



Diagnostic Imaging Dataset Statistical Release

Diagnostic Imaging Dataset Statistical Release

Provisional monthly statistics, August 2017 to August 2018

Version number: 1.0

First published: 20th December 2018

Prepared by: Operational Information for Commissioning

Classification: OFFICIAL

This information can be made available in alternative formats, such as easy read or large print, and may be available in alternative languages, upon request. Please contact:

Sheila Dixon

Operational Information for Commissioning

NHS England

Room 5E24, Quarry House, Quarry Hill, Leeds LS2 7UE

Email: england.did@nhs.net

Contents

1	Introduction	4
1.1	Frequently Used Acronyms	4
2	Headline Messages	5
3	Current Data – August 2017 to August 2018	6
3.1	Imaging Activity	6
3.2	Patient Test Times	8
3.3	Imaging Tests that could contribute to Early Diagnosis of Cancer	10
4	Annex	15
4.1	Glossary	15
4.2	Data Quality Statement	17
4.3	Contact Us	18
4.3.1	Feedback	18
4.3.2	iView	18
4.3.3	Websites	18
4.3.4	Additional Information	18

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*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 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.

¹ [Improving Outcomes: A Strategy for Cancer](#), first published 12 January 2011.

In May 2016, the cancer strategy implementation plan was updated: [Achieving World-Class Cancer Outcomes: Taking the strategy forward](#).

2 **Headline Messages**

- There were 42.8 million imaging tests reported in England in the 12 months from September 2017 to August 2018. Of these, 3.48 million imaging tests were reported to have taken place in August 2018.
- In August 2018, Plain Radiography (X-ray) was most common (1.8 million), followed by Diagnostic Ultrasonography (Ultrasound, 0.81 million), Computerized Axial Tomography (CT Scan, 0.46 million) and Magnetic Resonance Imaging (MRI, 0.31 million).
- The median period between the request being made and the test being performed in August 2018 varied greatly for the different tests, from the same day for X-ray, Fluoroscopy and Medical Photography, to 22 days for MRI.
- The median period for the report to be issued after the test in August 2018 was the same day for Ultrasound, CT scan, Fluoroscopy and Medical Photography, one day for X-Ray and Nuclear Medicine, two days for PET-CT and SPECT Scan and three days for MRI.
- In August 2018, GPs requested 24% of all tests that may have been used to diagnose or discount cancer², under direct access arrangements. Of these, the test most commonly requested by GPs was Chest X-ray (137,000), whilst the test with the highest proportion of GP referral was ultrasounds that may have been used to diagnose ovarian cancer (44% of which were requested by GPs).

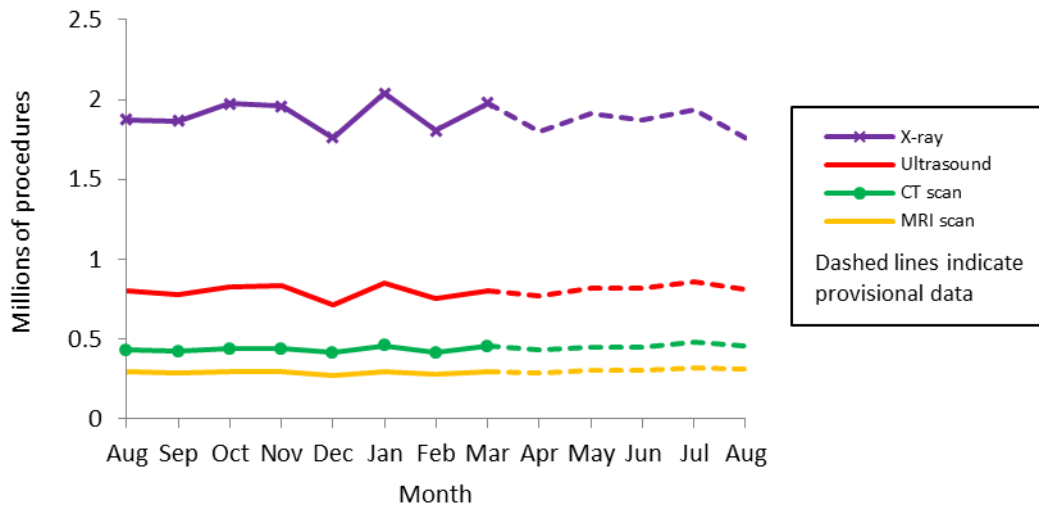
² Although these tests are used to diagnose cancer, many of the tests also have wider clinical uses. Within this data it is not possible to distinguish between the different uses of these tests

3 Current Data – August 2017 to August 2018

3.1 Imaging Activity

- 3.1.1. There were 42.8 million imaging tests reported in England during the year from September 2017 to August 2018. Of these, 3.48 million imaging tests were reported to have taken place in August 2018.
- 3.1.2. Out of all tests performed in August 2018, X-rays (Plain Radiography) were the most common, with 1.8 million X-rays being performed. The next most common procedures were Diagnostic Ultrasonography (Ultrasound, 0.81 million), Computerized Axial Tomography (CT Scan, 0.46 million) and Magnetic Resonance Imaging (MRI, 0.31 million).
- 3.1.3. Table 1 gives an all-England count of imaging activity by modality from August 2017 to August 2018. August 2017 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 1.8% between August 2017 and August 2018. However, this may be overstated as there are some known shortfalls in the latest data (see section 4.2).
- 3.1.4. Graph 1 shows the trend in imaging activity from August 2017 to August 2018.

Graph 1: NHS imaging activity in England, August 2017 to August 2018



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 1a – 6l (separate excel files), available from [NHS England DID website](#).

OFFICIAL

Table 1: Count of imaging activity in England, on NHS Patients, August 2017 to August 2018

	X-ray	Ultrasound	CT Scan	MRI	Fluoro- scopy	Nuclear Medicine	PET-CT Scans	SPECT Scans	Medical Photography	% organisations included	Total ¹
Aug	1,872,670	802,925	431,750	291,705	86,865	35,950	12,955	3,410	2,920	100.0%	3,541,150
Sep	1,864,235	775,315	421,750	284,765	84,800	34,265	12,485	3,310	2,990	100.0%	3,483,915
Oct	1,973,745	822,470	439,010	297,155	89,110	37,110	13,405	3,440	3,195	100.0%	3,678,645
Nov	1,959,735	838,300	439,940	298,370	91,665	37,740	13,730	3,905	3,375	100.0%	3,686,760
Dec	1,761,265	709,755	414,250	269,890	76,660	30,050	11,800	3,010	2,765	100.0%	3,279,450
Jan	2,040,025	849,590	456,585	299,240	87,330	37,430	14,030	3,805	3,770	100.0%	3,791,805
Feb	1,807,605	751,440	414,460	279,530	78,940	32,930	12,985	3,250	3,430	100.0%	3,384,570
Mar	1,980,030	805,535	452,915	298,550	84,045	34,750	13,670	3,590	4,145	100.0%	3,677,225
Apr	1,797,585	770,565	433,825	285,990	80,285	33,515	13,345	3,760	4,115	98.2%	3,422,985
May	1,913,585	818,920	445,585	300,875	84,305	35,455	14,840	3,515	4,645	97.6%	3,621,725
Jun	1,874,315	816,295	449,310	304,935	84,460	34,975	14,670	3,630	4,530	98.8%	3,587,120
Jul	1,936,325	861,040	476,755	318,390	87,150	34,685	14,195	3,200	4,575	100.0%	3,736,320
Aug	1,760,690	813,985	457,545	307,885	82,225	33,535	14,335	3,115	4,450	98.8%	3,477,765
Total	22,669,140	9,633,215	5,301,925	3,545,570	1,010,970	416,440	163,485	41,535	45,995	-	42,828,280

1. Total calculated as the sum of all activity for that month. Totals may not always equal the sum of the parts due to rounding. Activity not matched to a known organisation is omitted.
2. Data from April 2018 onwards are provisional and may be subject to change.
3. 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 and the test being performed for each of the different tests in August 2018. The median period was as low as the same day for X-ray, Fluoroscopy and Medical Photography and as high as 22 days for MRI scans.
- 3.2.4. Table 2 gives the median number of days between the 'date of test request' and the 'date of test', split by the test modality for each month from August 2017 to August 2018.

Table 2: Median number of days between 'date of test request' and 'date of test' for imaging activity, August 2017 to August 2018

	X-ray	Ultra-sound	CT Scans	MRI	Fluoro-scopy	Nuclear Medicine	PET-CT Scans	SPECT Scans	Medical Photography
Aug	0	14	1	21	0	18	7	18	0
Sep	0	14	1	20	0	18	7	17	0
Oct	0	14	1	20	0	18	7	17	0
Nov	0	14	2	22	0	17	7	17	0
Dec	0	14	1	23	0	17	7	16	0
Jan	0	14	1	26	0	21	7	19	0
Feb	0	13	1	20	0	17	7	16	0
Mar	0	14	1	21	0	17	7	16	0
Apr	0	15	1	23	0	19	8	19	0
May	0	14	1	21	0	18	7	16	0
Jun	0	15	1	22	0	19	7	19	0
Jul	0	14	1	21	0	18	7	14	0
Aug	0	14	1	22	0	18	7	14	0

Note: Median values of 0 occur where at least 50% of activity has a 'date of test request' and 'date of test' which is recorded as the same day. Records where either of these dates is missing are not used to calculate median values.

- 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 August 2018 this was the same day for Ultrasound, CT scan, Fluoroscopy and Medical Photography, one day for X-Ray and Nuclear Medicine, two days for PET-CT and SPECT Scan and three 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 August 2017 to August 2018. 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, August 2017 to August 2018

	X-ray	Ultra-sound	CT Scans	MRI	Fluoro-scopy	Nuclear Medicine	PET-CT Scans	SPECT Scans	Medical Photography
Aug	1	0	0	3	0	1	2	1	0
Sep	1	0	0	3	0	1	2	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	3	0	1	2	1	0
Jan	1	0	0	3	0	1	2	1	0
Feb	1	0	0	3	0	1	2	1	1
Mar	1	0	0	3	0	1	2	1	0
Apr	1	0	0	3	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	1	0	0	3	0	1	2	2	0
Aug	1	0	0	3	0	1	2	2	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. 91.7% of all records for tests performed in August 2018 included both of these dates.

Table 3.2: Percentage of records where date of test report issued equals date of test, by modality, August 2017 to August 2018

	X-ray	Ultra-sound	CT Scans	MRI	Fluoro-scopy	Nuclear Medicine	PET-CT Scans	SPECT Scans	Medical Photography
Aug	34%	92%	58%	24%	70%	35%	20%	33%	57%
Sep	33%	92%	58%	24%	70%	36%	17%	36%	59%
Oct	35%	92%	58%	25%	70%	35%	17%	34%	54%
Nov	35%	92%	57%	24%	69%	34%	16%	33%	54%
Dec	34%	92%	59%	23%	70%	35%	17%	35%	63%
Jan	35%	92%	58%	24%	71%	34%	17%	34%	56%
Feb	33%	92%	58%	23%	71%	34%	16%	35%	50%
Mar	32%	92%	58%	24%	70%	34%	14%	37%	57%
Apr	32%	92%	57%	23%	69%	33%	13%	38%	66%
May	33%	93%	58%	25%	70%	34%	15%	35%	56%
Jun	33%	92%	57%	25%	70%	33%	18%	33%	58%
Jul	33%	92%	57%	25%	70%	33%	18%	33%	58%
Aug	34%	93%	58%	25%	69%	35%	17%	35%	53%

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 August 2018, GPs requested 24% 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 (137,000), whilst the test with the highest proportion of GP referral was ultrasounds that may have been used to diagnose ovarian cancer (44% 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”.

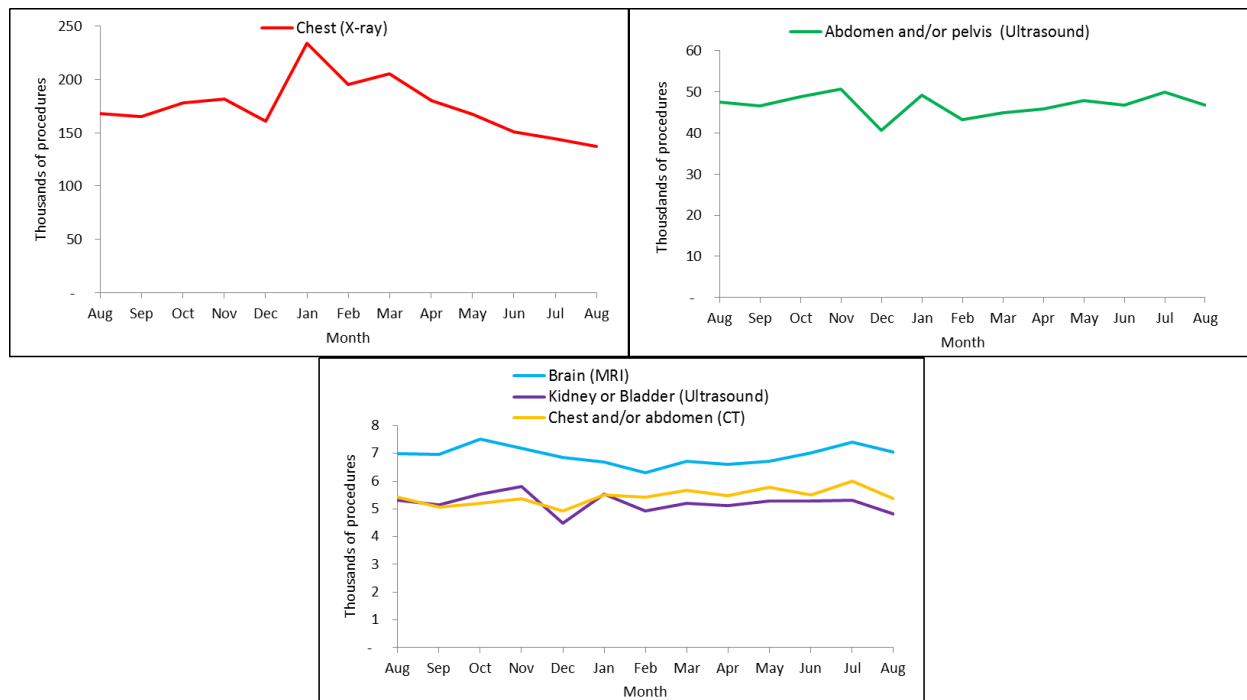
Table 4: Imaging activity for groups of tests suitable for diagnosing cancer, for all patients referred and for those directly referred by a GP, August 2017 to August 2018

	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
Aug	60,280	6,990	19,585	5,300	47,300	5,410	645,030	167,620	105,605	47,455
Sep	59,015	6,960	18,800	5,140	45,680	5,060	642,375	165,015	104,015	46,540
Oct	61,740	7,520	19,815	5,535	47,490	5,195	690,845	177,960	109,810	48,920
Nov	61,210	7,180	20,000	5,810	48,510	5,365	701,120	181,770	112,120	50,650
Dec	55,590	6,845	16,800	4,500	44,465	4,940	708,655	160,535	92,825	40,725
Jan	63,045	6,700	20,535	5,540	50,800	5,515	832,955	233,915	112,690	49,185
Feb	58,580	6,295	18,015	4,915	46,115	5,435	709,910	195,410	98,755	43,200
Mar	62,435	6,715	19,220	5,200	49,975	5,670	767,990	204,920	105,615	44,965
Apr	58,580	6,615	18,000	5,120	47,765	5,470	672,700	180,465	103,340	45,905
May	61,575	6,720	18,635	5,290	49,330	5,775	661,765	167,140	108,160	47,870
Jun	62,945	7,025	19,350	5,290	50,250	5,515	630,600	150,605	107,160	46,795
Jul	64,240	7,415	19,945	5,305	51,615	6,000	641,620	144,610	111,795	49,920
Aug	62,555	7,050	18,805	4,815	48,555	5,380	604,465	136,880	106,300	46,865

Note: Data from April 2018 onwards are provisional and subject to change

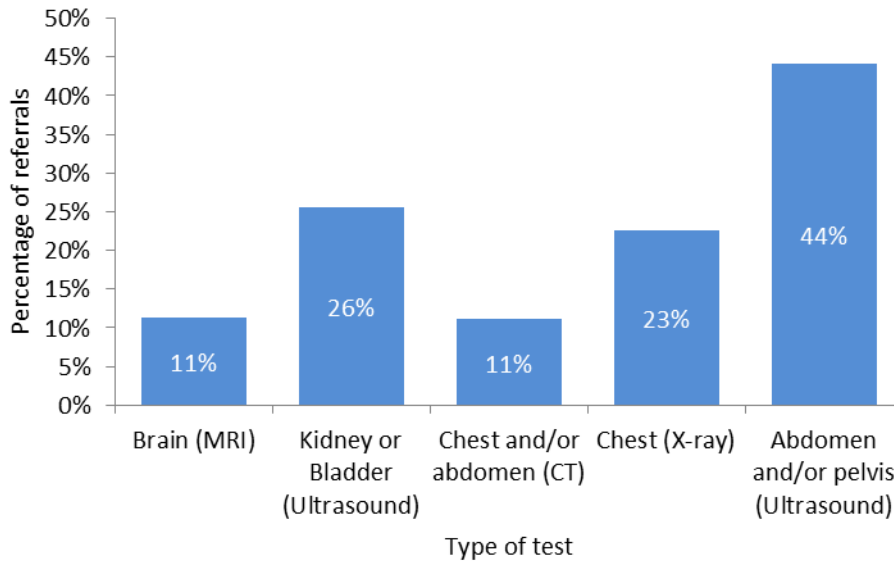
3.3.6. The number of Chest X-rays (all referrals and GP referrals) appeared to show some seasonality with summer months generally having lower numbers of Chest X-rays and winter months higher levels. This was not evident in the other tests. The trend in imaging activity for patients directly referred by a GP for August 2017 to August 2018 is shown in Graph 2.

Graph 2: Imaging activity for patients directly referred by a GP, August 2017 to August 2018



3.3.7. Graph 3 shows the proportion of referrals that were made by GPs for tests undertaken in August 2018. Ultrasounds on the Abdomen and/or Pelvis had the highest proportion (44%) of referrals made by GPs, whilst Brain MRI and Chest and/or abdomen CT had the lowest (11%).

Graph 3: Percentage of referrals made by GPs by type of test, August 2018



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 August 2017 to August 2018.

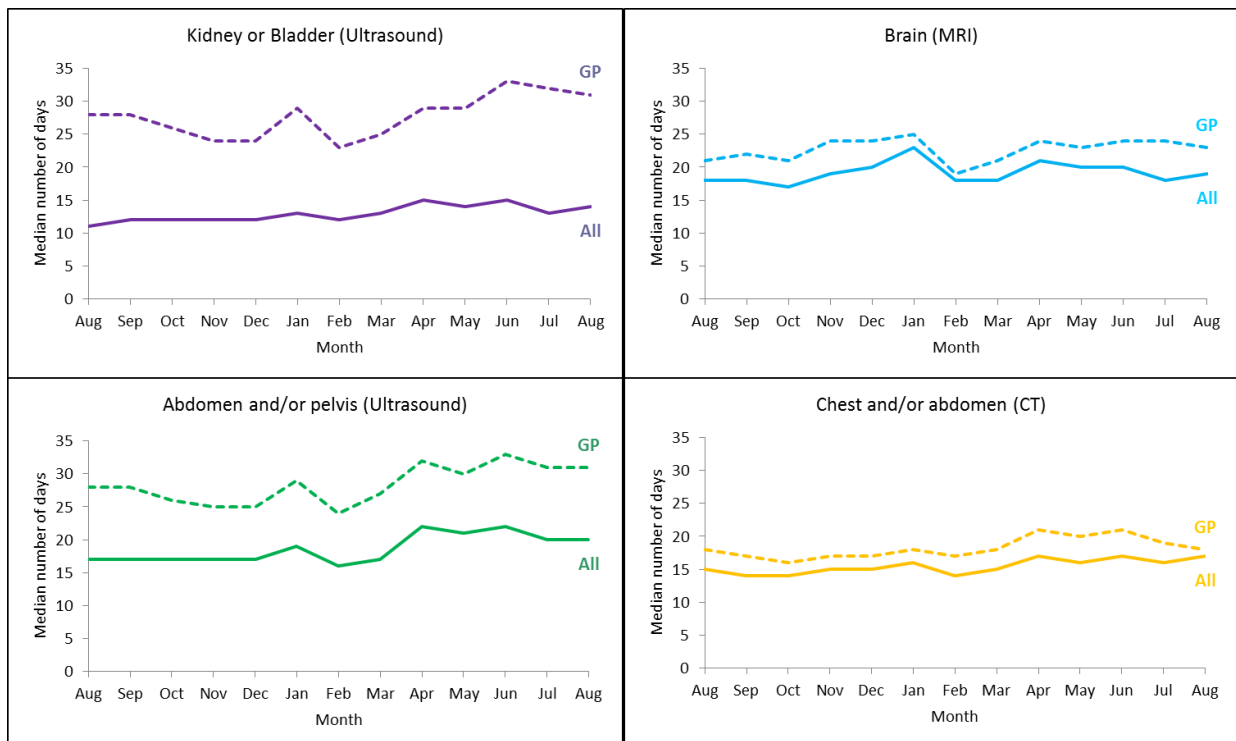
3.3.9. The median period from a test being requested to being performed is noticeably longer for GP direct access than overall for the Ultrasound tests (Kidney or bladder and Abdomen and/or pelvis) used to diagnose or discount cancer. There is a smaller difference for Brain MRI and Chest and/or abdomen CT in August 2018. 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, August 2017 to August 2018

	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
Aug	18	21	11	28	15	18	0	0	17	28
Sep	18	22	12	28	14	17	0	0	17	28
Oct	17	21	12	26	14	16	0	0	17	26
Nov	19	24	12	24	15	17	0	0	17	25
Dec	20	24	12	24	15	17	0	0	17	25
Jan	23	25	13	29	16	18	0	0	19	29
Feb	18	19	12	23	14	17	0	0	16	24
Mar	18	21	13	25	15	18	0	0	17	27
Apr	21	24	15	29	17	21	0	0	22	32
May	20	23	14	29	16	20	0	0	21	30
Jun	20	24	15	33	17	21	0	0	22	33
Jul	18	24	13	32	16	19	0	0	20	31
Aug	19	23	14	31	17	18	0	0	20	31

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'. Records where either of these dates is missing are not used to calculate median values.

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, August 2017 to August 2018



OFFICIAL

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 Chest CT and 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, August 2017 to August 2018

	Brain (MRI)				Kidney or bladder (ultrasound)			
	All Median	All % Same Day	GP Median	GP % Same Day	All Median	All % Same Day	GP Median	GP % Same Day
Aug	2	33%	3	14%	0	94%	0	91%
Sep	2	32%	3	13%	0	95%	0	91%
Oct	2	32%	2	17%	0	94%	0	90%
Nov	2	32%	3	15%	0	94%	0	92%
Dec	2	32%	3	16%	0	94%	0	90%
Jan	2	32%	2	17%	0	94%	0	91%
Feb	2	32%	3	16%	0	94%	0	90%
Mar	2	33%	3	16%	0	95%	0	91%
Apr	2	31%	3	17%	0	95%	0	91%
May	2	34%	2	19%	0	95%	0	92%
Jun	2	34%	2	19%	0	95%	0	91%
Jul	2	34%	3	19%	0	95%	0	91%
Aug	2	35%	3	17%	0	94%	0	91%

	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
Aug	2	33%	4	19%	2	24%	2	26%	0	94%	0	92%
Sep	2	34%	4	18%	2	25%	2	27%	0	94%	0	92%
Oct	2	34%	3	20%	2	25%	1	28%	0	94%	0	92%
Nov	2	33%	3	19%	2	25%	1	30%	0	94%	0	92%
Dec	2	35%	4	19%	2	25%	1	32%	0	94%	0	92%
Jan	2	35%	3	21%	2	25%	1	29%	0	94%	0	92%
Feb	2	33%	3	21%	2	24%	2	27%	0	94%	0	92%
Mar	2	33%	4	18%	3	22%	2	27%	0	94%	0	92%
Apr	3	32%	4	17%	2	23%	2	27%	0	95%	0	93%
May	2	32%	4	19%	2	25%	1	29%	0	95%	0	93%
Jun	3	32%	4	20%	2	24%	2	29%	0	94%	0	93%
Jul	3	32%	4	20%	2	24%	2	29%	0	94%	0	93%
Aug	3	31%	5	18%	3	24%	2	28%	0	94%	0	92%

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 of these dates are reported are included in the calculation of median values: 91.0% of all records for tests performed in August 2018 and 94.3% 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 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 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 28th 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 the finalised data which is generally made available three months after the original provisional publication and further detailed 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.

Data from April 2018 have known shortfalls for some modalities. This derives from a change in the SNOMED-CT codes that correctly map to DID modalities and may cause the data to understate the actual amount of imaging scans recorded during the month.

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 iView

The NHS Digital allow health sector colleagues to access DID information through their web-based reporting tool, iView. Registered users can access anonymised data at an aggregate level in a consistent and flexible format:

- **Access Information** – choose from a variety of data areas.
- **Build Reports** – select data to suit your needs.
- **Generate Charts** – customise report tables and graphs.
- **Export Data** – copy to Excel and manipulate data your way.
- **Save Reports** – store your favourite views for future use.

For more information, please visit the [iView website](#). If you would like to register to use iView for DID, please email enquiries@nhsdigital.nhs.uk (subject: DID iView Access).

4.3.3 Websites

NHS Digital collects the DID on behalf of NHS England. 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](#).

4.3.4 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 next scheduled publication of this report is 24th January 2019.

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

Sheila Dixon
Operational Information for Commissioning
NHS England
Room 5E24, Quarry House, Quarry Hill, Leeds LS2 7UE
Email: england.did@nhs.net