_1}$$

Where

r_1 = standardised rate for the base category (e.g. female)

r_2 = standardised rate for the comparison category (e.g. male)
expressed per unit of population.

So for example the rates ratio for male X-rays was calculated by:

	Standardised rate per 10,000	Rates Ratio
Female	3,826	1.00
Male	3,065	0.80

Note: The base level will always be set to 1 with other levels given as a ratio of this.

In this example, the rate of X-rays was 20% lower in males than females, even after standardising for the effect of age and IMD.

Further statistical analysis of the rates ratios was conducted using Pearson's Chi Square test of significance.

⁶ Although five-year age bands were used for analysis and standardisation, Rates ratios are given for broader age bands.

3.2 Results

3.2.1 Sex

There was variation in the rates of imaging tests by gender, see Tables 1 and 2. As would be expected, the rate of ultrasound tests in men was around a third of that in women (rates ratio = 0.35). Of these rates ratios, X-ray, Ultrasound, MRI, and Abdomen or Pelvis Ultrasound were found to be significant.

Table 1. Sex rates ratios by modality, 2022/23

	X-ray	Ultrasound	CT Scan	MRI	Fluorosc- scopy	Nuclear Medicine	PET Scan	SPECT Scan	Medical Photography
Female	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Male	0.80***	0.35***	0.98	0.83***	1.10	0.89	1.11	0.86	0.94

Table 2. Sex rates ratios by Early Diagnosis of Cancer, 2022/23

	Brain MRI	Chest X-ray	Chest CT	Kidney or Bladder Ultrasound	Abdomen or Pelvis Ultrasound
Female	1.00	1.00	1.00	1.00	1.00
Male	0.81	1.07	1.15	0.95	0.70***

3.2.2 Deprivation

There appears to be a consistent tendency for areas of highest deprivation to have most imaging tests, see Tables 3 and 4. Deprivation had a significant impact at all levels for X-ray, Ultrasound, CT and Chest X-ray, whilst the three least deprived quintiles were significantly different from the most deprived for Abdomen or Pelvis Ultrasound and Chest CT, and the least deprived quintile was significantly different for Fluoroscopy and MRI.

Table 3. Deprivation rates ratios by modality, 2022/23

	X-ray	Ultrasound	CT Scan	MRI	Fluoro- scopy	Nuclear Medicine	PET Scan	SPECT Scan	Medical Photography
1 Most deprived	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2 More deprived	0.91***	0.92*	0.87***	0.95	0.90	0.99	0.92	0.88	0.68
3 Mid quintile	0.84***	0.88***	0.78***	0.92	0.86	0.95	0.89	0.81	0.68
4 Less deprived	0.80***	0.87***	0.73***	0.90	0.81	0.94	0.89	0.81	0.58
5 Least deprived	0.75***	0.83***	0.68***	0.87*	0.75*	0.92	0.84	0.85	0.55

* significant at $p < 0.05$

** significant at $p < 0.01$

*** significant at $p < 0.001$

Table 4. Deprivation rates ratios by Early Diagnosis of Cancer, 2022/23

	Brain MRI	Chest X-ray	Chest CT	Kidney or Bladder Ultrasound	Abdomen or Pelvis Ultrasound
1 Most deprived	1.00	1.00	1.00	1.00	1.00
2 More deprived	0.96	0.85***	0.82	0.95	0.90
3 Mid quintile	0.91	0.74***	0.70**	0.85	0.79*
4 Less deprived	0.89	0.68***	0.66***	0.84	0.76**
5 Least deprived	0.85	0.62***	0.59***	0.76	0.70***

3.2.3 Age

Age has the largest impact on the rates of imaging tests, with the age band of 75 or older showing much higher rates ratios across all modalities and early diagnosis of cancer tests compared with age under 45. All modalities and EDOCs have a significant result for the 65+ age bands and most other age bands were also significantly higher than the 0 to 45 group except for Ultrasound and the modalities with small numbers (SPECT Scan and Medical Photography). Full breakdowns are given in Tables 5 and 6.

Table 5. Age band rates ratios by modality, 2022/23

	X-ray	Ultrasound	CT Scan	MRI	Fluoroscopy	Nuclear Medicine	PET Scan	SPECT Scan	Medical Photography
0 - <45	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
45 - <55	1.73***	1.01	2.88***	2.21***	2.50***	2.75***	5.01***	2.17	1.51
55 - <65	2.44***	1.04	4.63***	2.75***	4.19***	4.72***	10.68***	4.07*	2.45
65 - <75	3.35***	1.15***	7.56***	3.21***	6.14***	7.79***	19.68***	7.51***	4.75**
75+	5.26***	1.33***	13.40***	2.94***	8.05***	8.89***	19.39***	9.43***	11.97***

Table 6. Age band rates ratios by Early Diagnosis of Cancer, 2022/23

	Brain MRI	Chest X-ray	Chest CT	Kidney or Bladder Ultrasound	Abdomen or Pelvis Ultrasound
0 - <45	1.00	1.00	1.00	1.00	1.00
45 - <55	1.87***	2.18***	4.76***	1.39	1.82***
55 - <65	2.37***	3.32***	10.16***	1.78*	2.14***
65 - <75	3.04***	5.14***	18.32***	2.65***	2.34***
75+	3.62***	9.34***	22.98***	4.23***	2.46***

4 Annex

4.1 Annex A - Data quality and the impact of missing data

In 2022/23, the ICB of patients in the DID was derived from either their GP Practice code or, where this was missing, the Lower Super Output Area (LSOA) of their postcode. Although resident (LSOA based) ICB may not be the same as responsible (GP Practice based) ICB, with nationally around 3% of patients living in a different ICB from their GP Practice, this method improves the coverage of ICB activity.

For the standard modalities, 93.8% imaging tests (42.3 million) had an English ICB based on GP Practice in 2022/23, compared with 96.5% in 2021/22. A further 5.5% (2.5 million) had an English ICB derived from LSOA, 0.3% (139,000) had a non-English or other valid GP Practice (e.g. prisons and Ministry of Defence practices) and 0.3% (154,000) were unknown or unidentified.

Providers with more than 10% and 10,000 imaging tests (standard modalities) with no GP Practice are listed at the top of Table A.1. Most of these were allocated to a ICB using LSOA. However, providers with more than 10,000 imaging tests with no GP Practice **or** LSOA from which to allocate ICB are listed at the bottom of Table A.1. Mid and South Essex NHS Foundation Trust (RAJ) exceeds 2% and 19,000 imaging tests with no basis for deriving ICB, contributing to an estimated shortfall of 19,000 (2.1%) in NHS Mid and South Essex ICB (QH8). Dorset County Hospital NHS Foundation Trust (RBD) had 11,000 (8.3%) imaging tests with no basis for deriving ICB, contributing to an estimated shortfall of 11,000 (2.6%) imaging tests in NHS Dorset ICB (QVV). Nationally, 293,000 (0.6%) imaging tests were omitted from the ICB tables because no valid ICB could be identified.

Table A.1. Providers with more than 10% and 10,000 imaging tests with no GP Practice in the Diagnostic Imaging Dataset, 2022/23

Provider code and name		Activity with no GP Practice		Of which, activity with no LSOA	
		No. tests	% tests	No. tests	% tests
RWF	Maidstone and Tunbridge Wells NHS Trust	397,200	100%	2,500	0.6%
RM3	Northern Care Alliance NHS Foundation Trust	297,400	61%	8,900	1.8%
RCX	The Queen Elizabeth Hospital King's Lynn NHS Foundation Trust	161,200	100%	-	0.0%
RVV	East Kent Hospitals University NHS Foundation Trust	146,500	26%	1,000	0.2%
NT9	Alliance Medical	130,500	54%	600	0.2%
RWP	Worcestershire Acute Hospitals NHS Trust	58,600	14%	200	0.0%
RN5	Hampshire Hospitals NHS Foundation Trust	56,200	18%	700	0.2%
RXK	Sandwell and West Birmingham Hospitals NHS Trust	48,200	13%	800	0.2%
NYR	Healthshare Diagnostics	45,100	72%	1,400	2.2%
NTP	Practice Plus Group	37,900	32%	2,700	2.2%
NT4	Circle Health Group Limited	26,100	40%	100	0.2%
RAJ	Mid and South Essex NHS Foundation Trust	37,400	4%	19,500	2.3%
RBD	Dorset County Hospital NHS Foundation Trust	11,300	9%	11,000	8.3%

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Providers with more than 5% and 5,000 imaging tests (standard modalities) with no age or sex or LSOA (to impute deprivation score) are listed in Table A.2. Nationally, 232,000 (0.5%) imaging tests with a valid ICB were omitted from standardised rates because no deprivation score could be imputed from LSOA, a further 69,000 (0.2%) had gender missing and a further 600 (0.0%) had no date of birth submitted (to impute age band).

Table A.2. Providers with more than 5% and 5,000 imaging tests with no Age or Sex or LSOA in the Diagnostic Imaging Dataset, 2022/23

Provider code and name		Total no. tests	Of which, age, sex or LSOA missing	% missing	Most common missing
REM	Liverpool University Hospitals NHS Foundation Trust	538,000	62,000	11.5%	LSOA
RQ3	Birmingham Women's and Children's NHS Foundation Trust	154,000	60,000	39.2%	Sex
RAJ	Mid and South Essex NHS Foundation Trust	843,000	58,000	6.9%	LSOA
RBD	Dorset County Hospital NHS Foundation Trust	132,000	11,000	8.4%	Sex, Age & LSOA
NTP	Practice Plus Group	119,000	9,000	7.6%	LSOA
NYR	Healthshare Diagnostics	62,000	7,000	10.7%	LSOA
NFO	Kleyn Healthcare	6,000	6,000	100.0%	LSOA

The ICBs most affected by the omission of LSOA (to impute deprivation score), sex or age are listed in Table A.3. The biggest shortfall is for NHS Birmingham and Solihull ICB (QHL) which has standardised rates around 5% lower than expected for this reason.

Table A.3. ICBs with more than 1% and 5,000 imaging tests with no Age or Sex or LSOA in the Diagnostic Imaging Dataset, 2022/23

ICB code and name		Total no. tests	Of which, age, sex or LSOA missing	% missing	Most common missing
QYG	NHS Cheshire and Merseyside ICB	2,351,000	63,300	2.7%	LSOA
QHL	NHS Birmingham and Solihull ICB	985,000	49,600	5.0%	Sex
QH8	NHS Mid and South Essex ICB	930,000	35,400	3.8%	LSOA

In addition to the list above, some ICBs have reduced rates because of shortfalls in the data submissions of their providers. Details of known data coverage issues by provider are listed in Section 6.1 of the DID Annual Statistical Release 2022-23. The ICBs most affected by these shortfalls are listed in Table A.4. The biggest shortfalls are: NHS Greater Manchester ICB (QOP): 260,000 (13%) missing due largely to missing data for Northern Care Alliance NHS Foundation Trust (RM3), NHS North East and North Cumbria ICB (QHM): 149,000 (6%) missing due largely to missing data for North Cumbria Integrated Care NHS Foundation Trust (RNN) and NHS Dorset ICB (QVV): 137,000 (32%) missing due largely to missing data for University Hospitals Dorset NHS Foundation Trust (R0D).

Table A.4. ICBs with more than 5% and 5,000 estimated missing imaging tests in the Diagnostic Imaging Dataset, 2022/23

ICB code and name		Total no. tests	Records missing	% missing
QOP	NHS Greater Manchester ICB	1,990,000	260,000	13%
QHM	NHS North East and North Cumbria ICB	2,608,000	149,000	6%
QVV	NHS Dorset ICB	434,000	137,000	32%
QU9	NHS Buckinghamshire, Oxfordshire and Berkshire West ICB	1,155,000	101,000	9%
QNQ	NHS Frimley ICB	462,000	77,000	17%
QK1	NHS Leicester, Leicestershire and Rutland ICB	611,000	62,000	10%
QR1	NHS Gloucestershire ICB	428,000	34,000	8%

The impact of missing data outlined above is larger than in 2021/22 due to a higher volume of missing data. Outliers at the higher end of the distribution may be impacted by providers that tend to report multiple scans individually rather than as a group, but this is not common.

4.2 Annex B - ICB Standardised Imaging Rates per 10,000, 2022/23

See separate excel file (Annex 4a – DID Standardised ICB Rates 2022-23).

4.3 Contact Us

4.3.1 Feedback

We welcome feedback on this publication. Please contact us at england.did@nhs.net

4.3.2 Websites

Further information about the DID dataset can be found on [NHS Digital DID website](#).

The DID Tables and Reports can be found on the [NHS England DID website](#) (<http://www.england.nhs.uk/statistics/diagnostic-imaging-dataset/>).

4.3.3 Additional Information

For press enquiries contact the NHS England Media team on 0113 825 0958 or 0113 825 0959. Email enquiries should be directed to nhsengland.media@nhs.net

The NHS England Analyst responsible for producing these data is:

Sheila Dixon
 Performance Analysis Team
 NHS England
 Quarry House, Quarry Hill, Leeds LS2 7UE
 Email: england.did@nhs.net