The National

Oesophago-Gastric Cancer

Audit

Data Manual

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Version history

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Contents

Introduction

This document accompanies the dataset for the National Oesophago-Gastric Cancer Audit. It supplements the dataset tables and has several functions. Firstly, it describes the rationale behind the inclusion of each data item. Secondly, it provides the definition of each option in the data-items.

The dataset was produced by the Audit project team and was developed with extensive clinical input from representatives of the British Society of Gastroenterology, the Royal College of Radiologists and the Association of Upper GI Surgeons. Advice and revisions were also incorporated from the Audit Clinical Reference Group and other stakeholders.

Reference was made to existing national datasets wherever possible, including (but not limited to):

- The Cancer Outcomes and Services Dataset (COSD, version 1.0, later updated to 7.0), which superseded the National Cancer Dataset (version 4.5) which was used as a guidance document in the design of the First Oesophago-Gastric Cancer Audit,
- The Scottish Upper GI Cancer dataset (July 2005),
- The All Wales Oesophago-Gastric Cancer Dataset (version 7.4),
- The Royal College of Pathologists minimum datasets for reporting oesophageal and gastric cancers
- The Royal College of Radiologists radiotherapy dataset (version 3.7)

Where a data item is analogous to one in another dataset, the value options have been kept as similar as possible to improve consistency and the ease of data collection. Where appropriate, references to equivalent data items in the Cancer Outcomes and Services Dataset (v1.0) have been included in this manual.

The manual is divided into seven chapters which correspond to the components of the dataset, namely (Figure 1):

1. Details of newly registered patients (**for all patients eligible for inclusion in the NOGCA**).

2. **Newly diagnosed patients with oesophageal high grade glandular dysplasia (HGD)**: referral, diagnosis, planned treatment and use of endoscopic mucosal resection / endoscopic submucosal dissection.

3. **Newly diagnosed patients with oesophageal-gastric cancer:** patient details, staging investigations and treatment plan.

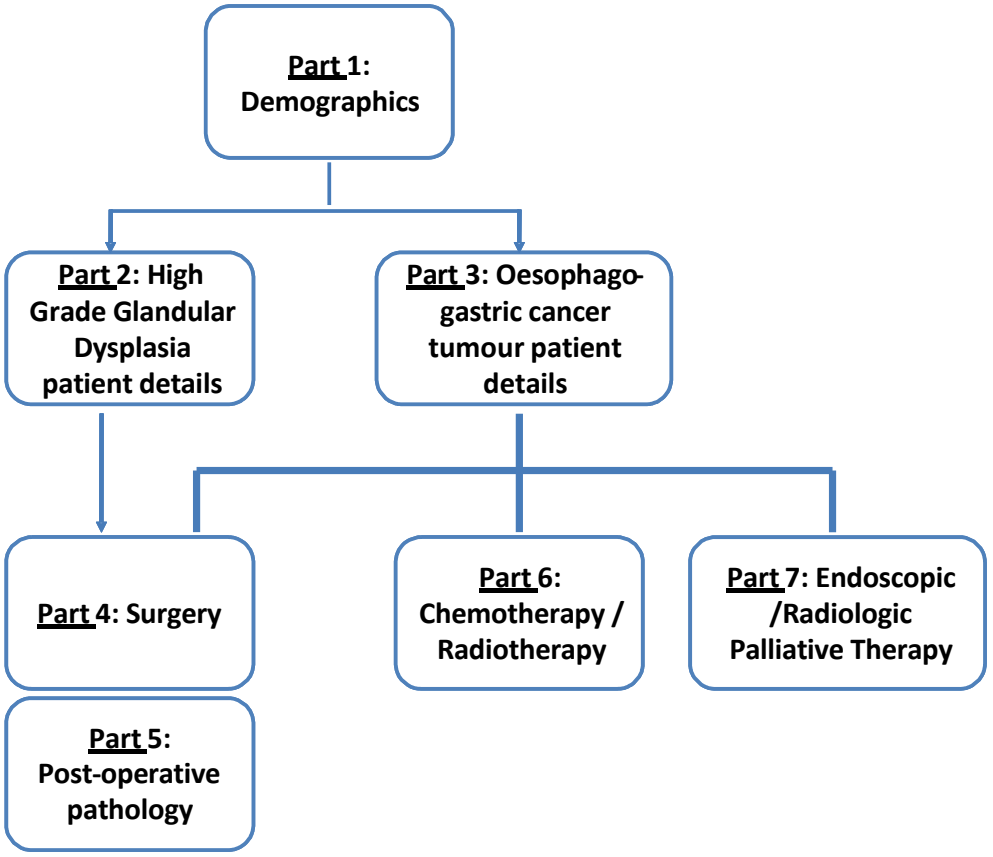
4. **Postoperative data**: admission and surgical details, procedure, post-operative complications.

5. **Postoperative pathology:** Length of tumour, histology, resection margins, TNM staging.

6. **Chemotherapy / radiotherapy**: Treatment intent and modality, treatment outcome.

7. **Endoscopic / radiologic palliative therapy**: Type of procedure, type of stents and stent placement, immediate complications.

Figure 1: Components of the NOGCA data set from 2012



Details of each component are described in individual chapters in this document. Each chapter contains a description of the purpose, definitions of data items, available choices, and references to sources. Where necessary, detailed definitions for each of the values of a data item are also included.

To simplify data collection, the dataset has been designed so that many data items can be collected at or shortly after MDT meetings.

- Data on the diagnosis, staging and planned treatment of ALL patients should be collected at, or very shortly after, the MDT meeting at which the management plan is decided.

- Data on neoadjuvant therapy, surgery and the pathology results are often presented at MDT meetings. The collection of these data items can be organised there. If this doesn't occur, data should be collected as soon as possible after discharge from surgery.

Endoscopic / radiologic palliative therapy, and adjuvant, curative or palliative oncological therapy are rarely reported back to MDT meetings. For these treatments:

- Data on oncological therapy (except neoadjuvant therapy) should be collected as soon as possible after the end of treatment.

- Data on endoscopic palliative therapy should be collected as soon as possible after the end of treatment.

Not all data items will be relevant to each patient. The number of data items that relate to particular types of oesophago-gastric (O-G) cancer patients are described below, together with an estimate of the proportion of patients likely to fall within each group overall (Table 1). These estimates may vary between hospitals depending upon the range of services it provides.

Table 1: Number of items of the dataset by patient type and components required

Patients with oesophageal high grade glandular dysplasia

Patient type	Components	Items	% patients
HGD: surveillance	New patient / HGD pre-treatment	20	**
HGD: EMR/ESD	New patient / HGD pre-treatment + EMR	26	**
HGD: surgery	New patient / HGD pre-treatment + surgery/pathology	55	**

Patients with invasive oesophago-gastric cancer

Patient type	Components	Items	% patients
Palliative : no active treatment	New patient / pre-treatment	25	15%
Palliative : oncological treatment	New patient / pre-treatment, oncology	33	15%
Palliative : endoscopic procedure	New patient / pre-treatment, endoscopic therapy	35	20%
Palliative : surgery	New patient / pre-treatment, surgery	42	10%
Palliative : oncology & endoscopic	New patient / pre-treatment, oncology, endoscopic therapy	43	10%
Curative : surgery only	New patient / pre-treatment, surgery, pathology	54	10%
Curative : surgery & oncology	New patient / pre-treatment, surgery, pathology, oncology	62	15%
Curative : oncology only	New patient / pre-treatment, oncology	33	5%

**No national data available or data highly variable

In order to facilitate direct data entry, users can upload data via CSV files as well as entering data directly into the web-based Audit IT system. Users should read this manual in conjunction with the relevant CSV specification document, 2018 Dataset_Users Version.

How to use this manual

- The organisation of this manual corresponds with the order of sections and fields in the National Oesophago-Gastric Cancer Audit dataset.
- Each section starts with a table listing
    - the names of data items,
    - reference numbers and the source of the definition
    - whether or not the item is mandatory – that is, required in order to recreate a record in the Audit IT system
    - whether the data item holds a single value or multiple values
- After the table, each data item is listed with its format and specific guidance on its completion.
- Where a data item is also in the Cancer Outcomes and Services Dataset (COSD) or National Cancer Dataset (NCDS), the relevant COSD and NCDS item are identified both in the table at the start of the section, and at the top of each item description.

Organisation Codes

Several fields in the National Oesophago-Gastric Cancer Audit dataset capture the unique five character organisation code of the unit at which a patient is seen or treated. See the NHS Data Dictionary (http://www.datadictionary.nhs.uk) under Supporting Information, Administrative Codes, for a description of Organisation Codes. There are also codes for private organisations (independent providers).

For information on how to obtain the national list of site codes, refer to Appendix A. Once identified, local Provider codes can be permanently held by systems and each provider should therefore only need to look up its code once, and then make this permanently available to those staff responsible for compiling and reporting datasets.

Part 1: New Patient Registration

Data on the diagnosis, staging and planned treatment of ALL patients should be collected at, or very shortly after, the MDT meeting at which the management plan is decided.

Patient Demographics

This section should be used to record details for ALL patients who either have a diagnosis of oesophageal high-grade glandular dysplasia OR oesophago-gastric cancer. It contains data items which capture key characteristics of the patient. All data items in this section must be collected to ensure that patients can be traced along their care pathways, and to enable the audit data to be linked to other data sources (such as Mortality Statistics from Office for National Statistics).

The IT system holds a single record for the patient demographics.

These data items are required for ALL PATIENTS

COSD Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
CR0050	Surname	Yes	COSD	N/A
CR0060	Forename(s)	Yes	COSD	N/A
CR0010	NHS number	Yes	COSD	N/A
CR0080	Postcode at usual address (at diagnosis)	Yes	COSD	N/A
CR0090	Sex	Yes	COSD	Single
CR0100	Date of birth	Yes	COSD	N/A

Surname

COSD CR0050

Record the patient's surname at diagnosis.

This item will be used to ensure the person in the dataset is correctly identified.

In the event of the surname changing (e.g. through marriage), the surname used should be the surname at time of presentation. The definition of surname according to the NHS Data dictionary is "That part of a person's name which is used to describe family, clan, tribal group, or marital association."

Forename(s)

COSD CR0060

Record the patient's forenames.

This item will be used to ensure the person in the dataset is correctly identified.

NHS number

COSD CR0010

Record the patient's unique 10 digit new format NHS number.

This item is essential for two reasons. Firstly it is the unique identifier for the patients. Secondly it will allow the Audit to match records from different data sources (for example the Office for National Statistics and the Hospital Episode Statistics).

Postcode of usual address (at diagnosis)

COSD CR0080

Record the postcode of the patient's address at diagnosis.

If the patient changes postcode, ensure that the postcode at the time of diagnosis is still available. If a Patient has no fixed abode this should be recorded with the appropriate code (ZZ99 3VZ). For overseas visitors the Postcode field must show the relevant country pseudo postcode commencing ZZ99 plus space followed by a numeric, then an alpha character, then a Z. For example, ZZ99 6CZ is the pseudo-postcode for India. Pseudo-Country postcodes can be found under 'Look Ups' here: http://systems.digital.nhs.uk/data/ods/datadownloads/onsdata

This item enables analysis by locality / region of patients and analysis of outcomes by social deprivation quintile.

Sex

COSD CR3170

Record the patient's gender using one of the following codes.

VALUE	DESCRIPTION
1	Male
2	Female
9	Not Specified
0	Not Known

This item enables analysis by gender

Date of birth

COSD CR0100

Record the patient's date of birth, in date format DD/MM/YYYY

This item enables analysis by age at diagnosis

Part 2: Data items for patients diagnosed with oesophageal high-grade glandular dysplasia

Patient referral and diagnosis

This section is used to record referral and diagnosis for patients with a diagnosis of oesophageal high-grade glandular dysplasia (HGD).

Patients are typically referred for diagnosis or treatment of HGD either through Barrett's surveillance or because of symptomatic referral. The data items in this section address the diagnostic process and results of follow-up biopsy.

COSD Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
NA	Route of HGD referral	Yes	New	S
NA	Date of endoscopic biopsy	Yes	New	N/A
NA	Hospital of first biopsy	Yes	New	N/A
NA	Original diagnosis confirmed by a second pathologist	Yes	New	S
NA	Repeat biopsy	Yes	New	S
NA	Repeat biopsy confirmed HGD	Yes	New	S
NA	Second biopsy reviewed by a second pathologist	Yes	New	S
NA	Comorbidity	Yes	New	Multiple

Route of HGD Referral

The field is used to assess the proportion of patients being referred from Barrett's surveillance or via symptomatic referral.

VALUE	DESCRIPTION
21	From Barrett's surveillance service
02	Symptomatic referral
99	Not known

Date of endoscopic biopsy

To establish the timeframe from diagnosis to subsequent treatment and outcomes. The date refers to the initial endoscopic biopsy that results in high-grade dysplasia being diagnosed for the first time. The date is captured in e-GIF format 'CCYY-MM-DD'.

Hospital of first biopsy

In order to link the initial hospital to subsequent treatment patterns, this field should capture the name of the hospital at which the initial biopsy that results in high-grade dysplasia being diagnosed was taken.

Second pathologist confirmation of diagnosis

To capture whether the original diagnosis of HGD was confirmed by a second pathologist.

VALUE	DESCRIPTION
Y	Yes
N	No
09	Not known

Repeat biopsy

This item establishes whether a repeat endoscopic biopsy was performed to confirm the diagnosis of HGD. The biopsy could be obtained from a normal endoscopic diagnostic procedure or from an endoscopic mucosal resection.

VALUE	DESCRIPTION
Y	Yes
N	No
09	Not known

Repeat biopsy confirmed HGD

This item captures whether the repeat biopsy showed HGD. This information will be used to establish the proportion of newly diagnosed HGD patients with subsequent inconclusive finding.

VALUE	DESCRIPTION
Y	Yes
N	No
09	Not known

Second pathologist confirmation of repeat biopsy result

To capture whether the repeat biopsy was reviewed by a second pathologist to confirm the diagnosis of HGD.

VALUE	DESCRIPTION
Y	Yes
N	No
09	Not known

Comorbidity

Record the nature of any pre-existing conditions / co-morbidity which may have effect on subsequent treatment. Multiple values can be entered.

VALUE	DESCRIPTION	DEFINITION (with relevant ICD-10 codes if applicable)
0	None	
1	Cardiovascular disease	Includes ischaemic heart disease (I20 – I25), valvular heart disease (I05-I08, I34-I39), cardiomyopathy (I42-I43), dysrhythmias (I44-I49), heart failure (I50) and hypertension (requiring medication to control – I10 – I13)
2	COPD / Asthma	Includes chronic bronchitis (J40-J42), asthma (J45-J46), chronic obstructive pulmonary disease (J44), bronchiectasis (J47), lung abscess (J85), lung diseases due to external agents (J60-J70)
3	Chronic Renal Impairment	Pre – existing renal impairment of any cause (N18 - N19)
4	Liver Failure or cirrhosis	Includes alcoholic liver disease, toxic liver disease, hepatic failure, chronic hepatitis, fibrosis or cirrhosis of the liver (K70 – K77)
5	Diabetes	Known diabetes of either sort (E10-E14) as defined by the WHO Criteria[11]
6	Mental Illness	Any mental disorder requiring care or medication; includes depression, bipolar disorder, schizophrenia, dementia and personality disorder (F00-F99)
7	Cerebro / peripheral vascular disease	Includes intracranial haemorrhage, stroke, cerebral artery stenosis (I60-I69), aneurysmal and peripheral vascular disease (I70 – I79)
9	Significant other	Other comorbidity judged by the clinical team to be significant not included in the above list.

Endoscopic report

This section is used to document the results of the endoscopic report, including HGD appearance, presence of Barrett's segment, length of Barrett's segment (if present) and characteristics of the HGD lesion.

COSD Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
NA	Quadrantic biopsies	Yes	New	Number
NA	Biopsies of visible nodules	Yes	New	Number
NA	Appearance of high grade dysplasia	Yes	New	S
NA	Barrett's Segment	Yes	New	S
NA	Length of circumferential columnar lining recorded in endoscopy report	Yes	New	S
NA	Length of circumferential columnar lining	Yes	New	Number
NA	Maximum length of columnar lining recorded in endoscopy report	Yes	New	S
NA	Maximum length of columnar lining	Yes	New	Number
NA	HGD lesion	Yes	New	S

Quadrantic biopsies

This item establishes whether quadrantic biopsies were taken every 2cm from the entire segment of Barrett's at the initial endoscopy where a diagnosis of HGD was made.

VALUE	DESCRIPTION
Y	Yes
N	No
09	Not known

Biopsies of visible nodules

This item establishes if additional biopsies taken of any visible nodule at the initial endoscopy where a diagnosis of HGD was made

VALUE	DESCRIPTION
Y	Yes
N	No
09	Not known

Appearance of high grade dysplasia

This item describes the appearance of oesophageal high-grade dysplasia.

VALUE	DESCRIPTION
1	Flat mucosa
2	Nodular lesion
3	Depressed lesion
9	Not known

Barrett's Segment

The item establishes whether Barrett's segment was present upon endoscopic examination.

VALUE	DESCRIPTION
1	Present
2	Absent
9	Not known

Length of circumferential columnar lining recorded in endoscopy report

To determine if length of circumferential columnar lining is recorded in endoscopy report. If yes, a value is required for the data item 'length of circumferential columnar lining'

VALUE	DESCRIPTION
Y	Yes
N	No

Length of circumferential columnar lining

If Barrett's segment is present, the Length of Circumferential Columnar Lining (nearest 0.5cm) should be provided. This and the following item (Maximum Length of Columnar Lining) form the Prague classification of Barrett's oesophagus. The Prague C (circumferential) and M (maximal extent) criteria were developed and validated by Sharma et al 2006[1] and is particularly useful to track the length of Barrett's segment over time.

Maximum length of columnar lining recorded in endoscopy report

To determine if maximum length of columnar lining is recorded in endoscopy report. If yes, a value is required for the data item 'maximum length of columnar lining'.

VALUE	DESCRIPTION
Y	Yes
N	No

Maximum length of columnar lining

If Barrett's segment is present, the Maximum length of the Columnar Lining (nearest 0.5cm) should be provided, including tongues/islands.

HGD lesion

To characterize HGD lesion, based on pathology report.

VALUE	DESCRIPTION
1	Unifocal
2	Multi-focal
9	Not known

[1] Sharma, P. *et al.* The development and validation of an endoscopic grading system for Barrett's esophagus: the Prague C & M criteria. *Gastroenterology* **131,** 1392-1399 (2006).

Planned HGD treatment

This section captures the treatment plan of the patient diagnosed with HGD. Details include date and place of treatment planning, modality of treatment and referral to specialist centres.

NCDS Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
NA	Hospital at which treatment plan was made	Yes	New	N/A
NA	Date that the treatment plan was agreed	No	New	N/A
NA	Was the treatment plan agreed at a MDT meeting	Yes	New	S
NA	Hospital where initial treatment was given	Yes	New	N/A
NA	Date initial treatment was given	Yes	New	N/A
NA	Initial HGD treatment modality	Yes	New	S
NA	Reason for this treatment plan	Yes	New	S
NA	Next surveillance endoscopy planned for?	Yes	New	S

Hospital at which HGD treatment plan was made

To identify the hospital at which a treatment plan was made.

Date that the treatment plan was agreed

To establish the date that the treatment plan was agreed. Date is captured in e-GIF format 'CCYY-MM-DD'.

Treatment plan agreed at a MDT meeting

To assess whether treatment plan was agreed at a multidisciplinary team meeting.

VALUE	DESCRIPTION
Y	Yes
N	No

Hospital at which initial HGD treatment was given

To identify the hospital at which initial treatment for HGD was given e.g. EMR/RFA

Date that the initial treatment plan was agreed

To establish the date that the initial treatment was given. Date is captured in e-GIF format 'CCYY-MM-DD'.

Initial HGD treatment modality

This field captures the different treatment modalities available for the treatment of oesophageal high-grade glandular dysplasia. Treatment modality refers to initial treatment plan.

VALUE	DESCRIPTION
01	Surveillance
02	Oesophagectomy
03	Endoscopic Mucosal Resection (EMR)
04	Photo dynamic therapy
05	Radiofrequency ablation
06	Argon plasma coagulation
07	Multipolar electrocautery
08	Laser therapy
09	Cryotherapy
10	Endoscopic Submucosal Dissection (ESD)
97	Other
99	No active treatment

What was the reason for the treatment plan

The BSG recommends that all patients with HGD are considered for active treatment of their HGD, so this field aims to establish reasons why patients are being considered for surveillance or no active treatment.

VALUE	DESCRIPTION
1	Patient choice
2	Patient unfit for endoscopic or surgical treatment
3	Lack of access to endoscopic treatment or surgery
9	Unknown

When was the next surveillance endoscopy planned for?

This field aims to establish the timing of planned surveillance endoscopies.

VALUE	DESCRIPTION
1	≤3 months
2	4-6 months
3	7-12 months
4	>12 months
9	Unknown

Use of endoscopic mucosal resection / endoscopic submucosal dissection

This section addresses the use of endoscopic mucosal resection (EMR) / endoscopic submucosal dissection (ESD), the purpose and results of the intervention, and post-treatment histology based on the results from the EMR/ESD.

COSD Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
NA	EMR date	Yes*	New	N/A
NA	Was excision complete?	Yes	New	S
NA	Excision complete, ongoing plan	Yes*	New	S
NA	Excision incomplete, ongoing plan	Yes*	New	S
NA	EMR pathology	Yes*	New	S

*These fields are mandatory only if the patient has an EMR/ESD.

EMR/ESD date

To capture the date of EMR/ESD. Date is captured in e-GIF format 'CCYY-MM-DD'.

Was excision complete

This item serves to establish whether the EMR/ESD excision was complete

VALUE	DESCRIPTION
1	Yes
2	No
09	Not Known

EMR/ESD complete, ongoing plan

This item serves to establish the ongoing plan where the excision was complete

VALUE	DESCRIPTION
1	Further endoscopic treatment of the remaining Barrett's segment
2	Surveillance (follow up endoscopy) only
3	No further surveillance or treatment
9	Not Known

EMR/ESD incomplete, ongoing plan

This item serves to establish the ongoing plan where the excision was incomplete

VALUE	DESCRIPTION
1	Further EMR/ESR
2	Further ablative endoscopic treatment e.g. RFA, APC
3	Refer for oesophagectomy
4	Surveillance (follow up endoscopy) only
5	No further surveillance or treatment
9	Not Known

EMR Pathology

To capture whether the resected tissue obtained from EMR/ESD identify whether HGD was confirmed or whether intramucosal carcinoma or submusosal carcinoma was identified.

VALUE	DESCRIPTION
0	No high-grade dysplasia or carcinoma
1	High-grade dysplasia confirmed
2	Intramucosal carcinoma identified
3	Submucosal carcinoma or worse

Part 3: Data items on diagnosis and treatment planning for patients with invasive oesophageal-gastric cancer

Oesophago-Gastric Cancer Patient Referral and Diagnosis Data

This section is used to record referral, diagnosis and staging details for patients with a definitive diagnosis of an epithelial oesophago-gastric cancer.

Patients are referred for diagnosis or treatment for oesophago-gastric (O-G) cancer from a variety of sources. The data items in this section were selected to enable the evaluation of the timescales of care, and the mechanisms of the referral process. Some initiatives already aim to monitor specific aspects of the time taken to move along the care pathway (for example, Cancer Waiting Times) and the Audit has tried to avoid duplicating the aims of these initiatives.

The tumour characteristics (site, histology and stage) are some of the key features required to determine the course of patient management. It is therefore essential for services to ensure that the stage is established accurately.

These data items apply to ALL PATIENTS with the exception of item Cancer Referral Priority Type which only applies to patients who are referred by a general practitioner for outpatient investigation

COSD Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
CR1600	Source of referral for cancer	Yes	COSD extended	Single
CR2020	Cancer referral priority type		COSD	N/A
NA	Cancer referral decision date	Yes	New	N/A
CR2030	Diagnosis date (cancer)	Yes	COSD	N/A
NA	Organisation code (code of provider)	Yes	New	N/A
NA	Pretreatment site	Yes	New	Single
CR0180	Histology (SNOMED)	Yes	COSD	Single
NA	Staging procedures	Yes	New	Multiple
CR2070	TNM version	Yes	COSD	Number
CR0520	T category (final pretreatment)	Yes	COSD	Single
CR0540	N category (final pretreatment)	Yes	COSD	Single
CR0560	M category (final pretreatment)	Yes	COSD	Single

Source of referral for cancer

COSD CR1600 (based on and extended)

Record the source of referral of a patient referred to secondary care for the investigation of suspected cancer.

VALUE	DESCRIPTION
01	Following an emergency admission (includes all acute admissions via A&E, Medical Admissions Unit, etc.)
03	Referral from General Medical Practitioner (for out-patient or other non-emergency referrals)
11	Other - Initiated by the CONSULTANT responsible for the Consultant Out-Patient Episode
20	Open Access Endoscopy
21	From Barrett's surveillance
99	Not Known

This item enables analysis of the patterns of referral

Note for users:

Patients are referred for investigation and treatment of oesophago-gastric cancer in three main ways:

1. They are referred by a general medical practitioner for an outpatient / day case endoscopy or to an outpatient's clinic. In the case, select code 03
2. The diagnosis is not suspected until they become seriously ill (for example with malnutrition, aspiration pneumonia or dehydration) and are admitted to hospital as an emergency (via A&E, urgent GP referral to the Medical Admissions Unit etc.). As a result of this admission, oesophago-gastric cancer is diagnosed or suspected and they are then referred to the local oesophago-gastric cancer team. In this case, select option 01
3. If the patient is referred via open access endoscopy, select option 20.
4. If the patient is referred by another hospital consultant (i.e. a hospital consultant who is not a specialist in oesophago-gastric cancer) following an outpatient appointment or elective admission, who suspects the diagnosis and refers the patient to the local oesophago-gastric cancer team. This would include screening referrals and incidental findings following elective admission for another condition, for example an unrelated operation. In this case, select option 11
5. For patients referred through Barrett's surveillance, select option 21.

Cancer referral priority type

COSD CR2020

This field is to be submitted in conjunction with "SOURCE OF REFERRAL FOR CANCER" in order to differentiate those records that fall within the boundaries of the two week wait standards. This data item is to refer to the initial referral into the first secondary care unit on the patient pathway.

VALUE	DESCRIPTION
1	Routine referral
2	Urgent referral for suspected cancer from a General Medical Practitioner
3	Two week wait

Cancer referral decision date

NA

Record the date on which the initial referral for investigation and treatment of suspected cancer was made. This is the date of referral to the O-G cancer team for investigation.

This should be (in order of preference):

- Date on the letter/fax/proforma/e-mail from referring GP or other hospital department
- Date of telephone call from referring GP or other hospital department
- Date of cross-referral, where patient is already in hospital
- Date of admission to hospital, in the case of patients coming in as emergencies
- Date on the recall letter for patients recalled following a routine screening appointment

The data item refers to the referral described in Data Item T1 above, i.e. the **initial** referral to the local O-G cancer team for investigation and management of suspected cancer. It does not relate to the referral from the local O-G cancer unit to the tertiary cancer centre (if applicable).

This item enables analysis of timescales of care.

Diagnosis date (cancer)

COSD CR2030

This field records the date of diagnosis of the tumour. It is required with the date of birth to derive the age at diagnosis.

Record the date where cancer was confirmed or diagnosis agreed. This will typically be the date of the pathology report which confirms the cancer.

NB: This definition is not the same as Date of Diagnosis used for Cancer Registration. The definition used for cancer registration was used in the previous National Oesophago-Gastric Cancer Audit but has been replaced by this new definition in the Cancer Outcomes and Services Dataset.

This item is required to calculate annual incidence rates and survival times.

Organisation code (code of provider)

Record the organisation code of the Unit where the diagnosis was made. This is the five-character hospital code.

Pretreatment site (COSD UG14230)

Record the site of the cancer for which the patient is receiving care.

VALUE	DESCRIPTION	DEFINITION
01	Oesophageal upper third	That part of the oesophagus that extends from the level of the jugular notch to the carina (approximately 24 cm from incisors)
02	Oesophageal middle third	The section of oesophagus between the carina and the gastro-oesophageal junction (lower level approximately 32 cm)
03	Oesophageal lower third	The section of the oesophagus between the carina and the gastro-oesophageal junction (lower level approximately 40cm). Includes the abdominal oesophagus
04	Siewert 1	Adenocarcinoma of the distal oesophagus, the centre of which is within 2-5cm proximal to the anatomical cardia. It may infiltrate the gastro-oesophageal junction from above.
05	Siewert 2	True junctional adenocarcinoma, the centre of which is within 2cm above or below of the anatomical cardia.
06	Siewert 3	Subcardial gastric adenocarcinoma the centre of which is within the 5cm distal to the anatomical cardia. It may infiltrate the gastro-oesophageal junction from below.
07	Fundus	The main bulk of the cancer lies in the fundus of the stomach
08	Body	The main bulk of the cancer lies in the body of the stomach
09	Antrum	The main bulk of the cancer lies in the antrum of the stomach. This includes pre–pyloric tumours
10	Pylorus	The main bulk of the cancer lies in the pylorus

Notes to users

Where the lesion overlaps two or more areas of the stomach or oesophagus, the user should select the area which contains the bulk of the tumour. Only one option for site may be selected. If the patient has linitis plastica, select the site as “body”.

The Siewert classification applies only to adenocarcinomas. Squamous cell carcinomas at the bottom of the oesophagus should be classified as “oesophageal lower third.”

This item is used to categorise patients according to the characteristics of their cancer, and to investigate the determinants of care and outcomes.

Although some of the options described above are mappable to ICD-10, others cannot. We adopted this approach because ICD-10 does not adequately code tumours of the gastro-oesophageal junction. These tumours are increasing in incidence and amongst the most challenging to manage. Consequently, the Audit has adopted the Siewert classification.

Histology (SNOMED)

COSD CR0180

Record the cell type of the malignant disease as determined at the point of diagnosis. We expect that histology will generally be entered using the overall tumour type (eg, adenocarcinoma, squamous cell carcinoma) but it is also possible to enter more specific subtypes. The range of histology codes within the scope of the Audit is described in the table below. The default SNOMED codes for the overall tumour types are highlighted in bold.

Value	Description
01	Adenocarcinoma
02	Squamous cell carcinoma
03	Adenosquamous carcinoma
04	Small cell carcinoma
05	Undifferentiated carcinoma
06	Other epithelial carcinoma

Tumour type	**Tumour subtypes (included SNOMED codes)**
Adenocarcinoma	**M8140/3 - adenocarcinoma NOS** M8142/3 - linitis plastica M8144/3 - adenocarcinoma intestinal type M8145/3 - carcinoma, diffuse type M8211/3 - tubular adenocarcinoma M8260/3 - papillary adenocarcinoma M8480/3 - mucinous adenocarcinoma M8481/3 - mucin-producing adenocarcinoma M8490/3 - signet ring cell carcinoma M8576/3 - hepatoid adenocarcinoma
Squamous cell carcinoma	**M8070/3 - squamous cell carcinoma NOS** M8071/3 - squamous cell carcinoma, keratinizing NOS M8072/3 - squamous cell carcinoma, large cell, non-keratinizing NOS M8074/3 – squamous cell carcinoma, spindle type M8083/3 - basaloid squamous cell carcinoma
Adenosquamous carcinoma	**M8560/3 - adenosquamous carcinoma**
Small cell carcinoma	**M8041/3 - small cell carcinoma NOS** M8042/3 - oat cell carcinoma
Undifferentiated carcinoma	**M8020/3 - carcinoma, undifferentiated NOS** M8021/3 - carcinoma, anaplastic NOS
Other epithelial carcinoma	**M8010/3 - epithelial carcinoma NOS** M8012/3 - large cell carcinoma M8011/3 - epithelioma, malignant M8014/3 - carcinoma with rhabdoid phenotype M8032/3 - spindle cell carcinoma M8033/3 - pseudosarcomatous carcinoma M8200/3 - adenoid cystic carcinoma M8430/3 - mucoepidermoid carcinoma M8512/3 - medullary carcinoma with lymphoid stroma M8980/3 – carcinosarcoma M9100/3 – choriocarcinoma.

Note for users:

The scope of the Audit covers only invasive epithelial cancer of the oesophagus, O-G junction or stomach. Non-epithelial tumours (for example GISTs or lymphomas) are not included. In case of high-grade dysplasia please use the specific HGD dataset.

Staging procedures

NA

Record the investigations performed to establish the stage of the cancer. Multiple values can be entered.

This item has been modified from the first national O-G cancer audit to include the response "none" for when no procedures are performed.

VALUE	DESCRIPTION	DEFINITION
0	None	
2	CT Scan	A CT Scan, which included the thorax and abdomen, was performed for the investigation and staging of oesophago-gastric cancer
4	PET / PET-CT	A PET scan or PET–CT scan was performed for the investigation and staging of oesophago-gastric cancer
5E	Endoscopic ultrasound (EUS)	Endoscopic ultrasound (EUS) was performed for the investigation and staging of oesophago-gastric cancer (but no biopsy taken – select EUS FNA option in this case)
L	Staging laparoscopy	A laparoscopic examination of the upper gastrointestinal tract was undertaken for the investigation and staging of oesophago-gastric cancer
F	EUS Fine needle aspiration	EUS - A Fine Needle Aspiration biopsy was performed during an endoscopic ultrasound
99	Other	Other investigation not listed above, that was performed to stage the extent of spread of the primary O-G tumour

This item monitors the investigations used to establish the stage of the cancer and the suitability for surgery.

Note for Users:

The Department of Health "Improving Outcomes Guidance" document[1], the BSG / AUGIS guidelines[2] and the Scottish SIGN87 guidelines[3] lay down standards for the staging of oesophago-gastric cancer. The item is based on COSD CR0330 (previously NCDS item 3.3) but has been trimmed to capture relevant practice.

Pre-treatment TNM Version

COSD CR2070

To identify the TNM version that is used locally. The item allows values of 6, 7 or 8 to indicate TNM version 6, version 7 or version 8, respectively.

T category (final pretreatment)

COSD CR0520

Record the 'T' part of the TNM classification used to describe the clinical stage of the tumour prior to treatment.

Together with items T11 and T12, this item allows for the pre-treatment stage of the tumour to be taken into account in the analysis of treatment, outcomes and the determinants of care.

Please see the table below for detailed definitions of the TNM classifications for oesophageal and gastric Cancer.

N category (final pretreatment)

COSD CR0540

Record the 'N' part of the TNM classification used to describe the clinical stage of the tumour prior to treatment.

Please see the table below for detailed definitions of the TNM classifications for oesophageal and gastric Cancer.

M category (final pretreatment)

COSD CR0560

Record the 'M' part of the TNM classification used to describe the clinical stage of the tumour prior to treatment. ***Note that Mx is not a valid option when using TNM7 or TNM8.***

Please see the table below for detailed definitions of the TNM classifications for oesophageal and gastric Cancer.

TNM CLASSIFICATION

The TNM classification of malignant tumours[4] allows clinicians to plan treatment, assess the results of treatment and gives an indication of prognosis. The information required at this point in the dataset is the clinical TNM stage, which is derived from all of the information available prior to treatment.

TNM6/7 CLASSIFICATION – <u>OESOPHAGEAL CANCER</u>

	TNM 6	**TNM 7 & TNM 8**
T	TX Primary tumour cannot be assessed. T0 No evidence of primary tumour. Tis Carcinoma *in situ* T1 Tumour invades lamina propria or submucosa T2 Tumour invades muscularis propria T3 Tumour invades adventitia T4 Tumour invades adjacent structures	TX Primary tumour cannot be assessed. T0 No evidence of primary tumour. Tis Carcinoma in situ /High-grade dysplasia T1 Tumour invades lamina propria or submucosa T1a lamina propria or muscularis mucosae T1b submucosa T2 Tumour invades muscularis propria T3 Tumour invades adventitia T4 Tumour invades adjacent structure T4a pleura, pericardium, diaphragm, or adjacent peritoneum T4b other adjacent structures, e.g. aorta, vertebral body, trachea
N	NX Regional lymph nodes cannot be assessed. N0 No regional lymph node metastasis N1 Regional lymph node metastasis	NX Regional lymph nodes cannot be assessed. N0 No regional lymph node metastasis N1 Metastasis in 1 to 2 regional lymph nodes N2 Metastasis in 3 to 6 N3 Metastasis in 7 or more
M	MX Distant metastasis cannot be assessed. M0 No distant metastasis. M1 Distant metastasis For tumours of lower thoracic oesophagus: M1a Metastasis in coeliac lymph nodes M1b Other distant metastasis For tumours of upper thoracic oesophagus: M1a Metastasis in cervical lymph nodes M1b Other distant metastasis For tumours of mid-thoracic oesophagus: M1a Not applicable M1b Non-regional lymph node or other distant metastasis	M0 No distant metastasis. M1 Distant metastasis

TNM 6/7 CLASSIFICATION – GASTRIC CANCER

	TNM 6	TNM 7 & TNM 8
T	TX Primary tumour cannot be assessed. T0 No evidence of primary tumour. Tis Carcinoma in situ: intraepithelial tumour without invasion of lamina propria. T1 Tumour invades lamina propria or submucosa. T2a Tumour invades muscularis propria. T2b Tumour invades muscularis propria and extends into subserosa. T3 Tumour penetrates serosa (visceral peritoneum) without invasion of adjacent structures. T4 Tumour invades adjacent structures.	TX Primary tumour cannot be assessed. T0 No evidence of primary tumour. Tis Carcinoma in situ: intraepithelial tumour without invasion of lamina propria T1 Tumour invades Lamina propria, submucosa T1a Lamina propria or muscularis mucosae T1b Submucosa T2 Tumour invades Muscularis propria T3 Tumour invades Subserosa (was T2b in TMN6) T4 Tumour perforates serosa or invades adjacent structures T4a Perforates serosa (was T3 in TMN6) T4b Invades adjacent structures
N	N0 No regional node involvement N1 Involvement of 1–6 regional nodes N2 Involvement of 7–15 regional lymph nodes N3 Involvement of more than 15 regional lymph nodes	NX Regional lumph nodes cannot be assessed N0 No regional node metastasis N1 Metastasis in 1 to 2 nodes N2 Metastasis in 3 to 6 nodes (was N1) N3 Metastasis in 7 or more regional lymph nodes N3a 7 - 15 nodes (was N2) N3b 16 or more (was N3)
M	MX Distant metastasis cannot be assessed. M0 No distant metastasis. M1 Distant metastasis	M0 No distant metastasis. M1 Distant metastasis

Patient co-morbidity and performance status

Background:

Comorbidity and performance status have been shown to be predictive of complications and mortality[5-7] in patients with oesophago-gastric cancer. They have therefore been included in the NOGCA for risk adjustment of patient outcomes. For some patients, they also affect decisions related to a patient's management plan, and so are included at this stage in the dataset.

Many data items could have been defined to describe similar characteristics patients. For example, POSSUM has been included in other studies. It was not incorporated into this Audit because it was judged to impose too high a data burden, and it can over-estimate mortality in this group of patients[8-10].

These data items apply to ALL PATIENTS

COSD Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
CR0510	Performance status (adult)	Yes	NCDS; WHO handbook	Single
NA	Comorbidities	Yes	New	Multiple

Performance Status (adult)

COSD CR0510

Record the patient's WHO performance status (ECOG score).

The WHO performance status (ECOG score), is an overall assessment of the functional / physical performance of the patient. The value recorded should be that presented at the MDT meeting prior to the beginning of treatment, or that recorded in a pre-treatment outpatient clinic letter.

VALUE	ECOG score	DEFINITION
0	0	Able to carry out all normal activity without restriction.
1	1	Restricted in physically strenuous activity but able to walk & do light work.
2	2	Able to walk and capable of all self-care but unable to carry out any work. Up and about >50% of waking hours.
3	3	Capable of only limited self- care, confined to bed or chair >50% of waking hours.
4	4	Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair.

Systematic review of the published literature has shown performance status to be predictive of complications and mortality in patients with oesophago-gastric cancer. It is also believed to be one of the determinants of care, hence its inclusion at this point in the dataset.

Comorbidities

Record the nature of any pre-existing conditions / co-morbidities which may have effect on subsequent treatment. Multiple values can be entered.

VALUE	DESCRIPTION	DEFINITION (with relevant ICD-10 codes if applicable)
0	None	
1	Cardiovascular disease	Includes ischaemic heart disease (I20–I25), valvular heart disease (I05-I08, I34-I39), cardiomyopathy (I42-I43), dysrhythmias (I44-I49), heart failure (I50) and hypertension (requiring medication to control – I10 – I13)
2	COPD / Asthma	Includes chronic bronchitis (J40-J42), asthma (J45-J46), chronic obstructive pulmonary disease (J44), bronchiectasis (J47), lung abscess (J85), lung diseases due to external agents (J60-J70)
3	Chronic Renal Impairment	Pre – existing renal impairment of any cause (N18-N19)
4	Liver Failure or cirrhosis	Includes alcoholic liver disease, toxic liver disease, hepatic failure, chronic hepatitis, fibrosis or cirrhosis of the liver (K70–K77)
5	Diabetes	Known diabetes of either sort (E10-E14) as defined by the WHO Criteria[11]
6	Mental Illness	Any mental disorder requiring care or medication; includes depression, bipolar disorder, schizophrenia, dementia and personality disorder (F00-F99)
7	Cerebro / peripheral vascular disease	Includes intracranial haemorrhage, stroke, cerebral artery stenosis (I60-I69), aneurysmal and peripheral vascular disease (I70–I79)
8	Barrett's oesophagus	Barrett's oesophagus (K22.7)
9	Significant other	Other comorbidity judged by the clinical team to be significant not included in the above list.

Note for Users:
Comorbidity is included in the NOGCA for two reasons. Firstly, it is likely to be a factor in determining treatment intent (i.e. curative or palliative). Secondly, it is known to be associated with patient outcomes and is required for risk adjustment[5-7].

Comorbidities can be difficult to define precisely and much of the published literature do not contain precise definitions (including the studies in which it was shown to be a risk factor for post-operative mortality)[5-7,12]. In the NOGCA, comorbidity is defined as "Any co-morbid disease suffered by the patient that may have effect on subsequent treatment".

Definitions for the individual options are stated above with the relevant ICD-10 codes in brackets.

Treatment plan

Background:

This section is designed to collect data on the proportion of patients undergoing treatment with palliative and curative intent, and the range of treatments being offered.

Items Care Plan Agreed Date, Cancer Care Plan Intent and Planned Cancer Treatment Type apply to ALL PATIENTS. Item Reason for Palliative Treatment applies to only those patients who will receive non-curative treatment.

COSD Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
CR0430	Care plan agreed date	Yes	COSD	N/A
CR0460	Cancer care plan intent	Yes	COSD (trimmed)	Single
CR0470	Planned cancer treatment type	Yes	COSD (modified)	Single
	Reason for palliative treatment	Yes	First NOGCA	Multiple

Care plan agreed date (or MDT discussion date)

COSD CR0430

Record the date on which it was decided to manage the patient's treatment with the corresponding management modalities. This may be at a Multi-disciplinary Team (MDT) meeting prior to the start of the patient's treatment, or a clinician may decide on the patient's cancer care plan without discussion at an MDT meeting.

This item is required for the analysis of the timescales of care

Cancer care plan intent

COSD CR0460 (trimmed)

Record whether it is intended to give curative treatment or palliative treatment that it is targeted at the cancer site or supportive care only.

VALUE	DESCRIPTION	DEFINITION
C	Curative	Treatment given with the potential for cure (radical treatment).
Z	Non-curative (palliative)	Palliative - anti-cancer treatment. Treatment targeted at the cancer site that is given with the aim of symptom control and improving quality of life. Examples include palliative chemotherapy and endoscopic palliative therapy (such as stenting, laser therapy and brachytherapy).
X	No active treatment (supportive care)	Treatment consists of supportive care only (whether inpatient or out-patient); includes non-specific symptomatic treatments such as syringe drivers, respite care, etc.

Note for users:

If it is unknown whether the patient will receive targeted palliative care or supportive care only, tick one of the palliative modalities as the important distinction is between curative and palliative intents.

This item is a trimmed version of the COSD item CR0460.

The category "No active treatment (supportive care)" should be used to cover general palliative care received by patients such as in a hospice. It relates to care that is not specifically targeted at the particular cancer site (unlike, for example an oesophageal stent).

This item is required to categorise patients and enable survival analysis by treatment intent.

Planned cancer treatment type

COSD CR0470 (based on and modified)

Record the treatment(s) that are planned for the patient

VALUE	DESCRIPTION
01	Surgery only
02	Radiotherapy only
11	No active treatment
13	Endoscopic mucosal resection
14	Chemotherapy and surgery (any combination)
15	Definitive chemo-radiotherapy
16	Chemo-radiotherapy and surgery (any combination)
21	Palliative surgery
22	Palliative oncology: unspecified
23	Endoscopic palliative therapy: unspecified

This item is required to determine patterns of **primary** treatment and to enable analysis of discrete groups of patients particularly where several modalities are used.

The values represent an O-G-specific modification of the current definition in the Cancer Outcomes and Services Dataset.

Reason for palliative treatment

Record the reason that the patient's treatment intent is palliative rather than curative. Multiple values can be entered.

VALUE	DESCRIPTION
01	Patient declined curative treatment
02	Unfit: poor performance status
03	Unfit: significant co-morbidity
04	Unfit: advanced stage cancer
99	Not known

This item is designed to enable the Audit to determine why patients had palliative rather than curative treatment when they may appear to be suitable candidates for curative treatment given the stage of their cancers and other patient characteristics.

The item is not the same as the COSD item CR0490, which concerns the reason why the patient had no treatment targeted at the cancer (whether curative or palliative).

Part 4: Data items on surgical procedures

Background:
The data items in this section will enable the Audit to examine the patterns of surgical care and outcome. The section only relates to the main surgical procedures that the patient undergoes (be it curative or palliative). It does not relate to diagnostic investigations such as staging laparoscopies or endoscopic procedures (which are examined elsewhere in the dataset).

The data items specify the date of admission, procedure and discharge and the hospital at which the procedure is undertaken. Other items relate to patient characteristics necessary for risk adjustment and accurate data analysis.

The information for this section will be collected as soon as possible after the procedure has taken place. Data on surgery are often presented at MDT meetings, and the collection of these data items can be organised to occur at, or shortly after, this meeting. Details of some procedures (for example emergency surgery for a bleeding tumour) will need to be collected and recorded retrospectively.

These data items apply to ALL SURGICAL PATIENTS

COSD Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
CR1450	Organisation code (code of provider) - surgery	Yes	COSD	N/A
CR1370	Start date (surgery hospital provider spell)		COSD	N/A
CR0710	Procedure date	Yes	COSD	N/A
CR0680	Cancer treatment intent	Yes	COSD trimmed	Single
CR6010	ASA grade	Yes	COSD trimmed - American Society of Anesthesiologists	Single
LU10190	Smoking		COSD trimmed	Single

Organisation code (code of provider) - surgery

COSD CR1450

Record the organisation code of the Unit providing the surgery to the patient. This is the five-character code.

This item enables analysis by hospital and will also enable further analysis of the volume-outcome effect.

Start date (surgery hospital provider spell)

COSD CR1370

Record the date of admission for the hospital stay during which the main surgical procedure took place.

Procedure date

COSD CR0710

Record the date that the main surgical procedure below started.

This item allows determination of the time interval between referral/diagnosis by the specialist team and the start of surgical treatment.

Cancer treatment intent

COSD CR0680 (trimmed)

Record the treatment intent of the surgical procedure.

VALUE	DESCRIPTION
P	Palliative
C	Curative
9	Not known

This item enables analysis by treatment intent.

ASA grade

COSD CR6010 (trimmed)

Record the patient's ASA grade (American Society of Anesthesiologists grade) as determined by the anaesthetist who assessed the patient and recorded it on the operation chart.

VALUE	DESCRIPTION
1	Normal healthy patient
2	Patient with mild systemic disease
3	Patient with severe systemic disease that is not a constant threat to life
4	Patient with severe systemic disease that is a constant threat to life
5	Moribund patient who is not expected to survive

The ASA grade is a subjective measure of fitness in use throughout the United Kingdom. It has been shown in previous studies to be predictive of increased post-operative risk[12,15] and is included here firstly to categorise patients, and secondly for inclusion in the risk adjustment mechanism.

Smoking

COSD LU10190 (trimmed)

To assess smoking status of the patient at the time of surgery.

VALUE	DESCRIPTION
1	Current smoker
2	Ex-smoker
3	Non-smoker (history unknown)
4	Never smoked
9	Not known

Surgical procedure and postoperative complications

Background

This section contains the details of the main surgical procedure performed and any post – operative complications suffered by the patient.

These data items apply to ALL SURGICAL PATIENTS with the exception of items In Hospital Death and Return To Theatre which apply only to those patients who have undergone tumour resection.

NCDS Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
NA	Primary procedure	Yes	First NOGCA	Single
NA	Number of surgeons	Yes	New	Single
NA	GMC code of surgeons	Yes	New	Multiple
UG14190*	Surgical access (thoracic)	Yes	COSD	Single
UG13110*	Surgical access (abdominal)	Yes	COSD	Single
NA	Nodal Dissection	Yes	First NOGCA	Single
UG14210	Surgical complications	Yes	COSD trimmed	Multiple
NA	In hospital death		First NOGCA	Single
UG6480	Return to theatre		COSD	Single
CR0740	Discharge date (hospital provider spell)		COSD	N/A
NA	Surgical Pathway Type		New (2017)	Single
NA	ERAS Pathway Completed		New (2017)	Single

*These two items have been superseded by CR6310 (COSD 7.0)

Primary procedure

Record the main surgical procedure performed on the patient

VALUE	DESCRIPTION
01	Left thoraco-abdominal Oesophagectomy
02	2 – Phase (Ivor-Lewis) Oesophagectomy
03	3 – Phase (McKeown) Oesophagectomy
04	Transhiatal Oesophagectomy
05	Thoracotomy (Open & Shut)
06	Total Gastrectomy
07	Extended Total Gastrectomy
08	Proximal Gastrectomy
09	Distal Gastrectomy
10	Completion Gastrectomy
11	Merendino Gastrectomy
12	Wedge/localised gastric resection
13	Bypass procedure / Jejunostomy only
14	Laparotomy (Open and Shut)

Together with items Surgical Access (thoracic), Surgical Access (abdominal), and Nodal Dissection below, this item enables determination of the type of surgery performed in order to enable analysis of surgically related data.

Note for users:

Although surgical practice is likely to vary nationally, there are a small number of procedures which are well-described, and are known from previous studies to be widely used in the United Kingdom to treat O-G cancer. The list above is based both on experience from previous audits, and on the expert advice of our lead clinician and Clinical Reference Group. It covers both curative and palliative procedures.

The terms "partial gastrectomy" and "sub-total gastrectomy" have been avoided in order to prevent confusion. The terms proximal gastrectomy and distal gastrectomy should be used in preference.

When selecting the appropriate procedure, use

- "14 – Laparotomy (Open and Shut") for a procedure where irresectable disease is discovered at laparotomy, and then no further procedure undertaken.
- "13 – Bypass procedure / Jejunostomy only" for a procedure where irresectable disease is discovered at laparotomy and the surgeon then proceeds to perform a bypass operation.

The change in surgical intent will be evident by a combination of this item and item S5 (Intent of surgery).

Number of surgeons

Only include surgeons involved in the original surgery; surgeons involved in follow up surgery for complications should not be included here.

GMC codes of surgeons

Consultant code for the responsible surgeon followed by the consultant code for any addition surgeons involved in the original surgery. This will be used to report Consultant Outcomes.

Surgical access (thoracic)

Record the approach used to perform the thoracic part of the main procedure

COSD UG14190 (superseded by CR6310)

VALUE	DESCRIPTION
01	Open operation
02	Thoracoscopic converted to open
03	Thoracoscopic completed
N/A	Not applicable

Together with items Primary Procedure, Surgical Access (abdominal) and Nodal Dissection, this item enables determination of the type of surgery performed in order to enable analysis of surgically related data.

Surgical access (abdominal)

Record the approach used to perform the abdominal part of the main procedure

COSD UG13110 (superseded by CR6310)

VALUE	DESCRIPTION
1	Open operation
3	Laparoscopic converted to open
4	Laparoscopic completed

Together with items Primary Procedure, Surgical Access (thoracic) and Nodal Dissection, this item enables determination of the type of surgery performed in order to enable analysis of surgically related data.

Note for users:

The Cancer Outcomes and Services Dataset item UG13110 allows for the entry of planned conversions from laparoscopic to open approaches (value 2). This was not seen as applicable to O-G cancer resections and was excluded. Response 3 should be used to cover all unplanned conversions from Laparoscopic to open approaches.

Items Surgical Access (thoracic) and Surgical Access (abdominal) are included to identify whether any part of the procedure was performed using minimal access techniques, and to categorise the operation accordingly. Each part of the operation should be coded separately. For example, if the thoracic part is done thoracoscopically but the abdominal part by an open approach, select option 3 for S10 and option 1 for Surgical Access (abdominal). It is important that these details are reported for the Audit to correctly classify surgical technique, and hence correctly report outcomes.

Nodal dissection

Record the extent of the lymphadenectomy performed (as described on the operation sheet).

VALUE	DESCRIPTION	DEFINITION
0	None	No lymphadenectomy was performed
1	1-field	Dissection of the diaphragmatic, right and left paracardiac, lesser curvature, left gastric, celiac, common hepatic and splenic artery nodes. Applies to oesophageal resections only.
2	2-field	Includes the para-aortic (mediastinal) nodes together with the thoracic duct, the right and left pulmonary hilar nodes, the para-oesophageal nodes, tracheal bifurcation and the right paratracheal nodes. Applies to oesophageal resections only.
3	3-field	Includes the first and second fields as well as a dissection in the neck to clear the brachiocephalic, deep lateral and external cervical nodes, and includes the right and left recurrent nerve lymphatic chains (deep anterior cervical nodes). Applies to oesophageal resections only.
4	D0 (peri-gut resection)	Peri-gut resection. Applies to gastric resections only
5	D1	Removal of all N1 nodes (perigastric nodes closest to the primary lesion) en bloc with the stomach. Applies to gastric resections only
6	D2	Removal of all N1 and N2 nodes (distant perigastric nodes and the nodes along the main arteries supplying the stomach) en bloc with the stomach. Applies to gastric resections only
7	D3	As above but includes the third tier nodes (defined by the Japanese Research Society for Gastric Cancer for each third of the stomach). Applies to gastric resections only

This item allows the extent of resection to be taken into account in the analysis of treatment and outcome.

Note for users:

The source of the option definitions was surgery for cancer of the oesophagus. S. Michael Griffin and "Surgery for cancer of the stomach", Simon A. Raimes in Oesophagogastric surgery (3rd Edition). Eds S. Michael Griffin and Simon A. Raimes [20,21].

Surgical complications

COSD UG14210
(trimmed)

Record the types of post-operative complications that the patient experiences between the time of the operation, and his / her discharge from hospital or death. Multiple values may be entered.

This item has been modified from the first Audit to include the response "none" for when no postoperative complications occurred.

A complication is defined as "a development of clinical significance that requires intervention (i.e. alteration in the patient's management plan) and occurs in the interval between the time of the main surgical procedure and his / her discharge from hospital". This definition is equivalent to that used in the Scottish Upper GI Cancer dataset Data Manual[22].

Late complications occurring after the patient's discharge are not included in the Audit.

VALUE	DESCRIPTION	DEFINITION (with relevant ICD-10 codes if applicable)
00	None	
01	Pneumonia	Includes the following: aspiration of gastric contents (at any time-point within the first 3 months of the first therapeutic procedure); development of pulmonary infection requiring antibiotic therapy within seven days of any therapeutic endoscopic procedure. NOTE: This seven day time-limit for pneumonia has been chosen in an attempt to differentiate between pneumonia developing as a result of aspiration following the procedure, and simple community acquired pneumonia (to which these patients, frequently being frail and elderly, are susceptible).
02	Acute respiratory distress syndrome (ARDS)	Acute respiratory distress syndrome (ARDS) – part of the spectrum of acute lung injury. Defined according to the American – European Consensus Conference Committee criteria (acute onset, bilateral pulmonary infiltrates on chest X-ray, PaO2:FiO2 ratio <200 (PaO2 measured in mmHg) and pulmonary artery wedge pressure <18)
03	Pulmonary embolism	Pulmonary embolism – a thromboembolism in the pulmonary vascular tree (confirmed by radiological imaging)
04	Pleural effusion	A pleural effusion that requires drainage
05	Anastomotic leak	Severe disruption to the anastomosis (whether detected clinically or radiologically, and irrespective of whether it is managed conservatively or by re-operation).
06	Chyle leak	Damage to the thoracic duct or pulmonary lymphatic vessels resulting in leakage of chyle
07	Haemorrhage	Occurrence of postoperative haemorrhage, whether managed conservatively or by re-operation
08	Cardiac complication	Includes myocardial infarction, arrhythmia needing drug or electrical treatment, cardiac failure needing admission to critical care or coronary care, need for cardio-pulmonary resuscitation

09	Acute renal failure	Acute deterioration in renal function requiring dialysis or haemofiltration
10	Wound infection	Wound infection or dehiscence needing any type of care.
98	Other	Any other complication in line with the definition above.

Note for users:

Reoperation or readmission to critical care is not required for a condition to be a complication. If these criteria were adopted, a significant number of conservatively treated complications would not be included, and the complication rate would be under-reported as a result. There is also the issue of creating perverse incentives (i.e. that the knowledge that a complication would be reported only if treated operatively could influence management). Small pleural effusions and mild acute renal failure are common after this kind of surgery and rarely alter management to a significant degree. Hence, for these two options, intervention is required. For more detail see the definitions of specific complications above.

Readmission to critical care is not included in the Audit dataset because this information will be obtained through a collaboration with the Intensive Care Network Audit and Research Council database (ICNARC).

Death in hospital

Record whether or not the patient died during the **SAME** admission as the primary procedure.

Death occurring after discharge or on a subsequent admission should not be recorded.

VALUE	DESCRIPTION
Y	Yes
N	No

This item is necessary to determine the short-term outcomes of surgery

Note for users:

This only refers to in-hospital mortality. Data from the Office for National Statistics will be used to examine deaths occurring at a later stage and separate, time-related end-points (e.g. 30-day mortality).

Return to theatre

COSD CR6480

Record whether or not the patient required a second (unplanned) operation during the same admission as the primary procedure

VALUE	DESCRIPTION
Y	Yes
N	No

Like items Surgical Complications and In Hospital Death above, this item is necessary to determine the short-term outcomes of surgery

Note for users:

An "unplanned" return to theatre should only be recorded if the return was within the period of hospitalisation relating to the main operation described above. Tracheostomy or minor procedures in the ITU / HDU, eg insertion of a Hickman line or catheterisation, should not be considered as a re-operation.

Discharge date (hospital provider spell)

COSD CR0740

Where the procedure took place with the patient as an inpatient (including day cases), record the date of discharge or death in hospital.

Note for users:

The date that should be recorded is either the patient's discharge date, or the date of their death if they died without leaving hospital after the first operation. If the patient is readmitted and then dies in hospital, it should be the date that he/she was discharged after the main procedure that is recorded. More detail on patient survival will be obtained by the Audit through linkage with the Office for National Statistics.

Surgical Pathway Type

Please indicate whether the patient followed a standard surgical pathway or a protocolised enhanced recovery after surgery (ERAS) pathway.

VALUE	DESCRIPTION
1	A protocolised enhanced recovery (ERAS) without daily documentation in medical notes?
2	A protocolised enhanced recovery (ERAS) with daily-documentation in medical notes?
3	A standard (non-ERAS) surgical pathway

Note for users:

ERAS is also known as fast-track surgery.

ERAS Pathway Completed

Please indicate whether the protocolised enhanced recovery after surgery (ERAS) pathway was completed or not.

VALUE	DESCRIPTION
1	Yes
2	No: but partial completion
3	No: non-completion
4	Unknown / not documented

Note for users:

Partial completion should be used if the patient started on an ERAS pathway and only some of the protocolised components could be applied. Non-completion should be used if the initially intended ERAS pathway turned out to be entirely impracticable for the patient.

Part 5: Data items for postoperative pathology

Background:
This section records the final extent of the primary tumour and examines the quality of the resection performed. In doing so it serves two purposes: it allows patients to be categorised according to their tumour stage, and it allows assessment of the quality of the surgery.

The data items are consistent with the Royal College of Pathology minimum dataset for oesophageal and gastric cancer. For full details of the histopathology minimum dataset for O-G cancer patients, see the website for the Royal College of Pathologists: www.rcpath.org.

These data items apply to patients who have undergone tumour resection. Some may also apply to those patients who have undergone palliative surgery.

NCDS Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
UG14230	Post-operative tumour site	Yes	COSD trimmed	Single
CR6420	Histology(SNOMED)	Yes	COSD	Single
CR1000	History of neo-adjuvant therapy	Yes	RCPath Minimum dataset	Single
NA	Proximal Margin Involved	Yes	RCPath Minimum dataset	Single
NA	Distal Margin Involved	Yes	RCPath Minimum dataset	Single
UG14490	Circumferential Margin involved	Yes	RCPath Minimum dataset	Single
CR0890	Nodes examined number	Yes	COSD	N/A
CR0900	Nodes positive number	Yes	COSD	N/A
NA	TNM version	Yes	New	Number
CR0910	T category (pathological)	Yes	COSD	Single
CR0920	N category (pathological)	Yes	COSD	Single
CR0930	M category (pathological)	Yes	COSD	Single

Post operative tumour site

COSD UG14230 (trimmed)

Record the site of the cancer for which the patient is receiving care, as confirmed by examination of the resection specimen or by intra-operative visual confirmation.

VALUE	DESCRIPTION	DEFINITION
01	Oesophageal upper third	That part of the oesophagus that extends from the level of the jugular notch to the carina (approximately 24 cm from incisors)
02	Oesophageal middle third	The section of oesophagus between the carina and the gastro-oesophageal junction (lower level approximately 32 cm)
03	Oesophageal lower third	The section of the oesophagus between the carina and the gastro-oesophageal junction (lower level approximately 40cm). Includes the abdominal oesophagus

04	Siewert 1	Adenocarcinoma of the distal oesophagus, the centre of which is within 2-5cm proximal to the anatomical cardia. It may infiltrate the gastro-oesophageal junction from above.
05	Siewert 2	True junctional adenocarcinoma, the centre of which is within 2cm above or below of the anatomical cardia.
06	Siewert 3	Subcardial gastric adenocarcinoma the centre of which is within the 5cm distal to the anatomical cardia. It may infiltrate the gastro-oesophageal junction from below.
07	Fundus	The main bulk of the cancer lies in the fundus of the stomach
08	Body	The main bulk of the cancer lies in the body of the stomach
09	Antrum	The main bulk of the cancer lies in the antrum of the stomach. This includes pre–pyloric tumours
10	Pylorus	The main bulk of the cancer lies in the pylorus

Note to users:

The option definitions were taken from the following sources:

- Sobin L.H., Wittekind C.H. *TNM classification of malignant tumours.* New York: John Wiley, 2003[4].

- Siewert JR, Stein HJ. Classification of adenocarcinoma of the oesophagogastric junction. *Br J Surg* 1998; **85**: 1457-9[23].

- Christopher Deans, Simon Paterson-Brown. Preoperative assessment and staging of oesophageal and gastric cancer. In: S Michael Griffin, Simon A Raimes., eds. *Oesophagogastric surgery*. Philadelphia: Elsevier Saunders, 2006: 47-80[24].

Histology (SNOMED)

COSD CR6420

Record the tumour histology, as confirmed by postoperative examination of the resection specimen or biopsies. We expect that histology will generally be entered using the overall tumour type (e.g. adenocarcinoma, squamous cell carcinoma) but it is also possible to enter more specific subtypes. The range of histology codes within the scope of the Audit is described in the table below. The default SNOMED codes for the overall tumour types are highlighted in bold.

Value	Description
01	Adenocarcinoma
02	Squamous cell carcinoma
03	Adenosquamous carcinoma
04	Small cell carcinoma
05	Undifferentiated carcinoma
06	Other epithelial carcinoma
07	High Grade Dysplasia

Tumour type	**Tumour subtypes (included SNOMED codes)**
Adenocarcinoma	**M8140/3 - adenocarcinoma NOS** M8142/3 - linitis plastica M8144/3 - adenocarcinoma intestinal type M8145/3 - carcinoma, diffuse type M8211/3 - tubular adenocarcinoma M8260/3 - papillary adenocarcinoma M8480/3 - mucinous adenocarcinoma M8481/3 - mucin-producing adenocarcinoma M8490/3 - signet ring cell carcinoma M8576/3 - hepatoid adenocarcinoma
Squamous cell carcinoma	**M8070/3 - squamous cell carcinoma NOS** M8071/3 - squamous cell carcinoma, keratinizing NOS M8072/3 - squamous cell carcinoma, large cell, non-keratinizing NOS M8074/3 – squamous cell carcinoma, spindle type M8083/3 – basaloid squamous cell carcinoma
Adenosquamous carcinoma	**M8560/3 - adenosquamous carcinoma**
Small cell carcinoma	**M8041/3 - small cell carcinoma NOS** M8042/3 - oat cell carcinoma
Undifferentiated carcinoma	**M8020/3 - carcinoma, undifferentiated NOS** M8021/3 - carcinoma, anaplastic NOS
Other epithelial carcinoma	**M8010/3 - epithelial carcinoma NOS** M8012/3 - large cell carcinoma M8011/3 - epithelioma, malignant M8014/3 - carcinoma with rhabdoid phenotype M8032/3 - spindle cell carcinoma M8033/3 - pseudosarcomatous carcinoma M8200/3 - adenoid cystic carcinoma M8430/3 - mucoepidermoid carcinoma M8512/3 - medullary carcinoma with lymphoid stroma M8980/3 – carcinosarcoma M9100/3 – choriocarcinoma.

Source	RCPath oesophageal dataset	The RCPath Gastric dataset uses these codes for dysplasia	Other codes used to identify high grade oesophageal glandular dysplasia
Codes	M-8148/2 Glandular intraepithelial neoplasia grade 3 M-8077/2 Squamous intraepithelial neoplasia grade 3	M-7400/0 Dysplasia (which could be low or high grade) M-8140/2 Adenocarcinoma in situ (unclear term but effectively synonymous with high grade dysplasia).	M-8010/2 Carcinoma in situ M-6703/0 glandular dysplasia M-6703/3 severe glandular dysplasia M-7400/3 severe dysplasia M-7441/0 epithelial dysplasia M-7441/3 severe epithelial dysplasia M-8000/0 neoplasm, benign (very unlikely to be used but would be correct, if non-specific)
Comment	Both of these diagnoses would indicate high grade dysplasia, and 8148/2 would be specifically high grade dysplasia arising in Barrett's - i.e. glandular high grade dysplasia. This is not a comprehensive list of all malignancies and other codes could be used as necessary.	Both of these terms could be used, too, to identify dysplasia in the oesophagus. Only M-8140/2 would specify that this was glandular and thus in Barrett's.	

Note for users:

The scope of the Audit covers only invasive epithelial cancer of the oesophagus, O-G junction or stomach. Non-epithelial tumours (for example GISTs or lymphomas) are not included.

For high-grade dysplasia please use the dedicated HGD dataset. HGD pathology results after EMR/ESD are collected using the HGD dataset, HGD pathology results after curative surgery need to be entered in the post-op pathology dataset, and the HGD code needs to be added.

History of neo-adjuvant therapy

COSD CR1000

Record whether or not the patient had neoadjuvant therapy prior to surgery.

VALUE	DESCRIPTION
Y	Yes
N	No

Note for users:

This information will be used together with the pre- and post-operative staging results to assess the response to neoadjuvant therapy, and to categorise patients appropriately.

Proximal margin involved

Record whether or not the proximal resection margins were involved by tumour (to within one millimetre of the edge).

VALUE	DESCRIPTION
Y	Yes
N	No

Distal margin involved

Record whether or not the distal resection margins were involved by tumour (to within one millimetre of the edge).

VALUE	DESCRIPTION
Y	Yes
N	No

Circumferential margin involved (<1mm)

COSD UG14490

Record whether or not the circumferential resection margins were involved by tumour (to within one millimetre of the edge).

VALUE	DESCRIPTION
Y	Yes
N	No
08	Not applicable

Note for users:

A recognised standard of care related to the surgical resection of O-G tumours is the proportion of patients with an R0 resection (one where the resection margins are clear of tumour). The above three data items are essential to assess this standard of surgical care.

Nodes examined number

COSD CR0890

Record the number of local/regional nodes examined histologically.

Local/regional nodes are defined by the UICC TNM Atlas and vary with the primary cancer site.

Nodes positive number

COSD CR0900

Record the number of local/regional nodes reported as being positive for the presence of tumour metastases.

Local/regional nodes are defined by the UICC TNM Atlas and vary with the primary cancer site.

Pathological TNM version

To identify the TNM version that is used locally. Values of 6, 7 or 8 should be entered to indicate TNM version 6, version 7 or version 8, respectively.

T category (pathological)

COSD CR0910

Record the pathological T stage (the extent of the primary tumour after excision or biopsy of the primarycancer).

Together with items P12 and P13, this item allows for the stage of the tumour to be taken into account in the analysis of treatment, outcomes and the determinants of care.

Note for users:

The information required in these three items is the pathological TNM classification (pTNM), which is derived from all of the information available prior to treatment plus that resulting from examination of the pathological specimen.

For detailed definitions of the TNM classifications of oesophageal and gastric cancer, please see chapter 3, pages 20/21.

N Category (pathological)

COSD CR0920

Record the 'N' part of the TNM classification used to describe the pathological stage of the tumour.

M category (pathological)

COSD CR0930

Record the 'M' part of the TNM classification used to describe the pathological stage of the tumour. ***Note that Mx is not a valid option when using TNM7 or TNM 8.***

Part 6: Data items on oncological therapy (chemotherapy / radiotherapy)

Background:
Following publication of the MAGIC and OEO2 trials[25,26], and with the evidence that definitive chemo-radiotherapy is a potential alternative to surgery in the treatment of squamous cell carcinomas[27], oncological treatment has an increasingly important role in the management of oesophago-gastric cancer. This is the first time in England and Wales that the patterns of oncological therapy for O-G cancer patients have been assessed, and the outcomes of treatment monitored.

In O-G cancer care, oncological therapy can be used as definitive or palliative treatment or in combination with surgery. The treatment modality may involve chemotherapy or radiotherapy alone, or in combination. The Audit requires some basic information about the characteristics of these modalities and a simple description of whether the prescribed treatment was completed as expected.

These data items are to be collected retrospectively as soon as possible after the treatment has been completed. If the results of neoadjuvant therapy are presented at an MDT meeting, the collection of these data items can be organised there.

COSD Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
CR1450	Organisation code (code of provider) – oncology	Yes	COSD	N/A
CR1070	Oncological treatment intent	Yes	COSD	Single
NA	Modality of oncological therapy	Yes	First NOGCA	Single
9.10	Start date of chemotherapy	Yes	NCDS	N/A
9.23	Outcome of chemotherapy	Yes	NCDS	Single
10.8	Start date of radiotherapy	Yes	NCDS	N/A
10.23	Outcome of radiotherapy	Yes	NCDS	Single
NA	Proceed to surgery		New definition	

Organisation code (code of provider) – oncology

COSD CR1450

Record the organisation code of the NHS trust at which the patient receives their oncological treatment. This is the five character code.

This item will enable analysis by provider.

Oncological treatment intent

COSD CR1070

Record the intent of the oncological treatment received by the patient.

VALUE	DESCRIPTION
C	Curative
P	Palliative
A	Adjuvant
N	Neoadjuvant

This item is required in order to establish patterns of oncological therapy

Modality of oncological therapy

Record the oncological treatment modality that it was intended the patient should receive (as decided pre-treatment)

VALUE	DESCRIPTION
1	Chemotherapy
2	Radiotherapy
3	Chemo-radiotherapy

Start date of chemotherapy

NCDS Item 9.10

Record the date that the first cycle of chemotherapy was started.

Outcome of chemotherapy

NCDS Item 9.23

This item examines the short–term outcomes of chemotherapy.
Record the outcome of chemotherapy (including the reason if the course was abbreviated)

VALUE	DESCRIPTION
0	Treatment completed as prescribed
1	Patient died
2	Progressive disease during chemotherapy
3	Acute chemotherapy toxicity
4	Technical or organisational problems
5	Patient choice (stopped or interrupted treatment)
9	Not known (default)

Note for users:

If there are two or more reasons for the patient not completing the course of chemotherapy, the consultant should exercise clinical judgement and select the most important reason.

Start date of radiotherapy

NCDS Item 10.8

Record the date that the first fraction of radiotherapy was started.

Outcome of radiotherapy

NCDS Item 10.23

This item examines the short–term outcomes of radiotherapy. Record the outcome of radiotherapy (including the reason if the course was abbreviated)

VALUE	DESCRIPTION
0	Treatment completed as prescribed
1	Patient died
2	Progressive disease during radiotherapy
3	Acute radiotherapy toxicity
4	Technical or organisational problems
5	Patient choice (stopped or interrupted treatment)
9	Not known (default)

Note for users:

If there are two or more reasons for the patient not completing the course of radiotherapy, the consultant should exercise clinical judgement and select the most important reason.

Proceed to surgery

Assesses whether the patient proceeded to curative surgery after neoadjuvant chemotherapy.

VALUE	DESCRIPTION
Y	Yes
N	No
08	Not applicable

Part 7: Data items on endoscopic / radiologic palliative therapy

Background
Dysphagia and vomiting are common problems in oesophago-gastric cancer, and cause significant morbidity and quality of life impairment. The mainstay of treatment for these is endoscopic palliative therapy. These treatments are often effective in controlling symptoms but complications may arise. For example, in the Scottish Audit of Gastro-Oesophageal Cancer (SAGOC), 23% of the patients who underwent endoscopic palliative therapy suffered a complication[28]. SAGOC also showed widespread variation in practice across Scotland. In addition, the 2004 report of the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) report "Scoping Our Practice" recommended that a nationwide audit of techniques and equipment used for oesophago-gastric dilatation and stent insertion be performed, in order to investigate national practice and monitor outcomes[29]. The data items in this section have been developed in response to this previous work.

Details of the procedure should be collected as soon as possible after the procedure.

The data items in this section only relate to endoscopic palliative therapeutic procedures. Data should not be collected on diagnostic endoscopic procedures or endoscopic procedures (such as dilation) performed in combination with other surgical procedures.

Although stent procedures are typically performed using an endoscope, in some hospitals, they may be performed using radiological control only. These radiological stent procedures **are** within the scope of the audit and data should be collected on these procedures.

Certain data items about the first therapeutic procedure may not be routinely recorded in patient notes (e.g. location of stent). The items were included because the 2004 NCEPOD report suggested that that there were risk factors that could explain variation in complication rates. Consequently, endoscopists (and radiologists, if appropriate) should be encouraged to collect all the data at the time of the procedure. It is possible that a patient will undergo an endoscopic procedure before their details are entered into the Audit IT system. We would therefore suggest that:

- Paper proformas are available in endoscopy units. Proformas should also be available in radiology departments if endoscopic palliative therapeutic procedures are performed there, or if stents are placed using radiological control only
- The endoscopist / radiologist completes a proforma at the time of the first procedure and files it in the patient's notes for a data clerk to input at a later date.

Items Endoscopic Procedure Date, Dysphagia Score, Type of Endoscopic Procedure, Planned Course of Multiple Treatments and Anaesthesia Used should be collected on all patients receiving endoscopic / radiological palliative therapy.

Items Stent Type, Method of Stent Placement, Success of Deployment and Endoscopic Complications should be collected on patients receiving an endoscopic / radiological stent.

NCDS Code (if applicable)	Field Name	Mandatory	Source of definition	Value response
UG14410	Organisation code (code of provider) – endoscopic palliative therapy	Yes	COSD (pre v7.0)	N/A
UG13030	Endoscopic procedure date	Yes	COSD (pre v7.0)	N/A
UG1429	Type of endoscopic procedure	Yes	COSD	Multiple
NA	Planned course of multiple treatments		First NOGCA	Single
NA	Anaesthesia used		First NOGCA	Single
NA	Stent type	Yes	New Definition	Single
NA	Method of stent placement	Yes	First NOGCA	Single
NA	Endoscopic complications	Yes	New definition	Multiple

Organisation code (code of provider) – endoscopic palliative therapy

COSD UG14410

Record the organisation code of the Unit providing endoscopic palliative therapy to the patient.

Endoscopic procedure date COSD UG130

Record the date that the **first therapeutic** endoscopic procedure was performed

Note that this does not include endoscopies performed for diagnostic or staging purposes, or in combination with other surgical procedures.

This item facilitates analysis of the complications of endoscopic palliative therapy.

Type of endoscopic procedure

COSD UG14290

Record the main endoscopic techniques performed as part of the first **therapeutic** endoscopic procedure.

More than one technique can be entered (for example dilatation and stent insertion).

VALUE	DESCRIPTION
1	Stent insertion
2	Laser therapy
3	Argon plasma coagulation
4	Photodynamic therapy
5	Gastrostomy
6	Brachytherapy
7	Dilatation
8	Other

This item determines the type of procedure performed, and enables analysis of endoscopic palliative therapy related data.

Note for users:

This item refers only to those techniques performed at the time of the **first therapeutic** endoscopic procedure. It does not refer to procedures performed on later occasions.

All techniques performed at the time of the **first therapeutic** endoscopic procedure should be selected. For example, if the patient undergoes dilatation and stent insertion as part of the same procedure, both options 1 and 7 should be selected.

Option 5 "Gastrostomy" includes both tubes placed endoscopically (for example, percutaneous endoscopic gastrostomy (PEGs)) and those placed radiologically (ie. radiologically inserted gastrostomy(RIG)).

Planned course of multiple treatments

Record whether or not the first procedure is part of a planned course of multiple endoscopic treatments.

VALUE	DESCRIPTION
Y	Yes
N	No
09	Not known

Note for users:

Some endoscopic procedures are performed in pre-planned courses (for example, laser therapy, requires several separate ablation procedures to be effective). If a series of procedures are

planned as a course of treatments, select the option YES. Other procedures, for example stent insertion, are intended to be performed only once. In these cases, select the option NO.

Anaesthesia used

Record the type of anaesthetic used during the procedure.

VALUE	DESCRIPTION
1	Sedation
2	Local anaesthetic spray
3	General anaesthetic
4	Sedation and local anaesthetic spray combined
9	Not known

This item allows the anaesthetic type to be taken into account in the analysis of treatment and outcome.

Note for users:

The NCEPOD report suggested that the type of anaesthetic used may have an impact on the development of post-procedure / intra-procedure complications[29]. This item investigates the size of the impact on outcome of anaesthetic technique, and analyses variations in national practice.

Stent type

Record the type of stent inserted during the procedure.

VALUE	DESCRIPTION
1	Plastic, expandable
2	Metal covered
3	Metal uncovered
4	Metal anti-reflux
5	Biodegradable
8	Other
9	Not known

Method of stent placement

Record whether a stent was placed using fluoroscopic control, endoscopic control or both techniques.

VALUE	DESCRIPTION
1	Fluoroscopic control
2	Endoscopic control
3	Fluoroscopic and endoscopic combined
9	Not known

The 2004 NCEPOD report "Scoping Our Practice" suggested that method of stent placement was associated with patient outcomes, and this item will enable the Audit to investigate national patterns of care.

Endoscopic short-term complications

Record the types of complications that the patient experiences during the admission period associated with the procedure. More than one option can be selected

As in the surgery section above, a complication is defined as "a development of clinical significance that requires intervention (i.e. alteration in the patient's management plan)".

VALUE	DESCRIPTION	DEFINITION (with relevant ICD-10 codes if applicable)
00	None	
01	Stricture	
02	Perforation	Perforation of the stomach or oesophagus occurring within 7 days of a therapeutic endoscopic procedure
03	Haemorrhage	Haemorrhage from the tumour site or site of the endoscopic intervention occurring anytime within the first 3 months of the first therapeutic procedure.
88	Other complication	Other clinically significant complication (as judged by the responsible consultant) that occurs during or shortly after the therapeutic procedure.

Appendix A: How to obtain a list of hospital site codes

The Organisation Data Service (ODS) is responsible for the publication of codes to identify organisations and individuals across health and social care. ODS is part of NHS Digital.

To download a file containing hospital site codes, visit:
http://systems.digital.nhs.uk/data/ods/datadownloads

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