



Data Dictionary

Updated June 2022

Welcome to the BreastSurgANZ Quality Audit Data Dictionary

The BreastSurgANZ Quality Audit (BQA), formerly the National Breast Cancer Audit, is a quality assurance activity directed by the Breast Surgeons of Australia and New Zealand, Inc. (BreastSurgANZ) as a service for their Full Members. The aim of the audit is the improvement of care by surgeons for people with early and locally advanced breast cancer in Australia and Aotearoa New Zealand.

The audit was first established in 1998 as the National Breast Cancer Audit (NBCA) and has since grown in size, scope, resources and technology. In 2004, the audit was transferred to a web-based data entry system, allowing surgeons to access and view their data from any location and update their information in real time. The audit's online data entry system underwent a significant update in 2006 and provides surgeons with a user-friendly and secure system for contributing breast cancer data to the audit and monitoring their own practice. In 2009, the Minimum Dataset (MDS) was introduced to the website. The MDS provides a shorter alternative to the full dataset while including all data items necessary for threshold calculations on key performance indicators. Surgeons can now choose whether to provide minimum or full data.

The primary intention of the BQA is to capture data on the management and treatment of early and locally advanced breast cancer in Australia and Aotearoa New Zealand. Early breast cancer is defined by the NHMRC below. However, the audit database has increased limits on fields, such as tumour size, which allow surgeons to enter cases which fall outside of this definition. The reason for this is to allow the BQA to collect as much breast cancer information as possible within the parameters of the dataset and as relevant to the performance thresholds measured by the audit. Capturing this broader scope of information makes the BQA data better represent the management of all cases of breast cancer, while still allowing for analysis of subsets such as early breast cancer. The focus of the BQA remains to audit practice by surgeons and thus the audit does not collect data for advanced or metastatic breast cancer.

Definition of early breast cancer

The BreastSurgANZ Quality Audit uses the definition of early breast cancer as stated in the NHMRC *Clinical Practice Guidelines for the Management of Early Breast Cancer*.

The Guidelines define early breast cancer as tumours of not more than 5 cm in diameter with either impalpable or palpable but not fixed lymph nodes and with no evidence of distant metastases. This corresponds to tumours that are T 1-2, N 0-1, and M0 as currently defined by the International Union against Cancer (UICC).

Definition of an episode

An episode refers to the diagnosis and treatment period of a patient's early breast cancer. An episode may not have a surgical event associated with it (select no surgery in the procedures table). A second episode is recorded if there is a second primary or a recurrence 3 months after surgery with clear margins.

How to use this data dictionary

This document provides detailed information on the data items collected by the BQA. Items appear in the document in alphabetical order by the lay name of the item (as opposed to the database item name). Please see the Table of Contents to find the item you are looking for. Entries in the data dictionary describe the data type and coding of data items, definitions of any relevant terms and explain how to answer the questions. This may be useful for groups wishing to create or align an existing database to the BQA.

Supporting documents

Other materials produced by the BQA may be found at the College website <http://www.surgeons.org/bqa>. These include paper forms of the audit dataset, reports and research. Contact the Help Desk for further information about the audit +61 8 8219 0939 or breast.audit@surgeons.org.

Minimum dataset

In 2008, the National Breast Cancer Audit introduced one-page minimum dataset forms, which provides surgeons with an avenue to contribute data that takes less time to complete than the full dataset. The minimum dataset has been developed by surgeons and the audit's overseeing committees and includes items required to calculate the quality thresholds. The minimum dataset is aimed at participants who wish only to contribute the minimum amount of information and are less concerned with auditing their practice for their own purposes.

The minimum dataset is available as a one-page online scrolling form or on two single paper forms, one for invasive tumours and one for DCIS. Any cases that are submitted to the audit will remain incomplete unless all minimum dataset items are filled in. The minimum dataset also differs from the main full dataset in that it does not allow for *unknown* values or non-final values such as *not yet*. Full dataset cases which utilise unknown or non-final values for minimum questions will also be considered incomplete until final values are input for these items.

Some notes about data entry

A case cannot be saved without entering the *mandatory* items such as gender or treating hospital. Other items in the minimum dataset are *required for completeness*. We request you make a response to each one or the case will be labelled incomplete. The remaining items are *optional* and contribute to the research aspect of the database and for surgeons collecting data for their own purposes.

For surgical events, leaving this section blank does not imply there was *no surgery*. The audit does collect data on cases where there was no surgery, so please indicate if this was the case by completing the *no surgery* or *no axillary surgery* field.

Please ensure that the form is submitted only after the final outcome for each data item is known. If minimum dataset items remain blank or are entered as 'unknown', these cases will be considered incomplete.

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MINIMUM DATA SET INDEX

Items in order they appear in Minimum Dataset Online Form

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DCIS Pathology

DCIS tumour size in mm	23
Histological grade of tumour (insitu)	47
Final assessment of relevant margins insitu: Distance (mm) to closest circum margin	34
Final assessment of relevant margins insitu: Distance (mm) to closest vertical margin	36
Number of axillary nodes examined	65
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Adjuvant therapy – Radiotherapy

Identifying and Definitional Attributes

Database field name: bstRadiotherapy

Definition: The use of radiation, usually X-rays or gamma rays, to kill tumour cells.

Context: The use of radiation therapy after primary treatment by surgery.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	Referred but not used	5
	<i>No longer an option for entry</i>	
	Not yet	3
	Unknown, not stated or inadequately described	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness

How to answer for BreastSurgANZ Quality Audit:

This item refers to therapy AFTER surgery and should be filled in regardless of neo-adjuvant therapy status.

If only neo-adjuvant therapy was given then *No or Referred but Not Used* should be ticked here. Ticking *Yes* here and also ticking neo-adjuvant implies Radiotherapy was received both before and after surgery.

If no surgery was performed and Radiotherapy was received, tick *Neoadjuvant* for Radiotherapy and mark Adjuvant Radiotherapy as *No*.

Yes = the patient received the treatment

No = the patient was not referred and therefore did not receive the treatment

Referred but not used = the surgeon referred or prescribed the treatment, but it was not received for some reason, e.g. the patient refused or another specialist felt it was not necessary. If the patient refused treatment or referral, record as referred but not used here and as refused radiotherapy under the Refused Treatment question.

Unknown = Not stated or inadequately described.

Not yet is not considered a final response, it is expected that surgeons who have given this response will go back to complete when the answer becomes clear.

Adjuvant therapy – Chemotherapy

Identifying and Definitional Attributes

Database field name: bstChemotherapy

Definition: The use of cytotoxic drugs that aim to kill, prevent or slow the growth of cancer cells after primary treatment by surgery.

Context: Chemotherapy reduces the annual risk of recurrence and death after treatment for women with node-positive and node-negative breast cancer.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	Referred but not used	5
	<i>No longer an option for entry</i>	
	Not yet	3
	Unknown, not stated or inadequately described	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset

Obligation: Required for completeness of invasive episodes; optional for in situ episodes

How to answer for BreastSurgANZ Quality Audit: This item refers to therapy AFTER surgery and should be filled in regardless of neo-adjuvant therapy status.

If only neo-adjuvant therapy was given then *No* or *Referred but Not Used* should be ticked here. Ticking *Yes* here and also ticking neo-adjuvant implies Chemotherapy was received both before and after surgery.

If no surgery was performed and Chemotherapy was received, tick *Neoadjuvant* for Chemotherapy and mark Adjuvant Chemotherapy as *No*.

Yes = the patient received the treatment

No = the patient was not referred and therefore did not receive the treatment

Referred but not used = the surgeon referred or prescribed the treatment, but it was not received for some reason, e.g. the patient refused or another specialist felt it was not necessary. If the patient refused treatment or referral, record as referred but not used here and as refused chemotherapy under the Refused Treatment question.

Unknown = Not stated or inadequately described.

Not yet is not considered a final response, it is expected that surgeons who have given this response will go back to complete when the answer becomes clear.

Adjuvant therapy – SERMs

Identifying and Definitional Attributes

<i>Database field name:</i>	bstTamoxifen
<i>Definition:</i>	The use of Selective Oestrogen Receptor Modulators to inhibit the growth of hormone responsive cancer cells after primary treatment by surgery.
<i>Context:</i>	Hormonal agent Tamoxifen and similar drugs in oestrogen receptor positive patients reduces the annual risk of recurrence and death after treatment for women with node-positive and node-negative breast cancer.

Relational and Representational Attributes

<i>Data type:</i>	Numeric												
<i>Data Domain:</i>	<table border="1"> <tr> <td>Yes</td> <td>1</td> </tr> <tr> <td>No</td> <td>2</td> </tr> <tr> <td>Referred but not used</td> <td>5</td> </tr> <tr> <td><i>No longer an option for entry</i></td> <td></td> </tr> <tr> <td>Not yet</td> <td>3</td> </tr> <tr> <td>Unknown, not stated or inadequately described</td> <td>9</td> </tr> </table>	Yes	1	No	2	Referred but not used	5	<i>No longer an option for entry</i>		Not yet	3	Unknown, not stated or inadequately described	9
Yes	1												
No	2												
Referred but not used	5												
<i>No longer an option for entry</i>													
Not yet	3												
Unknown, not stated or inadequately described	9												
<i>Representational Layout:</i>	N												

Guide for use

<i>Dataset:</i>	Minimum dataset; Full dataset
<i>Obligation:</i>	Required for completeness
<i>How to answer for BreastSurgANZ Quality Audit:</i>	<p>This item refers to therapy AFTER surgery and should be filled in regardless of neo-adjuvant therapy status. Any therapy provided for purely preventative purposes should still be recorded.</p> <p>If only neo-adjuvant therapy was given then <i>No</i> or <i>Referred but Not Used</i> should be ticked here. Ticking <i>Yes</i> here and also ticking neo-adjuvant implies Tamoxifen was received both before and after surgery.</p> <p>If no surgery was performed and Tamoxifen was received, tick <i>Neoadjuvant</i> for SERMs and mark Adjuvant SERMs as <i>No</i>.</p> <p>Yes = the patient received the treatment No = the patient was not referred and therefore did not receive the treatment Referred but not used = the surgeon referred or prescribed the treatment, but it was not received for some reason, e.g. the patient refused or another specialist felt it was not necessary. If the patient refused treatment or referral, record as referred but not used here and as refused hormone therapy under the Refused Treatment question.</p> <p>Unknown = Not stated or inadequately described. Not yet is not considered a final response, it is expected that surgeons who have given this response will go back to complete when the answer becomes clear.</p>

Adjuvant therapy – Ovarian Ablation

Identifying and Definitional Attributes

Database field name: bstOvarianablation

Definition: The use of surgery, radiation or drug treatment to cease or suppress hormone production by the ovaries, after primary treatment by surgery.

Context: Ovarian ablation or other hormonal treatment in oestrogen receptor positive patients reduces the annual risk of recurrence and death after treatment for women with node-positive and node-negative breast cancer.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	Referred but not used	5
	<i>No longer an option for entry</i>	
	Not yet	3
	Unknown, not stated or inadequately described	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset

Obligation: Required for completeness of invasive episodes; optional for in situ episodes

How to answer for BreastSurgANZ Quality Audit: This item refers to therapy AFTER surgery and should be filled in regardless of neo-adjuvant therapy status. Reversible treatments for ovarian function suppression should be recorded under Ablation.

If only neo-adjuvant therapy was given then *No* or *Referred but Not Used* should be ticked here. Ticking *Yes* here and also ticking neo-adjuvant implies Ovarian Ablation was received both before and after surgery.

If no surgery was performed and Ovarian Ablation was received, tick *Neoadjuvant* for Ovarian Ablation and mark Adjuvant Ovarian Ablation as *No*.

Yes = the patient received the treatment

No = the patient was not referred and therefore did not receive the treatment

Referred but not used = the surgeon referred or prescribed the treatment, but it was not received for some reason, e.g. the patient refused or another specialist felt it was not necessary. If the patient refused treatment or referral, record as referred but not used here and as refused hormone therapy under the Refused Treatment question.

Unknown = Not stated or inadequately described.

Not yet is not considered a final response, it is expected that surgeons who have given this response will go back to complete when the answer becomes clear.

Adjuvant therapy – Aromatase Inhibitors

Identifying and Definitional Attributes

Database field name: bstAromInhib

Definition: Aromatase inhibitors are a class of drugs which lower the level of oestrogen in the tumour. They are primarily used in post-menopausal patients. There are non-steroidal (e.g. anastrozole, letrozole) or steroidal (e.g. exemestane) types of inhibitors.

Context: Aromatase inhibitors reduce the annual risk of recurrence and death after treatment for women with node-positive and node-negative breast cancer.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	Referred but not used	5
	<i>No longer an option for entry</i>	
	Not yet	3
	Unknown, not stated or inadequately described	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness

How to answer for BreastSurgANZ Quality Audit: This item refers to therapy AFTER surgery and should be filled in regardless of neo-adjuvant therapy status. Any therapy provided for purely preventative purposes should still be recorded.

If only neo-adjuvant therapy was given then *No* or *Referred but Not Used* should be ticked here. Ticking *Yes* here and also ticking neo-adjuvant implies Aromatase Inhibitors were received both before and after surgery.

If no surgery was performed and Aromatase Inhibitors were received, tick *Neoadjuvant* for Aromatase Inhibitors and mark Adjuvant Aromatase Inhibitors as *No*.

Yes = the patient received the treatment

No = the patient was not referred and therefore did not receive the treatment

Referred but not used = the surgeon referred or prescribed the treatment, but it was not received for some reason, e.g. the patient refused or another specialist felt it was not necessary. If the patient refused treatment or referral, record as referred but not used here and as refused hormone therapy under the Refused Treatment question.

Unknown = Not stated or inadequately described.

Not yet is not considered a final response, it is expected that surgeons who have given this response will go back to complete when the answer becomes clear.

Adjuvant therapy – Herceptin or other immunotherapy

Identifying and Definitional Attributes

Database field name: bstImmunoTx

Definition: Immunotherapy may be called a biologically-oriented therapeutic intervention, using anti-body like those created in the human body to combat tumour cells. Herceptin is a drug aimed at women who show HER 2 gene amplification and/or protein over expression.

Context: Herceptin is indicated for HER 2+ breast cancer patients for use in adjuvant therapy

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	Referred but not used	4
	<i>No longer an option for entry</i>	
	Not yet	3
	Unknown, not stated or inadequately described	5

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset

Obligation: Required for completeness of invasive episodes; optional for in situ episodes

How to answer for BreastSurgANZ Quality Audit: This item refers to therapy AFTER surgery and should be filled in regardless of neo-adjuvant therapy status. If only neo-adjuvant therapy was given then *No* or *Referred but Not Used* should be ticked here.

Yes = the patient received the treatment

No = the patient was not referred and/or did not receive the treatment

Referred but not used = the surgeon referred or prescribed the treatment, but it was not received for some reason, e.g. the patient refused or another specialist felt it was not necessary. If the patient refused treatment or referral, record as referred but not used here and as refused Herceptin under the Refused Treatment question.

Unknown = Not stated or inadequately described.

Not yet is not considered a final response, it is expected that surgeons who have given this response will go back to complete when the answer becomes clear.

Axillary surgery date

Identifying and Definitional Attributes

Database field name: bsurgSurgeryDate

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

Context: This item is used to distinguish between immediate and staged procedures.

Relational and Representational Attributes

Data type: Date/time

Data Domain: Valid date (must be on or before today's date)

Representational Layout: DD/MM/YYYY

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness if axillary surgery was performed

How to answer for BreastSurgANZ Quality Audit: The date of each axillary surgical treatment event should be entered separately.

Axillary surgery discharge date

Identifying and Definitional Attributes

Database field name: bsurgDischargeDate

Definition: The date of the administrative process by which a patient ended their episode of institutional care for each surgical procedure, live or dead from hospital or other health care institution.

Context: This item combined with surgery date, allows the audit to collect information on length of hospital stays.

Relational and Representational Attributes

Data type: Date/time

Data Domain: Valid date (must be on or after surgery date)

Representational Layout: DD/MM/YYYY

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: The discharge date of each surgical treatment event should be entered separately.

Axillary surgery event

Identifying and Definitional Attributes

Database field name: bsurgAxilla; *bstNoAxillarySurgery

Definition: The surgical excision of the axillary contents (fat and lymph nodes) en bloc with mastectomy or as an independent procedure.

Context: Lymph node status is important for prognosis and planning. The omission of axillary dissection should be considered only in the case of small primary tumours and is least desirable in pre-menopausal women but is standard in cases of DCIS.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Sentinel node - The identification and excision of the sentinel lymph node (the first node(s) draining the primary tumour in the regional lymphatic basin) from patients with invasive breast cancer	1
	Level 1/Sampling - The excision of a single, low axillary node or the excision of the axillary contents up to the inferior border of the pectoralis minor muscle, includes sampling	2
	Level 2 - Excision of the axillary contents up to the superior border of the pectoralis minor muscle	3
	Level 3 - Excision of the axillary contents up to the apex of the axilla	4
	Not known - To be used if it is known an axillary procedure was performed but the level or extent of excision is unknown	9
	No axillary surgery (not sampled) - No axillary surgery was conducted (*stored as "1" in bstNoAxillarySurgery field in BreastData table)	1*

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness (note *Not Known* options not featured in MDS)

How to answer for BreastSurgANZ Quality Audit: This item requires the user to select the type of axillary surgery and then to enter the date the surgery was done. It is currently optional to also enter the date of discharge following the procedure. Each patient episode can have multiple axillary surgeries and can have the same axillary surgery entered more than once.

Missing data is not assumed to mean *Unknown* or *No axillary surgery*, the audit does collect data on cases where no axillary surgery was performed. If this is the case please complete the *No axillary surgery* field which appears as a tick box for both minimum and full dataset.

Bilateral synchronous cancer

Identifying and Definitional Attributes

Database field name: bstBilateralSync

Definition: Cancers that occur in both breasts simultaneously or sequentially within a relatively short time frame.
 ‘Synchronous’ breast cancers are diagnosed simultaneously or within three months of diagnosis of the first tumour. Contralateral breast cancers reported in the literature have been mainly invasive breast cancers.
 In contrast, metachronous breast cancers are defined as those that occur after the 3 months allowed for synchronous breast cancers.

Context: Multiple cancers occur in at least 5% of women with breast cancer. It is important to distinguish bilateral cancers from unilateral cancers when it has been decided to track these records for examining treatment or outcome. Record keeping for individual cancers needs to identify at least the breast in which each cancer occurred and the timing of occurrence, i.e., simultaneous or sequential. In addition, the adjuvant therapy recommended for each episode can be recorded.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	<i>No longer an option for entry</i>	
	Unknown/ inadequately described/ not stated	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness

How to answer for BreastSurgANZ Quality Audit: Diagnosis, surgery and axillary clearance for bilateral synchronous cancers should be recorded as two separate episodes for the same patient. In each episode, only list data relevant to the breast in question. Tick bilateral synchronous on both forms.

Follow-ups should be recorded on the form relating to the most prognostically significant cancer.

Metachronous breast cancers (those that occur after the 3 months allowed for synchronous breast cancers) are also separate episodes and can be distinguished by the date of diagnosis.

Breast Care Nurse involved

Identifying and Definitional Attributes

<i>Database field name:</i>	bstBrCareNurse
<i>Definition:</i>	Indicates whether a Breast Care Nurse participates in the care of this patient after diagnosis.
<i>Context:</i>	Breast Care Nurse involvement has been shown to improve the physical and psychological outcomes for early breast cancer patients.

Relational and Representational Attributes

<i>Data type:</i>	Numeric
<i>Data Domain:</i>	Yes 1
	No 2
	Unknown 3
	<i>Not an option for entry</i>
	Not stated 4
<i>Representational Layout:</i>	N

Guide for use

<i>Dataset:</i>	Minimum dataset; Full dataset
<i>Obligation:</i>	Mandatory for a save

<i>How to answer for BreastSurgANZ Quality Audit:</i>	<p>A specialist breast nurse is defined by Cancer Australia as “a registered nurse who applies advanced knowledge of the health needs, preferences and circumstances of women with breast cancer to optimise the individual’s health and well-being at various phases across the continuum of care, including diagnosis, treatment, rehabilitation, follow-up and palliative care. This advanced knowledge is based on an in-depth understanding of theory and research relevant to the field of breast cancer nursing.”</p> <p>Specifically, “practice incorporates advanced knowledge and skills in supportive care, including providing specialised and tailored information and education, psychological support, and clinical care. The [Breast Care Nurse] adapts his/her practice according to the specific and changing needs of individual women, taking into account their multiple health needs, concerns and preferences for care. The [Breast Care Nurse] also facilitates effective interdisciplinary team functioning and continuity of care between different phases of the cancer journey, care settings, care plans and care providers. [Breast Care Nurses] demonstrate leadership within the specialty of breast cancer nursing, by providing expert advice and support to other health professionals, through reflective practice, and by contributing to continuous improvement and the advancement of knowledge about care for women with breast cancer.” *</p> <p>A cancer nurse who is not specialised in the care of patients with breast cancer is not a Breast Care Nurse.</p>
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*Specialist Breast Nurse Competency Standards and Associated Educational Requirements. National Breast Cancer Centre. 2005

Clinic reference
Identifying and Definitional Attributes

Database field name: epiRefCode

Definition: Person identifier, allocated by the surgeon's practice to the patient being treated.

Context: This field is for the surgeon's use and is intended to minimise confusion between patients with similar patient IDs.

Relational and Representational Attributes

Data type: Text

Data Domain: Free text (can include letters, number and symbols)

Representational Layout: AN (30 characters)

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Mandatory for a save

How to answer for BreastSurgANZ Quality Audit: Enter the code used in your practice to identify patients in that particular clinic, a medical file number for example, a combination of letters and numbers, or the patients MRN. Aotearoa New Zealand surgeons are encouraged to use patient National Health Index number in this field.

To preserve confidentiality, it is better to use an identifier which is not the patient's name. If you do not have a clinic reference code in your filing system, enter something that will help you to identify who that patient is in a tie break situation, without revealing the identity of the patient i.e. do not use the patients full name.

Comments

Identifying and Definitional Attributes

Database field name: bstNotes

Definition: A free text space for clarifying responses where 'other' was selected. This text cannot be statistically analysed, but holds valuable information as an individual clinical note and for future development of the database.
Other information germane to the current intervention can be noted here.

Context: Surgeons may find additional detail useful during self-audit and peer review of surgery.

Relational and Representational Attributes

Data type: Memo

Data Domain: Free text (can include letters, number and symbols)

Representational Layout: AN

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Use this space for any additional information you would like to record regarding the patient, things not covered by the audit or clarifying information already entered.

New diagnostic, surgical and therapeutic techniques may not be listed in the relevant classification selections and can be described here, as can additional answers to question which allow you to tick only one option, such as patient's refusal of treatment.

The text box holds 255 characters.

Date created (automatically created field)

Identifying and Definitional Attributes

Database field name: RecordCreated

Definition: This field is a date stamp. It is created by the web server. It cannot be edited.

Context: Appears on the “my patients” screen of the online portal. Refers to the system date and time when the patient record is entered into the online system. This field cannot be edited.

Relational and Representational Attributes

Data type: Date/time

Data Domain: Valid date

Representational Layout: DD/MM/YYYY HH:MM

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: N/A

How to answer for BreastSurgANZ Quality Audit: You do not need to enter anything for this item, it is created automatically. If you entered data before the current website was launched you may notice these cases say date created 4th April 2006, the date when older data was migrated to the new system.

Excel exports of data do not have the Record Created field. The “Audit date” field in these exports refers to the date the original record was created. This date may be before 2006 for old records.

Date of diagnosis

Identifying and Definitional Attributes

Database field name: bstDiagnosisDate

Definition: The date when the diagnosis of the breast cancer related to the current treatment episode is established.

Context: This date is used as an indicator of the time when the patient was being treated. It can also be used by surgeons to re-identify patients or in a tie-break situation between patients with the same patient ID.

Relational and Representational Attributes

Data type: Date/time

Data Domain: Valid date

Representational Layout: DD/MM/YYYY

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Mandatory for a save

How to answer for BreastSurgANZ Quality Audit: The date upon which the cancer diagnosis was definitively made, based upon cytology, core biopsy or open biopsy (e.g. the date that the procedure was done).

If this date is unavailable, or if no pathological test was done, then the date may be determined from one of the sources listed in the following sequence:

- Date of the consultation at, or admission to, the hospital, clinic or institution when the cancer was first diagnosed. Note: DO NOT use the admission date of the current admission if the patient had a prior diagnosis of this cancer.
- Date of first diagnosis as stated by a recognised medical practitioner.
- Date of first surgery

DCIS tumour size in mm

Identifying and Definitional Attributes

Database field name: bstInsituTumourSize

Definition: The maximum diameter of the furthest points of extension of the tumour cells.

Context: Tumour size is a significant prognostic variable; the risk of local recurrence and lymph node involvement increases with tumour size; practical limits exist for the size of tumours that can be successfully excised using breast-conserving surgery.

Relational and Representational Attributes

Data type: Integer

Data Domain: 1-250

Representational Layout: N

Guide for use

Dataset: Minimum dataset (in situ); Full dataset (in situ)

Obligation: Required for completeness for DCIS only cases

How to answer for BreastSurgANZ Quality Audit: This item refers only to the amount of tumour that is DCIS, as recorded in pathology report. In the instance of bilateral cancer or two or more tumours, record the maximum diameter of the principle or most prognostically significant tumour.

In cases where there are both invasive and DCIS tumours, the case should be considered invasive and this question will not be shown.

Diagnostic procedures

Identifying and Definitional Attributes

<i>Database field name:</i>	procProcType
<i>Definition:</i>	The type of investigations performed to confirm or deny the presence of breast cancer.
<i>Context:</i>	The combination of clinical examination, mammography, ultrasound and fine needle aspiration cytology provides the highest diagnostic accuracy and the lowest risk of diagnostic error, particularly in women over 35.

Relational and Representational Attributes

<i>Data type:</i>	Numeric
<i>Data Domain:</i>	<p>Clinical examination Examination of both breasts and axillae for signs of primary cancer and local spread and a thorough examination of the rest of the body for signs of distant spread. 1</p> <hr/> <p>Mammography The process whereby dedicated mammographic imaging techniques are used to detect breast lesions. Includes techniques such as galactography. 2</p> <hr/> <p>Ultrasound The process whereby dedicated ultrasonic imaging techniques are used to detect breast lesions. 3</p> <hr/> <p>Fine needle aspiration / cytology The sampling of cells from breast tissue for cytological examination using a needle of size 23 gauge or smaller. When suction is applied during the sampling, this is referred to as a fine needle aspiration biopsy. Cytology refers to the assessment of cellular detail and abnormalities in a preparation of cells obtained by FNA or other methods such as duct discharge cytology. 4</p> <hr/> <p>Core biopsy The sampling of breast tissue with a cutting needle, 18 gauge or larger, to give a tiny cylinder of tissue for histological examination. This technique may involve a mechanical device to drive the cutting needle. 5</p> <hr/> <p>MRI The process whereby dedicated magnetic resonance imaging techniques are used to detect breast lesions. 10</p> <hr/> <p>Other A method of detection not listed above. Diagnostic procedures described as 'other' should be described in the clinical notes section. 6</p>
<i>Representational Layout:</i>	N

Guide for use

<i>Dataset:</i>	Full dataset
<i>Obligation:</i>	Optional
<i>How to answer for BreastSurgANZ Quality Audit:</i>	Record all investigations, regardless of result. The database allows for more than one of any type of diagnostic procedure. Record the result of each test in the item Diagnostic Procedure Result.

Diagnostic procedure result

Identifying and Definitional Attributes

Database field name: procProcResult

Definition: The result of a diagnostic test categorised into positive or negative

Context:

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Positive	1
	Negative	2

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Palpable tumours are recorded as “clinical examination positive’. Impalpable tumours are “Clinical examination negative”.

Quality Audit:

Some States and Territories use 5 categories to collect this item. The binary scale of positive / negative is more useful for national analysis.

Where the 5 point scale of: normal/benign/equivocal/suspicious/malignant is found, the following conversion should be used:

- Normal and Benign should be classified as “negative”.
- Equivocal, Suspicious and Malignant should be classified as “positive”.

Dominant pattern – DCIS Pathology

Identifying and Definitional Attributes

Database field name: bstArchitectureDominant

Definition: The characteristic appearance of the lesion under the microscope. Architecture refers to the way in which the tumour cells grow in relation to each other and how closely the growth pattern resembles normal breast structures.

Context: Applies only to in situ cancers. The *Dominant Pattern* is the form most widely seen in the lesion. Areas of different architecture should be noted in *Other Pattern*.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Solid	1
	Cribriform	2
	Micropapillary	3
	Other	4
	Unknown/NA	9

Representational Layout: N

Guide for use

Dataset: Full dataset (in situ)

Obligation: Optional – DCIS cases

How to answer for BreastSurgANZ Quality Audit: The *Dominant pattern* is the form most widely seen in the lesion, as noted in the pathology report. Areas of different architecture should be noted in *Other pattern*.

Enrolled in trial

Identifying and Definitional Attributes

Database field name: bstEnrolledInTrial

Definition: Indicates whether the patient is enrolled in a clinical trial.

Context: Being involved in a trial may result in the patient's treatment departing from expected path. Also, allows the audit to examine which types of patients are selected for trials.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: This item refers to clinical trials for any aspect of treatment captured by the audit. This could mean a surgical, radiation, drug, hormonal therapy or sentinel node trial.

Episode ID (automatically created field)**Identifying and Definitional Attributes**

Database field name: epiID

Definition: Unique number automatically assigned to each episode by the system.

Context: This field is always unique and cannot be edited or re-assigned to another patient, even if the record with that ID has been deleted.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Representational Layout: N

Guide for use

Dataset: Full dataset; Minimum dataset

Obligation: N/A

How to answer for BreastSurgANZ Quality Audit: This is a number automatically created for each episode by the system, the same patient may have two or more episodes of cancer and these will have different *episode IDs*. Users do not enter or edit the *episode ID*, but can view it on the website.

Final assessment of relevant margins invasive: Orientation of closest circum. margin**Identifying and Definitional Attributes**

Database field name: bstInvasiveMarginCircumType

Definition: The direction from the invasive component to closest circumferential (radial) margin.

Context: Clear margins with a rim of normal breast tissue around the periphery of the tumour are essential for breast conserving surgery. Careful examination of the surgical resection margins at the time of surgery to confirm clearance can significantly reduce the incidence of local recurrence. Re-excision may be required to obtain clear margins.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Lateral	1
	Medial	2
	Superior	3
	Inferior	4
	Unknown/ Not Available	5

Representational Layout: N

Guide for use

Dataset: Full dataset (invasive)

Obligation: Optional – invasive cases

How to answer for BreastSurgANZ This is recorded after completion of all surgical procedures.

Quality Audit: This element must be entered for whichever radial margin is the closest invasive margin for any invasive component of that breast, i.e., not necessarily for the most clinically significant tumour.

Select *Unknown/ Not Available* when there is no information at all for any circumferential margin in the pathology report or other sources.

Final assessment of relevant margins invasive: Distance (mm) to closest circum. margin

Identifying and Definitional Attributes

Database field name: bstInvasiveMarginCircumSize

Definition: The distance of the invasive component from the closest circumferential (radial) margin

Context: Clear margins with a rim of normal breast tissue around the periphery of the tumour are essential for breast conserving surgery. Careful examination of the surgical resection margins at the time of surgery to confirm clearance can significantly reduce the incidence of local recurrence. Re-excision may be required to obtain clear margins.

Relational and Representational Attributes

Data type: Numeric

Data Domain: 0-99

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset (invasive)

Obligation: Required for completeness for invasive cases.

How to answer for BreastSurgANZ Quality Audit: This element must be entered for whichever radial margin is closest to any invasive component of that breast, i.e., not necessarily for the most clinically significant tumour.

Record final margin after completion of all surgical procedures. If re-excision occurs add this to original margin.

If the skin has been excised, e.g., by mastectomy, then the reported superficial or skin margins are to be recorded as clear (even if the pathologist reports involved superficial /skin margins).

Involved margins should be reported as 0mm.

Margins must be recorded as whole numbers. If the pathology report lists decimal points, round up or down as relevant. Any margin between 0.1 and 0.9 should always be rounded up to 1mm as 0mm will be interpreted as involved.

Final assessment of relevant margins invasive: Orientation of closest vertical margin

Identifying and Definitional Attributes

Database field name: bstInvasiveMarginVerticalType

Definition: The direction from the invasive component to the closest vertical margin.

Context: Close vertical margins have prognostic significance which differs from radial margins.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Superficial (cutaneous/skin)	1
	Deep (pectoral fascia)	2
	Unknown/ Not Available	3

Representational Layout: N

Guide for use

Dataset: Full dataset (invasive)

Obligation: Optional – invasive cases

How to answer for BreastSurgANZ Quality Audit: This element must be entered for whichever vertical margin is closest to any invasive component of that breast, i.e., not necessarily for the most clinically significant tumour.

This is recorded after completion of all surgical procedures.

This element measures the closest subcutaneous or pectoral fascia margin from full thickness samples.

Select *Unknown/ Not Available* when there is no information at all for any vertical margin in the pathology report or other sources.

Final assessment of relevant margins invasive: Distance (mm) to closest vertical margin

Identifying and Definitional Attributes

<i>Database field name:</i>	bstInvasiveMarginVerticalSize
<i>Definition:</i>	The distance of the invasive component from the closest vertical margin
<i>Context:</i>	Close vertical margins have prognostic significance which differs from radial margins.

Relational and Representational Attributes

<i>Data type:</i>	Numeric
<i>Data Domain:</i>	0-99
<i>Representational Layout:</i>	N

Guide for use

<i>Dataset:</i>	Minimum dataset (invasive); Full dataset (invasive)
<i>Obligation:</i>	Required for completeness for invasive cases.

<i>How to answer for BreastSurgANZ Quality Audit:</i>	<p>This element must be entered for whichever vertical margin is closest to any invasive component of that breast, i.e., not necessarily for the most clinically significant tumour.</p> <p>This is recorded after completion of all surgical procedures.</p> <p>If the skin has been excised, e.g., by mastectomy, then the reported superficial or skin margins are to be recorded as clear (even if the pathologist reports involved superficial /skin margins).</p> <p>Involved margins should be reported as 0mm.</p> <p>Margins must be recorded as whole numbers. If the pathology report lists decimal points, round up or down as relevant. Any margin between 0.1 and 0.9 should always be rounded up to 1mm as 0mm will be interpreted as involved.</p>
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Final assessment of relevant margins insitu: Orientation of closest circum. margin

Identifying and Definitional Attributes

Database field name: bstInsituMarginCircumType

Definition: The direction from the insitu component to the closest circumferential (radial) margin.

Context: Clear margins with a rim of normal breast tissue around the periphery of the tumour are essential for breast conserving surgery. Careful examination of the surgical resection margins at the time of surgery to confirm clearance can significantly reduce the incidence of local recurrence. Re-excision may be required to obtain clear margins.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Lateral	1
	Medial	2
	Superior	3
	Inferior	4
	Unknown/ Not Available	5

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional – DCIS cases

How to answer for BreastSurgANZ Quality Audit: This element must be entered for whichever radial margin is the closest to any DCIS component of that breast, i.e., not necessarily for the most clinically significant tumour.

This is recorded after completion of all surgical procedures

Select *Unknown/ Not Available* when there is no information at all for any circumferential margin in the pathology report or other sources.

Final assessment of relevant margins insitu: Distance (mm) to closest circum. margin size

Identifying and Definitional Attributes

<i>Database field name:</i>	bstInsituMarginCircumSize
<i>Definition:</i>	The distance from the DCIS component to the closest circumferential (radial) margin
<i>Context:</i>	Clear margins with a rim of normal breast tissue around the periphery of the tumour are essential for breast conserving surgery. Careful examination of the surgical resection margins at the time of surgery to confirm clearance can significantly reduce the incidence of local recurrence. Re-excision may be required to obtain clear margins.

Relational and Representational Attributes

<i>Data type:</i>	Numeric
<i>Data Domain:</i>	0-99
<i>Representational Layout:</i>	N

Guide for use

<i>Dataset:</i>	Minimum dataset (in situ); Full dataset
<i>Obligation:</i>	Required for completeness for DCIS only cases.
<i>How to answer for BreastSurgANZ Quality Audit:</i>	<p>This element must be entered for whichever circumferential (also called radial) margin is the closest to any DCIS component of that breast, i.e., not necessarily for the most clinically significant tumour.</p> <p>This is recorded after completion of all surgical procedures</p> <p>If the skin has been excised, e.g., by mastectomy, then the reported superficial or skin margins are to be recorded as clear (even if the pathologist reports involved superficial /skin margins).</p> <p>Involved margins should be reported as 0mm.</p> <p>Margins must be recorded as whole numbers. If the pathology report lists decimal points, round up or down as relevant. Any margin between 0.1 and 0.9 should always be rounded up to 1mm as 0mm will be interpreted as involved.</p>

Final assessment of relevant margins insitu: Orientation of closest vertical margin

Identifying and Definitional Attributes

<i>Database field name:</i>	bstInsituMarginVerticalType
<i>Definition:</i>	The location of the closest vertical margin.
<i>Context:</i>	Close vertical margins have prognostic significance which differs from radial margins.

Relational and Representational Attributes

<i>Data type:</i>	Numeric						
<i>Data Domain:</i>	<table border="1"> <tr> <td>Superficial (cutaneous)</td> <td>1</td> </tr> <tr> <td>Deep (pectoral fascia)</td> <td>2</td> </tr> <tr> <td>Unknown / Not Available</td> <td>3</td> </tr> </table>	Superficial (cutaneous)	1	Deep (pectoral fascia)	2	Unknown / Not Available	3
Superficial (cutaneous)	1						
Deep (pectoral fascia)	2						
Unknown / Not Available	3						
<i>Representational Layout:</i>	N						

Guide for use

<i>Dataset:</i>	Full dataset
<i>Obligation:</i>	Optional – DCIS cases
<i>How to answer for BreastSurgANZ Quality Audit:</i>	<p>This element must be entered for whichever vertical margin is closest to any DCIS component of that breast, i.e., not necessarily for the most clinically significant tumour.</p> <p>This is recorded after completion of all surgical procedures.</p> <p>This element measures the closest subcutaneous or pectoral fascia margin from full thickness samples.</p> <p>Select <i>Unknown/ Not Available</i> when there is no information at all for any vertical margin in the pathology report or other sources.</p>

Final assessment of relevant margins insitu: Distance (mm) to closest vertical margin size

Identifying and Definitional Attributes

<i>Database field name:</i>	bstInsituMarginVerticalSize
<i>Definition:</i>	The size of the closest vertical margin in mm.
<i>Context:</i>	Close vertical margins have prognostic significance which differs from radial margins.

Relational and Representational Attributes

<i>Data type:</i>	Numeric
<i>Data Domain:</i>	0-99
<i>Representational Layout:</i>	N

Guide for use

<i>Dataset:</i>	Minimum dataset (in situ); Full dataset
<i>Obligation:</i>	Required for completeness for DCIS only cases.
<i>How to answer for BreastSurgANZ Quality Audit:</i>	<p>This element must be entered for whichever vertical margin is closest to any DCIS component of that breast, i.e., not necessarily for the most clinically significant tumour.</p> <p>This is recorded after completion of all surgical procedures.</p> <p>If the skin has been excised, e.g., by mastectomy, then the reported superficial or skin margins are to be recorded as clear (even if the pathologist reports involved superficial /skin margins).</p> <p>Involved margins should be reported as 0mm.</p> <p>Margins must be recorded as whole numbers. If the pathology report lists decimal points, round up or down as relevant. Any margin between 0.1 and 0.9 should always be rounded up to 1mm as 0mm will be interpreted as involved.</p>

Follow up - Clinical exam

Identifying and Definitional Attributes

Database field name: bfuClinicalExam

Definition: The incidence and result of clinical examination during follow-up visits.

Context: Used to document findings of follow up visits.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Not done	1
	No abnormality	2
	Abnormal	3
	Unknown	9

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Include examinations which were inconclusive. For example, an impalpable mass found by mammogram should be recorded in Clinical exam as No Abnormality.

Follow up - Cosmetic result

Identifying and Definitional Attributes

Database field name: bfuCosmetic

Definition: Provides an opportunity for surgeons to describe the cosmetic outcome of the episode. The cosmetic result may include symmetry and scarring.

Context: Observations made during follow up appointments.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Good	1
	Fair	2
	Poor	3
	Mastectomy	4
	Unknown	9

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Surgeons may wish to record the cosmetic outcome in cases referred for reconstruction. Correlations between excision technique and cosmetic result may be useful.

Follow up - Date

Identifying and Definitional Attributes

Database field name: bfuDate

Definition: The date of consultation following the patient's operation, or following the last follow-up visit.

Context: Used for examining patient outcomes including survival and recurrence rates, patient attendance patterns and follow up duration

Relational and Representational Attributes

Data type: Date/Time

Data Domain: Valid date

Representational Layout: DD/MM/YYYY

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Surgeons should record the day the consultation occurred, which may be different from the appointment date. Follow-up visits sorted by the date field will show a chronological summary of the patient's progress.

Follow up - Lymphoedema

Identifying and Definitional Attributes

Database field name: bfuLymphoedema

Definition: Records the nature and extent of any discomfort or swelling in the arm/s which is associated with the current (surgical and non-surgical) treatment episode.

Context: Lymphoedema is associated with radiotherapy and axillary node dissection. This data item can be used to investigate the effect of conservative management and /or sentinel node dissection on the incidence of lymphoedema.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	None	1
	Mild	2
	Moderate	3
	Severe	4
	Extreme	5
	Unknown	9

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: The severity of lymphoedema associated with breast cancer treatment the patient is experiencing at the time of the current follow up appointment.

Follow up - Mammogram

Identifying and Definitional Attributes

Database field name: bfuMammogram

Definition: The incidence and result of mammographic imaging ordered during follow-up visits.

Context:

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Not done	1
	No abnormality	2
	Abnormal	3
	Unknown	9

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ The result of mammogram associated with the current follow up appointment

Quality Audit: Abnormality refers to any result which indicates unhealthy remaining breast tissue; abnormality should not be selected to reference the disfigurement or mastectomy of the breast.

Follow up - Next appointment

Identifying and Definitional Attributes

Database field name: bfuNextAppt

Definition: The date the patient is due for the next appointment.

Context: This field can be used for scheduling, following missed appointments and to measure patient attendance patterns.

Relational and Representational Attributes

Data type: Date/time

Data Domain: Valid date

Representational Layout: DD/MM/YYYY

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Enter a number in the number box and select a unit of time from *days, weeks, months, or years* and click save when follow up data is complete. The system will convert the selected time period into date of next appointment.

Follow up - Status

Identifying and Definitional Attributes

Database field name: bfuDiseaseStatus

Definition: The current status of the patient in terms of disease progression.

Context: Status is used in conjunction with diagnosis and follow up visit dates to calculate patient outcomes such as length of survival, cumulative five year survival rates and treatment/relapse intervals.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Free of recurrence	1
	Progression of disease	8
	Local recurrence	2
	Systemic recurrence	3
	New breast cancer	13
	New unrelated cancer	14
	Death – breast cancer related	4
	Death – not related to breast cancer	5
	Death – unknown cause	15
	Care transferred	6
	Lost to follow-up	7
	Unknown	9
	Partial clinical response	10
	Complete clinical response	11
	Stable disease	12

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Options 10-12 above relate to patients who received neoadjuvant treatment without surgery.

Partial response = a reduction in dimensions of the tumour/s by at least 50%.
Complete clinical response = a complete absence of mass on a physical exam.
Stable disease = a small reduction (less than 50%) or no reduction in size of tumour/s.

Follow up - Ultrasound

Identifying and Definitional Attributes

Database field name: bfuUltrasound

Definition: Records the incidence and result of ultrasound imaging ordered during follow-up visits.

Context:

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Not done	1
	No abnormality	2
	Abnormal	3
	Unknown	9

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ The result of ultrasound associated with the current follow up appointment.

Quality Audit: Abnormality refers to any result which indicates unhealthy remaining breast tissue; abnormality should not be selected to reference the disfigurement or mastectomy of the breast.

Gender

Identifying and Definitional Attributes

Database field name: patGenderID

Definition: Whether the patient is male or female

Context: A small proportion of breast cancer patients are male.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Female	1
	Male	2
	<i>No longer an option for entry</i>	
	Unknown	3

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Mandatory for a save

How to answer for BreastSurgANZ Quality Audit: Select the gender of your patient.

Gestational status

Identifying and Definitional Attributes

Database field name: bstGestationalStatus

Definition: Whether the patient is currently, or has recently been, pregnant.

Context: To allow analysis on the incidence, management and outcomes of women diagnosed with breast cancer during a current or recent pregnancy

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Currently pregnant	1
	Recently pregnant (last 12 months)	2
	Not pregnant (now or last 12 months)	3

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: A patient is considered **currently pregnant** if they were diagnosed with breast cancer during pregnancy.

A patient should be categorised as **recently pregnant** if they were pregnant at any time in the 12 months previous to diagnosis with breast cancer.

If neither applies to the patient, the patient is categorised as **not pregnant**.

Histological grade of principal tumour (insitu)

Identifying and Definitional Attributes

Database field name: bstInsituHistoGrade

Definition: The degree of differentiation of the breast cancer or the degree to which it resembles normal tissue as assessed by the pathologist according to three components of the tumour.

Context: The histological grade of the tumour is a key element in prognosis and treatment; well differentiated tumours closely resemble normal tissue and have a better prognosis.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Low - Well differentiated	1
	Intermediate - Moderately differentiated	2
	High - Poorly differentiated	3
	Not known - The grade is not clearly defined in the pathology report	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset (in situ); Full dataset (in situ)

Obligation: Required for completeness for DCIS only cases

How to answer for BreastSurgANZ Quality Audit: Histological grade should reflect what is described in the pathology report.

Histological grade of principal tumour (invasive)

Identifying and Definitional Attributes

Database field name: bstInvasiveHistoGrade

Definition: The degree of differentiation of the breast cancer or the degree to which it resembles normal tissue as assessed by the pathologist according to three components of the tumour.

Context: The histological grade of the tumour is a key element in prognosis and treatment; well differentiated tumours closely resemble normal tissue and have a better prognosis.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Grade 1	1
	Grade 2	2
	Grade 3	3
	Not known - The grade is not clearly defined in the pathology report	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset (invasive)

Obligation: Required for completeness for cases with an invasive component

How to answer for BreastSurgANZ Quality Audit: Histological grade should reflect what is described in the pathology report in accordance with the Pathology Reporting Guidelines. Invasive carcinomas of all types, including invasive lobular carcinoma, should be graded using the Elston and Ellis modification of the Bloom and Richardson grading system. If the carcinoma is too small to be graded and the pathology report reads “not assessable” then select *Unknown*.

The histological grade is calculated by adding the three scores (mitosis score, nuclear score and tubular differentiation score):

Grade 1 Total score of 3–5

Grade 2 Total score of 6 or 7

Grade 3 Total score of 8 or 9

Histological type of invasive tumour

Identifying and Definitional Attributes

Database field name: bstInvasiveTumourType

Definition: The microscopic appearance of the invasive breast cancer cells. This question refers to the principal tumour.

Context: The histopathological type of tumour is important for prognosis and treatment decisions; the tumour type will be recorded for the principal invasive breast cancer that is the main reason for the current episode of surgery.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Ductal carcinoma NOS	1
	Invasive lobular	2
	Other invasive of mixed type	4
	Other neoplasm	5
	Unknown	9
	Tubular	31
	Medullary	32
	Mucinous	33
	Basal-like	35

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset (invasive)

Obligation: Required for completeness for cases with an invasive component

How to answer for BreastSurgANZ As recorded in the pathology report.

Quality Audit: **Basal-like**
Typically, these tumours are high grade, mitotically active lesions, often with central necrosis or scarring and are ER/PR negative and HER2 negative on immunohistochemistry. Immunopositivity for a variety of other “basal” markers including CK5/6 and CK14, and EGFR may be useful in establishing the diagnosis. It is important to identify patients with this cancer type as it has been associated with BRCA1 germline mutations and, therefore, an increased risk of both breast and ovarian cancer.[†]

Other Neoplasm may include other special types not listed here such as Cribriform and papillary.

[†] Description provided by pathologist A/Prof J.Harvey

Hospital

Identifying and Definitional Attributes

Database field name: hosHospitalName

Definition: The treating hospital or clinic at which the patient received their surgery. If no surgery was performed, it is defined as the hospital where the patient received most of their treatment.

Context: The hospital list was compiled from a list supplied by the NBCC and has been added to at the request of users. Please contact the audit office to have a hospital added if it does not appear.

Relational and Representational Attributes

Data type: Text

Data Domain: All Hospitals

Representational Layout: A

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Mandatory for a save

How to answer for BreastSurgANZ Quality Audit: Select the hospital for which the surgery took place from the “Clinic/Hospital” drop-down list which should contain the values of ‘My Hospitals’ defined by the user. To add hospitals to the list visit the “My Hospitals” section of the BQA portal.

If a patient’s initial treatment was at one hospital and subsequent treatment was at a different hospital, record the hospital where the most definitive surgery took place (e.g. mastectomy over CLE or re-excision).

Indigenous Status

Identifying and Definitional Attributes

Database field name: patIndigenousStatusId

Definition: Description of patient's indigenous origins.

Context: To better understand the variability in treatment and outcome in patients with identified indigenous origins.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Non-Indigenous	1
	Aboriginal	2
	Torres Strait Islander	3
	Both Aboriginal and Torres Strait Islander	4
	Maori	5
	Pacific Peoples	6
	Unknown – Not stated or inadequately described	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Mandatory for a save

How to answer for BreastSurgANZ Quality Audit: Individual self-identification of indigenous status should be sought. Where this is not stated, select "Unknown" in preference to providing no answer.

Invasive / In situ

Identifying and Definitional Attributes

Database field name: bstInvasiveInsitu

Definition: Description of whether the cancer is invasive or in situ.

Context: The neoplastic nature or 'behaviour' of the principal cancer determines prognosis and treatment planning and distinguishes between benign and malignant neoplasms and the stages in between: in situ and uncertain whether malignant or benign, as well as primary and metastatic cancers.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Invasive	A cancer which has grown beyond its site of origin and invaded neighbouring tissue.	1
	Insitu only	The presence of any malignant tumour which has not yet become invasive but is confined to the layer of cells from which it arose. A form of pre-invasive cancer.	2
	<i>No longer an option for entry</i>		
	Unknown	Unknown, inadequately described or not stated.	9

Representational Layout: N

Guide for use

Dataset: Full dataset; Minimum dataset

Obligation: Required for completeness

How to answer for BreastSurgANZ Quality Audit: If the patient has both invasive and insitu components, mark it as invasive and complete the appropriate pathology items.. The exception to this rule is if the case involves microinvasion only. If an in situ case involves microinvasion, mark the case as in situ and record the microinvasion in the comments section of the full dataset.

Invasive tumour (principal) size in mm

Identifying and Definitional Attributes

Database field name: bstInvasiveTumourSize

Definition: The maximum diameter in millimetres of the furthest points of extension of the invasive tumour cells.

Context: Tumour size is a significant prognostic variable; the risk of local recurrence and lymph node involvement increases with tumour size; practical limits exist for the size of tumours that can be successfully excised using breast-conserving surgery.

Relational and Representational Attributes

Data type: Integer

Data Domain: 0-250

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset (invasive)

Obligation: Required for completeness for cases with an invasive component

How to answer for BreastSurgANZ Quality Audit: This refers to the size of the invasive component of the tumour only, as recorded in the pathology report.

In the instance of multiple tumours, record the maximum diameter of the principal tumour.

For cases with a complete pathological response to neo-adjuvant treatment or an unknown primary tumour, zero can be entered into this field.

Laterality

Identifying and Definitional Attributes

Database field name: bstLaterality

Definition: The breast in which the Principal tumour is located.
The principal breast cancer is the tumour present in the current treatment episode and which the surgeon deems to be the indicator for prognosis and treatment. It is the most prognostically significant tumour.

Context: Laterality helps to identify that treatment relates to the primary tumour. It is useful in the description of bilateral cancers in the clinical notes.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Left	1
	Right	2
	Unknown	9

Representational Layout: N

Guide for use

Dataset: Full dataset; Minimum dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Select whether the principle tumour is located in the left or right breast. To indicate cancer in both breasts at the same time (or within 3 months) use the *Bilateral synchronous* item.

In the case of bilateral synchronous cancer, enter each breast as a separate episode. Enter follow up under the episode for the most prognostically significant laterality.

Menopausal status

Identifying and Definitional Attributes

Database field name: bstMenopausalStatus

Definition: The menopausal status of the patient.

Context: Some treatment recommendations differ by menopausal status, e.g. ovarian ablation is not indicated after the menopause; tamoxifen, multi-agent chemotherapy and ovarian ablation all reduce the risk of recurrence and death in women less than 50 years of age.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Pre - An individual who has not yet experienced the menopause	1
	Post - An individual who has experienced the menopause and the occurrence of 12 months of spontaneous amenorrhoea	2
	Peri - An individual who is either in the period just prior to the menopause or the subsequent 1 year of amenorrhoea following menopause	3
	Male - Not female	4
	<i>No longer an option for entry</i>	
	Unknown - Not stated or inadequately described	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness

How to answer for BreastSurgANZ Quality Audit: Individual self-identification of menopause should be sought. Where this is not stated but can be confidently imputed from the woman's age, select the appropriate category in preference to providing no answer.

Multidisciplinary discussion regarding treatment

Identifying and Definitional Attributes

Database field name: bstMDTrev

Definition: Indicates whether patient's management is discussed and a treatment plan developed by a multidisciplinary team (MDT).

Context: Access to multidisciplinary care is recommended for patients with cancer. Evidence has shown that an MDT approach improves patient satisfaction with treatment and outcomes, and that decisions are more likely to be consistent with evidence-based guidelines.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	Unknown	3
	<i>Not an option for entry</i>	
	Not recorded	4

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Mandatory for a save

How to answer for BreastSurgANZ Quality Audit:

Necrosis present

Identifying and Definitional Attributes

<i>Database field name:</i>	bstNecrosisPresent
<i>Definition:</i>	Two categories of necrosis are recognised with DCIS: focal necrosis with no central necrosis and central necrosis in ducts.
<i>Context:</i>	Histopathological evidence of confluent necrosis within DCIS is an indication of poor prognosis.

Relational and Representational Attributes

<i>Data type:</i>	Numeric						
<i>Data Domain:</i>	<table> <tr> <td>No necrosis/minimal - Necrosis not present or minimal No central duct necrosis is present, but focal necrosis and isolated apoptotic cells may be present.</td> <td style="text-align: right;">1</td> </tr> <tr> <td>Necrosis - Necrosis present Central necrosis is identified in ducts (this has previously been described as “comedo” type necrosis).</td> <td style="text-align: right;">2</td> </tr> <tr> <td>Not applicable - The default value for this data item. It is not applicable if the tumour is invasive</td> <td style="text-align: right;">9</td> </tr> </table>	No necrosis/minimal - Necrosis not present or minimal No central duct necrosis is present, but focal necrosis and isolated apoptotic cells may be present.	1	Necrosis - Necrosis present Central necrosis is identified in ducts (this has previously been described as “comedo” type necrosis).	2	Not applicable - The default value for this data item. It is not applicable if the tumour is invasive	9
No necrosis/minimal - Necrosis not present or minimal No central duct necrosis is present, but focal necrosis and isolated apoptotic cells may be present.	1						
Necrosis - Necrosis present Central necrosis is identified in ducts (this has previously been described as “comedo” type necrosis).	2						
Not applicable - The default value for this data item. It is not applicable if the tumour is invasive	9						
<i>Representational Layout:</i>	N						

Guide for use

<i>Dataset:</i>	Minimum dataset (in situ); Full dataset (in situ)
<i>Obligation:</i>	Required for completeness for DCIS only cases
<i>How to answer for BreastSurgANZ Quality Audit:</i>	Select the appropriate level of necrosis as reported in the pathology report.

Neoadjuvant therapy – Radiotherapy

Identifying and Definitional Attributes

Database field name: bstRadiotherapyNeoAdj

Definition: The administration of radiation therapy prior to, or as an alternative to, surgery.

Context: Neoadjuvant therapy is used to shrink tumour size in patients who are not candidates for primary surgery. Response to neoadjuvant therapy can also act as an indicator of long-term clinical response to therapeutic treatment.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	<i>Not an option for entry</i> Not recorded	3

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset

Obligation: Required for completeness of invasive episodes; optional for in situ episodes

How to answer for BreastSurgANZ Quality Audit: Choosing “Yes” implies that *Radiotherapy* was received prior to primary treatment by surgery.

If *Radiotherapy* was received after surgery, use the *Adjuvant therapy* item.

If no surgery was performed and *Radiotherapy* was received, choose “Yes” for *Neoadjuvant Radiotherapy* and mark *Adjuvant Radiotherapy* as “No”.

Selecting “Yes” in the *Adjuvant therapy* item as well as *Neoadjuvant* implies *Radiotherapy* was received both before and after surgery.

Neoadjuvant therapy – Chemotherapy

Identifying and Definitional Attributes

Database field name: bstChemotherapyNeoAdj

Definition: The administration of chemotherapy prior to surgery.

Context: Neoadjuvant therapy is used to shrink tumour size in patients who are not candidates for primary surgery. Response to neoadjuvant therapy can also act as an indicator of long-term clinical response to therapeutic treatment.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	<i>Not an option for entry</i> Not recorded	3

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset

Obligation: Required for completeness of invasive episodes; optional for in situ episodes

How to answer for BreastSurgANZ Quality Audit: Choosing “Yes” implies that *Chemotherapy* was received prior to primary treatment by surgery.

If *Chemotherapy* was received after surgery, use the *Adjuvant therapy* item.

If no surgery was performed and *Chemotherapy* was received, choose “Yes” for *Neoadjuvant Chemotherapy* and mark *Adjuvant Chemotherapy* as “No”.

Selecting *Yes* in the *Adjuvant therapy* item as well as *Neoadjuvant* implies *Chemotherapy* was received both before and after surgery.

Neoadjuvant therapy – SERMs

Identifying and Definitional Attributes

<i>Database field name:</i>	bstTamoxifenNeoAdj
<i>Definition:</i>	The administration of Selective Oestrogen Receptor Modulators, such as Tamoxifen, prior to surgery.
<i>Context:</i>	Neoadjuvant therapy is used to shrink tumour size in patients who are not candidates for primary surgery. Response to neoadjuvant therapy can also act as an indicator of long-term clinical response to therapeutic treatment.

Relational and Representational Attributes

<i>Data type:</i>	Numeric
<i>Data Domain:</i>	Yes 1
	No 2
	<i>Not an option for entry</i>
	Not recorded 3
<i>Representational Layout:</i>	N

Guide for use

<i>Dataset:</i>	Minimum dataset (invasive); Full dataset
<i>Obligation:</i>	Required for completeness of invasive episodes; optional for in situ episodes
<i>How to answer for BreastSurgANZ Quality Audit:</i>	<p>Choosing “Yes” implies that <i>Tamoxifen</i> was received prior to primary treatment by surgery.</p> <p>If <i>Tamoxifen</i> was received after surgery, use the <i>Adjuvant therapy</i> item.</p> <p>If no surgery was performed and <i>Tamoxifen</i> was received, choose “Yes” for <i>Neoadjuvant SERMs</i> and mark <i>Adjuvant SERMs</i> as “No”. Any therapy provided for purely preventative purposes should still be recorded.</p> <p>Selecting <i>Yes</i> in the <i>Adjuvant therapy</i> item as well as <i>Neoadjuvant</i> implies <i>Tamoxifen</i> was received both before and after surgery.</p>

Neoadjuvant therapy – Ovarian Ablation

Identifying and Definitional Attributes

Database field name: bstOvarianAblationNeoAdj

Definition: The use of surgery, radiation or drug treatment to cease or suppress hormone production by the ovaries, prior to cancer treatment by surgery.

Context: Neoadjuvant therapy is used to shrink tumour size in patients who are not candidates for primary surgery. Response to neoadjuvant therapy can also act as an indicator of long-term clinical response to therapeutic treatment.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	<i>Not an option for entry</i>	
	Not recorded	3

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset

Obligation: Required for completeness of invasive episodes; optional for in situ episodes

How to answer for BreastSurgANZ Quality Audit: Choosing “Yes” implies that *Ovarian Ablation* was received prior to primary treatment by surgery. Reversible treatments for ovarian function suppression should be recorded under Ablation.

If *Ovarian Ablation* was received after surgery, use the *Adjuvant therapy* item.

If no surgery was performed and *Ovarian Ablation* was received, choose “Yes” for *Neoadjuvant Ovarian Ablation* and mark *Adjuvant Ovarian Ablation* as “No”.

Selecting *Yes* in the *Adjuvant therapy* item as well as *Neoadjuvant* implies *Ovarian Ablation* was received both before and after surgery.

Neoadjuvant therapy – Aromatase Inhibitors

Identifying and Definitional Attributes

Database field name: bstArominhibNeoAdj

Definition: The administration of aromatase inhibitors prior to surgery.

Context: Neoadjuvant therapy is used to shrink tumour size in patients who are not candidates for primary surgery. Response to neoadjuvant therapy can also act as an indicator of long-term clinical response to therapeutic treatment.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	<i>Not an option for entry</i> Not recorded	3

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset

Obligation: Required for completeness of invasive episodes; optional for in situ episodes

How to answer for BreastSurgANZ Quality Audit: Choosing “Yes” implies that *Aromatase Inhibitors* were received prior to primary treatment by surgery.

If *Aromatase Inhibitors* were received after surgery, use the *Adjuvant therapy* item.

If no surgery was performed and *Aromatase Inhibitors* were received, choose “Yes” for *Neoadjuvant Aromatase Inhibitors* and mark *Adjuvant Aromatase Inhibitors* as “No”. Any therapy provided for purely preventative purposes should still be recorded.

Selecting *Yes* in the *Adjuvant therapy* item as well as *Neoadjuvant* implies *Aromatase Inhibitors* were received both before and after surgery.

Neoadjuvant therapy – Herceptin or other immunotherapy

Identifying and Definitional Attributes

Database field name: bstImmunoTxNeoAdj

Definition: The administration of Herceptin or other immunotherapy prior to surgery.

Context: Neoadjuvant therapy is used to shrink tumour size in patients who are not candidates for primary surgery. Response to neoadjuvant therapy can also act as an indicator of long-term clinical response to therapeutic treatment.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2
	<i>Not an option for entry</i> Not recorded	3

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset

Obligation: Required for completeness of invasive episodes; optional for in situ episodes

How to answer for BreastSurgANZ Quality Audit: Choosing “Yes” implies that *Herceptin* was received prior to primary treatment by surgery.

If *Herceptin* was received after surgery, use the *Adjuvant therapy* item.

If no surgery was performed and *Herceptin* was received, choose “Yes” for *Neoadjuvant Herceptin* and mark *Adjuvant Herceptin* as “No”.

Selecting *Yes* in the *Adjuvant therapy* item as well as *Neoadjuvant* implies *Herceptin* was received both before and after surgery.

Number of invasive breast cancers

Identifying and Definitional Attributes

Database field name: bstNoOfTumours

Definition: The number of invasive tumours in one breast.

Context: A proportion of breast cases will have more than one tumour; this item will identify those cases. The presence of other tumours to the principal tumour may affect management of the cancer.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	One	1
	Two	2
	Multicentric	4
	Unknown	9

Representational Layout: N

Guide for use

Dataset: Full dataset (invasive)

Obligation: Optional

How to answer for BreastSurgANZ As recorded in the pathology report or in diagnostic imaging.

Quality Audit: *Multicentric* can also be called Multiple or Multifocal.

Number of nodes examined

Identifying and Definitional Attributes

Database field name: bstAxillaNodesExamined

Definition: The total number of surgically excised axillary nodes examined histopathologically, including those excised by sentinel node biopsy.

Context: Nodal status includes the total number of nodes dissected and an assessment of the number of positive nodes involved by metastatic carcinoma. All nodes dissected should be sent for pathological examination.

Relational and Representational Attributes

Data type: Integer

Data Domain: 0-39

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness

How to answer for BreastSurgANZ Quality Audit: As recorded in the pathology report. The total number of examined nodes from axillary dissection AND sentinel node biopsy.

Missing data implies the number of nodes examined is unknown, it does not imply the number was *zero*. If no axillary surgery was performed, enter zero.

The BQA system does not accept numbers over 40 in this field. If there were more than 40 nodes examined, record 40 in this field and make a note in the comments section. A case with “40” in this field will be interpreted as having “40 or more” nodes examined.

Number of positive nodes

Identifying and Definitional Attributes

Database field name: bstAxillaNodesPositive

Definition: The total number of malignant or positive axillary nodes.

Context: Prognosis is related to the number of nodes that contain metastases; this relationship applies to both disease free interval and survival. Nodal status is an important element in planning adjuvant therapy and local radiotherapy.

Relational and Representational Attributes

Data type: Integer

Data Domain: 0-39

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness

How to answer for BreastSurgANZ Quality Audit: As recorded in the pathology report. The total number of positive nodes from axillary dissection AND sentinel node biopsy.

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

If no axillary surgery was performed, enter zero for nodes examined and nodes positive.

The BQA system does not accept numbers over 40 in this field. If there were more than 40 nodes positive, record 40 in this field and make a note in the comments section. A case with "40" in this field will be interpreted as having "40 or more" nodes positive.

Number of sentinel nodes histologically positive

Identifying and Definitional Attributes

Database field name: bstPathSentinelPos

Definition: This field refers to the number of sentinel nodes found to be positive for cancer when examined by a pathologist

Context: Used to determine the proportion of positive axillary nodes found by sentinel node biopsy techniques

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	1 node	1
	2 nodes	2
	3 nodes	3
	>3 nodes	4
	None	5

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Select one option to record the number of sentinel nodes found to be histologically positive when examined by a pathologist.

Other pattern

Identifying and Definitional Attributes

Database field name: bstArchitectureOther

Definition: Other microscopic arrangement of DCIS in the lesion, other than that noted in *Dominant Pattern*.

Context: Applies only to in situ cancers.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Solid	1
	Cribriform	2
	Micropapillary	3
	Other	4
	Unknown/NA	9

Representational Layout: N

Guide for use

Dataset: Full dataset (in situ)

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Select the DCIS pattern type most significant in the tumour other than the *Dominant Pattern*.

Patient ID

Identifying and Definitional Attributes

Database field name: patName; patDOB

Definition: Partially de-identifying code assigned to an individual patient.

Context: The arrangement of the data collection is patient-based but allows multiple episodes for each patient and also allows patients with the same ID, since they are otherwise identified with the Patient Number, which is assigned by the system and is never duplicated.

Relational and Representational Attributes

Data type: Text

Data Domain: Alphanumeric code, a concatenation of the first three letters of the patient's last name together with their 8-digit date of birth recorded as DDMMYYYY.

Representational Layout: XXXDDMMYYYY

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Mandatory for a save

How to answer for BreastSurgANZ Quality Audit: To add a patient on the website, first enter the patient ID by entering the first three letters of the patient's surname and the patient's date of birth.

If the patient name contains a special character, such as an apostrophe, omit it and use the first 3 alphabetic characters (for example, OCO for O'Connell). If a name possesses a prefix, record the letter following the space, such as DEV for De Ville. Do not enter hyphens or periods (e.g. enter STJ for St. John). If the patient has a two-letter surname, enter two letters only (no space) and the date of birth.

The website requires the day, month and four digit year of birthdate to be separated by a forward slash (/).

If the patient changes their name (due to marriage or divorce for example), for the purposes of maintaining the integrity of the database, it is important that you not duplicate the patient with a new record. Alter the name field of the original episode of treatment with the new three letter code and make a note of the previous name code in the comments field. Altering the record in this way allows for accurate data linkage with the National Death Index at a later date. When you alter the surname of a patient, this change affects all episodes of cancer treatment recorded for that patient. You will then be able to add follow-up or new episodes of cancer treatment as necessary.

Position of principal tumour

Identifying and Definitional Attributes

Database field name: bstPrincipalCaPosition

Definition: The position within the breast of the principal (most prognostically significant) tumour.

Context: The position of the tumour may have implications for the type of surgery performed. Collection of this information adds to the research capabilities of the audit.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Lateral – The side of the breast furthest from the midline of the body, closer to the arm. [Or- 3 o'clock on left breast, 9 o'clock right breast, outer quadrant]	1
	Medial – The side of the breast closest to the midline of the body, towards the sternum. [Or- 9 o'clock on the left breast, 3 o'clock right breast, inner quadrant]	2
	Superior – The area of the breast closest to the chin [Or- 12 o'clock, upper quadrant]	3
	Inferior – The area of the breast closest to the feet [Or- 6 o'clock, lower quadrant]	4
	Central – The centre area of the breast	5
	Superolateral – The upper outer quadrant [Or- 1 or 2 o'clock left breast, 10 or 11 o'clock right breast]	6
	Superomedial – The upper inner quadrant [Or- 10 or 11 o'clock left breast, 1 or 2 o'clock right breast]	7
	Inferolateral – The lower outer quadrant [Or – 4 or 5 o'clock left breast, 7 or 8 o'clock right breast]	8
	Unknown – not known or inadequately described	9
	Inferomedial – The lower inner quadrant [Or- 7 or 8 o'clock left breast, 4 or 5 o'clock right breast]	10
	Axillary tail – The area of the axilla	11
	>1 quadrant – The tumour is larger than one quadrant of the breast	12

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Anatomical positions offered in the options are relative to the centre of the breast, so will be a mirror image in the opposite breast. Anatomic positions refer to the human body in a standing position, so for example *Superior* is towards the sky. Some pathology reports or surgeons will refer to the position of the tumour by another method such as an o'clock reading or in plain English such as "upper outer quadrant".

Postcode

Identifying and Definitional Attributes

Database field name: patPostcode

Definition: The residential postcode of the patient

Context: Allows the audit to identify proportions of patients from various locations, compare metropolitan, regional and rural patients and track rural patients travelling to metropolitan hospitals for treatment.

Relational and Representational Attributes

Data type: Text

Data Domain: Any registered Australian or Aotearoa New Zealand postcode

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Mandatory for a save

How to answer for BreastSurgANZ The patient's residential postcode should be available from the patient's case notes.

Quality Audit: Postcode is not always readily available for Aotearoa New Zealand patients. If unknown enter 9999.

Preoperative scintigraphy: Number of nodes detected in the following locations – various

Identifying and Definitional Attributes

Database field name: bstScintLoweraxilla; bstScintUpperaxilla; bstScintSupraClavicular; bstScintInternalMammary

Definition: These fields record the number of nodes found during preoperative scintigraphy in various locations within the axilla.

Context:

Relational and Representational Attributes

Data type: Integer

Data Domain: 0-39

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Enter the number of nodes identified by scintigraphy for each location. The total number of nodes identified is autocalculated by the system (bstScintTotal).

For Level 1 axillary nodes, record as lower axilla. For Level 2 or 3 axillary nodes record as upper axilla.

Preoperative scintigraphy: Number of nodes detected - none

Identifying and Definitional Attributes

Database field name: bstScintnone

Definition: This is used to confirm that no nodes were found during preoperative scintigraphy

Context:

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Unchecked	0
	Checked (Yes)	1
	<i>No longer an option for entry</i>	
	No	2

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: If no nodes were detected with preoperative scintigraphy check this box.

Previous surgery

Identifying and Definitional Attributes

Database field name: bstPrevSurgery

Definition: A patient's history of any previous surgery specifically for breast cancer.

Context: A history of previous surgery indicates that the current treatment episode is not the first and that careful attention is needed to ensure the correct date of diagnosis for the breast cancer related to the current treatment episode. In a data collection which links all records for a woman, it indicates a need to ensure that all her previous records are correctly identified.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	No	1
	Same Breast	2
	Contralateral Breast	3
	Both Breasts	4
	Not Known	9

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Indicate whether the patient has had previous surgery for breast cancer. Do not include any breast surgery for bilateral synchronous cancer in the opposite breast.

Private/Public

Identifying and Definitional Attributes

<i>Database field name:</i>	bstPrivatePublic
<i>Definition:</i>	Accommodation chargeable status elected by patient on admission.
<i>Context:</i>	Allows the audit to compare patients and treatment patterns between private and public care.

Relational and Representational Attributes

<i>Data type:</i>	Numeric						
<i>Data Domain:</i>	<table border="1"> <tr> <td>Private</td> <td>1</td> </tr> <tr> <td>Public</td> <td>2</td> </tr> <tr> <td>Unknown</td> <td>9</td> </tr> </table>	Private	1	Public	2	Unknown	9
Private	1						
Public	2						
Unknown	9						
<i>Representational Layout:</i>	N						

Guide for use

<i>Dataset:</i>	Minimum dataset; Full dataset
<i>Obligation:</i>	Mandatory for a save
<i>How to answer for BreastSurgANZ Quality Audit:</i>	<p>At the time of, or as soon as practicable after admission to a public hospital, the patient must elect in writing to be treated as either</p> <ul style="list-style-type: none"> • a public patient or • a private patient in single accommodation or • a private patient in shared accommodation. <p>This item is independent of patient's hospital insurance status. Private includes private-single and private-shared.</p> <p>Public patient: A person, eligible for Medicare, who, on admission to a recognised hospital or soon after:</p> <ul style="list-style-type: none"> • receives a public hospital service free of charge or • elects to be a public patient or • whose treatment is contracted to a private hospital. <p>Private patient: A person who, on admission to a recognised hospital or soon after:</p> <ul style="list-style-type: none"> • elects to be a private patient treated by a medical practitioner of his or her choice or • elects to occupy a bed in a single room (where such an election is made, the patient is responsible for meeting certain hospital charges as well as the professional charges raised by any treating medical or dental practitioner) or • a person, eligible for Medicare, who chooses to be admitted to a private hospital (where such a choice is made, the patient is responsible for meeting all hospital charges as well as the professional charges raised by any treating medical or dental practitioner).

Receptor status – oestrogen (ER)

Identifying and Definitional Attributes

Database field name: bstOestrogenReceptors

Definition: The presence or absence of oestrogen receptors on the tumour cells. Oestrogen receptors (ER) are prognostic indicators. They are an intracellular receptor protein that binds oestrogens and antioestrogens, and mediate their effects by binding to DNA and altering the expression of specific genes.

Context: Oestrogen receptor status is an indicator of responsiveness to hormonal therapies. High ER expression is associated with a good prognosis and with a response to hormonal therapy.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Positive	1
	Negative	2
	Ordered but not known (not final answer, see below)	3
	Not Done	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness in cases with an invasive component

How to answer for BreastSurgANZ Quality Audit: As stated in pathology report. If pathology report states status as equivocal, record as negative.

For cases with multiple tumours in the breast, if any tumour is positive record positive regardless of whether this is the principal tumour.

Note that choosing the *Ordered but not known* option in the full dataset will result in the case being recorded as incomplete. The BQA recommends waiting until results are in before entering a case.

Receptor status – progesterone

Identifying and Definitional Attributes

Database field name: bstProgesteroneReceptors

Definition: The presence or absence of progesterone receptors on the tumour cells. Progesterone receptors (PR) are prognostic indicators. They are intracellular receptor proteins that bind progestins and antiprogestins.

Context: Expression of PR is mediated through activation of the oestrogen receptor. Therefore the presence of PR indicates functional ER status. High expression of progesterone receptors is associated with a good prognosis.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Positive	1
	Negative	2
	Ordered but not known (not final answer, see below)	3
	Not Done	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness in cases with an invasive component

How to answer for BreastSurgANZ Quality Audit: As stated in pathology report. If pathology report states status as equivocal, record as negative.

For cases with multiple tumours in the breast, if any tumour is positive record positive regardless of whether this is the principal tumour.

Note that choosing the *Ordered but not known* option in the full dataset will result in the case being recorded as incomplete. The BQA recommends waiting until results are in before entering a case.

Receptor status – HER 2

Identifying and Definitional Attributes

Database field name: bstHER2

Definition: The presence or absence of HER 2 receptors on the tumour cells
Human Epidermal Growth Factor Receptor 2, one of the many proteins on a cell's surface that signals the cell to divide and helps control normal cell growth, cell division, and cell survival.

Context: The status of the HER2 receptors may have implications for response to treatment with hormonal therapy including Herceptin

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Positive - biopsy revealed abnormally high levels of the HER2 gene or protein	1
	Negative - biopsy revealed a normal level of the HER2 gene or protein	2
	Ordered but not known (not final answer, see below)	3
	Not Done	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness in cases with an invasive component

How to answer for BreastSurgANZ Report results obtained in pathology report.

Quality Audit: Two main types of tests; immunohistochemistry (IHC) or insitu hybridization (ISH). To record HER-2 receptor status as positive, this **must** be based on positive results of an insitu hybridization test (e.g. FISH, CISH). IHC is not considered a final result for HER-2 status.

If pathology report states status as equivocal, record as negative.

For cases with multiple tumours in the breast, if any tumour is positive record positive regardless of whether this is the principal tumour.

Note that choosing the *Ordered but not known* option in the full dataset will result in the case being recorded as incomplete. The BQA recommends waiting until results are in before entering a case.

Referral source

Identifying and Definitional Attributes

<i>Database field name:</i>	bstReferralSource
<i>Definition:</i>	Source from which the person was referred to the surgeon.
<i>Context:</i>	To assist in analyses of intersectoral patient flow.

Relational and Representational Attributes

<i>Data type:</i>	Numeric												
<i>Data Domain:</i>	<table border="1"> <tr> <td>Symptomatic</td> <td>1</td> </tr> <tr> <td>Breast Screen Australia</td> <td>2</td> </tr> <tr> <td>Breast Screen Aotearoa</td> <td>3</td> </tr> <tr> <td>Other</td> <td>4</td> </tr> <tr> <td colspan="2"><i>No longer an option for entry</i></td> </tr> <tr> <td>Unknown</td> <td>9</td> </tr> </table>	Symptomatic	1	Breast Screen Australia	2	Breast Screen Aotearoa	3	Other	4	<i>No longer an option for entry</i>		Unknown	9
Symptomatic	1												
Breast Screen Australia	2												
Breast Screen Aotearoa	3												
Other	4												
<i>No longer an option for entry</i>													
Unknown	9												
<i>Representational Layout:</i>	N												

Guide for use

<i>Dataset:</i>	Minimum dataset; Full dataset
<i>Obligation:</i>	Required for completeness
<i>How to answer for BreastSurgANZ Quality Audit:</i>	<i>Symptomatic</i> patients are referred to a breast surgeon when presenting to a GP or other physician with symptoms such as a breast lump, pain, or discharge. Patients referred from <i>Other</i> sources may include private screening programmes.

Refused treatment

Identifying and Definitional Attributes

Database field name: InterventionChangeReasonId

Definition: The treatment which the patient refused.

Context: This item allows the audit to acknowledge the patient's choice as a possible reason for the surgeon's practice levels diverging from treatment guidelines.

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	No	10
	Breast conserving surgery	1
	Mastectomy	2
	Axillary surgery	4
	Radiotherapy	5
	Chemotherapy	6
	Hormone therapy	7
	Unspecified refusal	8
	Herceptin/Other immunotherapy	12
	Reconstruction	13

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness

How to answer for BreastSurgANZ Quality Audit: This field provides some facility to distinguish between treatment recommended by a surgeon and a different treatment path that the patient has decided to follow, after consultation with her surgeon. If a patient is referred to a specialist for adjuvant treatment and does not take up the referral, this should be recorded as the patient refusing that treatment.

The database allows for more than one type of refusal to be recorded. Add each refusal relevant to the episode.

Missing data is not assumed to mean there was no patient choice to refuse treatment, if the patient did not refuse any recommended treatment select *No*.

Scintigraphy conducted

Identifying and Definitional Attributes

Database field name: bstScintPerformed

Definition: Scintigraphy is a specialised radiology procedure used to assess the breasts; it is used particularly when the other diagnostic examinations have been inconclusive. A tiny amount of a radioactive substance, called a radionuclide (radiopharmaceutical or radioactive tracer), is absorbed by the breast tissue to assist in the examination of the breasts for any radiological abnormalities which may indicate breast cancer may be present.

Context: Preoperative scintigraphy is part of some sentinel node biopsies

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Yes	1
	No	2

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Indicate whether scintigraphy was performed. Missing data is not assumed to mean *No*; please ensure an option is selected.

Scintigraphy date

Identifying and Definitional Attributes

Database field name: bstScintDat

Definition: This field refers to the date scintigraphy was conducted

Context: Pre-operative scintigraphy is part of some sentinel node procedures.

Relational and Representational Attributes

Data type: Date/time

Data Domain: Valid date

*Representational
Layout:* DD/MM/YYYY

Guide for use

Dataset: Full dataset

Obligation: Optional

*How to answer for
BreastSurgANZ
Quality Audit:* Enter the date of the procedure

Sentinel node biopsy: Node detection method

Identifying and Definitional Attributes

Database field name: bstSentNodeDetectionMethod

Definition: The method by which candidate sentinel nodes were intraoperatively detected.

Context:

Relational and Representational Attributes

Data type: Numeric

<i>Data Domain:</i>	Isotope	1
	Blue dye only	2
	Both	3
	Unknown/NA	9

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: This data item refers to the way that the nodes were successfully detected, rather than a list of the tracers used.

Sentinel node biopsy: Position and number of located nodes

Identifying and Definitional Attributes

Database field name: bstSentNodeNoOfNodes;bstSentNodelowerAxilla; bstSentNodeUpperAxilla; bstSentNodeSupraClavicular; bstSentNodeInternalMammary; bstSentNodeOther

Definition: These fields record the number of nodes found during sentinel node biopsy.

Context:

Relational and Representational Attributes

Data type: Integer

Data Domain: 0-39

Representational Layout: N

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: Enter the number of nodes located by sentinel node biopsy in total and for each location.

For Level 1 axillary nodes, record as lower axilla. For Level 2 or 3 axillary nodes record as upper axilla.

Surgery date

Identifying and Definitional Attributes

Database field name: bsurgSurgeryDate

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

Context: This item is used to calculate patient age, and to distinguish between immediate and staged procedures, it can also be used as a proxy for a missing diagnosis date.

Relational and Representational Attributes

Data type: Date/time

Data Domain: Valid date

Representational Layout: DD/MM/YYYY

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness if surgery was performed

How to answer for BreastSurgANZ Quality Audit: The date of each surgical treatment event should be entered separately.

Surgery discharge date

Identifying and Definitional Attributes

Database field name: bsurgDischargeDate

Definition: The date of the administrative process by which a patient ended their episode of institutional care for each surgical procedure, live or dead from hospital or other health care institution.

Context: This item combined with surgery date, allows the audit to collect information on length of hospital stays.

Relational and Representational Attributes

Data type: Date/time

Data Domain: Valid date

Representational Layout: DD/MM/YYYY

Guide for use

Dataset: Full dataset

Obligation: Optional

How to answer for BreastSurgANZ Quality Audit: The discharge date of each surgical treatment event should be entered separately. The date of discharge cannot be before the date of surgery.

Surgical event

Identifying and Definitional Attributes

Database field name: bsurgSurgeryType; *bstNoSurgery

Definition: The type of surgical procedure carried out.

Context: The classification of the surgical procedure depends on local preference; the guidelines refer to two classifications, complete local excision and total mastectomy.

Relational and Representational Attributes

Data type: Numeric

Data Domain:

Open biopsy including localisation Surgical procedure in which a sample of breast tissue for histological examination is obtained in a conventional surgical procedure, using an open incision. This field combines both incisional and excisional biopsies.	1
Complete local excision The complete excision of an entire tumour mass, surrounded on every aspect by a margin of normal breast tissue, confirmed by histological examination of the margins. This includes wide local excision, segmentectomy, quadrantectomy, and lumpectomy.	2
Re-excision A secondary surgical procedure conducted to obtain a rim of normal breast tissue around the periphery of the previously removed primary tumour.	3
Total mastectomy The surgical removal of the breast.	4
Reconstruction The use of a prosthesis or tissue from other parts of the body to re-build a breast.	5
Other surgery (full dataset item) Surgery other than listed here. Provide additional description in the comments section.	6
ABBI (full dataset item) The process whereby an Advanced Breast Biopsy Instrumentation System (or similar) technique is used to excise non-palpable breast lesions.	7
No surgery To be completed if no surgery was undertaken for this patient. (*stored as "1" in bstNoSurgery field in BreastData table)	1*

Representational Layout: N

Guide for use

Dataset: Minimum dataset; Full dataset

Obligation: Required for completeness

How to answer for BreastSurgANZ Quality Audit: Used to classify the surgical procedure carried out. Missing data is not assumed to mean *Unknown* or *No surgery*. The audit does collect data on cases where no surgery for the primary breast cancer was performed. If this is the case please tick the *No surgery* field.
The database allows you to enter multiple events of any type of surgery from the full dataset view.

Total extent of lesion (DCIS plus invasive carcinoma) in mm

Identifying and Definitional Attributes

Database field name: bstTotalLesionExtent

Definition: The maximum diameter in millimetres of the furthest points of extension of the whole lesion including DCIS which extends beyond the invasive component

Context: In cases where there extensive DCIS beyond the invasive tumour component of the lesion, treatment options may be affected.

Relational and Representational Attributes

Data type: Integer

Data Domain: 1-250

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset (invasive)

Obligation: Required if invasive case with DCIS

How to answer for BreastSurgANZ Quality Audit:

Excerpts from the Guidelines for Pathology reporting of Breast Cancer[‡]

- A single focus of invasive carcinoma associated with DCIS. The “whole-lesion size” includes any associated DCIS seen beyond the margin of the invasive carcinoma. This measurement often correlates more closely with the lesion size assessed on imaging or clinical examination.
- Discrete foci of invasive carcinoma arising in a background of DCIS. The size of each invasive carcinoma is measured separately (the largest is recorded as invasive tumour size). The “whole-lesion size” includes invasive foci and all the associated DCIS.

If an invasive case contains no DCIS component, leave this field blank.

For more than one invasive component arising in separate areas of DCIS indicate the number of tumours in *No. of Invasive Tumours* and report *invasive tumour size* and *total extent of lesion* on the most prognostically significant tumour.

Please refer to the pathology reporting guidelines for more information.

[‡] The pathology reporting of breast cancer, a guide for pathologists, surgeons, radiologists and oncologist. 3rd Ed. National Breast and Ovarian Cancer Centre and the Australian Cancer Network. July 2008.

Vascular/ lymphatic invasion

Identifying and Definitional Attributes

Database field name: bstVascularLymphInvasion

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

<i>Data Domain</i>	Present	1
	Absent	2
	Not known	9

Representational Layout: N

Guide for use

Dataset: Minimum dataset (invasive); Full dataset (invasive)

Obligation: Required for completeness in cases with an invasive component

How to answer for BreastSurgANZ Quality Audit: As reported in pathology report or noted by surgeon.