



ANGOSA Audit

Australia & New Zealand
Gastric & Oesophageal
Surgery Association

Data Dictionary



ROYAL AUSTRALASIAN
COLLEGE OF SURGEONS

Created by the Morbidity Audits Department
Research, Audit and Academic Surgery Division
Royal Australasian College of Surgeons
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Welcome to the ANZGOSA Audit Data Dictionary

The ANZGOSA Audit is a bi-national audit, with data collected from practising surgeons in the Australian and New Zealand Gastric and Oesophageal Surgical Association (ANZGOSA). The aim of the audit is to collect and store both clinical and pathological data of patients undergoing resection for upper gastro-intestinal cancer and gastrointestinal stromal tumours (GIST).

The audit database is a resource for surgeons to easily analyse their own practice data and compare their results against national and international benchmarks. It will also aid in the development of best practice standards and guidelines for best practice in upper gastrointestinal cancer surgery. Finally, the data will be used for research at a publication level as well as disseminating information to surgeons and the general public where appropriate.

Data collected

The audit collects data on patients undergoing surgical resection for cancers of the oesophagus (oesophageal tumours) and stomach (gastric tumours) and GIST. If a patient does not undergo surgery or the primary tumour is anything other than gastric or oesophageal cancer or GIST, the case should not be recorded. A gastrointestinal stromal tumour should be recorded if it is found in the stomach, oesophagus or small bowel.

Please ensure that all relevant data items are completed as cases with missing fields will be marked as incomplete and may not be included in any data analysis. It is expected that surgeons may have some incomplete cases in the system while waiting on 30 day mortality and readmission data, however this information must be entered once available or the case will remain incomplete.

How to use this data dictionary

The data dictionary provides information on the data types, coding and definitions for each item in the dataset, as well as instructions on how to answer each question.

The dictionary is ordered according to the structure of the dataset. That is, you will encounter each data item in the dictionary in the same order you would encounter them as you enter data into the database. A table of contents is included prior to the data item entries; however, if you are searching for one particular data item, it may be simpler to use the alphabetical index located at the end of the dictionary.

If there is any doubt as to how to answer one of the questions in the dataset, in the first instance, check this data dictionary. If still unsure, you can contact the help desk at anzgosa.audit@surgeons.org or call +61 8 8219 0918.

A user manual for negotiating the online data entry portal can also be found on the College website (www.surgeons.org/anzgosa).

References

The definitions and instructions used in this data dictionary have been based on the following resources:

- The National Health Data Dictionary
- The National Oesophago-Gastric Cancer Audit Data Manual (United Kingdom)
- The National Breast Cancer Audit Data Dictionary
- Japanese gastric cancer treatment guidelines 2014 (ver. 4)

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Surname

Identifying and Definitional Attributes

Database field name: pat_surname

Definition: The name common to members of a family, as opposed to a given name which is unique to the individual. This can also be referred to as last name or family name.

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

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alpha (128 characters)

Guide for use

Data screen: Patient Information

Obligation: Mandatory for identified data

How to answer: Record the patient's full formal surname, in the format preferred by the patient and as appearing on medical records. In the event of the surname changing (e.g. through marriage), the surname used should be the surname at time of presentation.

If there is uncertainty about what is the person's surname, use either the name first provided to the medical centre or, where proof of identity is available use name listed on proof of identity documents.

If special characters, such as hyphens, are used in the surname, these should be included.

If you wish to enter patient de-identified data, use the ID Code field rather than the Surname and First Name field.

First name

Identifying and Definitional Attributes

Database field name: pat_firstname

Definition: A patient's identifying name in a family group, as opposed to their surname which is common to all family members.

Context: Record here full first name for accurate identifying of patient. Can also be referred to as given name.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alpha (128 characters)

Guide for use

Data screen: Patient Information

Obligation: Mandatory for identified data

How to answer: First name should be recorded in full, in the format preferred by the patient and as appearing on medical records.

If there is uncertainty about a person's first name, use either the name first provided to the medical centre or, where proof of identity is available use name listed on proof of identity documents.

If special characters, such as hyphens, are used in the given names, these should be included.

If you wish to enter patient de-identified data, use the ID Code field rather than the Surname and First Name field.

Middle initials

Identifying and Definitional Attributes

Database field name: pat_middleInitials

Definition: First letter of each given name of the patient subsequent to first name.

Context: Used for accurate identification of patient.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alpha (3 characters)

Guide for use

Data screen: Patient Information

Obligation: Optional

How to answer:

ID Code

Identifying and Definitional Attributes

Database field name: pat_idcode

Definition: A code assigned to patients for identification purposes.

Context: Allows for entry of patient de-identified data.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alphanumeric

Guide for use

Data screen: Patient Information

Obligation: Must enter either ID Code *or* patient Surname and First name.

How to answer: The ID_Code can be anything you like as long as it is individual to that patient (i.e. don't keep using the same code) and will help you remember who the patient is for later amendments to the case.

Gender

Identifying and Definitional Attributes

Database field name: pat_gender

Definition: The biological distinction between male and female, as represented by a code.

Context: This is used for classification, enabling analysis by gender.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Male 1
Female 2

Format: Drop-down box

Guide for use

Data screen: Patient Information

Obligation: Mandatory

How to answer: Record male or female as reported by patient or by observation.

Date of Birth

Identifying and Definitional Attributes

Database field name: pat_dob

Definition: Date on which the patient was born.

Context: This is used to calculate age at diagnosis.

Relational and Representational Attributes

Data type: Date/Time

Data Domain: Valid date

Format: DD/MM/YYYY

Guide for use

Data screen: Patient Information

Obligation: Mandatory

How to answer: The day, month and year of birth should be separated by a forward slash (/).

Every effort should be made to obtain an accurate date of birth, however if this cannot be achieved, an estimated date of birth should be given. If year of birth is known but specific date is not, record the date of birth as 01/01/YYYY so that an estimate of age can be achieved.

If date of birth is entirely unknown and cannot be estimated leave the field blank.

Date of birth must not be within last 18 years (data on children is not collected).

Country

Identifying and Definitional Attributes

Database field name: pat_country

Definition: Residential country of patient at diagnosis.

Context: Used for classification and identification.

Relational and Representational Attributes

Data type: Text

Data Domain: Australia
New Zealand
India

Format: Drop-down box

Guide for use

Data screen: Patient Information

Obligation: Mandatory

How to answer:

Street Address

Identifying and Definitional Attributes

Database field name: pat_street

Definition: Residential street address of patient at diagnosis.

Context: This data item is recorded for patient identification.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alphanumeric

Guide for use

Data screen: Patient Information

Obligation: Mandatory

How to answer: The following items should be present when recording a full address:

- Street number, name and type OR post box number

Suburb/town

Identifying and Definitional Attributes

Database field name: pat_suburb

Definition: Full name of suburb/town in patient residential address at diagnosis.

Context: This data item is recorded for patient identification and classification.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alphanumeric (80 characters)

Guide for use

Data screen: Patient Information

Obligation: Mandatory

How to answer: Record the suburb of residence for patient during treatment.

The suburb/town/locality name may be a town, city, suburb or commonly used location name such as a large agricultural property or Aboriginal community.

Enter 'Unknown' when the locality name or geographic area for a person or event is not known. Enter 'No fixed address' when a person has no fixed address or is homeless.

State

Identifying and Definitional Attributes

Database field name: pat_state

Definition: Residential state of patient.

Context: This data item is recorded for patient identification and classification.

Relational and Representational Attributes

Data type: Text

Data Domain: NSW
Vic
Qld
SA
WA
Tas
NT
ACT

Format: Drop-down box

Guide for use

Data screen: Patient Information

Obligation: Mandatory for Australian patients

How to answer: Record the state of residential address for patient during treatment, if the patient is from Australia.

Postcode

Identifying and Definitional Attributes

Database field name: pat_postcode

Definition: Numeric postal descriptor for the locality of patient residential address at diagnosis.

Context: This data item is recorded for patient identification and classification and enables analysis by region.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Free text

Format: NNNN

Guide for use

Data screen: Patient Information

Obligation: Mandatory for Australian patients.

How to answer: Record the Australian postcode for the patient residence at diagnosis. If the patient changes postcode, ensure that the postcode at the time of diagnosis is still available.

Weight

Identifying and Definitional Attributes

Database field name: pat_weight

Definition: The weight of the patient measured in kilograms.

Context: Used to calculate body mass index.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Free text (Max. 5)

Format: N[NN].N

Guide for use

Data screen: Patient Information

Obligation: Mandatory

How to answer: Record weight to the nearest 0.1 kg. If weight is not measured leave this question blank.

Height

Identifying and Definitional Attributes

Database field name: pat_height

Definition: The height of the patient measured in centimetres.

Context: Used to calculate body mass index.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Free text (Max. 5)

Format: N[NN].N

Guide for use

Data screen: Patient Information

Obligation: Mandatory

How to answer: Record height to the nearest 0.1 cm. If height is not measured leave this question blank.

Body Mass Index (automatically created field)**Identifying and Definitional Attributes**

Database field name: pat_bmi

Definition: A measure of a patient's weight (body mass) relative to height.

Context: Used to assess the extent of weight deficit or excess. Automatically created where height and weight have been recorded.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Ratio (Max: 6)

Format: NN[N].N[N]

Guide for use

Data screen: Patient Information

Obligation: N/A

How to answer: N/A – automatically created field.

Hospital

Identifying and Definitional Attributes

Database field name: hos_name

Definition: The treating hospital or clinic at which the patient received his/her surgery.

Context: The hospital list was compiled from a list supplied by the ANZGOSA and has been added to at the request of users.

Relational and Representational Attributes

Data type: Numeric

Data Domain: N/A

Format: Drop-down box

Guide for use

Data screen: Patient Information

Obligation: Mandatory

How to answer: Select hospital from your personalised drop-down box showing your hospitals.

If a hospital needs to be added to your personalised drop-down box, use the *My Hospitals* link on the left-hand side menu of the data entry portal.

Please contact the audit office to have a hospital added if it does not appear in the *All Hospitals* list.

Surgeon

Identifying and Definitional Attributes

Database field name: surg_id

Definition: The treating surgeon.

Context: Used to provide identification and grouping of a surgeon's data for analysis.

Relational and Representational Attributes

Data type: Numeric

Data Domain: N/A

Format: Drop-down box

Guide for use

Data screen: Patient Information

Obligation: Mandatory

How to answer: For surgeons: This field will automatically fill from surgeon log-in and will not be shown on screen.

For data managers: The drop-down box will show the surgeons associated with that data manager only.

Tumour site

Identifying and Definitional Attributes

Database field name: epi_tumour_site

Definition: The main anatomical site of the cancer for which the patient is receiving care.

Context: Used to categorise cases according to cancer characteristics and allow for analysis of treatment and outcome for these cancers.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Oesophageal tumours:	Hypopharynx	1
	Proximal 1/3 Oesophagus	2
	Middle 1/3 Oesophagus	3
	Distal 1/3 Oesophagus	4
Oesophageal junction tumours:	Siewert 1 (Distal oesophagus which may infiltrate the OGJ)	5
	Seiwert 2 (arising immediately at the OGJ)	6
	Siewert 3 (subcardial tumour that infiltrates OGJ and oesophagus from below)	7
Gastric tumours:	Stomach – fundus	8
	Stomach – body	9
	Stomach – antrum	10
	Stomach - pylorus	11
Other:	Small intestine	12
	Colon	13
	Rectum	14

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer: Only one option for site may be selected. 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. 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 distal third.”

Stomach-pylorus should only be selected for localised pyloric carcinoma.

The “other” categories are provided for GIST cases only.

Histological diagnosis

Identifying and Definitional Attributes

Database field name: epi_histological_diagnosis

Definition: Cell type of the malignant disease, as determined at the point of diagnosis.

Context: It is used for classification, epidemiological research and incidence reporting.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Adenocarcinoma	1
Squamous Cell Carcinoma	2
Barrett's with HGD Dysplasia	3
Adeno Squamous Carcinoma	4
Undifferentiated	5
Lymphoma	6
GIST	7
Neuroendocrine	8
No preoperative histological diagnosis	9
Other (will bring up a text box to specify – max. 200 characters)	10

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer: Enter overall tumour type.

If histology is not known because a biopsy has not been taken, record “No preoperative histological diagnosis”. This may occur if the tumour diagnosis was reached on the basis of radiological examination only.

Tumour dimensions to record

Identifying and Definitional Attributes

Database field name: epi_tumour_dimensions_recorded

Definition: Specifies whether the dimensions of the tumour have been recorded.

Context: This is used to define those cases that do not have a dimension measurement for data completeness purposes.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Distance (ab oral)	1
	Tumour size	2
	None recorded	3

Format: Drop-down box

Guide for use

Data screen: Pre-treatment diagnosis

Obligation: Mandatory

How to answer: If the surgeon does not have access to measurements of the tumour, record this question as “none recorded”. If this question is left blank, the case will be considered incomplete.

If either “distance” or “size” is selected, measurements of the tumour need to be given in a subsequent question.

Proximal distance (ab oral)

Identifying and Definitional Attributes

Database field name: epi_prox_distance

Definition: The distance, in centimetres, between the teeth and the edge of tumour closest to the mouth.

Context:

Relational and Representational Attributes

Data type: Numeric

Data Domain: Free text (Max. 5)

Format: NN.NN

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Must answer both proximal and distal distance OR tumour size.

How to answer:

Distal distance (ab oral)

Identifying and Definitional Attributes

Database field name: epi_distal_distance

Definition: The distance, in centimetres, between the teeth and the edge of tumour furthest from the mouth.

Context:

Relational and Representational Attributes

Data type: Numeric

Data Domain: Free text (Max. 5)

Format: NN.NN

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Must answer both proximal and distal distance OR tumour size.

How to answer:

Tumour size

Identifying and Definitional Attributes

Database field name: epi_vertical_tumour_size; epi_horizontal_tumour_size

Definition: Tumour size, in millimetres.

Context: Tumour size is a significant prognostic variable; the risk of local recurrence and lymph node involvement increases with tumour size.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Free text (Max. 3)

Format: NNN x NNN

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Must answer tumour size OR both proximal and distal distance.

How to answer: As recorded in the pathology report.

In the instance of multiple tumours, record the size of the principal tumour.

Method of diagnosis

Identifying and Definitional Attributes

Database field name: epi_type_diagnosis

Definition: The method used for diagnosis.

Context: Used to identify cases where the patient was diagnosed with a method other than endoscopy.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Endoscopy 2
Other 1

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer:

Date of diagnosis

Identifying and Definitional Attributes

Database field name: epi_diagnosis_date

Definition: Date at which the cancer was diagnosed at the primary site (i.e. oesophagus/stomach).

Context: This is used to calculate age at diagnosis, as well as to determine annual incidence rates and survival calculations.

Relational and Representational Attributes

Data type: Date/Time

Data Domain: Valid date

Format: DD/MM/YYYY

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer: Record date tumour was diagnosed either by endoscopy/imaging/other.

Pre-treatment staging investigations

Identifying and Definitional Attributes

Database field name: s_inves_name [s_inves_type will be 1, Pre-treatment]

Definition: Investigations performed to establish the stage of cancer.

Context: Used for monitoring the investigations used for establishing the stage of cancer.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	CT Scan	1
	EUS	2
	PET Scan	3
	Laparoscopy	4
	Peritoneal washings and cytology	5
	Bone scan	6
	Other (will bring up a text box to specify – max. 200 characters)	7

Format: Tick boxes

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer: Indicate one or more investigation.

Pre-treatment T-stage

Identifying and Definitional Attributes

Database field name: epi_pre_t_stage_oeso_gastric; epi_pre_t_stage_gist

Definition: Extent of primary cancer including tumour size, prior to treatment.

Context: 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.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Gastric or oesophageal cancer	Ca in situ or HGD	1
		T1	2
		T2 or 3	3
		T4	4
	GIST	T ≤ 2cm	5
		T > 2cm, ≤ 5cm	6
		T > 5cm, ≤ 10cm	7
		T > 10cm	8

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Only relevant if pre-treatment staging investigations are recorded

How to answer: This information is recorded in the patient's medical file. Choose the lower (less advanced) T category when there is any uncertainty.

Please note that if GIST was selected in the histological diagnosis question, the drop-down box will show the GIST options above. If any other diagnosis is selected, the drop-down box will display the gastric/oesophageal options.

Pre-treatment N-stage

Identifying and Definitional Attributes

Database field name: epi_pre_n_stage_oeso_gastric; epi_pre_n_stage_gist

Definition: Extent of regional lymph node metastasis prior to treatment.

Context: 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.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Gastric or oesophageal	No involved lymph nodes identified	1
		Loco-regional nodes identified	2
		Distant lymph nodes identified	3
GIST	No regional lymph nodes identified	4	
	Regional lymph nodes identified	5	

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Only relevant if pre-treatment staging investigations are recorded

How to answer: This information is recorded in the patient's medical file. Choose the lower (less advanced) N category when there is any uncertainty.

Please note that if GIST was selected in the histological diagnosis question, the drop-down box will show the GIST options above. If any other diagnosis is selected, the drop-down box will display the gastric/oesophageal options.

Pre-treatment M-stage**Identifying and Definitional Attributes**

Database field name: epi_pre_m_stage

Definition: Absence or presence of distant metastasis prior to treatment.

Context: 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.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Yes	1
No	2

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Only relevant if pre-treatment staging investigations are recorded

How to answer: This information is recorded in the patient's medical file. Choose the lower (less advanced) M category when there is any uncertainty.

Multidisciplinary discussion regarding treatment**Identifying and Definitional Attributes**

Database field name: epi_mdt_discussion

Definition: Indicates the involvement of providers from more than one profession in a discussion of patient treatment.

Context:

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	0

Format: Tick box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer:

Treatment decision

Identifying and Definitional Attributes

Database field name: epi_tx_decision

Definition: The intention of the treatment being planned.

Context: It is used for correlating outcome with original intent of the treatment.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Curative	1
	Palliative	2
	Not determined at treatment outset	3

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer: This question refers to surgical treatment as well as neoadjuvant therapy.

Code 1 is used when treatment is given for control of the disease.

Code 2 is used when the cure is unlikely to be achieved and treatment is given primarily for the purpose of pain control. Other benefits of the treatment are considered secondary contributions to the patient's quality of life.

Code 3 is used when the patient had treatment for cancer but the intention was not stated.

Patient on Prospective Randomised Controlled Trial**Identifying and Definitional Attributes**

Database field name: epi_prc

Definition: Indicates whether the patient is on a Prospective Randomised Controlled Trial.

Context:

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	0

Format: Tick box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer:

Planned chemotherapy

Identifying and Definitional Attributes

Database field name: epi_planned_chemo

Definition: The planned use of cytotoxic drugs that aim to kill, prevent or slow the growth of cancer cells.

Context: Enables analysis of discrete groups of patients particularly where several modalities are used.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Pre-surgery chemotherapy	1
Post-surgery chemotherapy	2
Both pre- and post-surgery chemotherapy	3
No chemotherapy	4

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer:

Planned radiotherapy

Identifying and Definitional Attributes

Database field name: epi_planned_radio

Definition: The planned use of radiation therapy to kill tumour cells.

Context: Enables analysis of discrete groups of patients, particularly where several modalities are used.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Pre-surgery radiotherapy	1
Post-surgery radiotherapy	2
Both pre- and post-surgery radiotherapy	3
No radiotherapy	4

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer:

Post neoadjuvant staging investigations

Identifying and Definitional Attributes

Database field name: s_inves_name [s_inves_type will be 2, Post neoadjuvant treatment]

Definition: Investigations performed to establish cancer stage subsequent to neoadjuvant treatment.

Context: Used for monitoring the investigations used for establishing the stage of cancer.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	CT Scan	1
	EUS	2
	PET Scan	3
	Laparoscopy	4
	Peritoneal washings and cytology	5
	Bone scan	6
	Other (will bring up a text box to specify – max. 200 characters)	7

Format: Tick boxes

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer: Indicate one or more investigation.

Post neoadjuvant treatment T-stage

Identifying and Definitional Attributes

Database field name: epi_post_neo_t_stage_oeso_gastric; epi_post_neo_t_stage_gist

Definition: Extent of primary cancer including tumour size, after neoadjuvant treatment.

Context: Allows for the post neo-adjuvant treatment stage of the tumour to be taken into account in the analysis of treatment, outcomes and the determinants of care.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Gastric or oesophageal	Ca in situ or HGD	1
		T1	2
		T2 or 3	3
		T4	4
	GIST	T ≤ 2cm	5
		T > 2cm, ≤ 5cm	6
		T > 5cm, ≤ 10cm	7
		T > 10cm	8

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Only relevant if post-neoadjuvant staging investigations are recorded

How to answer: This information is recorded in the patient's medical file. Choose the lower (less advanced) T category when there is any uncertainty.

Please note that if GIST was selected in the histological diagnosis question, the drop-down box will show the GIST options above. If any other diagnosis is selected, the drop-down box will display the gastric/oesophageal options.

Post neoadjuvant treatment N-stage

Identifying and Definitional Attributes

Database field name: epi_post_neo_n_stage_oeso_gastric; epi_post_neo_n_stage_gist

Definition: Extent of regional lymph node metastasis after neoadjuvant therapy.

Context: Allows for the post neo-adjuvant treatment stage of the tumour to be taken into account in the analysis of treatment, outcomes and the determinants of care.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Gastric or oesophageal	No involved lymph nodes identified	1
		Loco-regional nodes identified	2
		Distant lymph node/s identified	3
GIST	No regional lymph nodes identified	4	
	Regional lymph nodes identified	5	

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Only relevant if post-neoadjuvant staging investigations are recorded

How to answer: This information is recorded in the patient's medical file. Choose the lower (less advanced) N category when there is any uncertainty.

Please note that if GIST was selected in the histological diagnosis question, the drop-down box will show the GIST options above. If any other diagnosis is selected, the drop-down box will display the gastric/oesophageal options.

Post neoadjuvant treatment M-stage**Identifying and Definitional Attributes**

Database field name: epi_post_neo_m_stage

Definition: Absence or presence of distant metastasis after neoadjuvant therapy.

Context: Allows for the post neo-adjuvant treatment stage of the tumour to be taken into account in the analysis of treatment, outcomes and the determinants of care.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Yes	1
No	2

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Only relevant if post-neoadjuvant staging investigations are recorded

How to answer: This information is recorded in the patient's medical file. Choose the lower (less advanced) M category when there is any uncertainty.

Complications of neoadjuvant treatment

Identifying and Definitional Attributes

Database field name: epi_neo_complications

Definition: Adverse medical response resulting from treatment received prior to surgery.

Context:

Relational and Representational Attributes

Data type: Numeric

Data Domain: Yes (will bring up a text box to specify – max. 200 characters) 1
No 2

Format: Drop-down box

Guide for use

Data screen: Pre-surgery diagnosis and treatment

Obligation: Mandatory

How to answer:

Date of Surgery

Identifying and Definitional Attributes

Database field name: epi_surgery_date

Definition: The date on which the cancer-directed surgical treatment was performed.

Context: This item allows determination of the time interval between diagnosis and the start of surgical treatment.

Relational and Representational Attributes

Data type: Date/Time

Data Domain: Valid date

Format: DD/MM/YYYY

Guide for use

Data screen: Surgical details

Obligation: Mandatory

How to answer: Record the date that the main surgical procedure commenced.

Urgency of Surgery

Identifying and Definitional Attributes

<i>Database field name:</i>	epi_surg_urgency
<i>Definition:</i>	The urgency of the operation as categorised by the NCEPOD code.
<i>Context:</i>	This item allows risk adjustment of outcome assessment.

Relational and Representational Attributes

<i>Data type:</i>	Numeric								
<i>Data Domain:</i>	<table> <tr> <td>Immediate (within minutes)</td> <td>1</td> </tr> <tr> <td>Urgent (within hours)</td> <td>2</td> </tr> <tr> <td>Expedited (within days)</td> <td>3</td> </tr> <tr> <td>Elective (planned)</td> <td>4</td> </tr> </table>	Immediate (within minutes)	1	Urgent (within hours)	2	Expedited (within days)	3	Elective (planned)	4
Immediate (within minutes)	1								
Urgent (within hours)	2								
Expedited (within days)	3								
Elective (planned)	4								
<i>Format:</i>	Drop-down box								

Guide for use

<i>Data screen:</i>	Surgical details
<i>Obligation:</i>	Mandatory
<i>How to answer:</i>	<p>Record the urgency of the surgical procedure, as categorised by the UK National Confidential Enquiry into Patient Outcome and Death (NCEPOD) code.</p> <p>Immediate: Immediate life, limb or organ-saving operation. Resuscitation simultaneous with surgical treatment. Operation within minutes of decision to operate (e.g. laparotomy / thoracotomy for control of haemorrhage).</p> <p>Urgent: Acute onset or deterioration of conditions that threaten life, limb or organ survival or for relief of distressing symptoms. Operation within hours of decision to operate and normally once resuscitation completed (e.g. laparotomy for perforation).</p> <p>Expedited: Stable patient requiring early intervention for a condition that is not an immediate threat to life, limb or organ survival. Operation within days of decision to operate.</p> <p>Elective: Surgical procedure planned or booked in advance of routine admission to hospital. Operation at a time to suit both patient and surgeon.</p>

ASA grade**Identifying and Definitional Attributes**

Database field name: epi_asa_grade

Definition: American Society of Anesthesiologists (ASA) grade is an assessment of fitness for anaesthesia and surgery.

Context: Classification and risk adjustment. Medical co-morbidity increases the risk associated with anaesthesia and surgery.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Grade 1	1
Grade 2	2
Grade 3	3
Grade 4	4

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory

How to answer: 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.

Grade 1 is used for a normal healthy individual.

Grade 2 is used for a patient with a mild systemic disease that does not limit activity.

Grade 3 is used for a patient with severe systemic disease that limits function, but is not incapacitating.

Grade 4 is used for a patient with an incapacitating systemic disease which is constantly life-threatening.

Surgical intent

Identifying and Definitional Attributes

Database field name: epi_surgical_intent

Definition: The intention of surgical treatment.

Context: It is used for correlating outcome with original intent of the surgery.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Curative resection	1
Palliative resection	2

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory

How to answer:

Code 1 is used when surgery is performed for control of the disease.

Code 2 is used when the cure is unlikely to be achieved and surgery is given primarily for the purpose of pain control. Other benefits of the treatment are considered secondary contributions to the patient's quality of life.

Code 3 is used when the surgery was not completed as planned.

Primary Procedure

Identifying and Definitional Attributes

Database field name: epi_oesophagectomy; epi_gastrectomy; epi_local_excision

Definition: The main surgical procedure carried out.

Context: Used for classification of cases.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Oesophagectomy
Gastrectomy
Local Excision of Tumour
Resection abandoned due to inoperability

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory

How to answer: Record the main surgical procedure performed on the patient.

Oesophagectomy approach

Identifying and Definitional Attributes

Database field name: oeso_thoracotomy; oeso_thoracoscopy; oeso_laparotomy; oeso_laparoscopy; oeso_cervical_anastomosis; oeso_left_thoraco_abdominal

Definition: The method of surgical procedure in which all or part of the oesophagus is removed.

Context: Enable analysis of surgically related data.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Thoracotomy
Thoracoscopy
Laparotomy
Laparoscopy
Cervical Anastomosis
Left thoraco-abdominal

Format: Tick boxes

Guide for use

Data screen: Surgical details

Obligation: Mandatory for oesophagectomy cases

How to answer: Tick as many as apply.

Oesophageal conduit

Identifying and Definitional Attributes

Database field name: oeso_conduit

Definition: Conduit used to replace the removed section of diseased oesophagus.

Context: Enable analysis of surgically related data.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Stomach	1
Colon	2
Jejunum	3

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory for oesophagectomy cases

How to answer:

Feeding jejunostomy

Identifying and Definitional Attributes

Database field name: oeso_feeding_jejunostomy

Definition: Record whether feeding tube was inserted at the time of surgery.

Context: Enable analysis of surgically related data.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Yes 1
No 2

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory for oesophagectomy cases

How to answer: Only feeding tubes inserted at the time of the main procedure are included. The item does NOT cover feeding tubes inserted for pre-operative nutritional supplementation.

Gastrectomy type

Identifying and Definitional Attributes

Database field name: gas_type

Definition: Extent of surgical resection for primary gastric cancer.

Context: Enables analysis of surgically related data.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Total	1
	Subtotal	2
	Extended total	5
	Distal	3
	Proximal	4

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory for gastrectomy cases

How to answer: Subtotal: a partial gastrectomy that involves the resection of left gastric artery.

As defined by Japanese gastric cancer treatment guidelines:

Total gastrectomy: Total resection of the stomach, including the cardia and pylorus.

Extended total: Gastrectomy with combined resection of adjacent involved organs. Or gastrectomy with extended lymphadenectomy exceeding D2.

Distal gastrectomy: Stomach resection including pylorus. The cardia is preserved.

Proximal gastrectomy: Stomach resection including the cardia. The pylorus is preserved.

Gastrectomy approach

Identifying and Definitional Attributes

Database field name: gas_approach

Definition: The approach used to perform the abdominal part of the main procedure.

Context: Enables analysis of surgically related data.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	laparoscopic	1
	open	2
	laparoscopic converted to open	3

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory for gastrectomy cases

How to answer:

Reconstruction after gastrectomy**Identifying and Definitional Attributes**

Database field name: gas_reconstruction

Definition: Technique used for reconstruction of the upper part of the digestive tract after gastrectomy.

Context: Enables analysis of surgically related data.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Roux -en-Y	1
Billroth 1	2
Billroth 2	3
Other (will bring up a text box to specify – max. 200 characters)	4

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory for gastrectomy cases

How to answer:

Lymph node dissection

Identifying and Definitional Attributes

Database field name: oeso_lymph_node_dissection; gas_lymph_node_dissection

Definition: The extent of the lymphadenectomy performed.

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

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Oesophagectomy	Radical 3 field lymphadenectomy	1
		Radical 2 field lymphadenectomy	2
		Radical infracarinal 2 field	3
		Non radical lymphadenectomy	4
	Gastrectomy	D1	1
		D1+	4
		D2	2
		No lymph node dissection	3

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory for oesophagectomy/gastrectomy cases

How to answer: The options shown in the drop-down box for this question are dependent on the surgery being recorded.

Options for gastrectomy are based on the Japanese gastric cancer treatment guidelines.

Lymph node stations for total gastrectomy

D1: 1–7

D1+: 1–7, 8a, 9, 11p

D2: 1–7, 8a, 9, 10, 11p, 11d, 12a

Lymph node stations for distal gastrectomy

D1: 1, 3, 4sb, 4d, 5, 6, 7

D1+: 1, 3, 4sb, 4d, 5, 6, 7, 8a, 9

D2: 1, 3, 4sb, 4d, 5, 6, 7, 8a, 9, 11p, 12a

Lymph node stations for proximal gastrectomy

D1: 1, 2, 3a, 4sa, 4sb, 7

D1+: 1, 2, 3a, 4sa, 4sb, 7, 8a, 9, 11p

Local excision - Type

Identifying and Definitional Attributes

Database field name: loc_excision_type

Definition: Technique used for excision of tumour

Context: Enables analysis of surgically related data.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Endoscopic resection 1
Full thickness excision 2

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory for local excision of tumour cases

How to answer:

Local excision - Approach

Identifying and Definitional Attributes

Database field name: loc_excision_approach

Definition: Approach used to perform the excision

Context: Enables analysis of surgically related data.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Laparoscopic	1
Open	2
Laparoscopic converted to open	3

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory for full thickness excision cases

How to answer:

Excision site

Identifying and Definitional Attributes

Database field name: loc_excision_site

Definition: Site from which the tumour was surgically removed.

Context: Enables analysis of surgically related data.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Gastric	1
Oesophageal	2
Small bowel	3
Other (will bring up a text box to specify – max. 200 characters)	4

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory for local excision of tumour cases

How to answer:

Operative comments

Identifying and Definitional Attributes

Database field name: oeso_op_comments; gas_op_comments; loc_op_comments

Definition: Any information which needs to be recorded that is not covered by previous questions.

Context: Allows for extra information not recorded in set questions.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alphanumeric (200 characters)

Guide for use

Data screen: Surgical details

Obligation: Optional

How to answer: Record here any additional features observed during surgery.

Intraoperative complications

Identifying and Definitional Attributes

Database field name: epi_intra_op_complications

Definition: Adverse medical response that occurs during the surgery.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Yes (will bring up a text box to specify – max. 200 characters) 1
No 0

Format: Tick boxes

Guide for use

Data screen: Surgical details

Obligation: Mandatory

How to answer:

Postoperative complications

Identifying and Definitional Attributes

Database field name: epi_post_op_complications

Definition: Adverse medical response that occurs subsequent to surgery.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Yes 1
No 0

Format: Tick boxes

Guide for use

Data screen: Surgical details

Obligation: Mandatory

How to answer:

Postoperative surgical complications

Identifying and Definitional Attributes

Database field name: comp_name [comp_type will be 1, surgical]

Definition: Adverse medical response directly related to surgical procedure.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	No surgical complication	1
	Anastomotic leak (Clinical)	2
	Anastomotic leak (Radiological)	3
	Wound Infection	4
	Peritonitis	5
	Chylothorax	6
	Pancreatic Fistula	7
	Pleural Effusion Requiring Drainage	8
	Abscess	9
	Bleeding	10
	Jejunal Tube Complication	11
	Other (will bring up a text box to specify – max. 200 characters)	12

Format: Tick boxes

Guide for use

Data screen: Surgical details

Obligation: Only for those patients with a postoperative complication

How to answer: Indicate as many as apply.

Postoperative non-surgical complications

Identifying and Definitional Attributes

Database field name: comp_name [comp_type will be 2, non-surgical]

Definition: Adverse medical response occurring after surgery but having no direct link to the surgical procedure.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	No non-surgical complication	13
	Cardiac ischaemic event	14
	Cardiac arrhythmia	15
	Other CVS	16
	LRTI requiring antibiotics	17
	DVT/PE	18
	Other pulmonary	19
	Hepatic	20
	Renal	21
	CNS	22
	Other (will bring up a text box to specify – max. 200 characters)	23

Format: Tick boxes

Guide for use

Data screen: Surgical details

Obligation: Only for those patients with a postoperative complication

How to answer: Indicate as many as apply.

Intraoperative or post-operative blood transfusion**Identifying and Definitional Attributes**

Database field name: epi_blood_transfusion

Definition: The administration of whole blood or a component, such as packed red cells, to replace blood lost through surgery.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Yes 1
No 2

Format: Drop-down box

Guide for use

Data screen: Surgical details

Obligation: Mandatory

How to answer:

Clavien Dindo complication grade

Identifying and Definitional Attributes

<i>Database field name:</i>	epi_clavien_dindo_complications
<i>Definition:</i>	A grading of the severity of surgical complications.
<i>Context:</i>	To determine the short-term outcomes of surgery.

Relational and Representational Attributes

<i>Data type:</i>	Numeric																
<i>Data Domain:</i>	<table> <tr> <td>Grade 1: Any deviation from the normal postoperative course without the need for pharmacological treatment or surgical, endoscopic, and radiological interventions</td> <td>1</td> </tr> <tr> <td>Grade 2: Requiring pharmacological treatment</td> <td>2</td> </tr> <tr> <td>Grade 3a: Requiring surgical, endoscopic or radiological intervention NOT UNDER general anaesthesia</td> <td>3</td> </tr> <tr> <td>Grade 3b: Requiring surgical, endoscopic or radiological intervention UNDER general anaesthesia</td> <td>4</td> </tr> <tr> <td>Grade 4a: Life-threatening complication requiring ICU management — Single organ dysfunction</td> <td>5</td> </tr> <tr> <td>Grade 4b: Life-threatening complication requiring ICU management — Multi-organ dysfunction</td> <td>6</td> </tr> <tr> <td>Grade 5: Death of a patient</td> <td>7</td> </tr> <tr> <td>Grade 4 (inactive – only used for migration of old data where cannot map to Grade 4a or 4b)</td> <td>9</td> </tr> </table>	Grade 1: Any deviation from the normal postoperative course without the need for pharmacological treatment or surgical, endoscopic, and radiological interventions	1	Grade 2: Requiring pharmacological treatment	2	Grade 3a: Requiring surgical, endoscopic or radiological intervention NOT UNDER general anaesthesia	3	Grade 3b: Requiring surgical, endoscopic or radiological intervention UNDER general anaesthesia	4	Grade 4a: Life-threatening complication requiring ICU management — Single organ dysfunction	5	Grade 4b: Life-threatening complication requiring ICU management — Multi-organ dysfunction	6	Grade 5: Death of a patient	7	Grade 4 (inactive – only used for migration of old data where cannot map to Grade 4a or 4b)	9
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<i>Format:</i>	Drop-down box																

Guide for use

<i>Data screen:</i>	Surgical details
<i>Obligation:</i>	Mandatory
<i>How to answer:</i>	<p>If more than one complication, enter the highest grade of complication for the patient.</p> <p>Grade 1: Allowed therapeutic regimens are: drugs as antiemetics, antipyretics, analgetics, diuretics and electrolytes and physiotherapy. This grade also includes wound infections opened at the bedside.</p> <p>Grade 2: for complications which require pharmacologic treatment with drugs other than such allowed for grade 1. Blood transfusions and total parental nutrition are also included.</p> <p>Grade 4a and 4b: including CNS complications: brain haemorrhage, ischaemic stroke, subarachnoid bleeding, but excluding transient ischaemic attacks</p> <p>Grade 4a: including dialysis</p>

Date of extubation

Identifying and Definitional Attributes

Database field name: epi_date_extubation

Definition: The date of removal of the patient's breathing tube.

Context: Used to calculate days intubated, assuming patient intubated on day of surgery.

Relational and Representational Attributes

Data type: Date/Time

Data Domain: Valid date

Format: DD/MM/YYYY

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: If date of extubation is entirely unknown and cannot be estimated leave the field blank.

Days intubated (automatically created field)**Identifying and Definitional Attributes**

Database field name: epi_days_intubated

Definition: Number of days of intubation.

Context: This field is automatically created from date of surgery and date extubated.

Relational and Representational Attributes

Data type: Numeric

Data Domain: N/A

Format: NN

Guide for use

Data screen: Post-operative course

Obligation: N/A

How to answer: N/A – automatically created field.

Stay in ICU/HDU**Identifying and Definitional Attributes**

Database field name: epi_stay_icu

Definition: Record if patient was admitted to the Intensive Care or High Dependency Unit after surgery.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	0

Format: Tick boxes

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer:

Date of discharge from ICU/HDU

Identifying and Definitional Attributes

Database field name: epi_date_discharge_icu

Definition: Date patient leaves the Intensive Care or High Dependency Unit.

Context: Used to calculate days in ICU/HDU.

Relational and Representational Attributes

Data type: Date/Time

Data Domain: Valid date

Format: DD/MM/YYYY

Guide for use

Data screen: Post-operative course

Obligation: Answer only if patient was admitted to ICU after surgery

How to answer:

Days in ICU/HDU (automatically created field)**Identifying and Definitional Attributes**

Database field name: epi_days_in_icu

Definition: The number of days spent in Intensive Care/High Dependency Unit.

Context: This field is automatically created from date of surgery and date of ICUdischarge.

Relational and Representational Attributes

Data type: Numeric

Data Domain: N/A

Format: NN

Guide for use

Data screen: Post-operative course

Obligation: N/A

How to answer: N/A – automatically created field.

Unplanned return to OT

Identifying and Definitional Attributes

Database field name: epi_unplanned_return_ot

Definition: Whether or not the patient required a second (unplanned) operation during the same admission as the primary procedure.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Yes	1
No	0

Format: Tick boxes

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: An “unplanned” return to theatre should only be recorded if the return was within the period of hospitalisation relating to the main operation. Tracheostomy or minor procedures in the ICU / HDU, e.g. insertion of a Hickman line or catheterisation, should not be considered as a re-operation.

Date return to OT

Identifying and Definitional Attributes

Database field name: epi_unplanned_return_ot_date

Definition: Date patient returned to operating theatre for further surgical treatment.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Date/Time

Data Domain: Valid date

Format: DD/MM/YYYY

Guide for use

Data screen: Post-operative course

Obligation: Answer only if patient has an unplanned return to OT.

How to answer:

Reasons for return to OT

Identifying and Definitional Attributes

Database field name: epi_unplanned_return_ot_reasons

Definition: Explanation for an unplanned return to the operating theatre.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alphanumeric (200 characters)

Guide for use

Data screen: Post-operative course

Obligation: Answer only if patient has an unplanned return to OT.

How to answer:

Unplanned admission or readmission to ICU/HDU**Identifying and Definitional Attributes**

Database field name: epi_return_icu

Definition: Whether or not the patient was admitted or readmitted to ICU/HDU from the ward or subsequent to a second unplanned operation.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	0

Format: Tick boxes

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: Record "yes" if patient was admitted to the Intensive Care or High Dependency Unit from the ward or subsequent to a second unplanned operation.

Date of readmission to ICU/HDU

Identifying and Definitional Attributes

Database field name: epi_return_icu_date

Definition: Date patient was readmitted (or admitted if there was no initial admission after surgery) to ICU/HDU.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Date/Time

Data Domain: Valid date

Format: DD/MM/YYYY

Guide for use

Data screen: Post-operative course

Obligation: Answer only if patient has an unplanned admission/readmission to ICU

How to answer:

Reasons for readmission to ICU/HDU

Identifying and Definitional Attributes

Database field name: epi_return_icu_reasons

Definition: Explanation for readmission (or unplanned admission if no initial admission after surgery) to ICU/HDU.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alphanumeric (200 characters)

Guide for use

Data screen: Post-operative course

Obligation: Answer only if patient has an unplanned admission/readmission to ICU/HDU

How to answer:

Re-Intubation Required

Identifying and Definitional Attributes

Database field name: epi_reintubation_req

Definition: Record if a second intubation was necessary subsequent to planned extubation.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Yes 1
No 2

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer:

Tracheostomy Required

Identifying and Definitional Attributes

Database field name: epi_tracheostomy_req

Definition: The need for surgical construction of an opening in the trachea to facilitate ventilation.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Yes 1
No 2

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer:

Date of hospital discharge

Identifying and Definitional Attributes

Database field name: epi_date_hosp_discharge

Definition: Day patient is released from hospital care.

Context: Used to calculate hospital stay.

Relational and Representational Attributes

Data type: Date/Time

Data Domain: Valid date

Format: DD/MM/YYYY

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: 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.

Hospital stay (automatically created field)**Identifying and Definitional Attributes**

Database field name: epi_post_op_hosp_stay

Definition: Number of days patient spent under hospital care.

Context: This field is automatically created from date of surgery and date of hospital discharge.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Free text

Format: NN

Guide for use

Data screen: Post-operative course

Obligation: N/A

How to answer: N/A – automatically created field.

Readmitted within 30 days

Identifying and Definitional Attributes

Database field name: epi_readmission_30_days

Definition: Record if patient returns to hospital care within 30 days of surgical treatment.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type:

Data Domain:

Yes	1
No	2

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation:

How to answer: Tick yes box if patient was readmitted to hospital within 30 days of surgery.

Reason for readmission

Identifying and Definitional Attributes

Database field name: epi_readmission_reasons

Definition: Explanation for patient readmission to hospital within 30 days of surgery.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alphanumeric (200 characters)

Guide for use

Data screen: Post-operative course

Obligation: Optional

How to answer:

In-hospital death

Identifying and Definitional Attributes

Database field name: epi_in_hosp_death

Definition: Death of patient while under original admission for surgery.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Yes 1
No 0

Format: Tick boxes

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: 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.

30-day mortality**Identifying and Definitional Attributes**

Database field name: epi_30_day_mortality

Definition: Death occurring within 30 days of surgery.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Yes 1
No 0

Format: Tick boxes

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer:

Date of death

Identifying and Definitional Attributes

Database field name: epi_date_death

Definition: Date on which a patient died.

Context: Used to determine survival rates and mortality rates.

Relational and Representational Attributes

Data type: Date/Time

Data Domain: Valid date

Format: DD/MM/YYYY

Guide for use

Data screen: Post-operative course

Obligation: Record for persons who have died.

How to answer: If date of death is entirely unknown and cannot be estimated leave the field blank.

Reasons for death

Identifying and Definitional Attributes

Database field name: epi_reasons_death

Definition: Cause of death.

Context: To determine the short-term outcomes of surgery.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alphanumeric (200 characters)

Guide for use

Data screen: Post-operative course

Obligation: Record for persons who have died.

How to answer: Record details of cause of death.

Post-operative tumour site

Identifying and Definitional Attributes

Database field name: epi_post_op_tumour_site

Definition: The main anatomical site of the cancer for which the patient is receiving care, as confirmed by examination of the resection specimen.

Context: Used to categorise cases according to cancer characteristics and allow for analysis of treatment and outcome for these cancers.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Oesophageal tumours:	Hypopharynx	1
		Proximal 1/3 Oesophagus	2
		Middle 1/3 Oesophagus	3
		Distal 1/3 Oesophagus	4
<i>Data Domain:</i>	Oesophageal junction tumours:	Siewert 1 (Distal oesophagus which may infiltrate the OGJ)	5
		Seiwert 2 (arising immediately at the OGJ)	6
		Siewert 3 (subcardial tumour that infiltrates OGJ and oesophagus from below)	7
<i>Data Domain:</i>	Gastric tumours:	Stomach – fundus	8
		Stomach – body	9
		Stomach – antrum	10
		Stomach - pylorus	11
<i>Data Domain:</i>	Other:	Small intestine	12
		Colon	13
		Rectum	14

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: This answer for this question will be pre-populated from the pre-treatment tumour site question. The answer can be changed if necessary.

Only one option for site may be selected. 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. 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 distal third.”

Stomach-pylorus should only be selected for localised pyloric carcinoma.

The “other” categories are provided for GIST cases only.

Resection histopathology

Identifying and Definitional Attributes

Database field name: epi_resec_histopathology

Definition: The cell type of the malignant disease.
This data item records the definitive histology of the tumour after resection.

Context: Used for incidence calculation and epidemiological analyses.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Adenocarcinoma	1
	Squamous Cell Carcinoma	2
	Barrett's With HGD Dysplasia	3
	Adeno Squamous Carcinoma	4
	Undifferentiated	5
	Lymphoma	6
	GIST	7
	Neuroendocrine	8
	Other (will bring up a text box to specify)	9

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: This answer for this question will be pre-populated from the histological diagnosis question. The answer can be changed if necessary.

Record the tumour histology, as confirmed by postoperative examination of the resection specimen or biopsies.

Proximal margin

Identifying and Definitional Attributes

Database field name: epi_resec_prox_margin

Definition: The distance, in millimetres, of the closest edge of the tumour from the margin closest to the mouth.

Context: To determine adequacy of resection.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Involved	1
<1mm	2
≥ 1mm (will bring up a text box to specify exact margin)	3
Not recorded	4

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: In the text box, specify the exact proximal margin in mm, to the nearest whole number.

Distal margin

Identifying and Definitional Attributes

Database field name: epi_resec_distal_margin

Definition: The distance, in millimetres, of the closest edge of the tumour from the margin furthest from the mouth.

Context: To determine adequacy of resection.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Involved	1
<1mm	2
≥ 1mm (will bring up a text box to specify exact margin)	3
Not recorded	4

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: In the text box, specify the exact distal margin in mm, to the nearest whole number.

Radial margin

Identifying and Definitional Attributes

Database field name: epi_resec_radial_margin

Definition: The distance, in millimetres, of the closest edge of the tumour from the margin closest to the deepest penetration of tumour.

Context: To determine adequacy of resection.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Involved	1
<1mm	2
≥ 1mm (will bring up a text box to specify exact margin)	3
Not recorded	4

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: In the text box, specify the exact radial margin in mm, to the nearest whole number.

Closest margin (GIST)**Identifying and Definitional Attributes**

Database field name: epi_resec_closest_margin

Definition: The distance, of the edge of the tumour from the closest margin.

Context: To determine adequacy of resection.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Positive	1
Negative	2
Not recorded	3

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: GIST only

How to answer:

Post-operative T-stage

Identifying and Definitional Attributes

Database field name: epi_resec_t_oeso; epi_resec_t_gastric; epi_resec_t_gist

Definition: The extent of the primary tumour after excision or biopsy of the primary cancer.

Context: To allow for the stage of the tumour to be taken into account in the analysis of treatment and outcome.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Oesophageal		
TX	Primary tumour cannot be assessed	12
T0	No evidence of primary tumor	13
Tis	High-grade dysplasia	14
T1	Tumor invades lamina propria, muscularis mucosae, or submucosa	15
T1a	Tumor invades lamina propria or muscularis mucosae	16
T1b	Tumor invades submucosa	17
T2	Tumor invades muscularis propria	18
T3	Tumour invades adventitia	19
T4	Tumor invades adjacent structures	20
T4a	Resectable tumour invading pleura, pericardium or diaphragm	21
T4b	Unresectable tumour invading other adjacent structure such as aorta, vertebral body trachea etc.	22
Gastric		
TX	Primary tumour cannot be assessed	1
T0	No evidence of primary tumor	2
Tis	Carcinoma in situ: intraepithelial tumor without invasion of lamina propria	3
T1	Tumor invades lamina propria, muscularis mucosae, or submucosa	4
T1a	Tumor invades lamina propria or muscularis mucosae	5
T1b	Tumor invades submucosa	6
T2	Tumor invades muscularis propria	7
T3	Tumor penetrates subserosal connective tissue without invasion of visceral peritoneum or adjacent structures	8
T4	Tumor invades serosa (visceral peritoneum) or adjacent structures	9
T4a	Tumor invades serosa (visceral peritoneum)	10
T4b	Tumor invades adjacent structures	11
GIST		
TX	Primary tumour cannot be assessed	23
T0	No evidence of primary tumor	24
T1	Tumor 2cm or less	25
T2	Tumor more than 2cm but not more than 5cm	26
T3	Tumor more than 5cm but not more than 10cm	27
T4	Tumor more than 10cm in greatest dimension	28

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: This information is recorded in the patient's medical file. Choose the lower (less advanced) T category when there is any uncertainty.

The options seen in the drop-down box will be determined by the answer given in the Post-operative tumour site question.

Post-operative N-stage

Identifying and Definitional Attributes

Database field name: epi_resec_n_oeso; epi_resec_n_gastric; epi_resec_n_gist

Definition: Extent of regional lymph node metastasis subsequent to surgical treatment.

Context: To allow for the stage of the tumour to be taken into account in the analysis of treatment and outcome.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Oesophageal		
NX	Regional lymph nodes cannot be assessed	8
N0	No regional lymph nodes metastasis	9
N1	Metastasis in 1-2 regional lymph nodes	10
N2	Metastasis in 3-6 regional lymph node	11
N3	Metastasis in seven or more regional lymph nodes	12
Gastric		
NX	Regional lymph nodes cannot be assessed	1
N0	No regional lymph nodes metastasis	2
N1	Metastasis in 1-2 regional lymph nodes	3
N2	Metastasis in 3-6 regional lymph node	4
N3	Metastasis in seven or more regional lymph nodes	5
N3a	Metastasis in 7-15 regional lymph nodes	6
N3b	Metastasis in 16 or more regional lymph nodes	7
GIST		
NX	Regional lymph nodes cannot be assessed	13
N0	No regional lymph nodes metastasis	14
N1	Regional lymph node metastasis	15

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: This information is recorded in the patient's medical file. Choose the lower (less advanced) N category when there is any uncertainty.

The options seen in the drop-down box will be determined by the answer given in the Post-operative tumour site question.

Post-operative M-stage**Identifying and Definitional Attributes**

Database field name: epi_resec_m_stage

Definition: Absence or presence of distant metastasis subsequent to surgical treatment

Context: To allow for the stage of the tumour to be taken into account in the analysis of treatment and outcome.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	M0	No distant metastasis	1
	M1	Distant metastasis	2

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory

How to answer: This information is recorded in the patient's medical file. Choose the lower (less advanced) M category when there is any uncertainty.

Total lymph nodes examined

Identifying and Definitional Attributes

Database field name: epi_total_lymph_nodes_examined

Definition: The number of local/regional nodes examined histopathologically.

Context: To obtain information relating to the quality of the diagnostic process.

Relational and Representational Attributes

Data type: Numeric

Data Domain: Free text

Format: NNNN

Guide for use

Data screen: Post-operative course

Obligation: Mandatory for oesophageal and gastric cancers

How to answer: As recorded in the pathology report.

Missing data implies the number of nodes examined is unknown, it does not imply the number was zero.

Total lymph nodes positive

Identifying and Definitional Attributes

Database field name: epi_total_lymph_nodes_positive

Definition: The number of local/regional nodes positive for cancer cells.

Context:

Relational and Representational Attributes

Data type: Numeric

Data Domain: Free text

Format: NNNN

Guide for use

Data screen: Post-operative course

Obligation: Mandatory for oesophageal and gastric cancers

How to answer: As recorded in the pathology report.

Missing data implies the number of nodes positive is unknown, it does not imply the number was zero.

Lymphovascular invasion

Identifying and Definitional Attributes

Database field name: epi_lymph_invasion

Definition: Tumour cells observed within the lumen of blood or lymphatic vessels.

Context: Whether vascular/lymphatic invasion is present also lends more information related to prognosis.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Yes	1
No	2
Not recorded	3

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory for oesophageal and gastric cancers

How to answer: As reported in pathology report or noted by surgeon.

Perineural invasion

Identifying and Definitional Attributes

Database field name: epi_perineural_invasion

Definition: Tumour cells observed in the space surrounding a nerve

Context: Whether perineural invasion is present also lends more information related to prognosis.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Yes	1
No	2
Not recorded	3

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: Mandatory for oesophageal and gastric cancers

How to answer: As reported in pathology report or noted by surgeon.

Mitoses/50 high powered fields**Identifying and Definitional Attributes**

Database field name: epi_gist_mitoses

Definition: The number of mitotic figures (cells undergoing division) per 50 high-powered fields.

Context: Used to measure risk of recurrence or metastases.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

<5 mitoses/50 HPF	1
5-10 mitoses/50 HPF	2
>10 mitoses/50 HPF	3

Format: Drop-down box

Guide for use

Data screen: Post-operative course

Obligation: GIST only

How to answer: The mitotic count is expressed in the pathology report as the number of mitoses counted in 50 fields. Record the number of mitoses.

Risk of metastatic behaviour

Identifying and Definitional Attributes

Database field name: epi_resec_risk_metastatic

Definition: Assessment of the probability of developing tumours in new locations subsequent to successful removal of a primary GIST. National Institutes of Health Risk Table is used.

Context: This question is automatically created based on answers for Post-operative M Stage, Post-operative T-Stage (GIST) and Mitoses/50 HPF fields.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Very low	1
	Low	2
	Intermediate	3
	High	4

Format: Auto-calculated

Guide for use

Data screen: Post-operative course

Obligation: non-metastatic GIST only

How to answer: This question will be automatically calculated based on the below definitions.

Very low risk: Tumour size <2cm; Mitotic Count < 5/50 HPF.

Low risk: Tumour size 2-5cm; Mitotic Count < 5/50 HPF.

Intermediate risk: Tumour size <5cm; Mitotic Count 6-10/50 HPF.
OR Tumour size 5-10cm; Mitotic Count <5/50 HPF.

High risk: Tumour size >5cm; Mitotic Count >5/50 HPF.
OR Tumour size >10cm; any Mitotic Count

This scheme does not apply to GISTs that are already metastatic at the time of diagnosis.

General comments on Resection Specimen Histopathology

Identifying and Definitional Attributes

Database field name: epi_resec_comments

Definition: Any information which needs to be recorded in regards to histopathology that is not covered by previous questions.

Context: Allows for a record of extra information not recorded in set questions.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text

Format: Alphanumeric

Guide for use

Data screen: Post-operative course

Obligation: Optional

How to answer: Record here any additional relevant features of the case.

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