NHS England

GIRFT
GETTING IT RIGHT FIRST TIME

GIRFT clinical coding: breast conserving surgery

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ABS ASSOCIATION OF BREAST SURGERY

BAPRAS British Association of Plastic Reconstructive and Aesthetic Surgeons

Procedure coding guidance for surgeons and clinical coders

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Foreword by Tracey Irvine, GIRFT Clinical Lead for Breast Surgery

The first breast surgery Getting It Right First Time (GIRFT) visits were carried out in 2018-2019 by Fiona MacNeill and Tracey Irvine, who visited 129 trusts in England exploring trust level Hospital Episode Statistics (HES) and non-HES data. The GIRFT national report for breast surgery was being edited as we went into Covid in early 2020 and we felt the priority then was to focus on three overarching recommendations for recovery:

1. Limit unnecessary hospital attendances
2. Minimise unnecessary interventions
3. **Improve clinical coding and data capture**

With referral rates continuing to rise, imaging assessment and decision making becoming more complex, and an increasingly challenging financial environment, these three key principles remain as important now as they did then.

It is only by really understanding our activity and by focusing on what we can safely do less of that we can create enough capacity to keep up with demand.

The second round of GIRFT visits were carried out at Cancer Alliance level and were completed in June 2025. It was great to see in the revisits how many of you are regularly reviewing your data, but there is still work to be done – a key theme in both rounds of visits was capturing our increasingly complex oncoplastic workload.

We have worked with the Association of Breast Surgery (ABS), plastic surgeons, the GIRFT coding team and the relevant Expert Working Group (EWG) in the National Casemix Office (NCO) to get new OPCS-4 codes approved, and it is important that we apply all of the codes consistently. This involves us as surgeons being clear in our operation notes, and coders being aware of the range of oncoplastic techniques we now offer.

For the first time GIRFT has produced coding guidance for both breast conservation and for mastectomy +/- reconstruction, designed to be read by surgeons and coders alike to improve data capture going forward.

What is this guide for?

This document is for clinical coders and breast surgeons. The purpose of this guide is to provide supplementary information to help coders gain a better understanding of oncological breast conserving surgery procedures and the codes that most accurately describe them, together with why and how these procedures are performed. It also provides examples of different clinical terms that may be used by clinicians in patient records.

Understanding the relevant disease process and related procedures assists clinical coders to assign codes accurately and consistently in accordance with the national clinical coding standards. The information contained within this guide is produced by the GIRFT clinical coding team in collaboration with the Association of Breast Surgery (ABS) and the British Association of Plastic, Reconstructive and Aesthetic Surgeons (BAPRAS).

All OPCS-4 codes used in this guidance are taken from OPCS-4.10, which is valid from April 2023 until 31st March 2026.

What is this guide not for?

This guide does not cover the coding process in detail and does not cover specific index trails or national standards. The code examples do not replace or contravene national clinical coding standards.

Code examples

Examples of codes are presented in tables in the relevant section. The code tables do not routinely include all the codes that would be needed for complete clinical coding (e.g. approach and laterality codes) unless discussed in the section, or because the main code is affected by the additional detail.

Included

Breast conserving surgery:

- Localisation
- Excision of breast lesions
- Breast reshaping
- Partial breast reconstruction (volume displacement and replacement)
- Operations for involved margins

Not included

- Mastectomy (see separate guide *GIRFT clinical coding mastectomy and reconstruction*)
- Operations on the axillary region
- Subsequent operations
- Radiofrequency ablation of breast lesion

How to use this guide

This guide provides guidance on coding oncological breast conserving surgery accurately and consistently. It can be read in its entirety for a broad understanding, or by individual sections for coding guidance on specific procedures.

This guide should be used alongside the currently mandated ICD-10 and OPCS-4 national clinical coding standards and can assist in resolving local clinical coding queries and forming the basis of local clinical coding policies.

For a list of defined acronyms please see the glossary at the end of this document.

Questions and feedback

All feedback regarding this guide is welcomed and will be considered as part of the review process. Any questions or feedback regarding the information within this guide should be directed to england.girft.coding@nhs.net

Queries relating to the application of ICD-10 and OPCS-4 classifications codes and the national clinical coding standards should be directed to support.digitalservices@nhs.net.

The code examples do not replace or contravene national coding standards.

Introduction

The majority (over 70%) of breast cancer patients are treated with breast conserving surgery. The aim is to successfully remove tumours with clear margins to reduce the risk of local recurrence. Wide local excision alone, without the use of oncoplastic techniques, could lead to a poor aesthetic result for some patients. This is particularly the case for patients with large lesions, small breasts, or who need to have around 20-30% or more of their breast volume removed for treatment.

Oncoplastic techniques are increasingly being used in breast surgery with the dual aims of local control of the cancer and acceptable cosmetic results. Oncoplastic surgery involves plastic surgery techniques which are used to reshape the breast during cancer surgery. This can involve:

- **Level 1 oncoplastics** - reshaping the breast tissue
- **Level 2 oncoplastics** - making the breast smaller and removing skin or bringing in tissue from elsewhere (often the adjacent chest wall). Used when more extensive areas need to be removed

Oncoplastic procedures are usually technically more demanding than traditional wide local excision techniques. These procedures are usually done as one surgical operation and the patient leaves the operating room with the minimum possible amount of asymmetry or deformity.

Regardless of the oncoplastic technique used some general principles apply.

Breast conservation – general principles

Breast conservation covers all operations to remove breast tissue that do not involve a full mastectomy, including those using oncoplastic techniques. Many lesions are impalpable and as such require localisation before surgery, regardless of the breast conservation procedures used to remove them or reshape the breast afterwards. There are a number of different indications for removal of breast tissue (again, regardless of the conservation technique used). The complexity of the operation does not depend so much on the diagnosis but on the volume of tissue that needs to be removed, relative to the size of the breast. Any procedure to remove disease requires clear margins to reduce the risk of recurrence. Therefore, all breast conservation techniques could potentially require further surgery to clear margins. Depending on the volume of breast that has been (or that still needs to be) removed this

subsequent procedure may be simple re-excision of margins or involve a more complex oncoplastic procedure (with more extensive breast reshaping required).

See also *Margins* and *subsequent operations for involved margins* sections in this guide.

Localisation

Localisation is a preoperative technique used to mark the exact location of a breast tumour, cancer cells or lesion and can be performed at any time from months or weeks to just a few hours prior to surgery. Localisation is often described using a clockface analogy to confirm in which quadrant the area of concern is located. OPCS-4 site codes can be assigned to denote which breast quadrant contains a lesion (described in the *Procedure site codes* section below).

Surgeons are unlikely to use the term “approach”, which is a concept of the OPCS-4 classification. As well as “localisation”, the technique may also be described as “(image) guidance/guided”.

There are two main localisation techniques: guide wire and seed marker, described in more detail below.

- Wire guided
- Bracketing wire guided
- Magnetic seed/magnetic marker
- Radiofrequency identification (RFID) tag/seed
- Radar localisation
- Radioactive/radionuclide seed localisation (RSL)

Wire guided localisation

During insertion of a guide wire a radiologist places the guide wire into the lesion using mammography or ultrasound under local anaesthetic in the radiology department. During the operation the surgeon removes the tissue surrounding the guidewire and sends it to the laboratory. The wire insertion and surgery are usually performed on the same day. The guide wire insertion and the method of image control used for the guide wire insertion are not coded as part of the breast procedure.

When a procedure is described as “wire guided” the guide wire localisation is captured in the main procedure code (e.g. biopsy, excision of lesion, partial excision of breast).

Table 1: OPCS-4 codes for wire guided procedures on breast

Code	Code description
B32.3	Wire guided biopsy of lesion of breast
B28.7	Wire guided excision of lesion of breast *Includes: Wire guided lumpectomy of breast*
B28.5	Wire guided partial excision of breast *Includes: Wire guided wedge excision of breast* *Includes: Wire guided wide excision of breast*

Bracketing wire guided localisation

For extensive disease more than one localisation device may be used at either end of the area to be removed – this is described as bracketing wires/localisation. Very rarely a single area of disease may need three wires to be mapped out – this would usually have an accompanying level 2 oncoplastic procedure (wide local excision with reconstruction) as it implies a larger area of breast is being removed. This is distinct from removing two separate areas of disease each with its own localisation wire.

In OPCS-4 it is not currently possible to capture when more than one wire is used for one lesion: the same codes will be used for wire guided procedures for one, two or more wires (see example codes in the section above in Table 1).

Seed marker localisation

Seed marker localisation is an alternative to guide wire localisation. A small marker is inserted into the breast prior to surgery. There are several seed marker systems used in the UK which use a range of imaging techniques, including magnetic, radiofrequency, radar and radioactive.

Magnetic seed/magnetic marker localisation

Magnetic seed localisation consists of a small magnetic or metal marker, smaller than the size of a grain of rice, which can be detected using a handheld probe during surgery. The seeds can be inserted, using mammography or ultrasound, up to 30 days prior to surgery.

Examples of brand names which use magnetism (or para-magnetism) to image seed markers are Magseed (developed by Endomag) and Pintuition (owned by Sirius Medical).

Radiofrequency seed/tag localisation

Radiofrequency localisation uses an implantable radiofrequency identification (RFID) marker seed/tag and a hand-held radiofrequency reader. Prior to surgery, the seed is implanted into the breast under image control to mark abnormal breast tissue. The handheld probe is then used to locate this marker during surgery.

An example of a brand name which uses RFID technology is LOCaliser (developed by Hologic).

Radiofrequency ablation is a different procedure that uses radiofrequency energy to treat breast lesions. It is not a localisation technique and is not covered in this guide. Coders must read clinical documentation carefully to confirm which procedure is being performed.

In OPCS-4:

- There are specific codes for wire guided procedures on the breast
- There is an approach code (*Y45.3*) which is used to identify the use of seed marker localisation
- The same approach code (*Y45.3*) is used for magnetic, radar and RFID seed markers
- There are specific codes for radionuclide guided procedures on the breast

Table 2: OPCS-4 code for radiofrequency seed guided wide local excision of breast

Code	Code description
B28.2	Partial excision of breast NEC *Includes: Wedge excision of breast NEC* *Includes: Wide excision of breast NEC*
Y45.3	Approach to organ under seed marker guided control

Table 3: OPCS-4 codes for magnetic seed guided wide local excision of breast

Code	Code description
B28.2	Partial excision of breast NEC *Includes: Wedge excision of breast NEC* *Includes: Wide excision of breast NEC*
Y45.3	Approach to organ under seed marker guided control

The codes in these two tables are the same. The code for seed marker control (*Y45.3*) covers magnetic, radar and RFID seed markers and does not differentiate between them.

Radioactive/radionuclide seed localisation (RSL)

Radioactive/radionuclide seeds are tiny metal seeds, about the size of a sesame seed. The seed contains very low-energy radioactive material. The seed can be placed into the cancer by a radiologist under image control, using mammography or ultrasound, several days or weeks prior to surgery. During the procedure, the surgeon uses a handheld probe to precisely identify the location of the seed.

Radioactive/radionuclide seeds may also be used in sentinel node biopsy and targeted axillary dissection. Code assignment is likely to differ for these procedures; therefore, coders must ensure that the localisation is for a breast lesion before attempting to apply the coding advice below.

In OPCS-4:

- Whether the procedure is described as “radioactive” or “radionuclide” will not alter the code assignment
- The radioactive/radionuclide seed localisation is fully captured in the main procedure code (e.g. excision of lesion, partial excision of breast)
- Coders must take care to distinguish radioactive/radionuclide seed localisation from radiofrequency seed/tag localisation which is coded differently (see *Radiofrequency seed/tag localisation section* below)

Table 4: OPCS-4 codes for radionuclide seed guided procedures on the breast

Code	Code description
B41.1	Radionuclide guided excision of lesion of breast *Includes: Radionuclide guided lumpectomy*
B41.2	Radionuclide guided partial excision of breast *Includes: Radionuclide guided wedge excision of breast* *Includes: Radionuclide guided wide excision of breast*

Radar localisation (SCOUT)

Radar localisation is currently available in the UK under the brand name “SCOUT”. The SCOUT system (owned by Merit Medical) employs micro-impulse radar and infrared light (IR) technology to determine the location of the marker (also referred to as a reflector, seed or tag), that has been inserted into the soft tissue during a previous procedure. The marker

insertion is not coded as part of the breast procedure. A handheld probe, connected to a SCOUT "console", is then used to locate the reflector during surgery.

In OPCS-4:

- The use of the radar/SCOUT marker for localisation is captured using the addition of the subsidiary code *Y45.3 Approach to organ under seed marker guided control*
- Whether the radar/SCOUT marker is described as a reflector, seed or tag, *Y45.3* is the appropriate subsidiary code
- There is no way to distinguish radar/SCOUT localisation markers from radiofrequency or magnetic markers, seeds or tags. *Y45.3* is the only appropriate subsidiary code

Table 5: OPCS-4 codes for SCOUT guided local excision of breast

Code	Code description
B28.2	Partial excision of breast NEC *Includes: Wedge excision of breast NEC* *Includes: Wide excision of breast NEC*
Y45.3	Approach to organ under seed marker guided control

Additional notes on localisation methods

- Many breast surgery centres will have a single method of localisation used for the majority of their WLE procedures
- Some centres are now using more than one method of seed localisation for either multiple lesions within the same breast or for the breast and axilla, so it is now possible that single lesions and multiple lesions may be identified using more than one method of seed localisation

Procedure site codes and clock face references

Surgeons tend to use a clock face position system to indicate the location of lesions within the breast. To assign the correct OPCS-4 site code it is necessary to convert the clock numbers into the quadrants used in breast site codes (*Figure 1*, *Table 6* and *Table 7* below).

Important notes for surgeons and coders

- OPCS-4 site codes divide the breast into quadrants. Clock face references for 12, 3, 6 and 9 do not map precisely into the breast quadrant site codes
- Surgeons need to specify which is the closest quadrant site to use when the clock face reference is between two quadrants
- If surgeons do not help coders assign the correct quadrant site code then we ask coders to assume that the clock face reference maps into the preceding quadrant (the quadrant containing the two earlier hour times)
    - 1, 2 and 3 o'clock in the same quadrant; 4, 5 and 6 in the same quadrant; etc.
    - See the two tables below for the clock face references mapped to the quadrant site codes
- If possible, coders should reserve the site code *Z15.8 Specified breast NEC* for identifying the central portion of the breast only
- Clinical coding teams may choose to adopt a local coding policy to standardise the mapping of breast clock faces into quadrants and using *Z15.8* for the central part of the breast
- This (and everything else in the guide) is supported by the surgeon authors and ABS and BAPRAS on behalf of their members

Figure 1: OPCS-4 mapping of clock face references to breast quadrant site codes

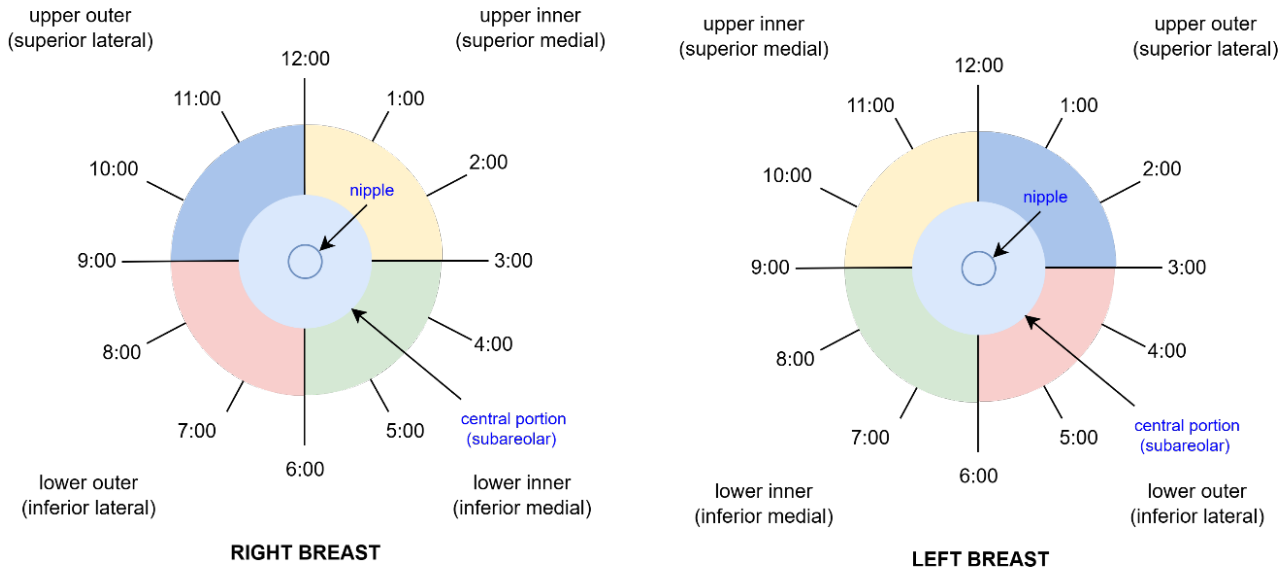

Table 6: OPCS-4 site codes mapped to RIGHT breast clock face

Breast laterality	Clock face reference	Code	Code description
Right	1, 2, 3	Z15.1	Upper inner quadrant of breast
	4, 5, 6	Z15.3	Lower inner quadrant of breast
	7, 8, 9	Z15.4	Lower outer quadrant of breast
	10, 11, 12	Z15.2	Upper outer quadrant of breast
	Central	Z15.8	Specified breast NEC

Table 7: OPCS-4 site codes mapped to LEFT breast clock face

Breast laterality	Clock face reference	Code	Code description
Left	1, 2, 3	Z15.2	Upper outer quadrant of breast
	4, 5, 6	Z15.4	Lower outer quadrant of breast
	7, 8, 9	Z15.3	Lower inner quadrant of breast
	10, 11, 12	Z15.1	Upper inner quadrant of breast
	Central	Z15.8	Specified breast NEC

Multiple lesions

Patients may have several lesions in one or both breasts – some of which may need diagnostic operations while others may need therapeutic operations. For clarity, the surgeon will tend to state where in the breast each lesion is using the clock face system (see *Procedure site codes and clock face references*), e.g. wide local excision of cancer right 2 o'clock and excision biopsy of lesion right 8 o'clock.

Table 8: OPCS-4 codes for wide local excision Right 2 o'clock + excision biopsy lesion Right 8 o'clock

Code	Code description
B28.2	Partial excision of breast NEC *Includes: Wedge excision of breast NEC* *Includes: Wide local excision of breast NEC*
Z15.2	Upper outer quadrant of breast
Z94.2	Right sided operation
B28.3	Excision of lesion of breast NEC *Includes: Lumpectomy of breast NEC*
Z15.4	Lower outer quadrant of breast
Z94.2	Right sided operation

Procedures for removal of breast lesions

Excision biopsy

Sometimes if a diagnosis cannot be made preoperatively a patient may have an excision biopsy. Excision biopsy is an operation to remove the lesion in question in order to make a definitive diagnosis and management plan. Sometimes the diagnosis will be confirmed as cancer and further surgery may be required (such as excision of margins).

As per OPCS-4 national clinical coding standard *GCS9: Excision and biopsy procedures*, "excision biopsy" of breast lesion is coded to excision of breast lesion alone. It is not necessary to add a Y code for the biopsy.

Table 9: the OPCS-4 codes available for excisions of breast lesions, some with built-in guidance detail

Code	Code description
B28.3	Excision of lesion of breast NEC *Includes: Lumpectomy of breast NEC*
B28.7	Wire guided excision of lesion of breast *Includes: Wire guided lumpectomy of breast*
B41.1	Radionuclide guided excision of lesion of breast *Includes: Radionuclide guided lumpectomy*

Incision biopsy

If there is a large area within the breast which has an uncertain pre-operative diagnosis it may be too cosmetically damaging to remove the area just to make a definitive diagnosis and management plan. In this case part of the abnormal appearing area will be removed – this is referred to as an incision biopsy.

Table 10: the OPCS-4 codes available for incision biopsies of breast lesions

Code	Code description
B32.2	Biopsy of lesion of breast NEC
B32.3	Wire guided biopsy of lesion of breast

Percutaneous biopsy (*B32.1*) is also known as a needle biopsy or core biopsy. Core biopsies (*B32.1*) and vacuum biopsies *(B32.4*) are only very rarely done in theatres. Normally they are local anaesthetic radiology procedures (carried out in the radiology department). Examples of patients who might have general anaesthetic needle biopsies in theatres are patients with learning difficulties or with extreme needle phobia.

Lumpectomy

The term lumpectomy is not clinically precise, but is still sometimes seen in clinical records. If no other information is available coders will need to code lumpectomy as an excision of lesion (see *Excision biopsy section* above). There are *Includes* notes under the relevant codes to support this.

Wide local excision

A wide local excision is a planned cancer or therapeutic operation that has the aim at the outset to achieve clear margins. If the whole quadrant of the breast is removed, it may be referred to as a quadrantectomy. A quadrantectomy will always need some form of reshaping to prevent cosmetic deformity.

Table 11: the OPCS-4 codes available for wide local excision (WLE) of breast lesions, some with built-in guidance detail

Code	Code description
B28.2	Partial excision of breast NEC *Includes: Wedge excision of breast NEC* *Includes: Wide excision of breast NEC*
B28.5	Wire guided partial excision of breast *Includes: Wire guided wedge excision of breast* *Includes: Wire guided wide excision of breast*
B41.2	Radionuclide guided partial excision of breast *Includes: Radionuclide guided wedge excision of breast* *Includes: Radionuclide guided wide excision of breast*
B28.1	Quadrantectomy of breast

Wide local excisions are covered in more detail in section *Level 1 oncoplastics.*

Indications for wide local excision

A wide local excision may be performed for a range of reasons, including:

- Primary treatment – the first line of treatment for a primary tumour
- Post neo-adjuvant systemic therapy – after treatments such as chemotherapy and hormone therapy
- Local recurrence – where cancerous cells have returned and where a breast wide local excision is required
- Involved margins – where the cancer cells have been found at the edge of a previously excised tissue sample and a further wide local excision is required to ensure complete removal of the tumour

Breast conservation – techniques

Breast conserving surgery refers to methods aimed at conserving breast tissue and keeping the breast aesthetically acceptable. The combination of therapeutic removal of tissue and breast reshaping using plastic surgical techniques is called oncoplastic surgery. Breast reshaping consists of moving and remodelling breast tissue (displacement) and/or adding tissue from outside the breast (replacement). The complexity depends on the volume of tissue to be removed relative to the size of the breast and can be broadly divided as follows:

- Level 1 – less than 20% breast volume is excised with no skin removed to reshape the breast. (Skin may be removed if close to or involved by cancer – this is part of cancer treatment and not aesthetic reshaping.) Breast volume displacement may be required.
- Level 2 – more than 20% breast volume is excised with or without skin removal. Breast volume displacement or replacement is also involved.

It is important to note that this division into two levels is a general guide; depending on volume some of the procedures below could be considered level 1 or 2 but they are also grouped according to complexity. Breast volume replacement using tissue from outside the breast is always level 2.

There is not likely to be explicit reference to oncoplastic levels in clinical records. This should not restrict the OPCS-4 codes that clinical coders can assign to accurately reflect the clinical detail. Coders should assign OPCS-4 codes based on the operation title and details in the operation note, not whether the procedure is described in the *Level 1 oncoplastic surgery* section or *Level 2 oncoplastic surgery* section of this guide.

Level 1 oncoplastic surgery

Wide local excision (WLE) without reshaping

Wide local excision (WLE) involves excision of the tumour together with a small amount of surrounding breast tissue to ensure clear margins.

Skin incisions for wide local excision (WLE)

There are several skin incisions used for a WLE and, clinically, the selection is important as it can affect the outcomes regarding scarring, recovery times and long-term results. Selecting the incision for a WLE will depend on factors such as the location of the tissue to

be excised, whether or not skin needs to be removed for cancer treatment and the plan to reshape the breast. In any one procedure there may be one or more lesions excised.

Different terms for the types of skin incisions used:

- Axillary scar
- Breast mound
- Including ellipse of skin – meaning skin over the tumour, and therefore part of cancer removal, not the oncoplastic reshaping
- Including nipple areolar complex
- Inframammary fold (IMF)
- Periareolar
- Peripheral breast margin
- Previous scar
- Skin crease

The type of skin incision does not affect OPCS-4 code assignment. Site codes for breast quadrant should be used where possible (see section *Procedure site codes and clock face references*).

Wide local excision (WLE) with reshaping

Where further reconstruction or volume displacement is required to reshape the breast, this may be performed during the same procedure and after the WLE has been completed. Volume displacement techniques for reshaping include:

- glandular remodelling
- glandular flaps

The aim of breast reshaping is to provide the patient with a better aesthetic result.

Breast reshaping using glandular remodelling and glandular flaps

Wide local excision (WLE) with glandular remodelling

A cosmetically acceptable incision is made on the breast either peri-areolar or at the peripheral contour of the breast. A skin flap is raised which means that the skin and subcutaneous tissue is separated from the breast tissue. The skin flap needs to be extensive enough to allow movement of the breast tissue without skin tethering.

A cylinder of breast tissue surrounding the lesion is then excised down to the chest wall. The surrounding glandular breast tissue is then dissected away from the chest wall to leave mobile pillars of glandular breast tissue that can be sutured together to fill in the defect left by the wide local excision.

Using the clock face position system (see *Procedure site codes and clock face references*), this mobilisation of tissue would be very local. For example, moving tissue from 12 o'clock to 1 o'clock. This differs significantly from the movement of tissue described for therapeutic mammoplasty (see *Therapeutic mammoplasty* below).

Table 12: OPCS-4 codes for WLE and glandular remodelling

Code	Code description
B28.2	Partial excision of breast NEC *Includes: Wedge excision of breast NEC* *Includes: Wide excision of breast NEC*
B29.6	Reconstruction of breast using glandular remodelling *Includes: Reconstruction of breast using glandular flap*

Wide local excision (WLE) with glandular flap

As an alternative to the "suture together" method described above for glandular remodelling, an internal flap of glandular tissue can be created and rotated into the defect left by the wide local excision. This is more complex than glandular remodelling, but it has the same OPCS-4 code. The code for dermoglandular flap is not appropriate for this procedure (see *Reconstructions using dermoglandular flaps* below). Following the glandular flap the skin incision is sutured and dressed.

Table 13: OPCS-4 codes for wire guided WLE and glandular flap

Code	Code description
B28.5	Wire guided partial excision of breast *Includes: Wire guided wedge excision of breast* *Includes: Wire guided wide excision of breast*
B29.6	Reconstruction of breast using glandular remodelling *Includes: Reconstruction of breast using glandular flap*

Glandular remodelling and glandular flap are coded using the same OPCS-4 code. Glandular remodelling or glandular flap carried out as part of a therapeutic mammoplasty are coded differently – see section *Therapeutic mammoplasty*.

Reconstructions using dermoglandular flaps

Grisotti flap

A Grisotti flap is used if the removal of the cancer also includes the nipple. A piece of breast tissue with a circle of skin attached is moved into the resulting space in order to create a new nipple.

The patient is marked pre-operatively to identify the area of resection and skin. Skin de-epithelisation is performed in order to remove the epidermal layer of skin, retaining the dermis. The nipple areola complex and lesion are excised down to the chest wall. The epidermal incision is continued along the dermal glandular pedicle around the pre-marked new nipple-areola complex. The epidermal layer of the pedicle is removed with retention of the disc of skin which will form the new nipple-areolar complex. Undermining of the glandular tissue at the level of the pectoralis fascia of the breast allows mobilisation and advancement of the dermal glandular pedicle. The skin is then sutured and dressed.

Table 14: OPCS-4 codes for WLE and Grisotti dermoglandular flap

Code	Code description
B28.2	Partial excision of breast NEC *Includes: Wedge excision of breast NEC* *Includes: Wide excision of breast NEC*
B29.7	Reconstruction of breast using dermoglandular flap

Benelli or round block flap

This is a breast resection procedure in which breast tissue is removed and the breast is reshaped through a periareolar ‘doughnut’ incision. The round block technique for breast cancer can be adapted for resection of tumours located in any quadrant of the breast.

Benelli and round block flap procedures are very similar techniques, and both are coded as dermoglandular flap reconstruction.

It is important to read the clinical documentation carefully to confirm the descriptions are of dermoglandular flap procedures, as “Benelli” and “round block” are also types of skin incisions used in level 2 oncoplastics (see *Skin incisions* below).

Table 15: OPCS-4 codes for WLE and Benelli/round block reconstruction

Code	Code description
B28.2	Partial excision of breast NEC *Includes: Wedge excision of breast NEC* *Includes: Wide excision of breast NEC*
B29.7	Reconstruction of breast using dermoglandular flap

Level 2 oncoplastic surgery

These procedures are performed where either the tumour and/or the breast is larger, hence requiring more tissue excision and possibly the need to remove skin to make the breast smaller in a breast reduction pattern. These can be subdivided into the following:

- Volume displacement is performed using breast tissue
- Volume replacement is performed using a tissue flap from elsewhere

Skin incisions

A range of incisions is used but they do not affect OPCS-4 code assignment. They differ slightly to those used in level 1 WLE (without reshaping) and include:

- Benelli/round block incision (different from the dermoglandular flaps that share these names)
- Comma/B-type
- Lateral
- Melon-slice
- Vertical/modified vertical/Hall-Findlay/Lejour
- Wise pattern
- Racquet

Breast pedicle

A pedicle is an area of tissue graft left attached to the original site to maintain its blood and nerve supply. The breast pedicle often describes the piece of breast tissue that has the nipple attached to it (when making the breast smaller as part of an oncoplastic procedure the

nipple usually needs to be moved upwards as part of the procedure to sit in the correct position).

There are several breast pedicles that may be documented in the clinical record. Whilst they cannot be reflected in OPCS-4 and do not affect code assignment, their presence in the operation note is usually confirmation that a therapeutic mammoplasty has been performed (see next section *Therapeutic mammoplasty*).

Different terms for the types of breast pedicle used include the clock face position system (see *Procedure site codes and clock face references*), along with:

- Bi-pedicle
- Central mound
- Inferior
- Lateral
- Superior
- Superior medial
- Whole breast

Coders should take care as breast pedicles are not the same as pedicles used for flap reconstruction (see the section on *Volume replacement* below). Pedicles used for flap reconstruction are pedicles of tissue from elsewhere (not breast tissue).

Volume displacement

Therapeutic mammoplasty

The most common form of volume displacement is the therapeutic mammoplasty. The surgery for therapeutic mammoplasty is more complex than breast excision. Therapeutic mammoplasty aims to remove the cancer from the breast and then reshape/remodel the breast to give an acceptable cosmetic appearance. Therapeutic mammoplasty is a type of breast reduction and remodelling that is done to remove the part of the breast that has cancer and make the overall breast smaller by reducing and reshaping volume.

Performing a therapeutic mammoplasty involves mobilising glandular breast tissue and moving this to a different part of the breast. Using the clock face position system (see *Procedure site codes and clock face references*), this movement could be moving tissue

from 6 o'clock round to the 12 o'clock position. Any glandular remodelling that takes place as part of a therapeutic mammoplasty does not require an additional code.

Table 16: OPCS-4 codes for therapeutic mammoplasty

Code	Code description
B28.2	Partial excision of breast NEC *Includes: Wedge excision of breast NEC* *Includes: Wide excision of breast NEC*
B31.1	Reduction mammoplasty

Table 17: OPCS-4 codes for therapeutic mammoplasty involving glandular remodelling or glandular flap

Code	Code description
B28.2	Partial excision of breast NEC *Includes: Wedge excision of breast NEC* *Includes: Wide excision of breast NEC*
B31.1	Reduction mammoplasty

Note: where a localisation method is used for therapeutic mammoplasty the specific code for the breast excision may change accordingly.

Table 18: OPCS-4 codes for therapeutic mammoplasty using wire localisation

Code	Code description
B28.5	Wire guided partial excision of breast *Includes: Wire guided wedge excision of breast* *Includes: Wire guided wide excision of breast*
B31.1	Reduction mammoplasty

Volume replacement

Volume replacement describes tissue brought in from outside the breast to replace the volume lost due to the cancer removal.

Specific techniques for volume replacement include:

- Chest wall perforator flaps
- Partial reconstruction with latissimus dorsi (LD) flap
- Abdominal advancement flap (AAF)

Chest wall perforator flaps

Local pedicled fasciocutaneous flap

Chest wall perforator flaps for oncoplastic breast surgery are local pedicled fasciocutaneous (skin and fat) flaps from the chest wall and are used to partially reconstruct a breast where a wide local excision has taken place (not a full mastectomy). These are muscle-sparing flaps based on the branches of intercostal arteries and lateral thoracic artery. The choice of perforator flap is likely to be based on the location of tumour in the breast.

Lateral intercostal artery perforator (LICAP) flap

Skin and fat from near the armpit area and side of the back are transferred to reconstruct defects of the outer breast, usually without sacrificing muscle tissue.

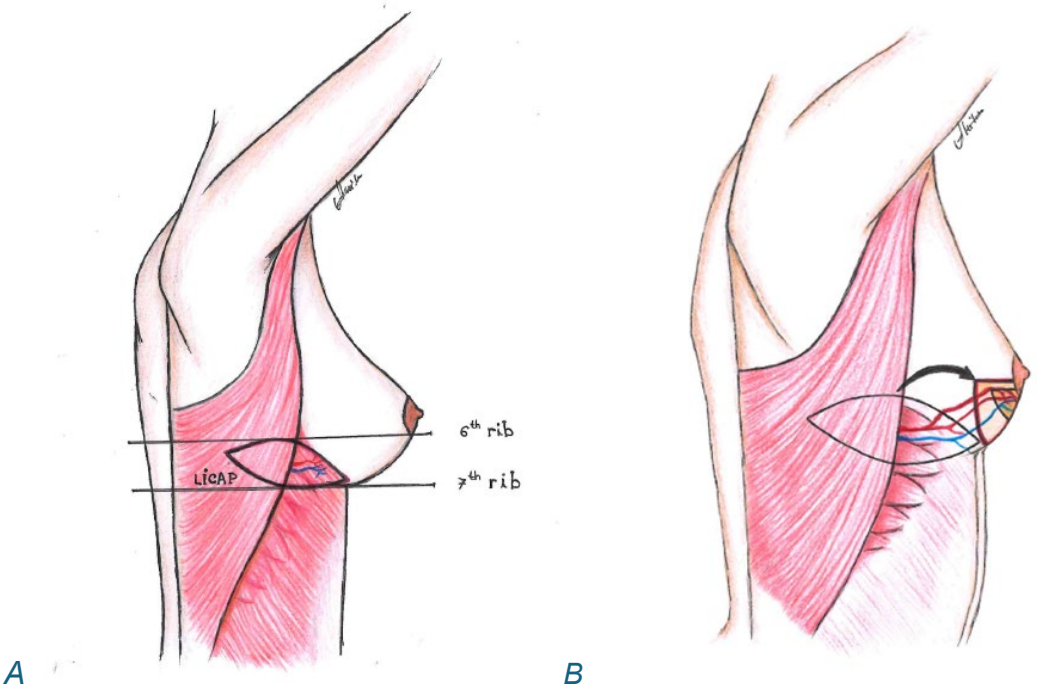

Figure 2: LICAP (A) Path of the thoracodorsal artery and TDAP flap design; (B) Flap insetted to breast defect.

Table 19: OPCS-4 code for lateral intercostal artery perforator flap (LICAP)

Code	Code description
B44.1	Reconstruction of breast using pedicled intercostal artery perforator flap *Includes: Reconstruction of breast using pedicled lateral intercostal artery perforator flap* *Includes: Reconstruction of breast using pedicled anterior intercostal artery perforator flap* *Includes: Reconstruction of breast using pedicled medial intercostal artery perforator flap*

Medial intercostal artery perforator (MICAP) flap

Used for lower inner breast quadrant defects.

Table 20: OPCS-4 code for medial intercostal artery perforator flap (MICAP)

Code	Code description
B44.1	Reconstruction of breast using pedicled intercostal artery perforator flap *Includes: Reconstruction of breast using pedicled lateral intercostal artery perforator flap* *Includes: Reconstruction of breast using pedicled anterior intercostal artery perforator flap* *Includes: Reconstruction of breast using pedicled medial intercostal artery perforator flap*

Anterior intercostal artery perforator (AICAP) flap

Used for lower inner breast quadrant defects.

Table 21: OPCS-4 code for anterior intercostal artery perforator flap (AICAP)

Code	Code description
B44.1	Reconstruction of breast using pedicled intercostal artery perforator flap *Includes: Reconstruction of breast using pedicled lateral intercostal artery perforator flap* *Includes: Reconstruction of breast using pedicled anterior intercostal artery perforator flap* *Includes: Reconstruction of breast using pedicled medial intercostal artery perforator flap*

Lateral thoracic artery perforator (LTAP) flap

Used as an option for partial breast reconstruction. LTAP can be raised on its own pedicle or incorporated into the more commonly used LICAP flap (see *Lateral intercostal artery perforator flap (LICAP) flap* section above).

Table 22: OPCS-4 code for lateral thoracic artery perforator flap (LTAP)

Code	Code description
B44.3	Reconstruction of breast using pedicled thoracic artery perforator flap *Includes: Reconstruction of breast using pedicled long thoracic artery perforator flap*

Thoracodorsal artery perforator (TDAP) flap

Skin and fat from the side of the chest are transferred to reconstruct breast defects following excision of lesion.

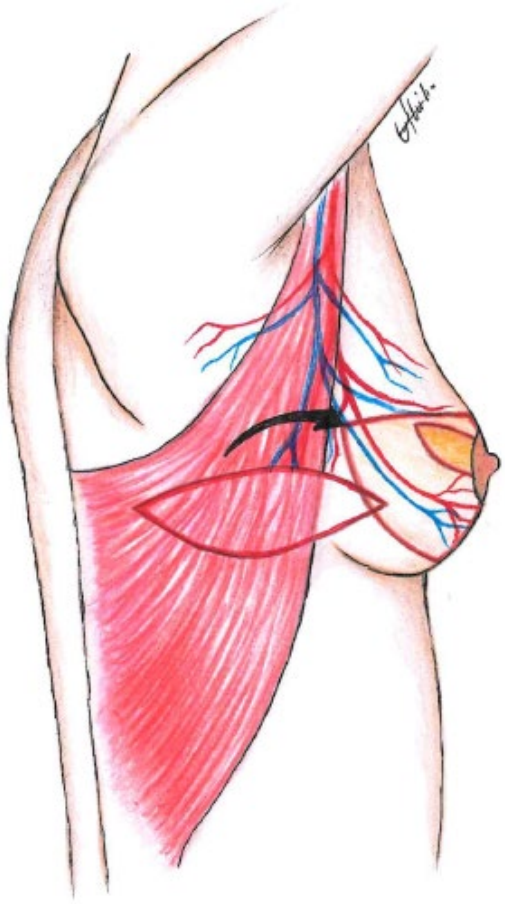

Figure 3: TDAP Flap inserted to breast defect

Table 23: OPCS-4 code for thoracodorsal artery perforator (TDAP) flap

Code	Code description
B44.2	Reconstruction of breast using pedicled thoracodorsal artery perforator flap

Multiple flaps

It is possible for surgeons to use more than one flap to replace breast volume. Clinical coders should assign codes for each of the flaps described in the operation title and operation note.

For example, the lateral thoracic artery perforator (LTAP) flap can be used as part of a lateral intercostal artery perforator flap (LICAP) flap. If both of these flaps are used they should both be coded, even if they share the same pedicle.

Partial reconstruction using latissimus dorsi (LD) flap

Harvested as a skin and muscle flap. This flap can be used for both partial breast reconstruction (as volume replacement) or for full breast reconstruction after mastectomy (with or without breast implant).

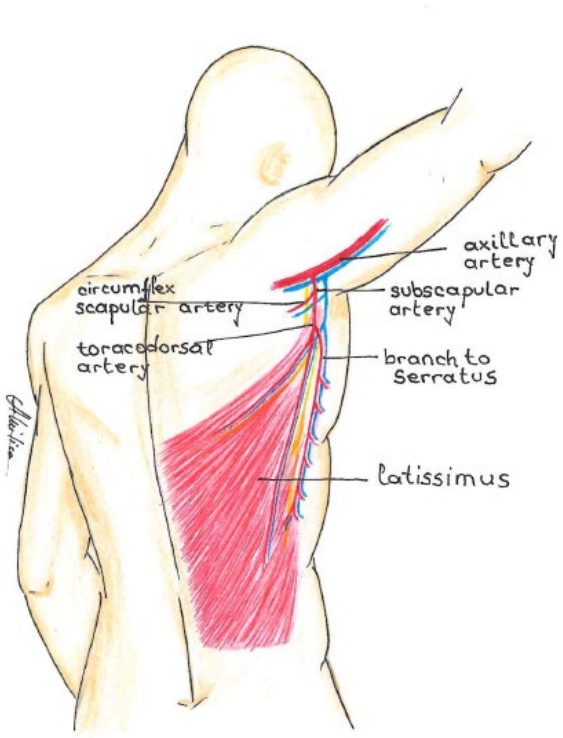

Figure 3: Latissimus dorsi muscle flap

Table 24: OPCS-4 code for partial reconstruction using latissimus dorsi flap

Code	Code description
B29.1	Reconstruction of breast using myocutaneous flap of latissimus dorsi muscle

Abdominal advancement flap (AAF) – partial reconstruction

An abdominal advancement flap (AAF) is pulled up using the skin and subcutaneous tissue of the upper abdomen that sits below the original breast. It can be used to create the shape of the underside of the breast and may be used alone in the reconstruction of smaller breasts or wide local excision defects. It may also be used alongside a prosthesis or another flap following mastectomy.

Table 25: OPCS-4 code for partial reconstruction using abdominal advancement flap

Code	Code description
B29.3	Reconstruction of breast using flap of skin of abdomen NEC

Margins

While the aim of all primary cancer excision is to remove the cancer with a margin of normal tissue, it may be that after histological analysis the margin is not adequate and further surgery is required.

In the initial breast conservation operation surgeons may take margins or margin shaves during the procedure, often after an intraoperative X-ray of the specimen. This use of margin testing/shaving is considered part of the index procedure and not re-excision. Re-excision is different and would occur at a later date, after the histopathology report becomes available.

In margin shaving (also known as “cavity shaves”) part of the process is the removal of more tissue in order to complete the wide local excision (e.g. based on the findings of an intra-operative X-ray of the main specimen taken). The decision to perform further excisions/shaves to complete the planned wide local excision is not based on pathological analysis. The OPCS-4 codes for wide local excision of breast are the same whether or not cavity shaves are included in the procedure.

Subsequent operations for involved margins

Sometimes a therapeutic excision of cancer is found to have involved margins on histological analysis. This will lead to further treatment with the aim of achieving a clear margin from the disease.

Depending on the residual breast volume, the operations that can be used for re-excision are:

- Re-excision of margins
- Wide local excision
- Mastectomy +/- reconstruction

Re-excision of margins

This is taking extra tissue in one or more areas around the initial cavity (the original operation site).

B28.4 is a dedicated OPCS-4 code for this procedure and is intended to be used for subsequent operations (meaning a separate theatre visit and/or admission following the initial excision). It should not be assigned as an additional code to represent any aspect of the primary excision/WLE procedure.

Table 26: OPCS-4 code for re-excision of margins

Code	Code description
B28.4	Re-excision of breast margins

Wide local excision (WLE) of breast tissue for involved margins

If all the margins are involved, then the whole cavity may be taken out with a rim of normal tissue. This may be described as a wide local excision (WLE). Level 1 or level 2 oncoplastic procedures (e.g. glandular remodelling) may also be performed. Any additional oncoplastic reshaping will need to be coded in addition to the re-excision of margins code.

Table 27: OPCS-4 codes for wide local excision for involved margins

Code	Code description
B28.4	Re-excision of breast margins

Any oncoplastic reshaping of the breast that occurs at the same time as re-excision of margins should also be coded – refer to the relevant sections in this guide.

Table 28: OPCS-4 codes for WLE for margins and lateral intercostal artery perforator flap (LICAP)

Code	Code description
B28.4	Re-excision of breast margins
B44.1	Reconstruction of breast using pedicled intercostal artery perforator flap

Completion (subsequent) mastectomy

Depending on the volume of breast remaining after the first breast conserving surgery and the extent of disease the patient may go on to have a mastectomy (with or without reconstruction).

For further information, see the separate *GIRFT clinical coding mastectomy and reconstruction* guide.

Table 29: OPCS-4 codes for completion mastectomy for involved margins following previous wide local excision

Code	Code description
B27.-	Total excision of breast
Y71.2	Secondary operations NOC

The OPCS-4 code used for completion mastectomy should reflect the type of mastectomy (*B27.1* to *B27.6*). A completion mastectomy without further information/of unspecified type should be coded to *B27.4 Total mastectomy NEC*.

Glossary

AAF	Abdominal advancement flap
ABS	Association of Breast Surgery
AICAP	Anterior intercostal artery perforator flap
BAPRAS	British Association of Plastic, Reconstructive and Aesthetic Surgeons
GIRFT	Getting It Right First Time
ICD-10	International Classification of Diseases, 10th revision
IMF	Inframammary fold
IR	Infrared light
JPRAS	Journal of Plastic, Reconstructive and Aesthetic Surgery
LD	Latissimus dorsi
LICAP	Lateral intercostal artery flap
LTAP	Lateral thoracic artery perforator flap
MICAP	Medial intercostal artery perforator flap
NEC	Not Elsewhere Classified
NOC	Not Otherwise Classified
OPCS-4	Office of Population Censuses and Surveys Classification of Interventions and Procedures version 4
RFID	Radiofrequency identification tag/seed
RSL	Radioactive/radionuclide seed localisation
SAS	Specialty, Associate Specialist, and Specialist doctors
TDAP	Thoracodorsal artery perforator flap
UKNFR	United Kingdom National Flap Registry
WHO	World Health Organization
WLE	Wide local excision

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The Association of Breast Surgery (ABS)

The Association of Breast Surgery was formed in 2010 and is the voice of breast surgery in the UK. It has over 950 members, who are consultant surgeons, SAS grades and senior breast trainees, as well as over 1,000 nurse members. The ABS sets standards for breast surgery through the development of guidance and delivers education and training opportunities through its courses and events. It awards a number of research grants annually to promote breast cancer trials and research and is active in UK breast surgery audits.

The ABS supports collection of robust clinical data and welcomes this coding guidance to enable surgeons and coding teams to improve data capture in breast surgery.

British Association of Plastic, Reconstructive and Aesthetic Surgeons (BAPRAS)

BAPRAS - the British Association of Plastic, Reconstructive and Aesthetic Surgeons, is a membership-based organisation representing the majority of plastic surgeons providing services to patients in the UK.

BAPRAS serves as "the voice of plastic surgery" in the UK, working to raise awareness of the breadth of plastic surgery and promote innovation in teaching, learning, and research.

The Association publishes the Journal of Plastic, Reconstructive and Aesthetic Surgery (JPRAS), one of the leading international journals in the specialty, and awards grants and prizes to support research, education, and professional development. BAPRAS also provides patient information guides and clinical guidance documents for surgeons, while maintaining a comprehensive archive of plastic surgery information.

BAPRAS supports accurate data and coding as evidenced by its ongoing support of the UKNFR and welcomes this coding guidance.

Appendix

GIRFT and a greener NHS

Climate change is one of the greatest health threats and opportunities of the 21st century. The NHS is acting now to mitigate and adapt to this threat in order to protect the health of current and future generations. Doing so will not only protect the environment but will also bring many health, social and financial benefits. As the largest employer in the UK, contributing 4.6% of national emissions, the NHS is both part of the challenge and the solution.

Through its endeavour to improve the quality of care within the NHS by reducing unwarranted variation, GIRFT can play an important role in reducing the carbon emissions associated with care delivery. Through the GIRFT model, there is the opportunity to identify changes that will help reduce the NHS carbon footprint and therefore improve patient care now and in the future.

The NHS Digital Terminology and Classifications Delivery Service produce and publish the National Clinical Coding Standards in England for the WHO International Statistical Classification of Diseases (ICD-10) and UK OPCS-4 Classification of Interventions and Procedures (OPCS-4) to ensure compliance with these information standards. All Admitted Patient Care episodes, using the information in the patient's clinical record, are coded using the current releases of the ICD-10 and OPCS-4 classifications and the National Clinical Coding Standards.

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Procedure coding guidance for surgeons and clinical coders