

The National Disease Registration & Analysis Service (NDRS)

Data Collection for
Recurrences, Progressions & Transformations
v2 August 2026

Welcome to this NDRS training module, which has been designed as a guide to data collection for non-primary pathways.

Background

2008

A commitment made in the 'Cancer Strategy, Improving Outcomes: a Strategy for Cancer' to pilot collection of recurrence data

2011

Announcement that data on recurrence and metastatic cancers should be collected via CWT

2013

COSD launch: Data collection for Primary and Non-Primary cancer (recurrence, progression and transformations)

2015

The 'Cancer Strategy for England, Achieving World Class Cancer Outcomes' Re-enforced the collection of data for recurrent cancers

2024

Launch of the NAOme National Audit of Metastatic Breast Cancer

First, a little background. In 2008, a commitment was made to pilot the collection of recurrence data. It took a while for this to actually come about but in 2013, COSD was launched to enable collection of data for both primary **and** non-primary cancers. The Cancer strategy for England reinforced the collection of recurrent cancers in 2015 and in 2024 the new national audit of metastatic breast cancers was launched...

Headlines in 2024

2024



Breast
Cancer
Network
Australia

Incomplete data means those living with metastatic breast cancer are also invisible to our health systems and policymakers. Without this figure we cannot advocate, plan or invest to ensure our health systems are meeting the needs of this group.

<https://www.bcna.org.au/latest-news/bcna-news/making-metastatic-breast-cancer-count/>

April



'The First ever publication of secondary breast cancer data met with concerns around absence of critical data'

<https://breastcancernow.org/about-us/media/press-releases/first-ever-publication-of-secondary-breast-cancer-data-met-with-concerns-around-absence-of-critical-data/>

April



THE LANCET

Lack of information on numbers of people with metastatic breast cancer

'Even though 20-30% of patients with early breast cancer experience relapse, relapse is not typically recorded by most cancer registries. Therefore, the number of patients living with metastatic breast cancer is not known. Meeting the needs of an under-measured patient population is difficult, as a result, feelings of abandonment and isolation are common among those living with the condition. '

<https://crukcambridgecentre.org.uk/news/lancet-commission-breast-cancer-publishes-recommendations-change>

... the only problem is, in too many cases, the data simply isn't there. Not just in the UK ...

Headlines in 2024

October

International Agency for Research on Cancer



'The number of survivors of breast cancer is growing, but **the number of women experiencing metastatic recurrence is unknown** due to a lack of international guidelines for the registration and analysis of recurrence data and support for cancer registries to routinely collect this important data item'
<https://www.iarc.who.int/news-events/collecting-long-term-outcomes-in-population-based-cancer-registry-data-the-case-of-breast-cancer-recurrence/>

May



Kat Southwell METUPUK Blog:

'Since recording of MBC data was made mandatory but never adhered to in 2013, just shy of 130,000 women will have died of metastatic breast cancer'

Kat stated **'We are only counted when we are dead'**

<https://metupuk.org.uk/2024/05/data-collection-for-metastatic-breast-cancer-we-are-only-counted-when-we-are-dead-kat-southwell/>

... but internationally. In her blog for METUPUK Kat Southwell wrote:

Since recording of MBC data was made mandatory (but never adhered to) in 2013, just shy of 130,000 women will have died of metastatic breast cancer. She also noted: We are only counted when we are dead.

Everyone's talking about 'metastatic patients'

Metastatic cancer

- This is where a cancer spreads from where it has started

Metastasis

- The process by which the cancer cells spread

Type

- Local – Cancer has returned in the original tumour site
- Regional – Cancer has spread to regional lymph nodes
- Distant – Cancer that has spread from its original location to other parts of the body it is known as late-stage cancer, Stage 4 cancer or M1 (TNM1)

If a disease changes from an **in-situ** tumour or **non-invasive** lesion (including non-invasive urothelial carcinoma) to a **new primary** invasive lesion, this must be recorded as a **new malignant primary diagnosis of cancer**

The term “metastatic patient” only applies to patients whose primary malignant cancer has spread, either in the form of a recurrence after a cancer-free period, or in the form of spread to other locations for an existing cancer

Definitions of non-primary cancers

Recurrence

*When a patient has been told that they are free of cancer **or** when the cancer can not be detected – **and has subsequently returned***

Progression

*Where a patient is living with a cancer diagnosis and there is a **change** to the **spread** of cancer*

Transformation

*Where there is a **change** in the cancer **type***

A Recurrence indicates the reappearance of a malignant cancer where the patient had previously been told their cancer was no longer detectable.

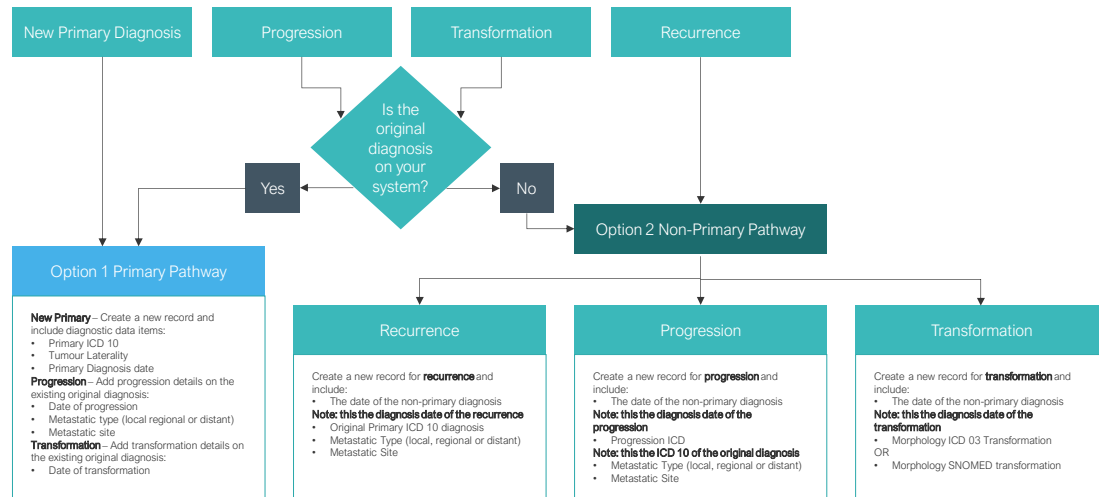
A Progression diagnosis indicates that their existing cancer has **spread** since it was originally diagnosed.

Haematology, Brain/CNS and Sarcoma are the cancer sites where transformations are mainly diagnosed.

A transformation is recorded where there is a change in the cancer type (morphology) or possibly the ICD10 code (this might occur in Haematology).

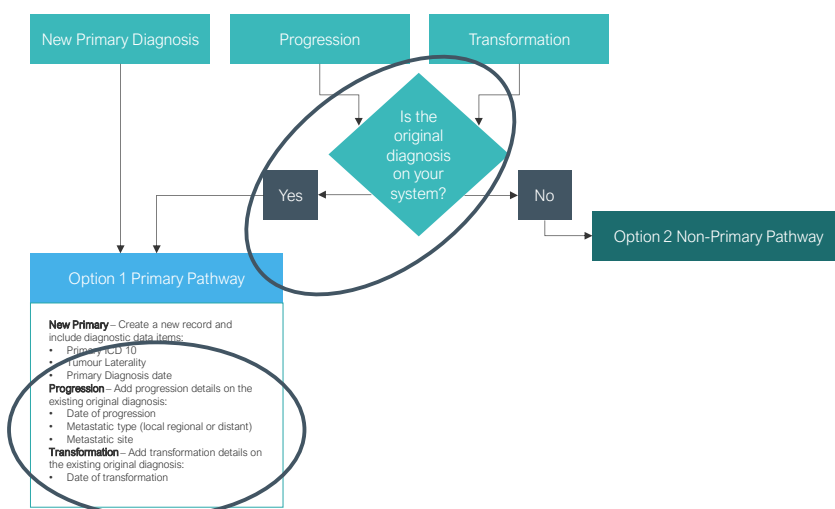
These are all types of **non-primary pathway**

Recording a Diagnosis - Primary vs Non-primary



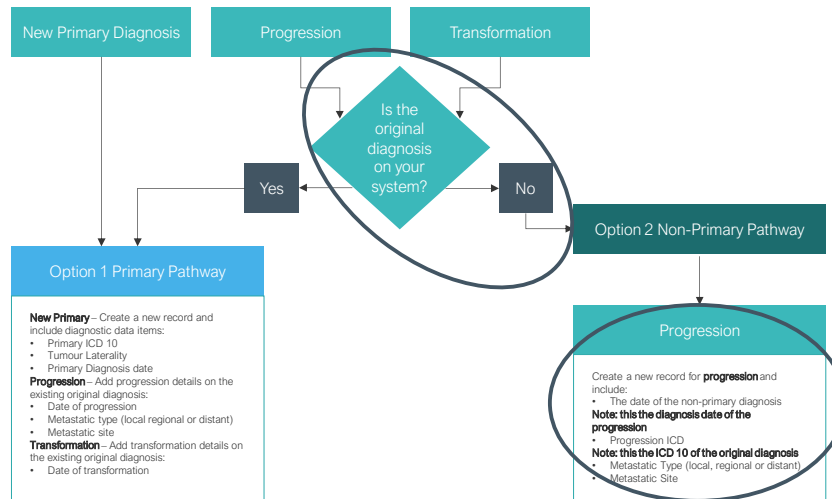
So how do you go about recording these progressions, transformations and recurrences? This graphic is included in the COSD user guide to help you decide. It details the options for recording both primary and non-primary pathways and we're going to go through the non-primary section step-by-step. **It's worth remembering: a diagnosis that includes metastases *could* be a new primary cancer (with mets at original diagnosis), it might be a recurrence OR it might be a progression.**

Recording a Diagnosis - Primary vs Non-primary



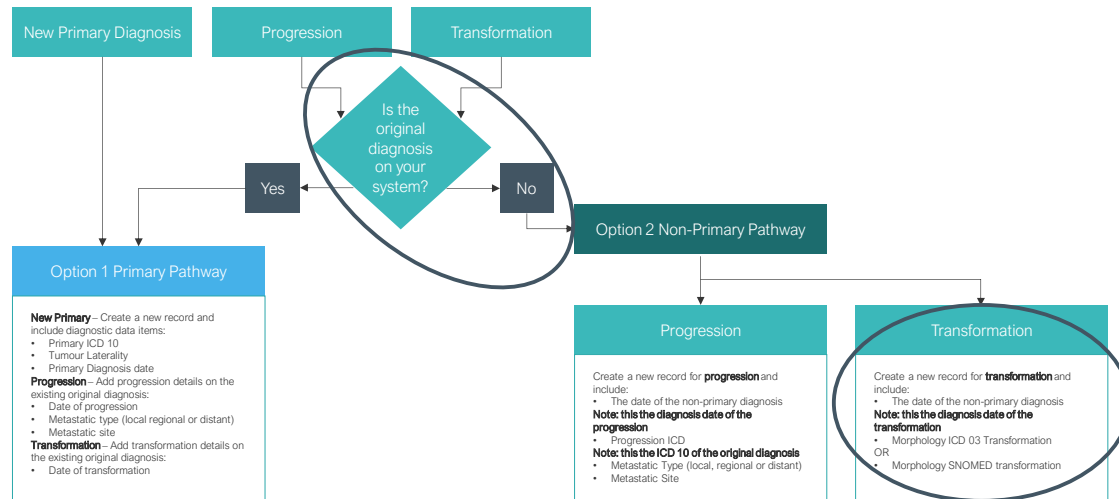
If a patient presents with a progression or a transformation, you must first determine if the original primary diagnosis is already on your cancer management system. If it is, record any progression or transformation on the original primary pathway.

Recording a Diagnosis - Primary vs Non-primary



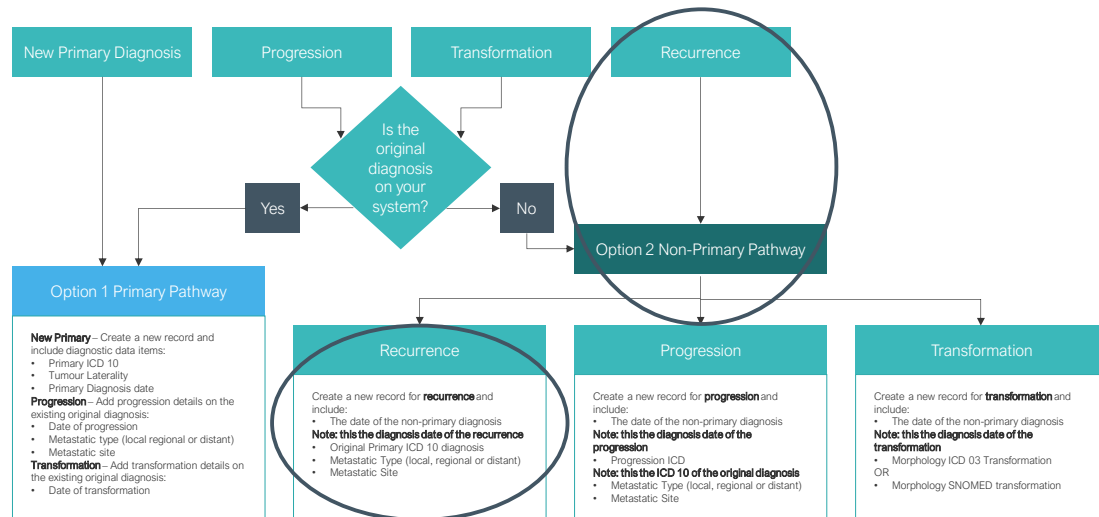
But if a patient's original primary pathway is not on your cancer management system, record any progression on a new non-primary pathway. The progression details needed include the ICD10 code of the primary cancer and the type & site of the metastases. Most cancer systems will automatically classify this as a non-primary pathway when a progression diagnosis is selected.

Recording a Diagnosis - Primary vs Non-primary



Similarly, where the patient's original primary pathway is not on your cancer management system, a transformation will need to be recorded on it's own non-primary pathway. Details needed will include the date of the transformation and the morphology. Again, classification as a non-primary pathway is automatic in most systems.

Recording a Diagnosis - Primary vs Non-primary



A recurrence is always recorded on a separate non-primary pathway. Details required will include the date of the recurrence diagnosis and the type & site of metastases.

Non-Primary Dataset

All Non-Primary:

- Date of Non-Primary Cancer Diagnosis (Clinically Agreed)
- Original Primary Diagnosis (ICD)
- Metastatic Type
- Metastatic Site
- Palliative Care Specialist Seen Indicator
- Method of Detection

Transformations:

- Morphology (ICD-O-3) Transformation
- Morphology (SNOMED) Transformation
- SNOMED Version Current (Transformation)

The non-primary dataset includes certain basic data items that apply to **all** types of non-primary pathway...

Non-Primary Dataset

Recurrence / Progression / Transformation pathways:

- Date of Non-Primary Cancer Diagnosis (Clinically Agreed)
- Original Primary Diagnosis (ICD)

- **Metastatic Type**

- Metastatic Site
- Palliative Care Specialist Seen Indicator
- Method of Detection

Transformation pathways only:

- Morphology (ICD-O-3) Transformation
- Morphology (SNOMED) Transformation
- SNOMED Version Current (Transformation)

Local

Regional

Distant

Has the cancer recurred in / progressed to the **same** location as the primary tumour?
This is a LOCAL metastatic deposit

You're already aware that for any new primary diagnosis, we will always want a full stage. You're probably also aware that we **don't** need an actual stage for **non-primary pathways**. But what we DO need for **ANY** pathway where the patient has metastases are the details of the **metastatic type and metastatic site** in your cancer data management system because we can't do much with the data if we don't know where these mets have arisen.

For metastatic **TYPE**, the options are LOCAL (to the original tumour)...

Non-Primary Dataset

Recurrence / Progression / Transformation pathways:

- Date of Non-Primary Cancer Diagnosis (Clinically Agreed)
- Original Primary Diagnosis (ICD)

- **Metastatic Type**

- Metastatic Site
- Palliative Care Specialist Seen Indicator
- Method of Detection

Transformation pathways only:

- Morphology (ICD-O-3) Transformation
- Morphology (SNOMED) Transformation
- SNOMED Version Current (Transformation)

Local

Regional

Distant

Has the cancer recurred in / progressed to the **regional lymph nodes**?

This is a REGIONAL metastatic deposit

... REGIONAL (this usually means in the **regional** lymph nodes) ...

Non-Primary Dataset

Recurrence / Progression / Transformation pathways:

- Date of Non-Primary Cancer Diagnosis (Clinically Agreed)
- Original Primary Diagnosis (ICD)

- **Metastatic Type**

- Metastatic Site
- Palliative Care Specialist Seen Indicator
- Method of Detection

Transformation pathways only:

- Morphology (ICD-O-3) Transformation
- Morphology (SNOMED) Transformation
- SNOMED Version Current (Transformation)

Local

Regional

Distant

Has the cancer recurred in /
progressed to a **distant organ /**
distant lymph nodes?
This is a DISTANT metastatic deposit

...or DISTANT. It's worth remembering that **all recurrences** are deemed to BE metastases so we will always need to know where in the body the recurrences have happened. If you're not sure of the metastatic type or site, ask your clinical team.

Non-primary dataset

Recurrence / Progression / Transformation pathways:

- Date of Non-Primary Cancer Diagnosis (Clinically Agreed)
- Original Primary Diagnosis (ICD)
- Metastatic Type

• Metastatic Site

- Palliative Care Specialist Seen Indicator
- Method of Detection

Transformation pathways only:

- Morphology (ICD-O-3) Transformation
- Morphology (SNOMED) Transformation
- SNOMED Version Current (Transformation)

Brain

Liver

Unknown Metastatic

Skin

Distant Lymph Node

Bone

Bone Marrow

Regional Lymph Nodes

Not Applicable

Other Metastatic Site

For metastatic **site**, we need to know if the metastatic deposits are in specific organs, regional or distant lymph nodes or somewhere else. If the metastases are in the **same** location as the original primary tumour (local mets), choose **Not Applicable**. If a regional or distant metastatic site is not listed, you'll need to select **Other Metastatic Site** and add an explanatory note

Non-primary dataset

Recurrence / Progression / Transformation pathways:

- Date of Non-Primary Cancer Diagnosis (Clinically Agreed)
- Original Primary Diagnosis (ICD)
- **Metastatic Type**
- **Metastatic Site**
- Palliative Care Specialist Seen Indicator

- **Method of Detection**

Transformation pathways only:

- Morphology (ICD-O-3) Transformation
- Morphology (SNOMED) Transformation
- SNOMED Version Current (Transformation)

Histology

Flow

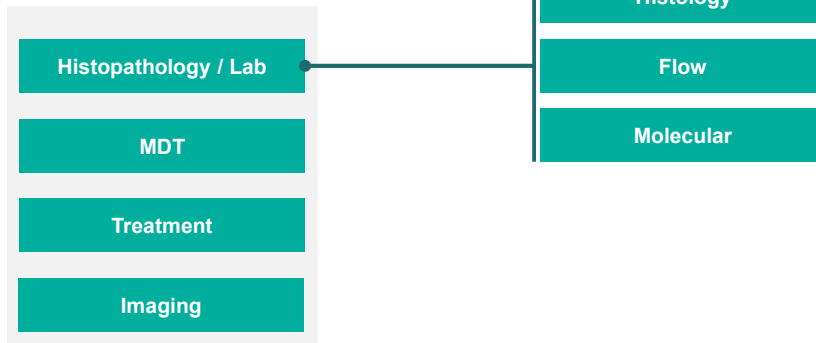
Molecular

Clinical Exam

... and **how** were the metastases found?

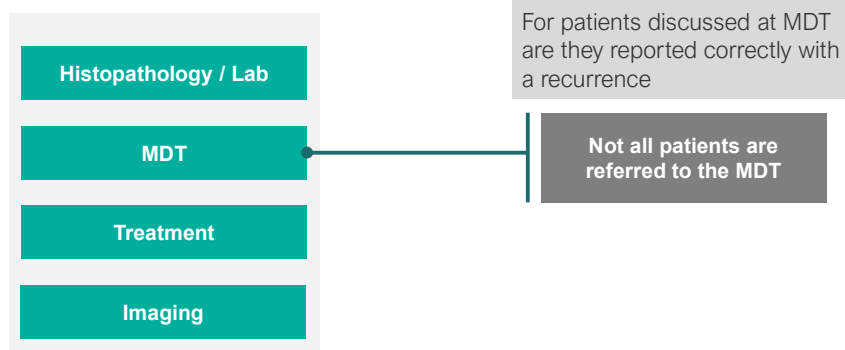
How to identify the non primary patients

Findings of recurrences from these sources are low



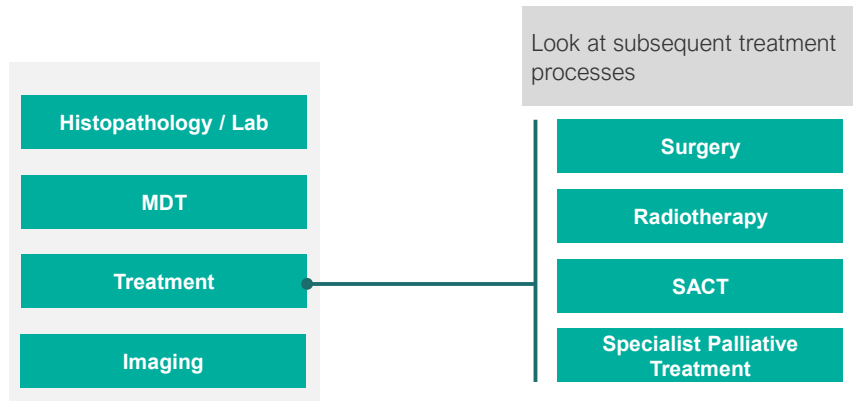
Histological identification of non-primary diagnoses is uncommon ...

How to identify the non primary patients



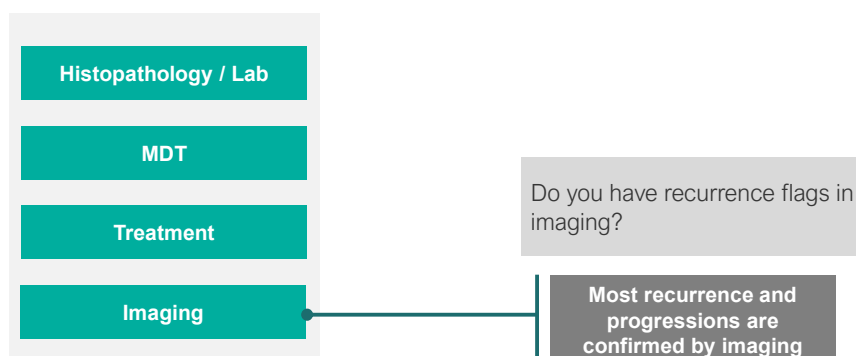
...and not all patients are referred to MDT – we know this but for those that are, are they being reported correctly?

How to identify the non primary patients



Where patients on existing pathways have a subsequent treatment, is this subsequent treatment in response to disease progression and is this progression being recorded?

How to identify the non primary patients



A lot of recurrences and progression will however be confirmed by imaging...

New: Cancer flag in imaging dataset DID's

This is a pilot data item that would be part of the imaging dataset

The **CANCER INDICATION CODE** (IMAGING) flags that a cancer (or the suspicion of a cancer) has been found and requires further investigation.

- 01 Confirmation of primary cancer
- 02 Suspected primary cancer
- 03 Confirmation of cancer recurrence
- 04 Suspected cancer recurrence

There is a new data item in the Diagnostic Imaging Dataset – this dataset is submitted direct from radiology systems ... but as a backup, are the imaging reports that indicate progression being flagged and recorded?

How to identify the non primary patients

In 2024

- Top providers (7) – report between 15% and 29% of their overall COSD submissions on non-primary pathways
- 103 (76%) are reporting under 6%



Referral for new or recurrence



Under follow-up (outpatients)



Incidental finding

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We estimate somewhere in the region of 20% of the total pathways submitted to NDRS every month **should** be Recurrences, Progressions or Transformations – although this figure will have some variation according to case mix. The top 7 providers in the country reported between 15 and 29% of their diagnoses as non-primary pathways in 2024 ... but ¾ of providers in England reported less than 6% of their total diagnoses as non-primary pathways. This suggests we are missing a number of diagnosis records.

How to identify the non primary patients

In 2024

- Top providers (7) – report between 15% and 29% of there overall COSD submissions on non-primary pathways
- 103 (76%) are reporting under 6%



Referral for new or recurrence

Cancer Management System

- CWT
- COSD



Under follow-up (outpatients)



Incidental finding

Where a patient is referred in for a suspected new primary cancer that turns out to be a recurrence, these **are** more likely to be recorded because the “suspected cancer” pathway is already in the system...

How to identify the non primary patients

In 2024

- Top providers (7) – report between 15% and 29% of there overall COSD submissions on non-primary pathways
- 103 (76%) are reporting under 6%



Referral for new or recurrence

Cancer Management System

- CWT
- COSD



Under follow-up (outpatients)

Is there a system for notifying
either the MDT or your Cancer
Services Administration?



Incidental finding

... but what happens where a patient is under out-patient follow up OR there's an incidental finding? Is there a robust system in place to capture **these** non-primary diagnoses?

Tools to support you – Breast and other solid tumour sites

<https://digital.nhs.uk/ndrs/data/cancer-data-training-materials>

National Audit of Metastatic Breast Cancer (NaoMe)

GUIDE TO COLLECTING COSD DATA FOR BREAST CANCER RECURRENCE

What is a recurrence?

A cancer recurrence can be defined as the return of an invasive cancer after treatment and after a period with no apparent cancer. The length of time is not clearly defined. The same cancer may come back where it first started or somewhere else in the body.

A progression differs from recurrence as it relates to a deterioration in known persistent cancer.

A transformation is uncommon in breast cancer and does not apply if the recurrent cancer has an altered grade / molecular marker profile.

Confirming and recording a recurrence

All suspected recurrence diagnoses should be discussed at MDT. If the cancer is located within the breast the MDT should decide if it is a new primary or a recurrence.

Completion of the date of diagnosis of recurrence (CR6500) is particularly important.

If the case is deemed to be a recurrence you must record a new non-primary breast cancer pathway and complete all data items shown on the right to successfully record a recurrence in COSD.

TNM stage is not recorded for a recurrence.

FIRST RELEASE MARCH 2024

NDRS HQIP NHS

COSD DATA ENTRY CHECKLIST

Refer to the COSD User Guide for further details of any form boxes.

Referral Details - Non-Primary Cancer Pathway

☐ CR0300 Source of Referral

☐ CR7400 Date First Seen

YYYY-MM-DD

☐ CR7410 Organisation Site Identifier (Provider First Seen)

Minimum 5 character code

Diagnosis

☐ CR7100 Original Primary Diagnosis (ICD)

☐ CR6500 Date of Non-Primary Pathway (Clinically Agreed)

Record the date when the cancer recurrence diagnosis was confirmed or agreed. This will normally be one of the three following dates: Pathology, MDT or Other (such as clinical imaging or investigation).

YYYY-MM-DD

☐ CR6520 Metastatic / Recurrence Type

The location of the recurrence:

LOCAL REGIONAL DISTANT

☐ CR1590 Metastatic Site(s)

LIVER BRAIN LUNG SKIN REGIONAL NODES

DISTANT NODES BONE MARROW OTHER UNKNOWN

☐ CR9000 Method of Detection

MORPHOLOGY CLINICAL EXAM OTHER TUMOUR MOLECULAR

including histology / cytology including imaging

Palliative Care Specialist Activity

☐ CR1550 Palliative Care Specialist Seen Indicator (Cancer Recurrence)

YES NO NOT KNOWN

Clinical Nurse Specialist

☐ CR2050 Clinical Nurse Specialist Indication Code

Record when contact is made with a site-specific clinical nurse specialist.

Further help and information

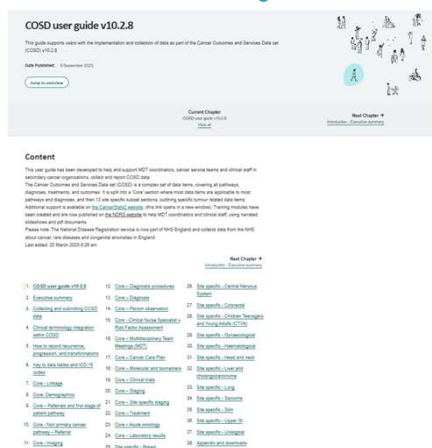
Visit digital.nhs.uk/ndrs/data set up for details of the Cancer Outcomes and Services Dataset including the COSD User Guide.

Where recurrences are found, we have a tool to help you with the recording. This downloadable PDF was put together for recurrences in Breast cancer but in truth can be applied to recurrences for **all solid tumour sites** and is available to download from our training modules page

Tools to support you

COSD User Guide (online):

<https://digital.nhs.uk/ndrs/data/data-sets/cosd/cosd-user-guide-v10>

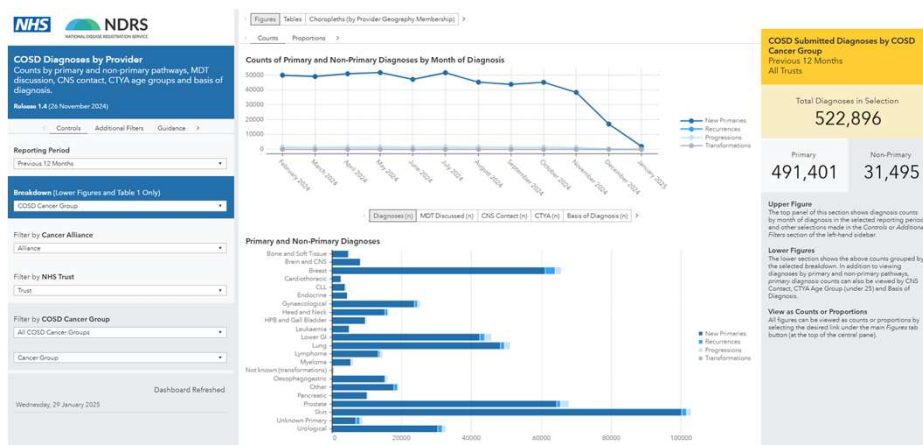


There's also help available in the COSD guidance...

Tools to support you

Data Quality & Insights Hub:

<https://digital.nhs.uk/ndrs/data/data-outputs/data-quality-and-insights-hub>



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...we also have feedback for you – **types** of diagnosis are shown in the Diagnoses dashboard available via our Data Quality & Insights Hub. No account is needed to access the dashboards but users must be on a secure Health & Social Care Network connection...

Tools to support you

Your Regional Data Liaison Manager:

East Midlands: **Simon Cairnes** – simon.cairnes@nhs.net
Eastern: **Marianne Mollett** – marianne.mollett@nhs.net
London & South East: **Katrina Sung** – katrina.sung@nhs.net
London & South East: **Karen Graham** – karen.graham36@nhs.net
North West: **Gemma Feeney** – gemma.feeney@nhs.net
Northern & Yorkshire: **Rachael Mann** – rachaelmann@nhs.net
Oxford: **Maddie Purvin** – m.purvin@nhs.net
South West: **James Withers** – james.withers@nhs.net
West Midlands: **Maddie Purvin** – m.purvin@nhs.net

... and don't forget that NDRS is a resource too! We're here to help.

Wrapping Up

- Over recent years the focus for Trusts has been improving stage data
 - 10 years ago, it was said what you are achieving wouldn't be possible
- We need to show the same commitment with recording recurrences and progressions
- **We don't know how many people are living with metastatic cancer**
- It can take years of data before trends, something meaningful, can be identified
- For every year we don't collect this well, it means another year where this work can't even begin

Trust focus in the last few years has been on improving stage, something that was not, at the time, universally accepted as possible – **but you went and did it anyway**, demonstrating extraordinary commitment to the gathering of accurate data on new primary cancers. We're now being asked to demonstrate that same level of commitment for non-primary pathways because we **genuinely** don't know how many people are living with metastatic cancer. Gathering a meaningful amount of data takes years: the sooner we start getting the data **in**, the sooner we can **work** with it.

Let's change this statement

Data collection for metastatic breast cancer,

“we are only counted when we are dead”

– Kat Southwell – METUPUK

We can change this.