

Diagnostic Imaging Dataset Annual Statistical Release 2023/24

Version 1, 21st November 2024

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1 Introduction

The Diagnostic Imaging Dataset (DID) is a monthly data collection covering data on diagnostic imaging tests on NHS patients in England. It provides estimates of GP usage of direct access to key diagnostics tests for cancer, for example chest imaging, non-obstetric ultrasound and Brain MRI.

The DID was introduced to monitor progress on *Improving Outcomes: A Strategy for Cancer*¹. This strategy set out how the Government, NHS and public can help prevent cancer, improve the quality and efficiency of cancer services and move towards achieving outcomes that rival the best. One aspect of that is to ensure that GPs have access to the right diagnostic tests to help them to diagnose or exclude cancer earlier. The DID therefore reports on imaging activity, referral source and timeliness.

These data are collated from Radiology Information Systems (RISs), which are hospital administrative systems used to manage the workflow of radiology departments, and uploaded into a database maintained by NHS England.

This publication finalises estimates of imaging activity in 2023/24.

¹ [Improving Outcomes: A Strategy for Cancer](#), first published 12 January 2011. The cancer strategy was subsequently part of the NHS Long Term Plan, see <https://www.longtermplan.nhs.uk/online-version/chapter-3-further-progress-on-care-quality-and-outcomes/better-care-for-major-health-conditions/cancer/>.

2 Headline Messages

For all imaging activity:

- 47.2 million imaging tests were reported in England in the year to March 2024, compared with 45.0 million in the previous year, an increase of 4.8%.
- Plain Radiography (X-ray) was most common with 22.6 million procedures (up 2.6% from 2022/23), followed by Diagnostic Ultrasonography (Ultrasound, 10.9 million, up 5.9%), Computerized Axial Tomography (CT Scan, 7.7 million up 8.4%) and Magnetic Resonance Imaging (MRI, 4.4 million, up 8.1%).
- The median period between the request being made and the test being performed varied from the same day for X-ray, Fluoroscopy and Medical Photography up to 21 days for Nuclear Medicine scans in 2023/24.
- Across all types of imaging, emergency admissions and inpatients have shorter waits than outpatients and referrals made under GP direct access arrangements.
- The median period from a test being performed to the report being issued varied from the same day for CT scan, Ultrasound, Fluoroscopy and Medical Photography up to 4 days for MRI in 2023/24 (the same as in 2022/23).

For the key tests² Chest X-ray or CT, Brain MRI and Non-obstetric Ultrasound of the Abdomen and/or pelvis or Kidney/bladder:

- In 2023/24, GPs requested 27.7% of all tests that may have been used to diagnose or discount cancer, under direct access arrangements. This increase from 26.4% in 2022/23 was seen for all tests.
- The test most commonly requested by GPs was Chest X-ray with 2.2 million tests (up 6.4% from 2022/23), whilst the test with the highest proportion of GP referrals was Ultrasounds that may have been used to diagnose ovarian cancer, 49% of which were requested by GPs in 2023/24.
- The median period between the request being made and the test being performed was unchanged or lower in 2023/24 than in 2022/23 for most key tests under GP direct access arrangements, but remained higher than the pre-pandemic levels seen in 2019/20 for Kidney or Bladder (Ultrasound).

² Although these tests are used to diagnose cancer, many of the tests also have wider clinical uses. Within this dataset it is not possible to distinguish the different uses of these tests.

3 Annual Imaging Activity

3.1 Imaging Activity by Modality

- 3.1.1. 47.2 million imaging tests were reported in England in the year to March 2024, compared with 45.0 million in the previous year, an increase of 4.8%.
- 3.1.2. Plain Radiography (X-ray) had the biggest share of all tests performed during the year, with 22.6 million X-rays reported in 2023/24 (up 2.6% from 2022/23). The next most common procedures were Ultrasound (10.9 million, up 5.9%), CT scans (7.7 million, up 8.4%) and MRI Scans (4.4 million, up 8.1%). All other modalities except Nuclear Medicine (down 0.7%) also increased in 2023/24: Medical Photography by 22.9%, SPECT by 8.6%, PET-CT scans by 7.8% and Fluoroscopy by 2.0% Table 1 shows the imaging counts and growth for each modality.
- 3.1.3. April was the month with least reported activity during 2023/24, at 3.6 million tests, whilst January had the most, at 4.2 million. This reflects a seasonal effect, including the number of weekdays in the month. Graph 1 shows this seasonal fluctuation overall and by modality.

Further information on the tests included in these tables is given in the glossary at Section 6.3.

Monthly breakdowns of activity by modality, provider and referral source setting are given in Tables 1 - 6 (separate excel files), available from [NHS England DID website](#).

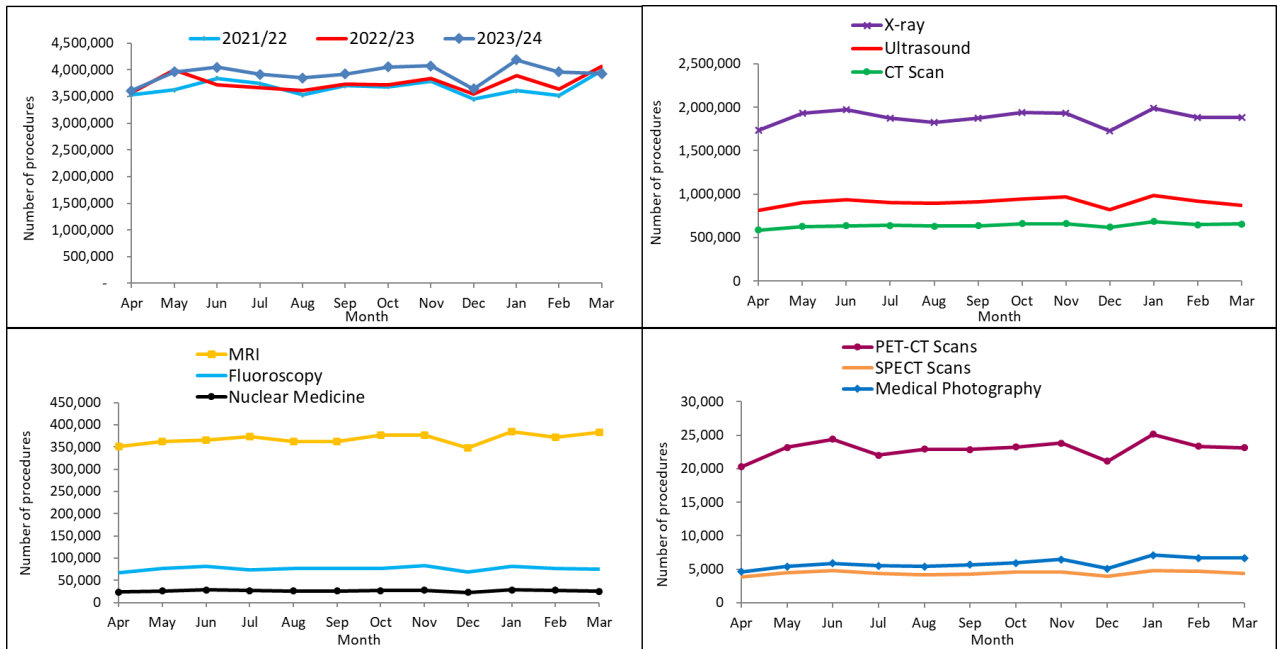
Table 1: Count of NHS imaging activity in England, 2013/14 to 2023/24

	X-ray	Ultrasound	CT Scan	MRI	Fluoro-scropy	Nuclear Medicine	PET-CT Scans	SPECT Scans	Medical Photography	% organisations included	Total ¹
2012/13²	21,195,275	7,807,695	3,474,970	2,352,090	1,061,980	439,470	71,485	19,205	6,090	93.6%	36,428,260
2013/14	21,845,725	8,176,945	3,825,130	2,617,110	1,051,370	444,830	75,650	21,370	10,525	97.8%	38,068,660
2014/15	22,637,935	8,596,590	4,210,630	2,898,465	1,023,720	436,505	89,245	27,690	16,180	99.2%	39,936,960
2015/16	22,572,915	8,919,015	4,461,975	3,085,065	1,043,980	428,400	97,990	32,080	23,945	99.6%	40,665,365
2016/17	22,908,620	9,351,480	4,815,890	3,358,485	1,057,115	427,145	132,745	36,075	31,225	99.7%	42,118,780
2017/18	22,908,795	9,507,560	5,146,475	3,464,010	1,025,330	417,460	154,270	40,015	37,550	100.0%	42,701,465
2018/19	23,467,930	10,161,965	5,665,930	3,743,995	1,034,025	421,650	177,330	45,365	52,875	99.8%	44,771,065
2019/20	23,150,820	10,261,890	5,959,860	3,811,415	1,001,770	396,350	199,585	45,110	57,650	99.9%	44,884,450
2020/21	16,815,875	8,221,710	5,574,475	3,008,970	745,385	269,350	200,175	33,180	51,305	100.0%	34,920,420
2021/22	21,780,645	10,075,110	6,720,535	3,845,155	916,335	328,235	239,400	46,270	56,950	99.9%	44,008,635
2022/23	21,994,050	10,257,395	7,088,365	4,084,055	894,610	317,520	255,445	48,580	57,330	98.4%	44,997,345
2023/24	22,576,650	10,860,980	7,681,150	4,415,475	912,195	315,360	275,300	52,735	70,470	98.1%	47,160,310
% Change³	2.6%	5.9%	8.4%	8.1%	2.0%	-0.7%	7.8%	8.6%	22.9%	-0.3%	4.8%
2023/24											
Apr	1,733,355	814,160	588,425	351,750	67,455	23,750	20,245	3,800	4,620	98.7%	3,607,555
May	1,933,585	904,670	626,980	362,600	77,305	26,305	23,160	4,430	5,395	96.8%	3,964,420
Jun	1,973,215	934,310	633,580	365,395	81,570	27,985	24,395	4,795	5,900	97.4%	4,051,140
Jul	1,870,895	899,195	637,505	373,630	72,685	26,680	22,010	4,375	5,510	98.7%	3,912,490
Aug	1,827,490	896,210	631,790	361,705	75,890	26,330	22,900	4,215	5,425	98.7%	3,851,955
Sep	1,878,105	910,300	634,960	362,105	76,315	25,895	22,870	4,230	5,655	99.4%	3,920,435
Oct	1,938,455	940,445	660,335	375,920	77,230	27,025	23,210	4,565	5,940	98.7%	4,053,125
Nov	1,931,210	966,120	658,190	376,780	82,500	27,775	23,805	4,585	6,475	98.7%	4,077,435
Dec	1,729,040	825,135	620,700	348,095	68,505	22,775	21,135	3,950	5,105	98.1%	3,644,440
Jan	1,992,860	980,910	684,255	383,985	80,690	28,170	25,130	4,770	7,105	98.1%	4,187,870
Feb	1,884,190	917,285	647,685	371,150	77,130	27,300	23,320	4,645	6,685	98.1%	3,959,395
Mar	1,884,255	872,240	656,745	382,365	74,930	25,360	23,120	4,370	6,655	96.2%	3,930,040

Notes:

- Totals do not always equal the sum of parts due to rounding.
- 2012/13 was the first year of the DID collection and as such some of the changes since then may be due to improved coverage of the dataset.
- % Change is between 2022/23 and 2023/24.

Graph 1: NHS imaging activity in England, April 2023 to March 2024

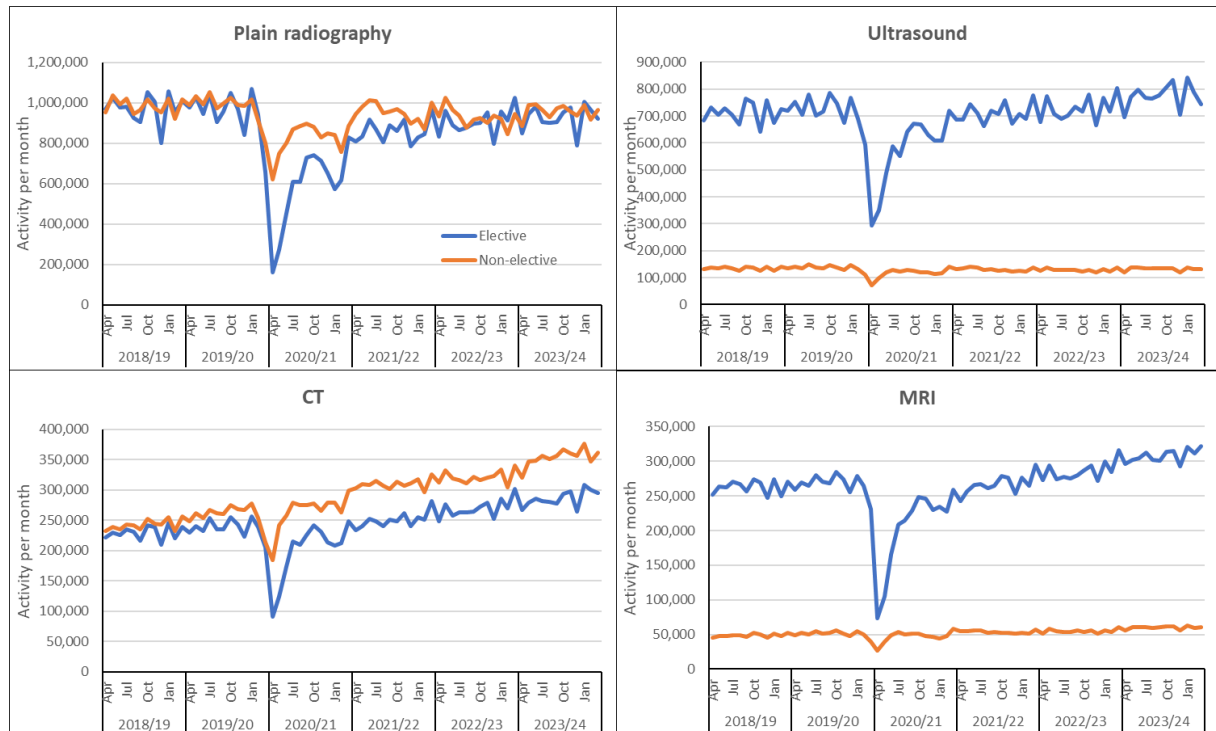


3.2 Imaging Trend by Modality

- 3.2.1. Trends in NHS imaging activity in England were impacted by the COVID-19 pandemic from March 2020, with the biggest reduction in April 2020. The reduction was greatest for elective activity, that is referrals arising from outpatient appointments, GP direct access or other healthcare providers. Referrals from A&E departments or for admitted patients³ were generally less impacted, with some modalities contributing to COVID diagnostics.
- 3.2.2. By the end of 2023/24, most services had resumed or accelerated the trend in activity to 2019/20. Plain radiography activity was slightly lower in 2023/24 than in 2019/20, but CT and MRI were considerably higher. Graph 2 shows activity by month from 2019/20 to 2023/24 for selected modalities, split by elective and non-elective request sources.

³ Analysis of admitted patient data suggests that imaging requests are most likely to be raised for patients admitted as an emergency, although some are elective or for other admission methods.

Graph 2: NHS imaging activity, selected modalities by grouped Patient source setting, April 2019 to March 2024



Notes

1. Non-elective referrals are from A&E departments or all admitted patients; Elective are from Outpatients or GP direct access, Other Healthcare provider or Other.

3.3 Imaging Activity by Age and Gender

3.3.1. 7.9 million more tests were performed on females than on males in 2023/24. The largest differences occurred for Ultrasound procedures (5.1 million more on females) and for X-rays (2.4 million more). The rate of most imaging modalities increased markedly with age; the main exception was Ultrasound, where the rate was highest for women aged 15 to 44. Most of the 2.3 million extra X-rays for females than males were attributable to demographic differences, especially the higher number of older women compared to older men. Conversely there were more Fluoroscopy and PET-CT scans on males than females. Table 2 shows the age and gender of patients who have received diagnostic tests in 2023/24.

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Table 2: NHS Imaging activity in England by gender and age, 2023/24

	X-ray	Ultrasound	CT Scan	MRI	Fluoro- scopy	Nuclear Medicine	PET-CT Scan	SPECT Scan	Medical Photography	Total ¹
Female	12,468,655	7,953,145	3,854,840	2,404,490	432,665	163,150	129,345	27,815	35,760	27,469,865
Male	10,049,230	2,854,315	3,806,880	2,001,115	476,630	151,785	145,655	24,855	34,345	19,544,815
Not known / specified ²	58,770	61,445	20,545	9,870	2,900	425	300	65	360	154,685
0 -14	1,929,300	459,375	67,305	164,250	43,380	12,500	665	375	6,730	2,683,880
15 - 44	4,972,265	5,389,820	1,256,295	1,266,935	147,820	46,415	25,295	9,390	10,695	13,124,930
45 - 59	4,456,465	2,047,425	1,456,100	1,150,165	192,940	65,670	55,645	9,365	9,775	9,443,545
60 - 74	5,645,975	1,733,280	2,279,810	1,173,990	286,750	108,230	115,935	18,145	16,740	11,378,855
75+	5,567,875	1,237,960	2,620,240	659,075	241,155	82,495	77,760	15,430	26,170	10,528,165
Not known	4,770	1,040	2,520	1,060	160	50	*	25	360	9,990

Notes:

1. Totals do not always equal the sum of parts due to rounding.
2. "Not Specified" means that the patient did not want to reveal their gender. "Not known" means that the patient's gender was recorded as "Not known" or else was not reported.

4 Patient Test Times

4.1 Patient Test Times – Request to test

4.1.1. The DID collects data on four dates for each imaging event:

- Date of test request (made by a health care professional).
- Date of test request received (by the organisation providing the imaging).
- Date of test
- Date of test report Issued (by a health care professional interpreting the imaging output).

4.1.2. This publication is based on all imaging which had a Date of test between April 2023 and March 2024.

4.1.3. There were big differences in the median period between the request being made (or received) and the test being performed for the different tests. The median ranged from the same day for X-ray, Fluoroscopy and Medical Photography up to 21 days for Nuclear Medicine scans. There was also variability within individual tests over the course of the year, see Table 3.

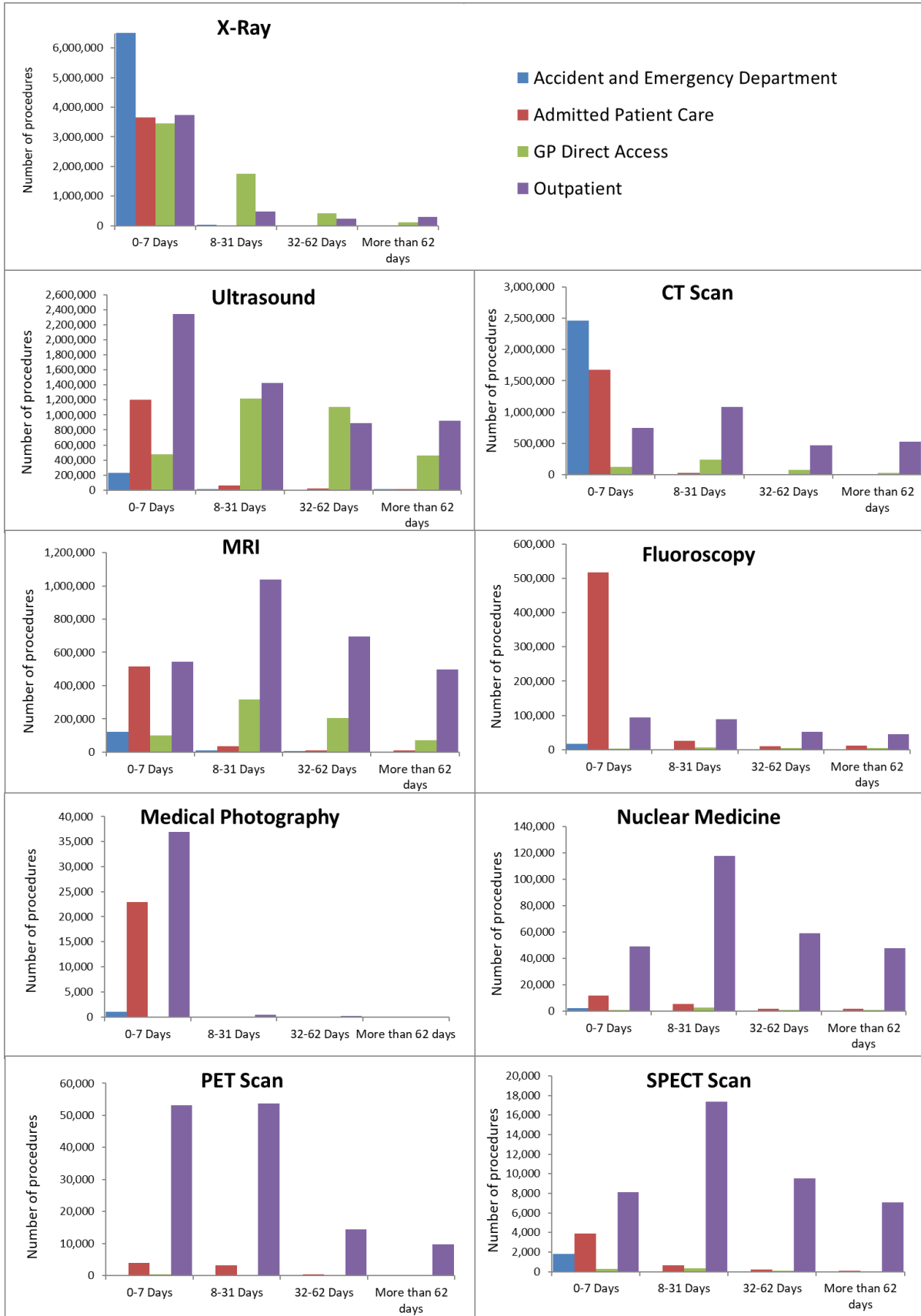
Table 3: Median number of days between date of test request and date of test, by modality, April 2023 to March 2024

	X-ray	Ultra-sound	CT Scans	MRI	Fluoro-scropy	Nuclear Medicine	PET-CT Scans	SPECT Scans	Medical Photography
2012/13	0	13	2	23	0	15	8	14	0
2013/14	0	13	2	24	0	14	7	17	0
2014/15	0	13	2	24	0	15	8	15	0
2015/16	0	13	1	22	0	16	7	15	0
2016/17	0	13	1	22	0	16	7	17	0
2017/18	0	14	1	21	0	18	7	17	0
2018/19	0	14	1	21	0	19	8	18	0
2019/20	0	14	1	21	0	19	8	17	0
2020/21	0	10	1	16	0	16	8	13	0
2021/22	0	14	1	21	0	19	10	15	0
2022/23	0	14	1	20	0	21	9	19	0
2023/24	0	15	1	20	0	21	9	20	0
Apr	0	16	1	22	0	23	10	22	0
May	0	15	1	19	0	22	9	21	0
Jun	0	14	1	19	0	22	8	21	0
Jul	0	14	1	19	0	21	8	20	0
Aug	0	15	1	19	0	21	8	20	0
Sep	0	15	1	19	0	22	8	20	0
Oct	0	15	1	19	0	21	8	19	0
Nov	0	15	1	20	0	21	8	18	0
Dec	0	15	1	21	0	20	10	17	0
Jan	0	15	1	23	0	26	11	22	0
Feb	0	14	1	20	0	21	10	20	0
Mar	0	14	1	22	0	21	10	19	0

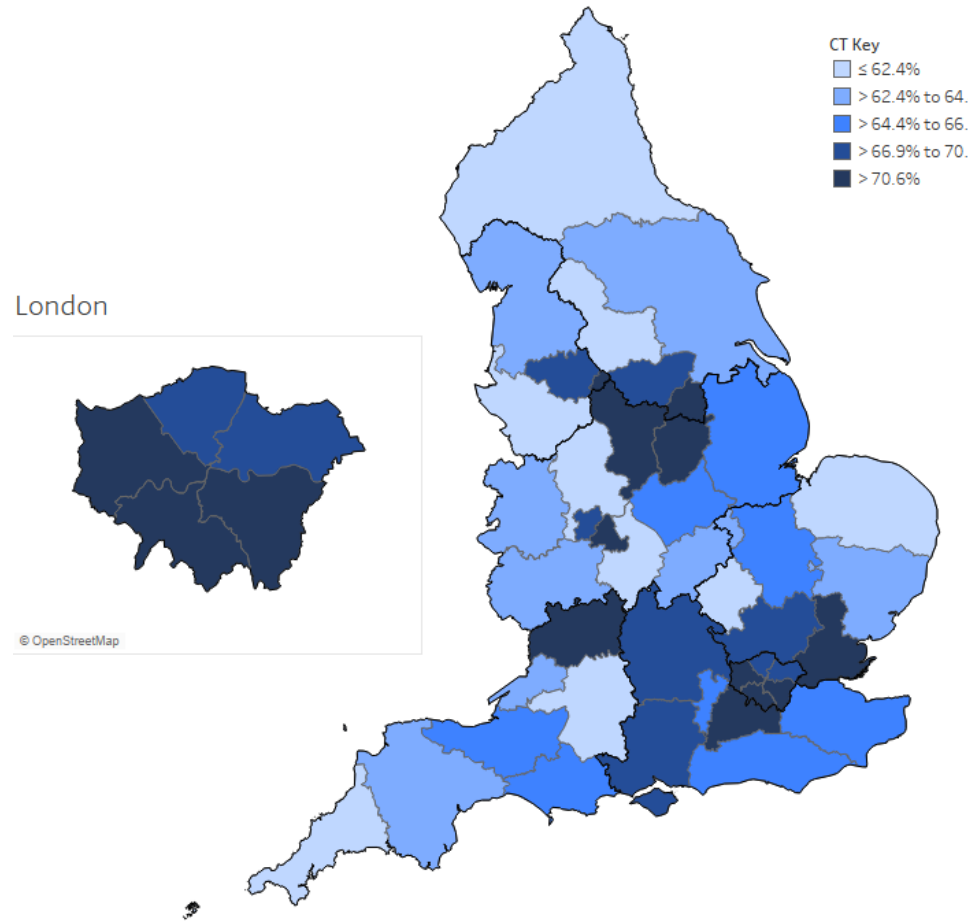
Note: Median values of 0 occur where at least 50% of activity has the same day for both 'date of test request' and 'date of test'. Where 'Date of test request' was missing in 2023/24, 'Date of test request received' was used instead. Records where both dates were missing were excluded from the median calculation.

- 4.1.4. The figures in Table 3 should not be compared to “waiting time” statistics that measure how long patients are on a waiting list for a procedure, since these figures included both planned and unplanned imaging activity. In addition, these figures exclude any cancelled or missed appointments and they count the period for individual tests not each patient appointment.
- 4.1.5. The median period between test request (or test request received) and test was higher overall in 2023/24 for SPECT and ultrasound, compared with 2022/23. Both of these have relatively high proportions of activity for elective purposes (85% or more were GP direct access or outpatient requests) but much shorter waits for non-elective activity (requests from A&E departments or for admitted patients).
- 4.1.6. For all modalities, patients from Accident & Emergency departments and admitted patients have shorter waits for their scan than other sources of referral. GP direct access and outpatient referrals show a longer “waiting time” distribution, affecting the median number of days from request to test for those modalities with more outpatient and GP referrals. This is illustrated in Graph 3, which shows the distribution of periods from request to test for individual procedures, by patient source setting and modality. Table 9 (separate Excel file) gives the underlying figures for these charts.
- 4.1.7. There was some regional variation in the proportion of imaging which occurred within seven days of the test being requested (or received) for CT Scans and within fourteen days of the test being requested (or received) for Ultrasound and MRI Scans. Maps 1-3 illustrate this for each ICB in England (with a fifth of ICBs in each band shown). The underlying data for these charts are given in Table 7 (separate Excel file).

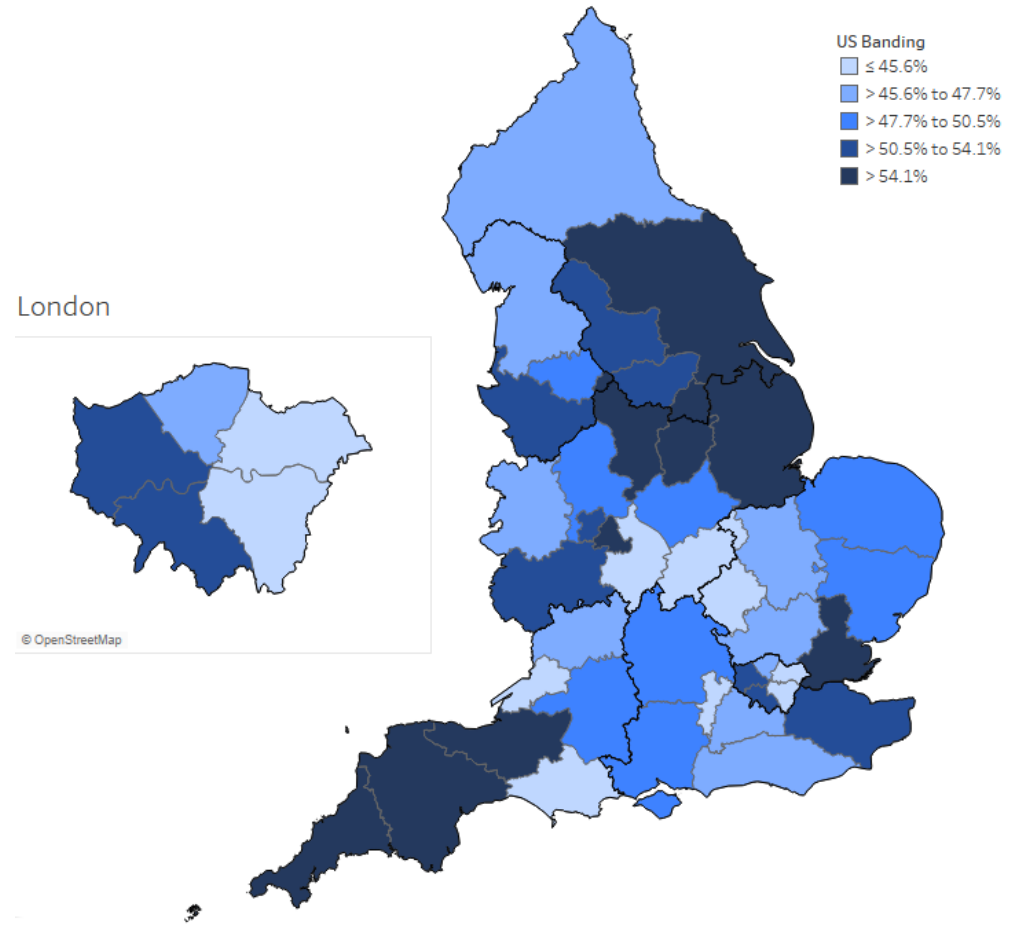
Graph 3: Imaging activity by number of days from date of test request to date of test, by modality and source of referral, 2023/24



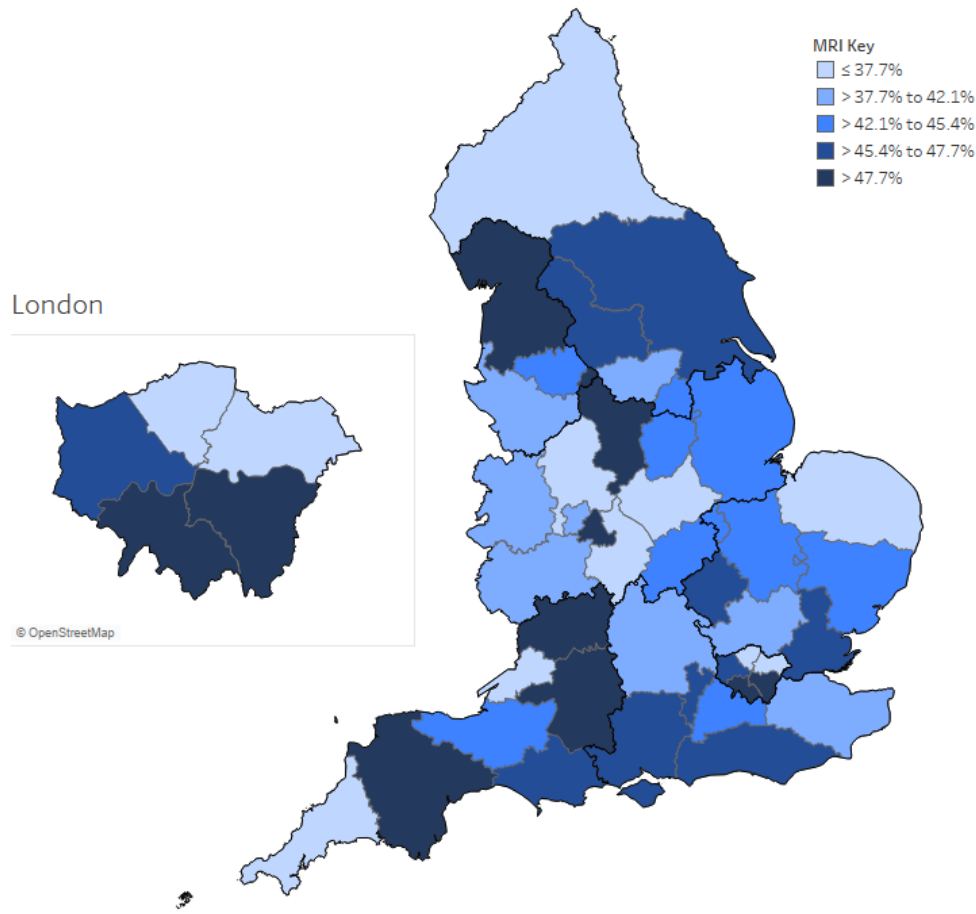
Map 1: Proportion of CT scans where date of test is up to 7 days after date of referral, for each ICB, 2023/24



Map 2: Proportion of Ultrasounds where date of test is up to 14 days after date of request, for each ICB, 2023/24



Map 3: Proportion of MRI Scans where date of test is up to 14 days after date of request, for each ICB, 2023/24



4.2 Patient Test Times – Test to report

- 4.2.1. Different test types varied in the median period for the report to be issued after the test, see Table 4. For Ultrasound, CT scans, Fluoroscopy and Medical Photography, at least half the procedures (with a report issue date) were reported the same day as the test (that is, a median of 0). For MRI the median period was 4 days, for PET-CT and SPECT scans it was 2 days and for X-ray and Nuclear Medicine the median period was 1 day.
- 4.2.2. The median turnaround time for a test report in 2023/24 remained the same as in 2022/23 for all modalities.

Table 4: Median number of days between date of test and date test report issued, by modality, April 2023 to March 2024

	X-ray	Ultra-sound	CT Scans	MRI	Fluoroscopy	Nuclear Medicine	PET-CT Scans	SPECT Scans	Medical Photography
2012/13	1	0	0	2	0	2	2	1	1
2013/14	1	0	0	2	0	1	2	1	0
2014/15	1	0	0	3	0	1	2	1	0
2015/16	1	0	0	3	0	1	2	1	0
2016/17	1	0	0	3	0	1	2	1	0
2017/18	1	0	0	3	0	1	2	1	0
2018/19	1	0	0	3	0	1	2	1	0
2019/20	1	0	0	3	0	1	2	1	0
2020/21	1	0	0	2	0	1	1	1	0
2021/22	1	0	0	3	0	1	2	1	0
2022/23	1	0	0	4	0	1	2	2	0
2023/24	1	0	0	4	0	1	2	2	0
Apr	1	0	0	4	0	1	2	2	0
May	1	0	0	3	0	1	2	2	0
Jun	1	0	0	3	0	1	3	2	0
Jul	1	0	0	4	0	1	3	2	0
Aug	1	0	0	4	0	1	3	3	1
Sep	1	0	0	4	0	1	2	2	2
Oct	1	0	0	4	0	1	2	2	1
Nov	1	0	0	3	0	1	2	2	1
Dec	1	0	0	4	0	1	2	2	0
Jan	1	0	0	3	0	1	2	2	0
Feb	1	0	0	4	0	1	2	2	0
Mar	1	0	0	4	0	1	2	2	0

4.2.3. Guidance on Diagnostic imaging reporting turnaround times⁴, developed in consultation with and supported by The Royal College of Radiologists and The Society of Radiographers, stresses the importance of reporting images in as short a time as possible for the timely diagnosis and treatment of patients. The guidance suggests turnaround times from 12 hours (<4 hours for Emergency Department requests and the acutely unwell) up to 28 days according to urgency and modality. Whilst the DID cannot currently monitor all these report turnaround times, Table 13 (separate Excel file) provides quarterly turnaround times in relevant numbers of days, by provider.

4.2.4. Table 5 shows the percentage of reports that were issued the same day as the test and those issued by the end of the next day separately for Admitted patient and A&E referred tests and for Outpatient and GP direct access tests, for each modality. For most modalities, the percentage of reports issued on the same or next day were the same or higher in 2023/24 than in 2022/23; the main exceptions were nuclear medicine and SPECT where the percentage of reports issued on the same day were lower in 2023/24 compared to 2022/23. Table 10 (separate Excel file) gives this breakdown by provider.

⁴ Diagnostic imaging reporting turnaround times, NHS England, first published 9 August 2023, see [NHS England » Diagnostic imaging reporting turnaround times](#)

Table 5: Proportion of imaging reports that were issued, either the same day as the test or by the end of the following day, by modality, April 2023 to March 2024

Inpatient and A&E

Reported by:		X-ray		Ultrasound		CT Scans		MRI		Fluoroscopy		Nuclear Medicine		PET-CT Scans		SPECT Scans		Medical Photography	
		Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day
Inpatient and A&E	2012/13	25%	50%	91%	94%	81%	92%	64%	81%	70%	79%	58%	76%	23%	54%	75%	84%	20%	59%
	2013/14	25%	51%	92%	96%	84%	94%	65%	81%	71%	80%	59%	78%	28%	52%	73%	84%	48%	76%
	2014/15	26%	53%	93%	96%	85%	95%	66%	82%	72%	81%	60%	78%	29%	57%	67%	87%	49%	73%
	2015/16	28%	55%	94%	96%	88%	96%	67%	83%	72%	82%	62%	77%	35%	61%	72%	85%	52%	74%
	2016/17	29%	55%	94%	96%	88%	96%	65%	80%	73%	82%	64%	77%	39%	64%	76%	85%	48%	66%
	2017/18	28%	53%	95%	97%	88%	97%	66%	80%	73%	82%	66%	79%	36%	61%	80%	88%	52%	65%
	2018/19	28%	53%	95%	97%	89%	97%	69%	83%	73%	81%	66%	79%	33%	62%	78%	87%	51%	62%
	2019/20	28%	53%	96%	98%	90%	97%	70%	83%	75%	82%	65%	79%	28%	58%	80%	88%	52%	62%
	2020/21	36%	64%	97%	98%	91%	98%	75%	89%	77%	85%	69%	83%	35%	67%	83%	91%	54%	68%
	2021/22	28%	53%	97%	98%	91%	98%	74%	87%	79%	86%	68%	81%	30%	63%	79%	89%	49%	60%
	2022/23	29%	53%	97%	98%	91%	98%	74%	87%	79%	86%	65%	78%	26%	53%	78%	87%	47%	56%
	2023/24	31%	55%	97%	98%	91%	98%	74%	87%	79%	86%	61%	74%	26%	53%	78%	86%	53%	61%
	Apr	30%	54%	97%	98%	91%	97%	72%	83%	79%	85%	59%	72%	28%	55%	72%	81%	48%	55%
	May	30%	54%	97%	98%	91%	98%	73%	87%	77%	83%	61%	75%	27%	54%	77%	85%	53%	62%
	Jun	32%	55%	96%	98%	91%	98%	74%	87%	79%	87%	62%	76%	27%	51%	75%	82%	48%	60%
	Jul	31%	55%	97%	98%	91%	98%	74%	86%	79%	87%	61%	75%	25%	46%	74%	82%	50%	57%
	Aug	32%	56%	97%	98%	91%	98%	73%	86%	79%	87%	61%	74%	22%	45%	76%	84%	52%	60%
	Sep	31%	54%	97%	98%	91%	98%	74%	86%	79%	86%	61%	73%	25%	50%	78%	85%	46%	50%
	Oct	31%	55%	97%	98%	91%	98%	74%	87%	79%	87%	61%	74%	25%	56%	79%	86%	55%	65%
	Nov	33%	57%	97%	98%	91%	98%	75%	87%	79%	86%	62%	75%	28%	60%	79%	87%	56%	68%
Dec	31%	53%	97%	98%	92%	98%	75%	87%	80%	86%	63%	76%	24%	53%	79%	87%	58%	65%	
Jan	32%	57%	96%	98%	92%	98%	76%	88%	80%	86%	63%	75%	25%	51%	82%	89%	58%	69%	
Feb	32%	56%	96%	98%	92%	98%	75%	88%	80%	87%	61%	73%	30%	57%	82%	89%	56%	68%	
Mar	31%	54%	97%	98%	92%	98%	75%	87%	80%	86%	64%	75%	29%	55%	81%	88%	51%	57%	

Outpatient and GP Direct Access

Reported by:		X-ray		Ultrasound		CT Scans		MRI		Fluoroscopy		Nuclear Medicine		PET-CT Scans		SPECT Scans		Medical Photography	
		Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day	Same day	Next day
Outpatient and GP Direct Access	2012/13	37%	53%	84%	90%	34%	50%	20%	35%	54%	68%	23%	45%	9%	39%	23%	46%	25%	70%
	2013/14	38%	53%	87%	91%	32%	47%	19%	34%	56%	70%	25%	46%	9%	35%	22%	43%	66%	90%
	2014/15	38%	54%	88%	93%	29%	45%	18%	33%	59%	72%	26%	47%	10%	38%	20%	44%	70%	86%
	2015/16	39%	54%	89%	93%	27%	42%	17%	32%	61%	73%	29%	50%	13%	38%	23%	44%	57%	76%
	2016/17	38%	54%	90%	94%	27%	40%	17%	31%	63%	74%	30%	50%	16%	41%	24%	44%	58%	72%
	2017/18	39%	54%	91%	94%	25%	37%	16%	29%	65%	76%	31%	51%	14%	43%	23%	43%	60%	71%
	2018/19	39%	54%	92%	95%	23%	36%	15%	29%	64%	74%	30%	49%	12%	39%	24%	42%	62%	70%
	2019/20	38%	53%	93%	95%	21%	33%	14%	28%	63%	74%	30%	50%	11%	37%	23%	43%	62%	71%
	2020/21	47%	64%	94%	96%	26%	43%	19%	36%	67%	78%	37%	58%	17%	50%	28%	49%	74%	83%
	2021/22	39%	53%	94%	96%	19%	32%	14%	28%	67%	77%	35%	54%	15%	44%	25%	44%	72%	81%
	2022/23	37%	50%	94%	96%	18%	29%	13%	24%	67%	77%	34%	52%	11%	36%	24%	41%	65%	74%
	2023/24	38%	50%	94%	96%	18%	29%	12%	24%	68%	78%	33%	51%	12%	36%	21%	39%	56%	66%
	Apr	37%	50%	94%	96%	18%	29%	12%	23%	69%	79%	34%	52%	12%	35%	22%	40%	70%	77%
	May	37%	49%	94%	96%	18%	29%	12%	25%	68%	77%	34%	51%	11%	35%	22%	36%	72%	84%
	Jun	37%	48%	94%	96%	18%	30%	13%	25%	67%	77%	35%	53%	12%	32%	23%	40%	75%	79%
	Jul	38%	49%	94%	96%	17%	28%	12%	24%	69%	78%	33%	51%	11%	30%	20%	36%	54%	59%
	Aug	38%	50%	94%	96%	17%	27%	13%	24%	70%	81%	33%	51%	11%	29%	20%	36%	47%	53%
	Sep	38%	50%	94%	96%	17%	27%	12%	24%	69%	78%	34%	52%	10%	30%	22%	39%	41%	48%
	Oct	39%	50%	94%	96%	18%	29%	12%	24%	68%	77%	33%	52%	13%	37%	24%	43%	40%	56%
	Nov	40%	53%	94%	96%	18%	30%	12%	25%	68%	78%	33%	52%	13%	43%	19%	39%	51%	67%
Dec	40%	52%	94%	96%	18%	28%	12%	23%	69%	79%	34%	52%	13%	40%	20%	39%	48%	59%	
Jan	40%	53%	93%	96%	20%	32%	13%	25%	68%	78%	33%	51%	15%	44%	19%	40%	63%	77%	
Feb	39%	51%	94%	96%	18%	29%	12%	24%	68%	78%	32%	50%	11%	39%	19%	39%	61%	72%	
Mar	37%	48%	94%	96%	17%	27%	12%	23%	68%	78%	33%	50%	13%	36%	22%	40%	58%	71%	

5 Imaging Tests that could contribute to Early Diagnosis of Cancer

5.1 Definition of the tests

5.1.1. One of the main drivers for establishing the DID was to assess the use of diagnostic imaging that could contribute to the early diagnosis of cancer and in particular General Practitioner (GP) direct access to these tests. To enable this analysis, a subset of procedures that are often used to diagnose or discount a diagnosis of cancer has been identified:

- **Brain (MRI)**
This may diagnose brain cancer, this includes – MRI of brain (often with contrast);
- **Kidney or bladder (Ultrasound)**
This may diagnose kidney or bladder cancer, this includes – ultrasound of kidney, ultrasound scan of bladder or ultrasound and Doppler scan of kidney;
- **Chest and/or abdomen (CT)**
CTs which may diagnose lung cancer, this includes – chest + abdominal CT, CT of chest (high resolution or other), CT thorax + abdomen with contrast, CT thorax with contrast or CT chest + abdomen;
- **Chest (X-ray)**
This may diagnose lung cancer, this includes – plain chest X-ray only;
- **Abdomen and/or pelvis (Ultrasound)**
This may diagnose ovarian cancer, this includes – ultrasonography of pelvis, ultrasonography of abdomen (upper, lower or other) or abdomen + pelvis.

5.1.2. Although these tests are used to diagnose cancer, many of them also have wider clinical uses. Within this data, it is not possible to distinguish between the different uses of these tests.

5.1.3. Brain MRI, chest X-ray, and ultrasounds of the abdomen and pelvis to diagnose Ovarian Cancer were three of the key tests outlined in *Improving Outcomes: a Strategy for Cancer*.

5.2 Imaging activity and GP referral

5.2.1. In 2023/24, 11.4 million of these tests that may have been used to diagnose or discount cancer were performed, up 2.8% from 11.1 million in 2022/23. Chest X-ray referrals were up 1.4% from 2022/23 and Pelvic and Kidney Ultrasound were up 5.1% and 1.3% respectively; GP referrals for these were generally over pre-pandemic levels but total referrals remained slightly lower. However, Chest or abdomen CT and Brain MRI activity exceeded 2019/20 pre-pandemic levels, especially for direct GP referrals, and were up 8.5% and

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8.1% respectively compared with 2022/23. Table 6 shows the total number of tests suitable for diagnosing cancer, with the subset of these that had a referral source of GP direct access.

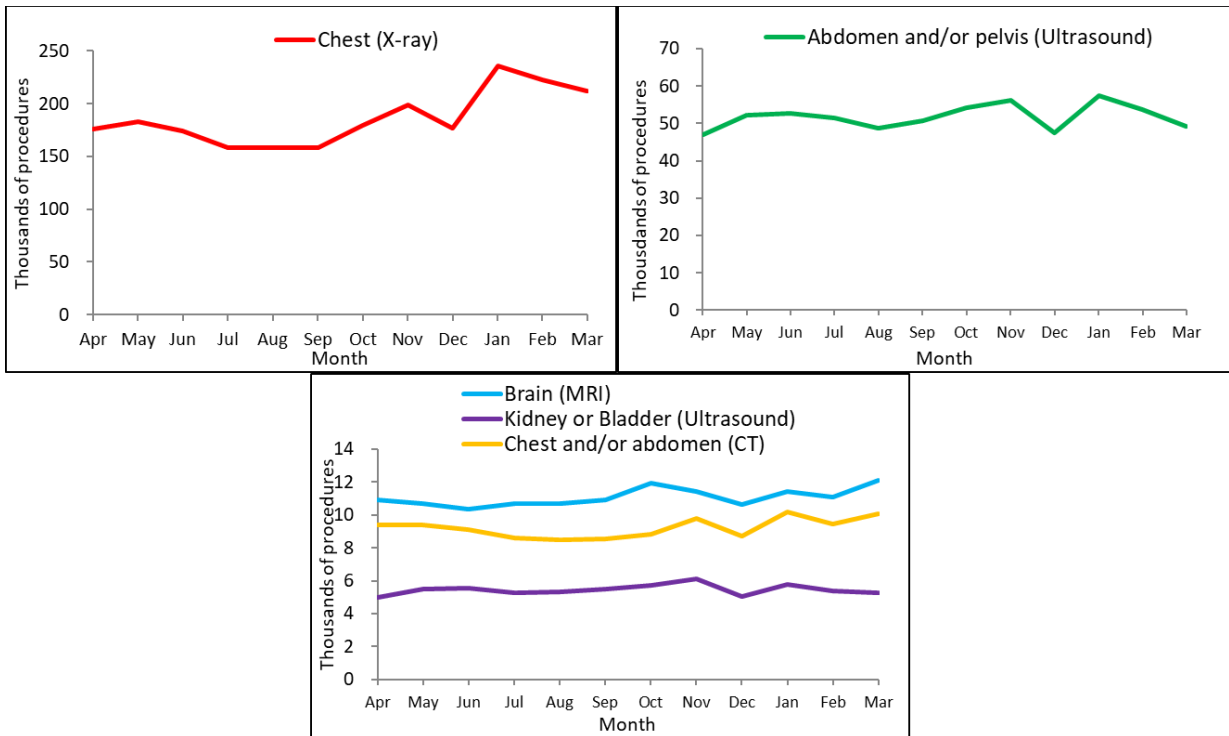
Table 6: Imaging activity for groups of tests suitable for diagnosing cancer, for all patients referred and for those directly referred by a GP, April 2023 to March 2024

	Brain (MRI)		Kidney or bladder (Ultrasound)		Chest and/or abdomen (CT)		Chest (X-ray)		Abdomen and/or pelvis (Ultrasound)	
	All	GP	All	GP	All	GP	All	GP	All	GP
2012/13	472,820	31,035	220,270	67,455	388,640	32,210	7,728,945	1,993,455	1,165,540	536,945
2013/14	529,285	39,540	220,045	65,390	438,190	39,180	7,694,255	1,931,255	1,246,130	570,170
2014/15	584,755	50,150	228,810	67,060	490,140	46,680	8,170,075	2,128,450	1,303,945	600,390
2015/16	629,050	68,325	222,740	65,920	512,825	50,995	8,070,205	2,019,280	1,312,635	600,365
2016/17	686,365	76,925	233,440	65,990	539,405	58,875	8,253,310	2,167,875	1,286,845	576,665
2017/18	717,650	82,115	228,970	62,700	566,610	63,790	8,332,405	2,161,805	1,264,240	559,955
2018/19	774,845	87,320	240,255	65,745	611,620	68,105	8,280,540	2,051,840	1,312,270	586,075
2019/20	802,490	90,970	237,355	63,870	638,905	75,910	8,347,800	2,079,920	1,290,100	581,370
2020/21	689,780	75,280	176,455	43,665	561,555	52,775	6,723,690	1,090,125	947,380	390,705
2021/22	837,395	103,735	203,270	57,415	684,040	82,115	7,906,825	1,818,905	1,179,865	537,275
2022/23	882,125	115,460	211,845	62,995	743,400	97,280	8,080,450	2,099,550	1,208,240	563,815
2023/24	953,500	132,845	214,645	65,525	806,625	110,510	8,194,405	2,233,695	1,269,595	621,030
Change	8.1%	15.1%	1.3%	4.0%	8.5%	13.6%	1.4%	6.4%	5.1%	10.1%
2023/24										
Apr	76,365	10,910	16,750	5,005	63,755	9,365	644,570	176,100	97,765	47,090
May	79,490	10,690	18,455	5,495	66,830	9,400	663,815	182,500	105,965	52,310
Jun	78,790	10,355	18,905	5,560	68,115	9,110	640,380	174,390	107,880	52,610
Jul	80,230	10,710	17,295	5,265	66,905	8,585	628,725	157,840	105,020	51,525
Aug	78,525	10,675	17,940	5,345	65,110	8,475	623,275	158,505	100,745	48,790
Sep	78,850	10,935	17,915	5,480	65,005	8,555	629,290	158,285	104,305	50,600
Oct	80,760	11,945	18,075	5,740	66,825	8,840	687,455	179,510	110,210	54,215
Nov	80,590	11,435	18,985	6,130	68,650	9,805	711,345	198,885	112,380	56,165
Dec	73,775	10,610	16,655	5,065	63,255	8,705	701,855	176,955	97,295	47,505
Jan	82,325	11,425	19,040	5,790	72,640	10,185	794,365	236,150	116,125	57,330
Feb	80,435	11,060	17,815	5,380	69,505	9,420	738,385	222,685	109,265	53,610
Mar	83,375	12,105	16,830	5,280	70,030	10,060	730,950	211,890	102,645	49,270

1. Totals do not always equal the sum of parts due to rounding.
2. % Change is between 2022/23 and 2023/23.

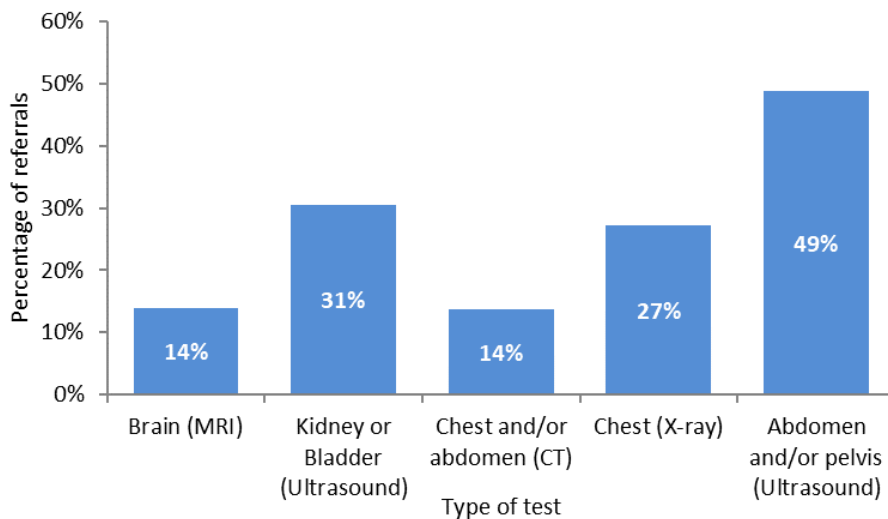
5.2.2. Chest X-ray remained the most common of these tests, with 8.2 million tests being requested through all source settings in 2023/24. This was also the most common test requested by GPs, at 2.2 million (up 6.4% on 2022/23). Next most common were tests that may have been used to diagnose ovarian cancer (Abdominal or Pelvic Ultrasound, 1.3 million), with 49% of such tests being requested by a GP. Imaging activity for patients referred by a GP increased for all modalities in 2023/24 compared with 2022/23. The variation in the number of these tests directly referred by GPs over the year is shown in Graph 4.1.

Graph 4.1: Imaging activity for patients directly referred by a GP, April 2022 to March 2024



5.2.3. Of the 11.4 million tests suitable for diagnosing cancer requested in 2023/24, 27.7% were requested by GPs under direct access arrangements, compared with 26.4% in 2022/23. This increase in the proportion referred by GPs was seen for all tests. Graph 4.2 shows the proportion of each test requested by GPs. The lowest proportions of GP direct access were for Chest and/or Abdomen CT and Brain MRI (both 14%).

Graph 4.2: Percentage of referrals made by GPs by type of test, 2023/24



5.3 Patient test times

Patient test times – Request to test

5.3.1. For the key tests that may be used to diagnose or discount cancer, the median period from a test request being made (or received) to being performed is longer for GP direct access than for all referrals, see Table 7. The main reason for this difference is that ‘all referrals’ includes tests on emergency admissions and inpatients, which have shorter waits.

Table 7: Median number of days between date of test request and date of test for groups of tests suitable for diagnosing cancer, overall and for GP Direct Access, April 2023 to March 2024

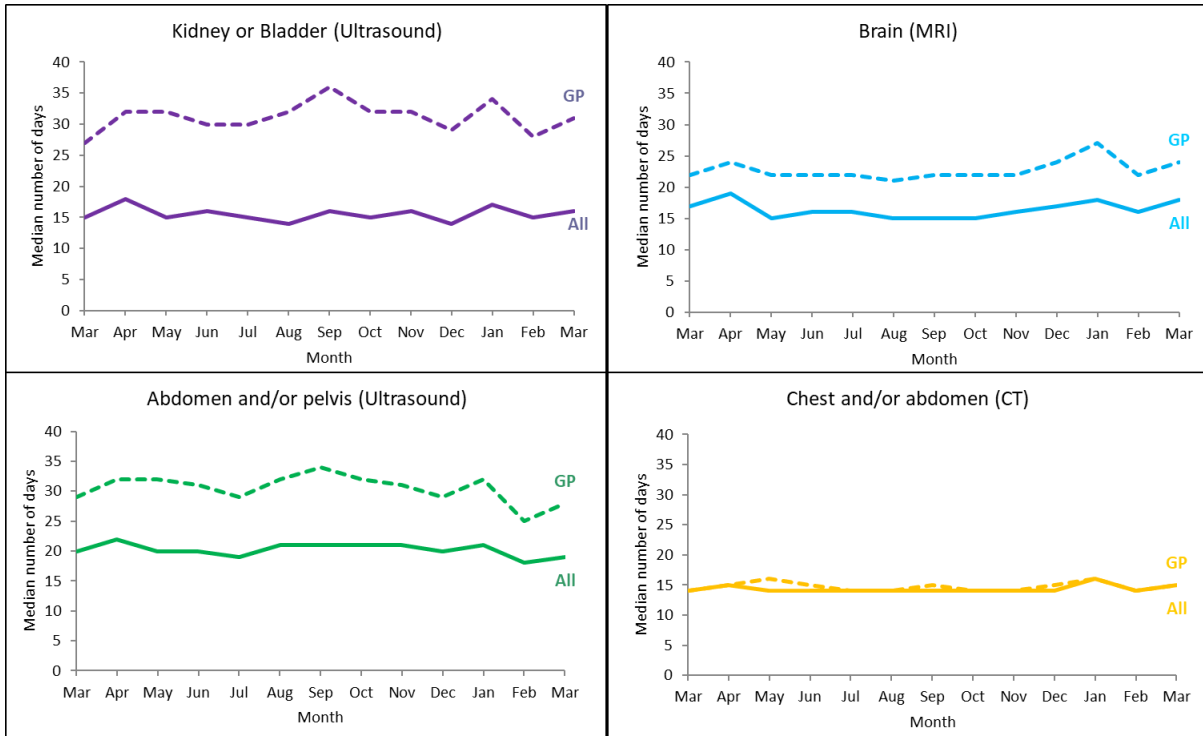
	Brain (MRI)		Kidney or bladder (Ultrasound)		Chest and/or abdomen (CT)		Chest (X-ray)		Abdomen and/or pelvis (Ultrasound)	
	All	GP	All	GP	All	GP	All	GP	All	GP
2012/13	21	25	13	23	13	17	0	0	14	22
2013/14	21	25	13	23	13	16	0	0	15	24
2014/15	21	26	13	24	14	17	0	0	17	26
2015/16	19	21	11	26	14	16	0	0	17	27
2016/17	19	21	12	27	14	17	0	0	17	27
2017/18	19	22	12	27	15	18	0	0	17	27
2018/19	19	22	13	28	16	18	0	0	20	30
2019/20	18	23	13	27	16	19	0	0	19	30
2020/21	12	21	11	25	13	16	0	5	13	26
2021/22	16	25	14	32	15	16	0	7	19	32
2022/23	16	25	15	30	14	15	0	5	20	32
2023/24	16	23	15	31	14	15	0	3	20	30
Apr	19	24	18	32	15	15	0	4	22	32
May	15	22	15	32	14	16	0	4	20	32
Jun	16	22	16	30	14	15	0	4	20	31
Jul	16	22	15	30	14	14	0	4	19	29
Aug	15	21	14	32	14	14	0	4	21	32
Sep	15	22	16	36	14	15	0	3	21	34
Oct	15	22	15	32	14	14	0	3	21	32
Nov	16	22	16	32	14	14	0	3	21	31
Dec	17	24	14	29	14	15	0	3	20	29
Jan	18	27	17	34	16	16	0	2	21	32
Feb	16	22	15	28	14	14	0	3	18	25
Mar	18	24	16	31	15	15	0	3	19	28

Note: Median values of 0 occur where at least 50% of activity has the same day for both 'date of test request' and 'date of test'. Where 'Date of test request' was missing in 2023/24, 'Date of test request received' was used instead. Records where both dates were missing were excluded from the median calculation.

5.3.2. The median period from request to test was unchanged or lower in 2023/24 than in 2022/23 for most key tests under GP direct access arrangements. Kidney or Bladder (Ultrasound) still has a higher median period from request to test than before the pandemic, but most other figures in 2023/24 were comparable to or below pre-pandemic levels for tests that may be used to diagnose or discount cancer.

5.3.3. The median number of days between date of request and date of test varied during 2023/24 for tests that are suitable for diagnosing cancer as shown in Graph 5. There was a seasonal increase in the request to test period in January 2023 for all modalities except Chest X-ray.

Graph 5: Median number of days between date of test request and date of test for groups of tests suitable for diagnosing cancer, overall and for GP Direct Access, March 2023 to March 2024



Patient test times – Test to report

5.3.4. The overall median period between the date of test and the date the report was issued was similar to pre-pandemic 2019/20 levels for most tests suitable for diagnosing cancer in 2023/24, as shown in Table 8. Compared with 2022/23, a lower percentage of reports for Chest CT were turned around the same day in 2023/24, with the median period from test to report for GP Chest CT rising from 4 to 5 days, but the median turnaround time for all other tests remained the same

5.3.5. For GP direct access referrals, there is generally a slightly lower percentage of tests suitable for diagnosing cancer reported the same day than overall; the exception is Chest X-ray. The difference for Ultrasound tests were small, as over 90% were reported on the same day. For Brain MRI, the median period from test to report was 2 days longer for GP-referred cases than the overall median.

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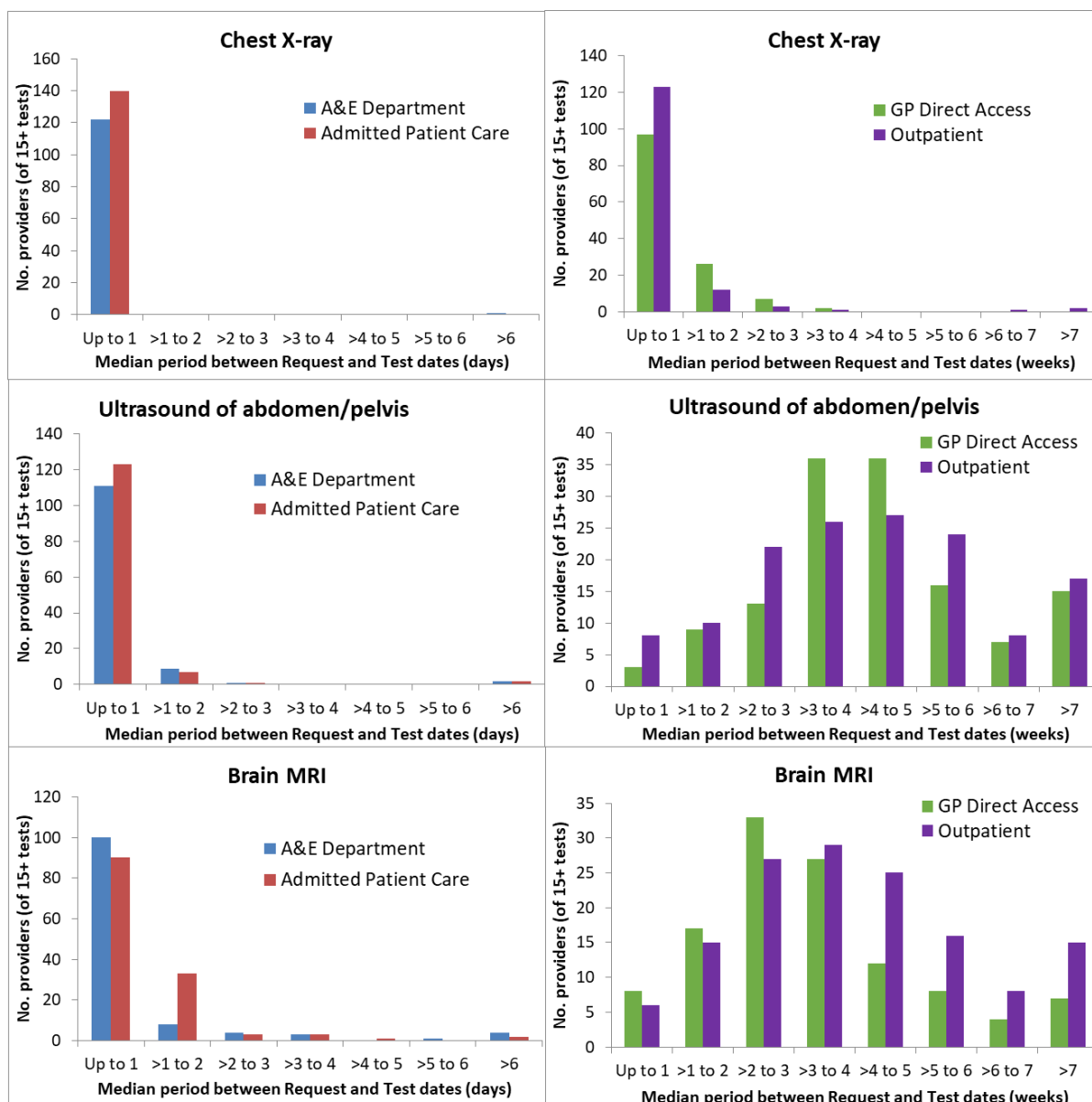
Table 8: Median number of days between date of test and date test report issued and Percentage of records where report issued on day of test, for groups of tests suitable for diagnosing cancer, All referrals and GP Direct Access, April 2023 to March 2024

	Brain (MRI)				Kidney or bladder (Ultrasound)				Chest and/or abdomen (CT)				Chest (X-ray)				Abdomen and/or pelvis (Ultrasound)			
	All Median	All % Same day	GP Median	GP % Same day	All Median	All % Same day	GP Median	GP % Same day	All Median	All % Same day	GP Median	GP % Same day	All Median	All % Same day	GP Median	GP % Same day	All Median	All % Same day	GP Median	GP % Same day
2012/13	2	32%	3	17%	0	85%	0	80%	1	42%	2	32%	2	25%	2	29%	0	86%	0	84%
2013/14	2	34%	3	18%	0	89%	0	85%	1	40%	2	29%	2	25%	2	28%	0	89%	0	88%
2014/15	2	33%	3	18%	0	91%	0	88%	1	38%	2	27%	2	25%	2	28%	0	90%	0	89%
2015/16	2	35%	3	21%	0	92%	0	89%	1	36%	2	25%	2	26%	2	29%	0	92%	0	90%
2016/17	2	33%	3	19%	0	93%	0	89%	2	36%	3	23%	2	26%	2	27%	0	93%	0	91%
2017/18	2	32%	3	16%	0	94%	0	90%	2	34%	4	19%	2	24%	2	28%	0	94%	0	92%
2018/19	2	33%	3	17%	0	95%	0	92%	3	32%	4	19%	2	24%	1	29%	0	95%	0	93%
2019/20	2	33%	3	17%	0	95%	0	92%	3	30%	4	16%	2	24%	2	28%	0	95%	0	94%
2020/21	1	39%	2	23%	0	95%	0	92%	1	39%	2	23%	1	35%	1	43%	0	96%	0	93%
2021/22	2	35%	3	18%	0	95%	0	91%	3	30%	4	18%	2	24%	1	30%	0	95%	0	93%
2022/23	2	34%	4	16%	0	95%	0	92%	4	28%	4	17%	2	23%	2	29%	0	95%	0	93%
2023/24	2	33%	4	16%	0	95%	0	93%	4	27%	5	15%	2	25%	2	31%	0	95%	0	93%
Apr	3	32%	4	15%	0	95%	0	95%	4	27%	5	15%	2	25%	2	30%	0	96%	0	94%
May	2	33%	4	16%	0	96%	0	94%	4	28%	4	17%	2	23%	2	30%	0	95%	0	93%
Jun	2	34%	4	16%	0	96%	0	94%	4	28%	4	16%	2	25%	2	30%	0	95%	0	93%
Jul	2	33%	4	14%	0	96%	0	94%	4	27%	5	16%	2	25%	2	31%	0	95%	0	93%
Aug	2	34%	4	16%	0	96%	0	94%	5	27%	5	15%	2	25%	2	31%	0	96%	0	94%
Sep	2	34%	4	15%	0	95%	0	92%	4	26%	5	14%	2	25%	2	32%	0	95%	0	93%
Oct	2	33%	4	15%	0	95%	0	92%	4	27%	4	16%	2	24%	2	32%	0	95%	0	93%
Nov	2	33%	3	15%	0	95%	0	92%	4	27%	4	15%	2	26%	1	33%	0	95%	0	93%
Dec	2	33%	3	16%	0	95%	0	93%	4	28%	5	13%	2	24%	1	33%	0	95%	0	93%
Jan	2	34%	3	17%	0	95%	0	92%	3	28%	4	15%	2	25%	2	30%	0	95%	0	93%
Feb	2	33%	4	16%	0	95%	0	92%	4	27%	5	14%	2	25%	2	30%	0	95%	0	93%
Mar	3	33%	4	16%	0	96%	0	93%	4	26%	6	12%	2	23%	2	28%	0	95%	0	94%

Patient test times – Variation by provider

5.3.6. The median period between the date the test request was made (or received) and the test date varies by provider as well as by referral source and modality, see Graph 6.1 for Chest X-ray, Ultrasound of the abdomen and/or pelvis and Brain MRI. Chest X-ray has least variation by provider in the median period from request to test, with the median for A&E and admitted patients generally up to a day and those for GP referrals and outpatients generally up to a week, but with more spread over a week than was usual pre-COVID. The median from request to test by provider was also generally up to one day for Ultrasound of abdomen/pelvis and Brain MRI for A&E and admitted patients, but with more variability for Brain MRI for admitted patients. There was much more variation in the median from request to test for GP direct access and outpatients for all three tests, with providers differing in their median request to test period by several weeks.

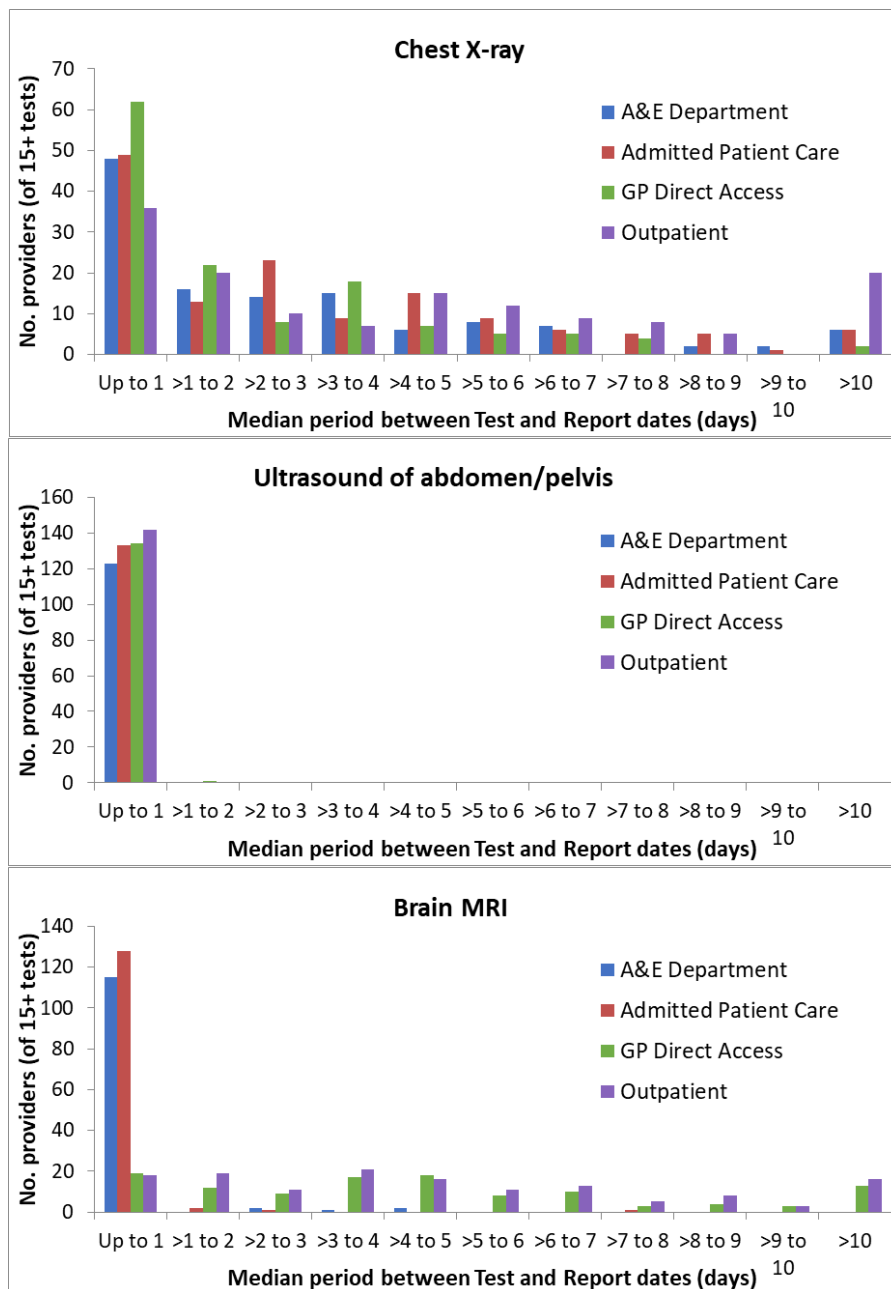
Graph 6.1 Variation by provider of median period from date of test request to date of test for procedures suitable for diagnosing cancer, by referral source, 2023/24



Note: Median period from 'date of test request' or, where missing, 'date of test request received' to 'date of test'.

5.3.7. The median period between the test and report dates varies by provider for Chest X-ray and Brain MRI, but not for Ultrasound of the abdomen and/or pelvis, see Graph 6.2. Of these, only Chest X-ray shows some variation by provider for A&E and admitted patients, but Brain MRI also shows variation in the provider medians for GP direct access and outpatient referrals. The median reporting period for Ultrasound of the abdomen and/or pelvis is up to a day for almost all providers for all referral sources. Longer median test to report periods did not necessarily appear in the same providers as longer median request to test periods, nor in those with higher or lower activity (no significant correlations were found).

Graph 6.2 Variation by provider of median period from date of test to date test report issued for procedures suitable for diagnosing cancer, by referral source, 2023/24



6 Annex

6.1 Data Quality Statement

6.1.1. Although Radiology Information Systems (RISs) were not originally intended to provide data for statistical purposes and have some inconsistencies, they do provide a rich resource with great potential for wider analysis. This data collection aligns with the code of practice for official statistics in making better use of administrative data and evaluating existing data sources to limit the burden on respondents.

6.1.2. There are a number of validations built into the DID upload system, verifying that the data provided by organisations makes sense. Whilst validations and other checks have been made to ensure that the data are complete and accurately reflect activity, data issues affect activity for some providers.

6.1.3. Final data for each month are extracted from the DID data warehouse around the 28th of the sixth month after the period. There continues to be gaps in data coverage in 2023/24, with 13 providers failing to submit all or any records for at least one month. The overall shortfall from these missing submissions is estimated to be around 1.2 million imaging records, or 2.6% of the total submitted. In addition, some data submissions may be incomplete. The biggest shortfalls are listed below (see Section 4 of the Technical Report for further details):

- King's College Hospital NHS Foundation Trust (RJZ) did not report any activity from October 2023 to March 2024, resulting in an estimated shortfall of 320,000 records.
- Guy's and St Thomas' NHS Foundation Trust (RJ1) did not report any activity from October 2023 to March 2024, resulting in an estimated shortfall of 230,000 records.
- Buckinghamshire Healthcare NHS Trust (RXQ) did not report any activity from April to August 2023 and December 2023 to February 2024, resulting in an estimated shortfall of 215,000 records.
- East Kent Hospitals University NHS Foundation Trust (RVV) did not report any activity for July and August 2023, resulting in an estimated shortfall of 100,000 records.
- North Cumbria Integrated Care NHS Foundation Trust (RNN) did not report any activity from April to June 2023 and March 2024, resulting in an estimated shortfall of 100,000 records.
- University Hospitals of Leicester NHS Trust (RWE) did not report any activity for August and September 2023, resulting in an estimated shortfall of 100,000 records.

6.1.4. In addition to shortfalls from missing submissions, absent or misleading data in individual fields may affect analysis of the data. Examples are listed below, with more given in Section 4 of the Technical Report:

- Birmingham Women's and Children's NHS Foundation Trust (RQ3) did not report gender for 49% of its activity at the Women's hospital site during 2023/24 (85% of activity from April to October).

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- Countess of Chester Hospital NHS Foundation Trust (RJR) resubmitted records for January to March 2024 without overwriting, resulting in an excess of 45,000 records.
- Chelsea and Westminster Hospital NHS Foundation Trust (RQM) defaulted to 'Other' patient source setting for up to 40% of their OP requests from April to October 2024, affecting ultrasound.
- Northampton General Hospital NHS Trust (RNS) defaulted to 'Other' patient source setting for all records in February 2024, that should be from a variety of sources.
- Whittington Health NHS Trust (RKE) submitted no Test request dates or Test report issued dates for 96,000 (45%) records during 2023/24.

6.1.5. Other providers missing certain data fields for all or part of the year include a valid GP Practice, Patient postcode, Age (date of birth), Sex, Date of request or report and Patient source setting. The Technical Report gives more information on data completeness and quality in Section 4.

6.1.6. Reported times from test request to test should not be compared to diagnostic test waiting time statistics, as these are collected using different definitions. Unlike these statistics, the DM01 diagnostic test waiting times statistics exclude records where, for example:

- The patient is waiting for a planned (or surveillance) diagnostic test/procedure, that is a procedure or series of procedures as part of a treatment plan which is required for clinical reasons to be carried out at a specific interval or repeated at a specific frequency;
- The patient is currently admitted to a hospital bed and is waiting for a diagnostic test/procedure as part of their inpatient treatment.

6.1.7. For the data published here, 98.9% of tests had a date of test request or date of test request received included (up from 98.3% in 2022/23). In addition, 94.3% of tests had a date of test report issue included (the same as in 2022/23).

6.1.8. Some patient records have no known commissioner as this is derived from patient registered GP practice which is not a mandatory field. In 2023/24, where this was missing, ICB and Sub-ICB Location were derived from Lower Super Output Area (LSOA) based on patient postcode instead. Data shortfalls by provider also affect their commissioner data.

6.1.9. Details of coverage, completeness, comparability with other data sources and a discussion on the types of data quality issues encountered are provided in the Technical Report which is available on the [NHS England DID website](#).

6.2 Revisions

In the provisional publications, several Trusts did not provide data on time and their figures were shown as blank. Many of these subsequently submitted data, with the exceptions listed above. Further revisions will only be made in exceptional circumstances, see the Technical Report.

6.3 Glossary

Computerised Axial Tomography (CT Scan)

Computed tomography (CT), sometimes called CAT scan, uses special X-ray equipment to obtain image data from different angles around the body, then uses computer processing of the information to show a cross-section of body tissues and organs. In the DID this means all codes mentioning CAT or computed tomography except those also mentioning PET.

Diagnostic Ultrasonography (Ultrasound)

The use of ultrasonic waves for diagnostic or therapeutic purposes, specifically to image an internal body structure, monitor a developing foetus or generate localised deep heat to the tissues. In the DID this means any code relating to ultrasound.

Fluoroscopy

Fluoroscopy is an imaging technique commonly used by physicians to obtain real-time images of the internal structures of a patient through the use of a fluoroscope. In its simplest form, a fluoroscope consists of an X-ray source and fluorescent screen between which a patient is placed. In the DID this is a collection of codes mentioning fluoroscopy or using fluoroscopic guidance, Barium enema or swallow. Interventional procedures are classified under imaging modalities which provide guidance. Almost all interventional procedures are under fluoroscopy procedure. A much smaller number of interventional procedures are under CT or MRI procedures.

Magnetic Resonance Imaging (MRI)

Magnetic resonance imaging (MRI) is a method of producing extremely detailed pictures of body tissues and organs without the need for X-rays. The electromagnetic energy that is released when exposing a patient to radio waves in a strong magnetic field is measured and analysed by a computer, which forms two- or three-dimensional images that may be viewed on a TV monitor. In the DID this means all codes mentioning MRI.

Plain Radiography (X-ray)

A Radiograph is an image produced on a radiosensitive surface, such as a detector, by radiation other than visible light, especially by X-rays passed through an object or by photographing a fluoroscopic image. In the DID this means any code referring to radiography or X-ray.

Medical Photography

A Photograph is an image recorded on sensitised material by energy from the light spectrum, which is then processed to create a print that can be viewed clearly. Medical Photography is used in order to document a variety of different medical conditions and their treatment.

Nuclear Medicine

Nuclear medicine (NM) is a branch of medicine and medical imaging that uses unsealed radioactive substances in diagnosis and therapy. These substances consist of radionuclides, or pharmaceuticals that have been labelled with radionuclides (radiopharmaceuticals). In diagnosis, radioactive substances are administered to patients and the radiation emitted is measured.

Nuclear medicine imaging tests differ from most other imaging modalities in that the tests primarily show the physiological function of the system being investigated, as opposed to the anatomy. It has both diagnostic and therapeutic uses, such as planning cancer treatments and evaluating how well a patient has responded to a treatment. It can be used with other diagnostic methods, including CT scans and MRI, where the images are superimposed to produce complex cross-sectional, three-dimensional scans.

Position Emission Tomography – Computer Tomography (PET-CT Scans)

Position Emission Tomography - Computed Tomography (PET-CT Scan) is an imaging technique used in the diagnosis and treatment of cancer which combines PET with CT. PET uses gamma-type cameras to produce crude three-dimensional images highlighting radionuclide concentration in the body. CT allows precise localisation of the radionuclide concentration. PET-CT scans can be used to show how far a cancer has spread and can determine if a patient is responding positively to a treatment. In the DID this means all codes mentioning PET, whether or not they also mention CT.

Single Photon Emission Computerised Tomography (SPECT scans)

Single Photon Emission Computerised Tomography (SPECT scans) is an imaging method that allows for analysis of internal organs. Gamma photon-emitting radionuclides are administered to a patient prior to being exposed to gamma cameras that rotate around a patient to produce cross-sectional slices that can then be reformatted into a true three-dimensional image of the patient.

Median

The median is the preferred measure of the average time between pairs of dates within records as it is less susceptible to extreme values than the mean. The median number of days between pairs of dates is calculated by ordering the values obtained by subtracting the dates for each record and selecting the middle value when all records are ranked by these numbers of days.

Modality

The broad procedure or method used for examination, for example MRI. This may include procedures assisted by the method, e.g. biopsy or injection. In the DID the modality of the examination is derived from SNOMED CT (Systematised Nomenclature of Medicine - Clinical Terms) or NICIP (National Interim Clinical Imaging Procedure) codes.

Patient source setting

This is a categorisation of the department or organisation making the referral for the imaging activity. It includes categories for admitted patient care, outpatients, GP Direct Access, A&E and health care providers other than the organisation providing the imaging activity.

6.4 Contact Us

6.4.1. Feedback

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

6.4.2. Websites

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

Those who submit data to DID do so via a secure submission portal. Further information about submissions can be found on the [submission website](#).

The DID Additional Tables and Technical Report can be found on [NHS England DID website](#).

6.4.3. 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

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