

Breast Reconstruction Surgery

Department of Health Standard

QH-IMP-463

1. Statement

Breast reconstruction surgery following mastectomy for breast cancer is evidenced to improve psychological well-being¹, body image, self-esteem and enhance quality of life², whilst also being clinically indicated for other medical conditions, including congenital abnormalities.

Evidence shows that the percentage of women in Queensland choosing to have breast reconstruction surgery following mastectomy (18.3%³) is lower than expected (around 50%⁴). Some women will choose to remain 'flat' and not undergo a breast reconstruction and this choice must be respected. However, evidence shows that women are less likely to choose to have breast reconstruction surgery if they do not have access to adequate information about their options⁵. Some women are less likely to choose to have a mastectomy as part of their cancer treatment if they have not discussed breast reconstruction surgery with their treating clinician⁶.

Queensland Health is committed to providing timely, equitable and quality care for patients within a fiscally responsible environment. This standard clearly defines patient suitability guidelines and access criteria to enable consistency in care and equitable access to publicly funded services for breast reconstruction surgery across Queensland. This standard was developed to assist - not replace - clinical judgement and decision-making.

2. Scope

This standard applies to all employees, contractors and consultants within the Department of Health divisions, Hospital and Health Services and commercialised business units involved directly or indirectly in the provision of care.

3. Requirements

3.1. Patient eligibility criteria

3.1.1. Breast reconstruction surgery may be performed on patients who have:

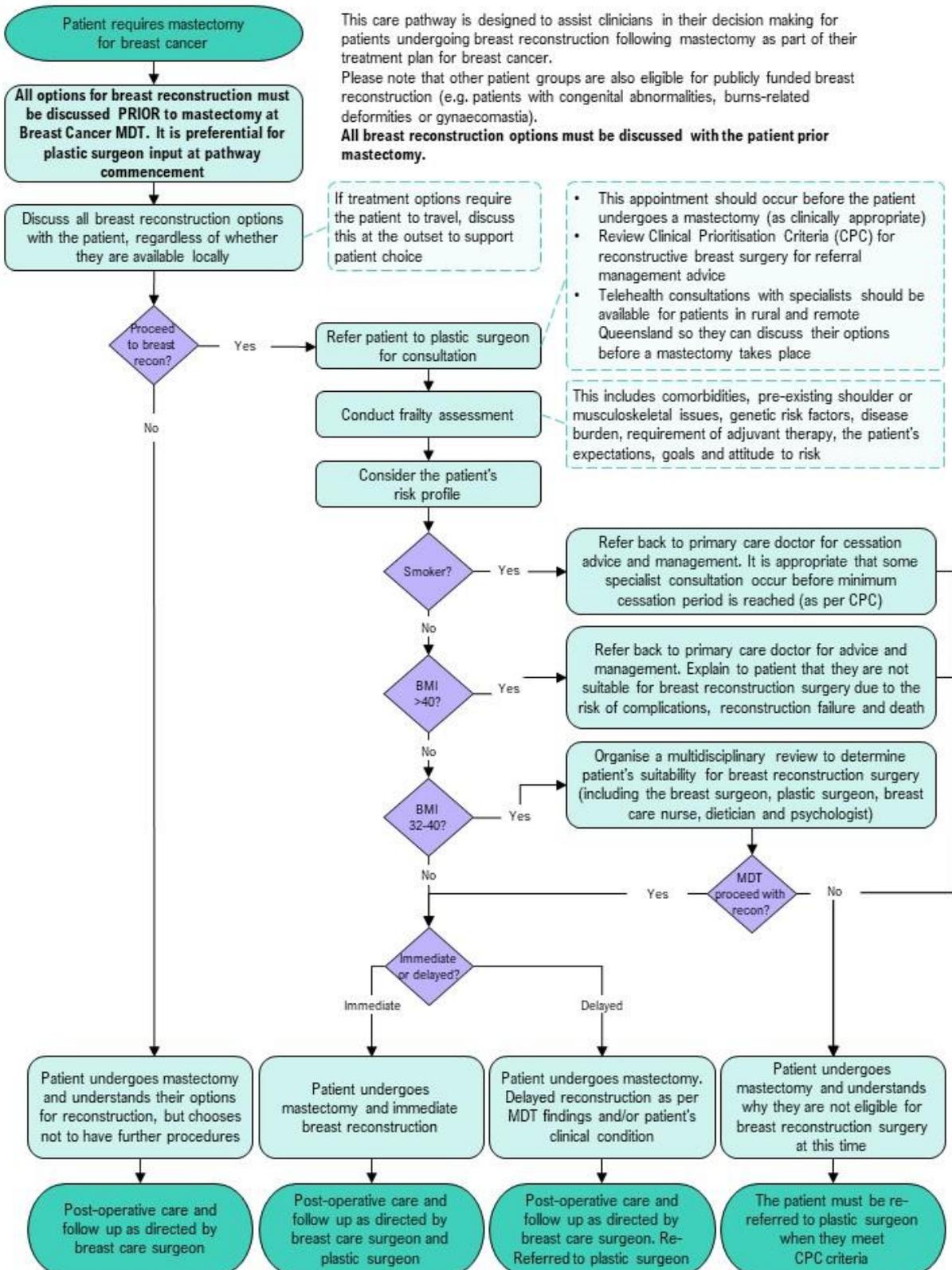
- undergone mastectomy for the treatment of breast cancer
- undergone prophylactic mastectomy (in accordance with section 3.11)
- congenital abnormalities – e.g. Poland syndrome, tuberous breast deformity and gross asymmetry
- gynaecomastia

- burn-related abnormalities or deformities.
- 3.1.2. The Clinical Prioritisation Criteria (CPC) for reconstructive breast surgery are to be applied in the management of referrals for breast reconstruction surgery.
- 3.1.3. There are many factors that affect a patient's risk profile. It is important that each patient's suitability be considered individually and their specific circumstances are discussed with their treating clinician. Some of these risk factors include:
- Comorbidities
 - Pre-existing shoulder or musculoskeletal issues
 - Genetic risk factors
 - Disease burden
 - The requirement of adjuvant therapy
 - Body mass index (BMI)
 - Smoking status
 - The patient's expectations, goals and attitude to risk.
- 3.1.4. Obesity is a significant risk factor that increases the likelihood of complications and reconstruction failure. The following should guide decision-making:
- BMI >40: These patients are not suitable for surgery due to the associated risk of complications, reconstruction failure and death.
 - BMI 32-40: These patients should be reviewed by a multidisciplinary team (MDT) with suitability for reconstruction determined on a case-by-case basis. It is recommended that the MDT consists of the patient's breast surgeon, plastic and reconstructive surgeon, breast care nurse, dietitian and psychologist.
 - Where patients are not suitable due to a high BMI, they are to be referred to an appropriate primary care weight loss management program. In the meantime, it is appropriate that some consultation occurs to prepare the patient for surgery should the target weight range be achieved.
- 3.1.5. Smoking is a significant risk factor which increases the likelihood of complications and reconstruction failure. The following should guide decision-making:
- smoking should not automatically preclude a patient from breast reconstruction surgery, however, smokers are not suitable for immediate breast reconstruction, as a period of smoking cessation is required (as outlined in CPC)
 - patients not suitable for surgery due to their smoking status are to be referred back to their primary care doctor for advice and management. In the meantime, it is appropriate that some consultation occurs to prepare the patient for surgery should cessation take place.

- 3.1.6. A frailty assessment should be undertaken, where relevant, to ensure appropriate surgical management.
- 3.1.7. Where a patient is deemed to be not suitable or eligible for surgery, a reason must be provided to the patient along with appropriate information about their options.
- 3.1.8. The care pathway for breast reconstruction surgery following mastectomy has been summarised in Figure 1 below.

Figure 1. Care pathway for breast reconstruction surgery following mastectomy.

Breast reconstruction surgery pathway



Healthcare Improvement Unit, Clinical Excellence Queensland. 2024.

3.2. Supporting patient decision-making

- 3.2.1. All breast reconstruction options should be discussed with patients before they undergo a mastectomy, even if some of these options are not available locally.
- 3.2.2. If some breast reconstruction options require the patient to travel, the patient should be made aware of this requirement at the outset.
- 3.2.3. Patients should be offered a referral to a plastic surgeon prior to having a mastectomy.
- 3.2.4. When clinically appropriate, surgical techniques (lumpectomy, partial mastectomy and oncoplastic surgery) which avoid a full mastectomy should be discussed with the patient.
- 3.2.5. The range of external prosthesis options available should be discussed as an alternate to breast reconstruction surgery.
- 3.2.6. Patients should receive information about their options, recovery and hospital stay in a modality (written information, photos, videos, visual diagrams) that suits their needs. There are resources listed at the end of this document that may be helpful.

3.3. Improving access

- 3.3.1. Telehealth consultations with specialists should be available for patients in rural and remote Queensland so that they may discuss their options before making a decision (ideally before a mastectomy takes place).
- 3.3.2. Where possible, the total number of surgeries required should be minimised to reduce the disruption to the patient's life (e.g. travelling to receive care, recovery time, making alternative care arrangements for dependents and missing work).

3.4. Radiotherapy

- 3.4.1. For patients requesting a reconstruction where radiotherapy is required post-mastectomy, a discussion should take place with the patient regarding the benefits and risks of different reconstruction options.
- 3.4.2. Immediate reconstruction in the setting of radiation has a very high complication and dissatisfaction rate. Further to this, a complication post-surgery can delay cancer treatment. Patients seeking immediate reconstruction should be reviewed prior to surgery by MDT including the Plastic and Reconstructive Surgery team.

3.5. Clinical urgency categorisation

- 3.5.1. Delayed breast reconstruction surgery is to be assigned clinical urgency category 3 (clinically indicated within 365 days) as per the National Elective Surgery Urgency Categorisation Guideline.
- 3.5.2. For staged breast reconstructions (i.e. those requiring completion over multiple surgeries), all procedures should be performed in the shortest possible timeframe and without undue delay.
- 3.5.3. Since immediate breast reconstruction surgery is performed at the same time as mastectomy, the clinical urgency category will be that assigned to the mastectomy procedure.

3.6. Other best practice considerations

- 3.6.1. Medical photography should form part of the clinical record (before and after each surgery). All images should be stored on a secure server with limited access and are not to be used for training or publishing purposes without the patient's express consent.
- 3.6.2. Patients should be collocated with the same gender in the post-operative ward environment where possible.

3.7. Contralateral symmetrising breast reconstruction / augmentation

- 3.7.1. Medicare guidelines regarding contralateral breast reconstruction and augmentation surgery are to be applied. Symmetrising procedures on the contralateral breast may be performed to match the reconstructed breast.

3.8. Revision breast reconstruction surgery

- 3.8.1. Patients are not to proceed to further revision procedures after three (3) operations without undergoing a documented multidisciplinary team (MDT) review or a second opinion from another consultant surgeon.

(Note: A revision procedure is distinct from the planned stages of a breast reconstruction. These stages are documented at the outset as part of the initial treatment plan and may often exceed five [5] separate procedures.)

3.9. Replacement of breast implants

- 3.9.1. Breast implants inserted either post-mastectomy or for other medically indicated conditions, as outlined in section 3.1.1, may be removed in the event of complications and replaced to the same or lesser size.
- 3.9.2. Breast implants inserted for cosmetic reasons (i.e. reasons other than those outlined in section 3.1.1) may be removed in the event of complications but are not to be replaced. In this event, no other surgery (e.g. augmentation or mastopexy) is to be performed.
- 3.9.3. Patients undergoing removal of breast implants should be appropriately counselled on the expected outcomes.
- 3.9.4. All implants, tissue expanders or dermal matrices inserted into patients must be registered on the Australian Breast Device Registry.

3.10. Nipple and areola reconstruction

- 3.10.1. Nipple and areola reconstruction may be offered to patients who have undergone breast reconstruction surgery.

3.11. Prophylactic mastectomy

- 3.11.1. The Cancer Institute NSW's eviQ risk management guidelines are to be applied in the management of female BRCA1 and BRCA2 mutation carriers and high breast cancer risk patients.
- 3.11.2. Patients should only be offered prophylactic mastectomy where it is clinically indicated. This may include patients at high risk due to:
 - BRCA or other genetic susceptibility gene mutations
 - Strong family history with no identifiable mutations
 - Proven high risk breast pathology.

- 3.11.3. Bilateral prophylactic mastectomy should only be a routine option where it is clinically indicated. Contralateral prophylactic mastectomy should only be a routine option for patients if they are identified as high risk for developing contralateral breast cancer.
- 3.11.4. For women where breast conserving surgery is suitable for the treatment of unilateral breast cancer, but a patient chooses bilateral mastectomy, access to reconstruction is not to be routinely available without a multidisciplinary team review and approval, as this would not normally be considered as fiscally responsible care.
- 3.11.5. Prophylactic (contralateral) mastectomy should not be a routine option for patients undergoing unilateral mastectomy for the affected breast if they do not fall into a 'high risk' category. In particular, bilateral mastectomy with reconstruction would in most cases be considered inappropriate for a unilateral conservable breast cancer in a non-high-risk patient.
- 3.11.6. Patients seeking to undergo prophylactic mastectomy are to be categorised as a category 3 for both outpatients and elective surgery and placed on a high-risk surveillance program. Patients must not be waitlisted for surgery until a decision for surgery has been made.

3.12. Outcomes

- 3.12.1. The rate of implant loss, unplanned return to theatre and unplanned readmission should be assessed and audited.
- 3.12.2. Patient satisfaction should be recorded at 6 months and 2 years during post operative review appointments.

4. Aboriginal and Torres Strait Islander considerations

4.1. Queensland Health obligations

- 4.1.1. Queensland Health's public hospital staff recognise and respect the cultural values, principles, differences and needs when caring for Aboriginal or Torres Strait Islander patients.
- 4.1.2. Each individual HHS is responsible for providing culturally appropriate services to Aboriginal and Torres Strait Islander individuals and their communities within the respective HHS catchments.
- 4.1.3. Prior to discussing a diagnosis and surgery plan with the patient, ask if they would like their support person to be present. When explaining their surgery options use jargon-free language. Visual aids such as diagrams, models or drawings may be useful. Seek assistance from the Indigenous Hospital Liaison Officer (IHLO) or health worker if required.
- 4.1.4. Many Aboriginal and Torres Strait Islander patients accessing or admitted to urban and metropolitan hospitals come from remote communities. Full episodes of care (including initial consultation, relevant preadmission appointments/investigations and surgery) should be considered and offered to all Aboriginal and Torres Strait Islander patients travelling from the following remote communities:

Aurukun	Lockhart River
Badu Island (Mulgrave Island)	Mapoon
Bamaga	Mer (Murray Island)
Cherbourg	Napranum
Coen	Palm Island (Bwgcolman)
Doomadgee	Pormpuraaw
Erub (Darnley) Island	New Mapoon
Goondiwindi	Saibai Island
Gununa	Seisia (formerly known as Red Island Point)
Horn Island (Ngurupai)	Thursday Island (Waiben)
Iama (Yam) Island	Weipa
Injinoo	Woorabinda
Kowanyama	Yarrabah
Kubin	

- 4.1.5. It is important to discuss cultural preferences with the patient and explain what will happen with any removed tissues following surgery.

4.2. The Aboriginal and Torres Strait Islander Patient Care Guideline

4.2.1. Refer to the Aboriginal and Torres Strait Islander Patient Care Guideline for advice on providing culturally capable patient care and culturally safe environments. Some key points to consider:

- Female patients may feel uncomfortable speaking to male clinicians about breast reconstruction surgery (and vice versa with male patients and female clinicians). If there isn't a clinician available of the same gender as the patient, the appropriate course of action is to explain this to the patient and ask if they would like a support person participating in consultations.
- IHLOs can help patients navigate their healthcare journey and understand their options by translating medical terms. Ask the patient if they would like to be connected with the IHLO service.

5. Human rights

Human rights are not engaged by this standard.

6. Legislation

- Hospital and Health Boards Act 2011
- Public Sector Act 2022
- Public Records Act 2002
- Right to Information Act 2009
- Human Rights Act 2019.

7. Supporting documents

7.1. Authorising policy

- Breast Reconstruction Surgery Policy (QH-POL-463).

7.2. Procedures, guidelines, and protocols

- Aboriginal and Torres Strait Islander Patient Care Guideline – https://www.health.qld.gov.au/_data/assets/pdf_file/0022/157333/patient_care_guidelines.pdf
- Clinical Prioritisation Criteria (CPC) for reconstructive breast surgery – <https://www.health.qld.gov.au/cpc/draft-plastic-reconstructive-surgery/reconstructive-breast-surgery>
- EviQ risk management guidelines – <https://www.eviq.org.au/cancer-genetics/adult/risk-management/3814-brca1-or-brca2-risk-management-female>
- National Elective Surgery Urgency Categorisation Guideline – <https://ranzocg.edu.au/wp-content/uploads/2022/05/National-Elective-Surgery-Categorisation.pdf>
- Health, safety and wellbeing risk management guideline – https://www.health.qld.gov.au/_data/assets/pdf_file/0034/1099735/gh-gdl-401-3-1.pdf

7.3. Consumer resources

- Informative videos on breast reconstruction surgery, Clinical Excellence Queensland – www.clinicalexcellence.qld.gov.au/resources/breast-reconstruction/breast-reconstruction
- Breast Reconstruction, Cancer Council – www.cancer.org.au/assets/pdf/breast-prostheses-and-reconstruction
- BRECONDA decision aid, Breast Cancer Network Australia – www.bcna.org.au/tools-breconda
- Reclaim your curves – www.reclaimyourcurves.org.au

8. Definitions

Term	Definition
Autologous fat grafting	Breast reconstruction technique involving the transfer of fatty tissue from other parts of the patient's body (i.e. abdomen, buttocks or thighs)
Breast reconstruction	A procedure to restore the shape and appearance of the breast following mastectomy or as a result of congenital abnormalities, gynaecomastia or burns
Breast augmentation	A procedure used to increase the breast size
Contralateral breast	The opposite breast to that reconstructed
Cosmetic	Relating to treatment intended to improve appearance rather than for medically indicated reasons
Delayed breast reconstruction	Breast reconstruction procedure occurs as a separate procedure following mastectomy
Gynaecomastia	An excessive enlargement of the male breast, which may be present in one breast (unilaterally) or in both breasts (bilaterally)
Immediate breast reconstruction	Breast reconstruction procedure occurs on the same day as mastectomy procedure
Mastectomy	A surgical procedure involving the removal of all or part of the breast. Mastectomy classifies into partial, simple, modified-radical and radical.
Mastopexy	A procedure for raising sagging breasts by changing and modifying the shape of the breast, as well as the position of the nipples
Oncoplastic surgery	Plastic surgery methods used during the cancer-removing surgery (lumpectomy or partial mastectomy) to help reshape the breast
Prophylactic mastectomy	Surgery to remove one or both breasts to reduce the risk of developing breast cancer. This is also known as risk-reducing mastectomy.

9. References

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2. Cancer Australia. 2020. Making decisions about breast reconstruction. Retrieved from <https://www.canceraustralia.gov.au/cancer-types/breast-cancer/treatment/surgery/breast-reconstruction/deciding-about-breast-reconstruction>
3. Flitcroft K, Brennan M, Costa D, Spillane A. Documenting patterns of breast reconstruction in Australia: The national picture. *The Breast*. 2016 Dec; 30: 47-53. doi: 10.1016/j.breast.2016.08.013
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5. Alderman AK, Hawley ST, Janz NK, Mujahid MS, Morrow M, Hamilton AS, Graff JJ, Katz SJ. Racial and ethnic disparities in the use of postmastectomy breast reconstruction: results from a population- based study. *J Clin Oncol*. 2009 Nov 10;27(32):5325-30. doi: 10.1200/JCO.2009.22.2455.
6. Alderman AK, Hawley ST, Waljee J, Mujahid M, Morrow M, Katz SJ. Understanding the impact of breast reconstruction on the surgical decision-making process for breast cancer. *Cancer*. 2008 Feb 1;112(3):489-94. doi: 10.1002/cncr.23214.

10. Approval and implementation

Policy Custodian	Policy Contact Details	Approval Date	Approver
<i>Executive Director Healthcare Improvement Unit</i>	<i>HIU@heath.qld.gov.au</i>	<i>14/06/2024</i>	<i>Acting Deputy Director-General Clinical Excellence Queensland</i>

11. Version control

Version	Date	Comments
1.0	10 December 2018	New Standard endorsed by the breast reconstruction surgery clinical and operational reference group
2.0	7 June 2024	Transferred into new template and updated 1, 3, 4, 7 and 8