**Classification: Official** 



# Diagnostic Imaging Dataset Statistical Release

Version 1, 20th July 2023

# Contents

1	Intr	oduction	2
	1.1	Frequently Used Acronyms	2
2	Hea	adline Messages	3
3	Cu	rrent Data – March 2022 to March 2023	4
	3.1 3.2 3.3	Imaging Activity Patient Test Times Imaging Tests that could contribute to Early Diagnosis of Cancer	6
4	Anı	nex	13
	4.2 Conta 4.2 4.2	Glossary Data Quality Statement act Us .1 Feedback .2 Websites	15 16 16 16
	4.2	.3 Additional Information	16

# 1 Introduction

The Diagnostic Imaging Dataset (DID) is a monthly data collection covering data on diagnostic imaging tests on NHS patients in England. It includes 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*<sup>1</sup>. 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 Digital.

## 1.1 Frequently Used Acronyms

- DID
  Diagnostic Imaging Dataset
- RIS
  Radiology Information System

In this publication, imaging activity for the latest month of data is based on submissions up to the 28th of the month before the publication.

<sup>&</sup>lt;sup>1</sup> <u>Improving Outcomes: A Strategy for Cancer</u>, first published 12 January 2011. In May 2016, the cancer strategy implementation plan was updated: <u>Achieving World-Class Cancer</u> <u>Outcomes: Taking the strategy forward</u>.

# 2 Headline Messages

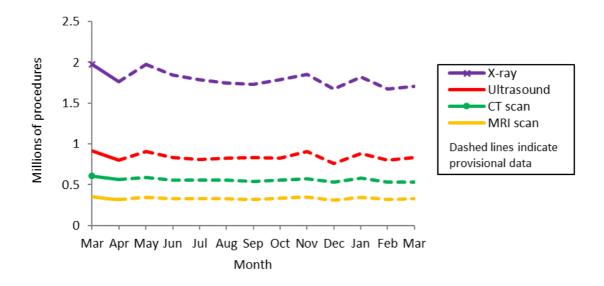
- There were 43.5 million imaging tests reported in England in the 12 months from April 2022 to March 2023. Of these, 3.53 million imaging tests were reported to have taken place in March 2023.
- In March 2023, Plain Radiography (X-ray) was most common (1.71 million), followed by Diagnostic Ultrasonography (Ultrasound, 0.83 million), Computerized Axial Tomography (CT Scan, 0.54 million) and Magnetic Resonance Imaging (MRI, 0.33 million).
- The median period between the request being made and the test being performed in March 2023 varied greatly for the different tests, from the same day for X-ray, Fluoroscopy and Medical Photography to 23 days for SPECT scan.
- The median period for the report to be issued after the test in March 2023 ranged from the same day for Ultrasound, for example, to 3 days for MRI.
- In March 2023, GPs requested 28.6% of all tests that may have been used to diagnose or discount cancer<sup>2</sup>, under direct access arrangements. Of these, the test most commonly requested by GPs was Chest X-ray (188,000), whilst the test with the highest proportion of GP referral was ultrasounds that may have been used to diagnose ovarian cancer (47% of which were requested by GPs).

<sup>2</sup> Although these tests are used to diagnose cancer, many of the tests also have wider clinical uses. Within this data it is not possible to distinguish between the different uses of these tests

# 3 Current Data – March 2022 to March 2023

## 3.1 Imaging Activity

- 3.1.1. There were 43.5 million imaging tests reported in England during the year from April 2022 to March 2023. Of these, 3.53 million imaging tests were reported to have taken place in March 2023.
- 3.1.2. Out of all tests performed in March 2023, X-rays (Plain Radiography) were the most common, with 1.71 million X-rays being performed. The next most common procedures were Diagnostic Ultrasonography (Ultrasound, 0.83 million), Computerized Axial Tomography (CT Scan, 0.54 million) and Magnetic Resonance Imaging (MRI, 0.33 million).
- 3.1.3. Table 1 gives an all-England count of imaging activity by modality from March 2022 to March 2023. March 2022 is shown at the top of the table for comparison but is not included in the totals for the latest 12 months. Overall activity for all modalities decreased by 11.6% between March 2022 and March 2023.
- 3.1.4. Graph 1 shows the trend in imaging activity from March 2022 to March 2023.



Graph 1: NHS imaging activity in England, March 2022 to March 2023

All data from April 2022 onwards remain provisional and subject to change. Further information on the tests included in these tables is given in the glossary section. Full break-downs by modality, provider and referral source setting are given in Tables 1 - 6 (separate excel files), available from <u>NHS England DID website</u>.

	X-ray	Ultrasound	CT Scan	MRI	Fluoroscopy	Nuclear Medicine	PET-CT Scans	SPECT Scans	Medical Photography	% organisations included	Total
Mar	1,970,995	913,005	608,115	350,970	81,980	30,405	21,905	4,485	4,900	100.0%	3,986,765
Apr	1,765,845	799,965	560,880	323,780	69,895	25,660	19,455	3,140	4,435	99.4%	3,573,060
May	1,977,975	905,150	586,075	347,900	79,765	29,470	21,775	3,405	5,110	100.0%	3,956,630
Jun	1,843,245	831,545	554,700	325,835	73,380	26,865	20,500	3,345	4,765	99.4%	3,684,175
Jul	1,789,560	808,280	556,760	328,110	71,315	26,320	20,830	3,330	4,010	98.2%	3,608,515
Aug	1,745,250	824,185	553,650	325,130	71,690	26,855	20,565	3,385	4,375	97.6%	3,575,075
Sep	1,733,860	830,850	539,865	317,575	70,925	25,965	20,785	3,205	4,170	95.7%	3,547,195
Oct	1,788,870	827,875	555,785	332,820	68,780	25,975	19,995	3,320	4,335	96.3%	3,627,765
Nov	1,849,125	903,595	573,625	345,805	75,775	21,320	22,255	2,965	4,705	96.3%	3,799,175
Dec	1,673,905	762,920	531,760	309,295	64,045	24,180	19,130	3,265	3,985	97.6%	3,392,485
Jan	1,822,915	880,190	578,360	342,175	72,205	28,635	21,470	3,650	4,610	96.3%	3,754,205
Feb	1,670,620	799,965	528,180	317,960	64,820	26,015	21,135	3,410	4,425	92.7%	3,436,530
Mar	1,706,335	834,430	535,275	327,180	66,265	26,020	21,645	3,735	4,880	88.4%	3,525,770
Total	21,367,505	10,008,955	6,654,915	3,943,570	848,860	313,280	249,535	40,155	53,800	-	43,480,575

#### Table 1: Count of imaging activity in England, on NHS Patients, March 2022 to March 2023

1. Activity not matched to a known organisation is omitted.

 Data from April 2022 onwards remain provisional and subject to change.
 Total row represents a rolling 12-month total and does not include activity from the earliest month in the table. Totals may not always equal the sum of the parts due to rounding

#### 3.2 Patient Test Times

- 3.2.1. The DID collects data on four dates associated with each imaging event:
  - Date of test request (request made by health care professional)
  - Date of test request received (by the organisation providing the imaging)
  - Date of test
  - Date of test report issued (by health care professional interpreting the imaging output)
- 3.2.2. The Date of Test determines the month an imaging event is reported under in the DID monthly publications.
- 3.2.3. There is variation in the median period between the request being made (or received) and the test being performed for each of the different tests in March 2023. The median period was as low as the same day for X-ray, Fluoroscopy and Medical Photography and as high as 23 days for SPECT scan scans.
- 3.2.4. Table 2 gives the median number of days between the 'date of test request' (or, where this was missing, the 'date of test request received') and the 'date of test', split by the test modality for each month from March 2022 to March 2023.

	X- ray	Ultra- sound	CT Scans	MRI	Fluoro- scopy	Nuclear Medicine	PET- CT Scans	SPECT Scans	Medical Photography
Mar	0	14	1	20	0	20	9	18	0
Apr	0	14	1	22	0	21	10	20	0
May	0	14	1	20	0	20	9	19	0
Jun	0	14	1	21	0	22	10	20	0
Jul	0	14	1	20	0	21	9	20	0
Aug	0	14	1	20	0	21	9	21	0
Sep	0	14	1	19	0	21	9	20	0
Oct	0	14	1	18	0	20	9	17	0
Nov	0	15	1	20	0	21	8	19	0
Dec	0	14	1	21	0	22	9	21	0
Jan	0	15	1	25	0	28	11	28	0
Feb	0	14	1	20	0	22	10	22	0
Mar	0	14	1	20	0	22	9	23	0

# Table 2: Median number of days between 'date of test request' and 'date of test' for imaging activity, March 2022 to March 2023

<u>Note:</u> 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, 'Date of test request received' was used instead. Records where both dates were missing were excluded from the median calculation.

3.2.5. These figures should not be compared to "waiting time" statistics that measure how long patients are on a waiting list, since the DID figures include both planned and unplanned imaging activity. In addition, they exclude any cancelled or missed appointments and they count the period for each distinct test not each patient appointment.

3.2.6. There was slight variation between different test types in the median period for the report to be issued after the test. In March 2023 this ranged from the same day for Ultrasound, for example, to 3 days for MRI. Table 3.1 gives the median number of days between 'date of test' and 'date of test report issued', split by the test modality for each month March 2022 to March 2023. Table 3.2 gives the percentage of records where the test report is issued on the same day of test, split by modality.

Table 3.1: Median number of days between 'date of test' and 'date of test report
issued' for imaging activity, by modality, March 2022 to March 2023

	X-ray	Ultra- sound	CT Scans	MRI	Fluoro- scopy	Nuclear Medicine	PET-CT Scans	SPECT Scans	Medical Photography
Mar	1	0	0	3	0	1	2	1	0
Apr	2	0	0	4	0	1	2	1	0
May	1	0	0	3	0	1	2	1	0
Jun	1	0	0	3	0	1	2	2	0
Jul	2	0	0	4	0	1	3	2	0
Aug	1	0	0	4	0	1	3	2	0
Sep	1	0	0	4	0	1	3	1	0
Oct	1	0	0	3	0	1	2	1	0
Nov	1	0	0	3	0	1	2	1	0
Dec	1	0	0	4	0	1	2	1	0
Jan	1	0	0	3	0	1	2	1	0
Feb	1	0	0	3	0	1	2	1	0
Mar	1	0	0	3	0	1	2	1	0

Note: Median values of 0 occur where at least 50% of activity has the same day for both 'date of test' and 'date of test report issued'. Records where either of these dates is missing are excluded from the calculation of median values. 95.3% of all records for tests performed in March 2023 included both these dates.

# Table 3.2: Percentage of records where date of test report issued equals date of test, by modality, March 2022 to March 2023

	X-ray	Ultra- sound	CT Scans	MRI	Fluoro- scopy	Nuclear Medicine	PET-CT Scans	SPECT Scans	Medical Photography
Mar	33%	94%	60%	25%	75%	36%	14%	33%	58%
Apr	32%	94%	60%	24%	75%	36%	15%	39%	54%
May	33%	94%	58%	24%	74%	36%	14%	38%	57%
Jun	33%	94%	58%	25%	74%	37%	13%	35%	61%
Jul	32%	94%	58%	24%	75%	36%	10%	35%	53%
Aug	33%	94%	58%	25%	74%	36%	11%	33%	51%
Sep	33%	94%	58%	24%	74%	37%	12%	37%	52%
Oct	33%	94%	58%	23%	75%	36%	13%	38%	52%
Nov	36%	94%	58%	24%	74%	37%	11%	36%	50%
Dec	35%	94%	59%	23%	75%	37%	14%	38%	53%
Jan	36%	94%	57%	23%	74%	36%	14%	37%	40%
Feb	35%	93%	57%	24%	74%	35%	12%	34%	54%
Mar	35%	94%	57%	23%	74%	35%	12%	36%	52%

#### 3.3 Imaging Tests that could contribute to Early Diagnosis of Cancer

3.3.1. A main driver for the creation of the DID is to assess 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 particularly used to identify or discount a diagnosis of cancer have 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)

These 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.

- 3.3.2. 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.
- 3.3.3. Brain MRI, Chest X-ray, and Ultrasounds of the abdomen and pelvis to diagnose ovarian cancer are three of the key tests which are outlined in *Improving Outcomes: a Strategy for Cancer.*
- 3.3.4. In March 2023, GPs requested 28.6% of all tests that may have been used to diagnose or discount cancer, under direct access arrangements. Of these, the test most commonly requested by GPs was Chest X-ray (188,000), whilst the test with the highest proportion of GP referral was ultrasounds that may have been used to diagnose ovarian cancer (47% of which were requested by GPs).
- 3.3.5. Table 4 gives a count of tests carried out on NHS patients that may have been used to make an early diagnosis of cancer. It includes the total number of these tests carried out, regardless of referral source setting, and a subset of this total where the referral source was recorded as "GP Direct Access".

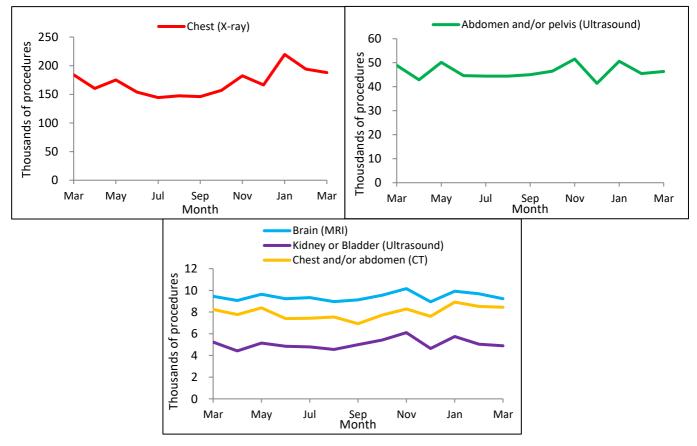
	Brain (MRI)		Blac	Kidney or Bladder (Ultrasound)		and/or en (CT)	Chest	(X-ray)	Abdomer pel <sup>s</sup> (Ultras	vis			
	All	GP	All	GP	All	GP	All	GP	All	GP			
Mar	73,605	9,445	18,030	5,235	64,970	8,240	715,345	184,070	107,430	48,905			
Apr	70,485	9,070	15,555	4,420	58,570	7,765	651,925	160,130	93,555	42,885			
Мау	76,045	9,645	17,595	5,145	64,370	8,385	684,210	175,045	107,575	50,190			
Jun	70,935	9,225	16,545	4,850	60,015	7,395	634,510	153,770	97,105	44,655			
Jul	70,400	9,335	16,530	4,790	60,170	7,435	616,355	144,265	95,770	44,405			
Aug	70,205	8,970	16,505	4,550	58,080	7,550	594,350	147,390	96,490	44,455			
Sep	69,550	9,125	16,920	5,000	55,170	6,930	597,475	146,040	96,860	45,015			
Oct	70,995	9,550	17,410	5,430	59,235	7,725	650,365	157,010	98,835	46,505			
Nov	74,935	10,160	19,230	6,105	62,670	8,290	683,355	182,380	108,555	51,540			
Dec	67,035	8,945	15,965	4,640	56,820	7,600	714,550	166,460	88,500	41,415			
Jan	75,455	9,920	18,595	5,750	64,635	8,920	737,455	219,545	106,045	50,625			
Feb	69,905	9,685	16,770	5,040	60,155	8,515	642,605	194,010	95,765	45,515			
Mar	71,595	9,230	16,580	4,885	62,560	8,445	648,940	187,930	97,895	46,375			

Table 4: Imaging activity for groups of tests suitable for diagnosing cancer, for all patients referred and for those directly referred by a GP, March 2022 to March 2023

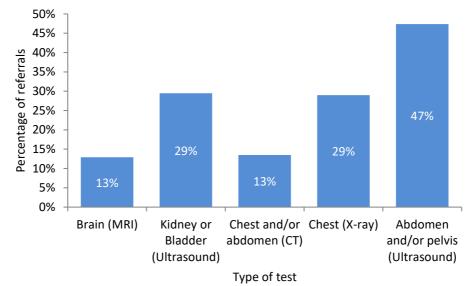
Note: Data from April 2022 onwards have been updated but remain provisional and subject to change.

3.3.6. The number of Chest X-rays (all referrals and GP referrals) appeared to show some seasonality with summer months generally having lower numbers of Chest X-rays and winter months higher levels. This was not evident in the other tests. The trend in imaging activity for patients directly referred by a GP for March 2022 to March 2023 is shown in Graph 2.

Graph 2: Imaging activity for patients directly referred by a GP, March 2022 to March 2023



3.3.7. Graph 3 shows the proportion of referrals that were made by GPs for tests undertaken in March 2023. Ultrasounds on the Abdomen and/or Pelvis had the highest proportion (47%) of referrals made by GPs, whilst Brain MRI and Chest and/or Abdomen CT had the lowest (13%).



#### Graph 3: Percentage of referrals made by GPs by type of test, March 2023

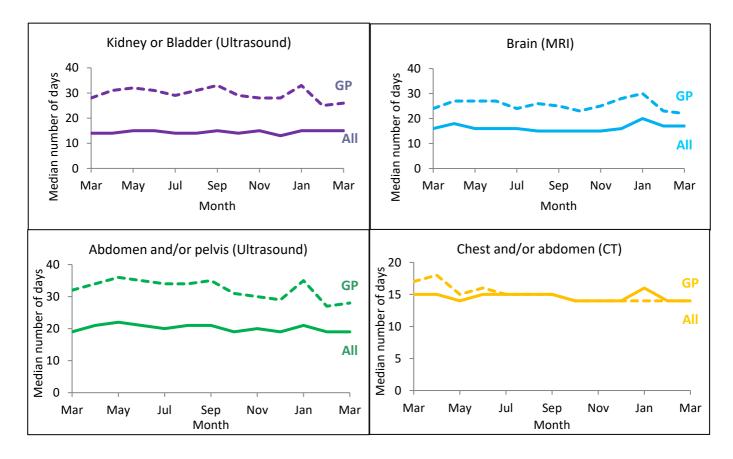
- 3.3.8. Table 5 shows the median number of days between the date a test was requested and the date the test was completed, for groups of tests suitable for diagnosing cancer, for All Referral routes and GP Direct Access for March 2022 to March 2023.
- 3.3.9. The median period from a test being requested (or, where this was missing, the date of test request being received) to being performed is noticeably longer for GP direct access than overall for the Ultrasound tests (Kidney or bladder and Abdomen and/or pelvis) used to diagnose or discount cancer. There are smaller differences for Brain MRI and Chest and/or abdomen CT in March 2023. The main reason for a difference is that 'All Referrals' includes tests on emergency admissions and inpatients, which have shorter waits. The trend in these differences is shown in Graph 4.

Table 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 2022 to March 2023

	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
Mar	16	24	14	28	15	17	0	7	19	32
Apr	18	27	14	31	15	18	0	7	21	34
May	16	27	15	32	14	15	0	6	22	36
Jun	16	27	15	31	15	16	0	7	21	35
Jul	16	24	14	29	15	15	0	6	20	34
Aug	15	26	14	31	15	15	0	5	21	34
Sep	15	25	15	33	15	15	0	5	21	35
Oct	15	23	14	29	14	14	0	4	19	31
Nov	15	25	15	28	14	14	0	4	20	30
Dec	16	28	13	28	14	14	0	4	19	29
Jan	20	30	15	33	16	14	0	3	21	35
Feb	17	23	15	25	14	14	0	4	19	27
Mar	17	22	15	26	14	14	0	4	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, 'Date of test request received' was used instead. Records where both dates were missing were excluded from the median calculation.

# Graph 4: 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 2022 to March 2023



3.3.10. As can be seen from Table 6, although there is generally little difference in the time taken for a test report to be issued for GP Direct Access and All Referrals, GP-referred reporting periods were slightly longer for Brain MRI.

Table 6: 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, for all referrals and GP Direct Access, March 2022 to March 2023

		Brain	(MRI)		Kidney	or Blado	ler (Ultras	ound)
	All Median	All % Same Day	GP Median	GP % Same Day	All Median	All % Same Day	GP Median	GP % Same Day
Mar	2	34%	4	14%	0	95%	0	90%
Apr	2	34%	5	12%	0	95%	0	91%
May	2	34%	4	15%	0	95%	0	91%
Jun	2	35%	4	14%	0	95%	0	91%
Jul	2	34%	4	18%	0	94%	0	90%
Aug	2	35%	4	16%	0	95%	0	92%
Sep	2	35%	4	18%	0	95%	0	92%
Oct	2	34%	3	18%	0	95%	0	93%
Nov	2	35%	3	15%	0	95%	0	93%
Dec	2	35%	4	15%	0	96%	0	93%
Jan	2	33%	4	16%	0	95%	0	92%
Feb	2	34%	4	14%	0	94%	0	91%
Mar	2	34%	4	16%	0	95%	0	92%

	Chest	and/or a	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	
Mar	3	29%	4	19%	2	22%	2	27%	0	95%	0	93%	
Apr	4	28%	4	17%	3	22%	2	27%	0	95%	0	93%	
May	4	28%	4	17%	2	23%	2	28%	0	95%	0	93%	
Jun	4	28%	5	16%	2	23%	2	29%	0	95%	0	93%	
Jul	4	27%	5	17%	3	22%	2	27%	0	95%	0	93%	
Aug	5	28%	5	18%	2	23%	2	27%	0	95%	0	93%	
Sep	4	28%	4	18%	3	22%	2	28%	0	95%	0	93%	
Oct	4	27%	4	17%	2	23%	2	29%	0	95%	0	93%	
Nov	3	28%	4	16%	2	25%	1	32%	0	95%	0	93%	
Dec	4	28%	4	17%	2	24%	1	32%	0	95%	0	93%	
Jan	3	28%	3	18%	2	26%	1	32%	0	95%	0	93%	
Feb	4	27%	4	16%	2	25%	2	30%	0	94%	0	92%	
Mar	4	27%	4	17%	2	26%	1	31%	0	95%	0	93%	

Note: Median values of 0 occur where at least 50% of activity has 'date of test' and 'date of test report issued' recorded as the same day. Only records where both dates are reported are included in the calculation of median values: 96.5% of all records for tests performed in March 2023 and 97.5% of records for patients referred through GP Direct Access.

# 4 Annex

#### 4.1 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 realtime 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 very small 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 sensitized 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 number 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.

#### **Referral 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.

## 4.2 Data Quality Statement

This collection uses data from Radiology Information Systems (RISs) as a rich resource for analysis, making wider use of administrative data in line with the code of practice for official statistics. Some RIS systems cover additional test activity not reported in this publication.

A number of validations and other checks are built into the DID upload system and processing to seek to ensure that the data are complete and accurately reflect activity. Nevertheless, data issues may affect activity for some providers and users should exercise care when interpreting the results.

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 as part of a treatment plan, which is carried out at a specific time or repeated at a specific frequency for clinical reasons, eg. 6-month check cystoscopy;
- The patient is currently admitted to a hospital bed and is waiting for a diagnostic test/procedure as part of their inpatient treatment.

Data for this publication is extracted from the DID data warehouse around the 28<sup>th</sup> of the third month after the period. Any data submitted after this date may not be included in the provisional published data but should be included in subsequent updates. Finalised data are published in the Annual Report at the end of the year.

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 and the Coverage Completeness Data Quality Summary report which is available on the NHS England Statistics website.

## Contact Us

#### 4.2.1 Feedback

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

#### 4.2.2 Websites

NHS Digital collects the DID on behalf of NHS England. Further information about the dataset can be found on <u>NHS Digital DID website</u>.

Those who submit data to DID do so via a secure submission portal. Further information about submissions can be found on the <u>submission website</u>.

The DID Additional Tables and Technical Report can be found on <u>NHS England DID</u> <u>website</u>.

#### 4.2.3 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 <a href="mailto:nhsengland.media@nhs.net">nhsengland.media@nhs.net</a>

The next scheduled publication of this report is 24<sup>th</sup> August 2023.

The Government Statistical Service (GSS) statistician responsible for producing these data is:

Sheila Dixon Performance Analysis Team NHS England Room 5E24, Quarry House, Quarry Hill, Leeds LS2 7UE Email: <u>england.did@nhs.net</u>