

National Mastectomy and Breast Reconstruction Audit

Prospective Audit Dataset

Final Version



Purpose

This document contains the technical specification of the proposed dataset for the prospective audit phase of the Mastectomy and Breast Reconstruction Audit.

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MBR Audit Dataset – Tabular Reference Version (Final)

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Section 1 – Patient registration data

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	Unique Ref
1.1	NHS NUMBER	Unique 10 digit new format NHS number	Patient Identification and Tracing	10 digit numeric NHS standard	Mandatory unless 1.2 completed	NHS Data Dictionary	NCDS1.1
1.2	PRIVATE HOSPITAL PATIENT IDENTIFIER	Unit-specific local patient identifier	Patient Identification and Tracing	Free alphanumeric text	Mandatory if 1.1 not completed	Undefined	MBR1.2
1.3	PATIENT FAMILY OR SURNAME	Surname at time of presentation	Patient Identification and Tracing	Free text (alphabetical)	Mandatory	NHS Data Dictionary	NCDS1.5
1.4	PATIENT FORENAME OR GIVEN NAME	Forename of the patient	Patient Identification and Tracing	Free text (alphabetical)	Mandatory	NHS Data Dictionary	NCDS 1.6
1.5	POSTCODE OF PATIENT ADDRESS	Patient postcode at time of admission	Casemix description and risk adjustment	Standard postcode format	Mandatory	NHS Data Dictionary	NCDS 1.8

1.6	DATE OF BIRTH	Patient's date of birth	Patient Identification and Tracing / Casemix description and risk adjustment	Dd/mm/yyyy	Mandatory	NHS Data Dictionary	NCDS 1.10
1.7	ETHNIC CATEGORY CODE	Patient's self-defined ethnic origin	Casemix description and risk adjustment	White A - British B - Irish C - Any other white background Mixed D - White and Black Caribbean E - White and Black African F - White and Asian G - Any other mixed background Asian or Asian British H - Indian J - Pakistani K - Bangladeshi L - Any other Asian background Black or Black British M - Caribbean N - African P - Any other black background Other Ethnic Groups R - Chinese S - Any other ethnic group	Mandatory	NHS Data Dictionary	NCDS 1.15
				Z – Not stated			

Section 2 – Previous treatment data

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	NCDS / OPCS
2.1	DIAGNOSIS DATE (CANCER)	Date of diagnosis of the tumour (see priority order of dates)	To calculate time between diagnosis and decision to treat	Date format (dd/mm/yyyy)	Mandatory	NCDS	NCDS 4.1
2.2	DATE OF DECISION TO TREAT (SURGERY)	Date on which the decision to operate was taken	Calculate time between decision to treat and surgery	Date format (dd/mm/yyyy)	Mandatory for M and IR patients only	NCDS	NCDS 7.5
2.3	TREATMENT MODALITIES USED TO TREAT IPSILATERAL BREAST CANCER BEFORE CURRENT SURGERY	All treatments undergone prior to current mastectomy and/or reconstruction surgery	Casemix description and risk adjustment	00 - None 01 - Breast-conserving surgery 02 - Axillary surgery (including SNB) 03 - Radiotherapy 04 - Chemotherapy 05 - Hormone therapy Select all that apply	Mandatory	New definition	MBR2.
2.4	DATE OF ORIGINAL MASTECTOMY	Date of previous mastectomy for those patients admitted for delayed reconstruction	Calculate time between mastectom y and delayed reconstruction	Date format (dd/mm/yyyy) Dd optional, mm/yy mandatory	Mandatory for DR patients only	New definition	MBR2. 4

Section 3 – Co-morbidity data

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	NCDS / OPCS
3.1	SMOKING STATUS	Patient's smoking status	Casemix description and risk adjustment	1 – current smoker 2 – ex-smoker 4 – never smoked	Mandatory	NHS DD / 3 removed (NS,history unknown)	MBR3.
3.2	BODY MASS INDEX	Patient's body mass index (weight in kg / (height in m) ²)	Casemix description and risk adjustment	Free text numeric	Mandatory	NHS DD /NCDS	MBR3. 2
3.3	DIABETES TYPE	Known diabetes mellitus (any type)	Casemix description and risk adjustment	00 – not diabetic 01 – type I diabetes 02 – type II diabetes	Mandatory	NHS DD / 00 added	MBR3. 3
3.4	AMERICAN SOCIETY OF ANAESTHESIOLOGI STS (ASA) GRADING	Pre-operative assessment of fitness for anaesthesia and surgery	Casemix description and risk adjustment - access	I – Normal healthy individual II – Mild systemic disease that does not limit activity III – Severe systemic disease that limits activity but is not incapacitating IV – Incapacitating systemic disease which is constantly life-threatening	Mandatory	ASA	MBR3.
3.5	PERFORMANCE STATUS (ADULT) RATED BEFORE SURGERY	Pre-operative assessment of any functional limitation	Casemix description and risk adjustment - outcomes	0 - Able to carry out all normal activity without restriction 1 - Restricted in physically strenuous activity but able to walk and do light work 2 - Able to walk and capable of all self care but unable to carry out any work. Up and about more than 50% of waking hours 3 - Capable of only limited self care, confined to bed or chair more than 50% of waking hours 4 - Completely disabled. Cannot carry on any self care. Totally confined to bed or chair		NCDS/ WHO handbook	NCDS 5.10

Section 4 – Patient-reported outcomes consent data

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	NCDS / OPCS
4.1	PATIENT REPORTED OUTCOMES CONSENT STATUS	Has patient consented to being sent outcome questionnaires?	To document inclusion into PRO study	01 – Patient has consented to receive questionnaires 02 – Patient does not wish to receive questionnaires 03 – Patient was judged incapable of completing a written questionnaire in English 04 – Patient was capable but not asked whether they were happy to receive questionnaires	Mandatory	New definition	MBR4.
4.2	REASON PATIENT WAS JUDGED INCAPABLE OF COMPLETING THE QUESTIONNAIRES	If not, for what reason?	To explain why patient has not consented	01 – Poor eyesight 02 – Literacy or language comprehension problems 03 – Cognitive impairment	Mandatory If 4.1=03	New definition	MBR4. 2

Section 5 – Operative and planned treatment data

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	NCDS / OPCS Ref.
5.1	ADMISSION DATE (SURGERY EPISODE)	Date of admission	Calculate length of stay	Date format (dd/mm/yyyy)	Mandatory	NCDS	NCDS 7.8
5.2	PROCEDÚRE DATE	Date of mastectomy and/or reconstruction surgery	Calculate questionnaire timing	Date format (dd/mm/yyyy)	Mandatory	NCDS / None	NCDS 7.9 / MBR5.2
5.3	DETAILS OF MASTECTO MY SURGERY PERFORME D FOR CANCER	Technique of therapeutic mastectomy surgery (not to include prophylactic surgery performed)	To allow casemix description and risk adjustment	01 - Simple mastectomy 02 - Subcutaneous or skin sparing mastectomy via circumareolar approach (nipple excised) 03 - Subcutaneous or envelope mastectomy via lateral or submammary approach (nipple spared) 04 - Total mastectomy with excision of any part of pectoralis muscle 05 - Total mastectomy with excision of both pectoral muscles + part of chest wall	Mandatory	New definition and OPCS	MBR5.3
5.4	DETAILS OF AXILLARY SURGERY PERFORME D	Technique of axillary lymph node surgery used	To allow casemix description and risk adjustment	00 – None 01 - Sentinel node biopsy 02 - Axillary sampling 03 - Level 1 axillary clearance (Level 1 = Lymph nodes lying lateral to the lateral border of the pectoralis muscle. Level 1 represents the tissue between the latissimus dorsi muscle and the	Mandatory	New definitions and OPCS	MBR5.4

5.5	PRIMARY RECONSTR UCTIVE SURGERY	Technique used (immediate or delayed) to reconstruct breast mound / nipple-areolar complex	To allow casemix description and risk adjustment	lateral border of the pectoralis minor muscle) 04 - Level 2 axillary clearance (Level 2 = Lymph nodes lying behind pectoralis minor muscle. Level 2 is the axillary tissue between and inferior to the lateral and medial borders of the pectoralis minor muscle) 05 - Level 3 axillary clearance (Level 3 = Lymph nodes located medial to the medial border of the pectoralis muscle. Level 3 is the tissue between the medial border of the pectoralis minor and the apex of the axilla) 00 - None (mastectomy only) 01 - Tissue expander (Insertion of skin expander into subcutaneous tissue of breast) 02 - Fixed volume Implant (Insertion of definitive prosthesis for the breast) 03 - Latissimus Dorsi flap 04 - TRAM pedicle flap 05 - TRAM free flap 06 - DIEP free flap 07 - SIEA free flap 09 - TMG/TUG free flap 10 - SGAP free flap	Mandatory	New definitions and OPCS	MBR5.5
				11 - IGAP free flap 12 - Nipple reconstruction Select all that apply			
5.6	CONTRALAT ERAL SYMMETRIS ATION SURGERY	Technique used on contralateral side at time of mastectomy and/or breast reconstruction to help improve/achieve	To allow casemix description and risk adjustment	00 - None 01 - Tissue expander (Insertion of skin expander into subcutaneous tissue of breast) 02 - Augmentation mammoplasty	Mandatory	New definitions and OPCS	MBR5.6

5.7	PLANNED ADJUVANT TREATMENT S	Those adjuvant oncological treatments planned for this patient follwing their operation	To help to explain clinical decision making	03 – Reduction mammoplasty 04 – Mastopexy (skin reduction only) Select all that apply 00 – None 01 – Radiotherapy 02 – Chemotherapy 03 – Hormone therapy 04 – Specialist palliative care Select all that apply	Mandatory for M and IR patients only	New definitions	MBR5.7
5.8	PLANNED SECONDAR Y RECONSTR UCTIVE PROCEDUR ES	Those secondary reconstructive procedures planned for this patient following the primary reconstruction performed on this admission	To help to explain clinical decision making	00 - None 01 - Tissue expansion of breast mound 02 - Exchange of expander for fixed volume implant 03 - Nipple reconstruction 04 - Areolar tattooing 05 - Symmetrisation procedure (e.g. contralateral reduction or augmentation) 06 - Exchange of implant/expander for autologous flap Select all that apply	Mandatory for IR and DR patients only	New definitions	MBR5.8

Section 6 – Reconstructive decision making data

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	NCDS / OPCS Ref.
6.1	WAS IMMEDIATE RECONSTRUCTION OFFERED TO THIS PATIENT? (M & DR GROUPS)	Offer of IR to patient	To help describe and explain access to immediate reconstruction	01 – Yes 02 – No	Mandatory for M only and DR patients	New definition	MBR6.1
6.2	IF IMMEDIATE RECONSTRUCTION WAS NOT OFFERED, WHY WAS THIS? (M & DR GROUPS)	Reasons for this patient not being offered IR	To help explain clinical decision making in this case	01 – Advanced stage of disease 02 – Concerns about local recurrence 03 – Age of patient 04 – Degree of co-morbidity 05 – Lifestyle factors 06 – Cognitive impairment 07 – Mental health issues 08 – Recent neo-adjuvant chemotherapy 09 – Anticipated adjuvant radiotherapy to chest wall 10 – Delay to anticipated adjuvant therapies 11 – Immediate reconstruction not available locally 12 – Immediate reconstruction would significantly delay mastectomy surgery Select all that apply	Mandatory for M only and DR patients	New definitions	MBR6.2

6.3	HAS DELAYED RECONSTRUCTION BEEN OFFERED TO THIS PATIENT? (M GROUP ONLY)	Offer of DR to patient	To help describe and explain access to delayed reconstruction	01 – Yes (go to 6.4) 02 – No (go to 6.5)	Mandatory for M only patients	New definition	MBR6.3
6.4	IF IT HAS BEEN, HAVE THEY ACCEPTED THE OFFER? (M GROUP ONLY)		To help describe and explain uptake of delayed reconstruction	01 – Yes 02 – No	Mandatory for M only patients for whom 6.3 = 01	New definition	MBR6.4
6.5	IF DELAYED RECONSTRUCTION HAS NOT BEEN OFFERED, WHY IS THIS? (M GROUP ONLY)	Reasons for delayed reconstructio n not being planned	To help explain clinical decision making in this case	01 – Patient choice (offer declined) 02 – Advanced stage of disease 03 – Concerns about local recurrence 04 – Age of patient 05 – Degree of co-morbidity 06 – Lifestyle factors 07 – Cognitive impairment 08 – Mental health issues 10 – DR not available locally	Mandatory for M only patients for whom 6.3 = 02	New definitions	MBR6.5
				Select all that apply			

Section 7 – Morbidity data

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	Unique Ref.
7.1	DISCHARGE DATE (SURGERY EPISODE)	Date of discharge	Calculate length of stay	Date format (dd/mm/yyyy)	Mandatory	NCDS	NCDS 7.12
7.2	DID THE PATIENT RETURN TO THEATRE DURING THE ADMISSION?	Return to theatre during the admission (all reasons)	To describe outcomes after surgery	01 – Yes 02 – No	Mandatory	New definition	MBR7.2
7.3	DID THE PATIENT REQUIRE EMERGENCY TRANSFER TO HDU OR ITU DURING THE ADMISSION?	Emergency transfer to HDU/ITU (all reasons)	To describe outcomes after surgery	01 – Yes 02 – No	Mandatory	New definition	MBR7.3
7.4	DEATH DURING ADMISSION (DISCHARGE METHOD)	To document death of patient during the inpatient episode intra- or post-operatively	To describe outcomes after mastectom y and breast reconstructi on surgery	01 – Yes 02 – No	Mandatory	NHS DD 01 = 4 - Patient died 02 = 1,2,3 - Other methods	MBR7.4

COMPLICATIONS REQUIRING THERAPEUTIC INTERVENTION AT MASTECTOMY OR FLAP DONOR SITE (Please specify site)	Those complications arising at the mastectomy or flap donor site that required the medical or surgical interventions specified during this admission	To describe clinical outcomes after mastectom y and breast reconstructi on surgery	00 – None 01 – Wound infection requiring intravenous antibiotics - mastectomy site 02 – Wound infection requiring surgical debridement - mastectomy site 03 – Skin flap necrosis requiring surgical debridement - mastectomy site 04 – Wound dehiscence requiring re-closure - mastectomy site 05 – Haematoma/seroma requiring aspiration or drainage - mastectomy site 06 – Wound infection requiring intravenous antibiotics - flap donor site 07 – Wound infection requiring surgical debridement - flap donor site 08 – Skin flap necrosis requiring surgical debridement - flap donor site 09 – Wound dehiscence requiring re-closure - flap donor site 10 – Haematoma/seroma requiring aspiration or drainage - flap donor site	Mandatory	New definitions	MBR7.5
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7.6	FLAP RELATED COMPLICATIONS (IF APPLICABLE) REQUIRING THERAPEUTIC INTERVENTION	Those complications arising secondary to a reconstructive flap that required the medical or surgical interventions specified during this admission		00 - None 01 - Impaired flap perfusion requiring re-exploration or revision of anastomosis 02 - Partial flap necrosis or failure requiring debridement 03 - Total flap necrosis or failure requiring removal 98 - Not applicable Select all that apply	Mandatory	New definitions	MBR7.6
7.7	IMPLANT/EXPANDER RELATED COMPLICATIONS (IF APPLICABLE) REQUIRING THERAPEUTIC INTERVENTION	Those complications arising secondary to an implant or tissue expander that required the medical or surgical interventions specified during this admission	To describe clinical outcomes after mastectom y and breast reconstructi on surgery	00 - None 01 - Displaced implant /expander requiring re- positioning 02 - Infected implant /expander requiring intravenous antibiotic therapy 03 - Infected implant /expander requiring removal 04 - Ruptured implant /expander requiring removal 98 - Not applicable Select all that apply	Mandatory	New definitions	MBR7.7

COMPLICATIONS REQUIRING THERAPEUTIC INTERVENTION	Those distant or systemic complications that required the medical or surgical interventions specified during this admission	To describe outcomes after mastectom y and breast reconstructi on surgery	00 – None 01 - Haemorrhage requiring blood transfusion 02 - Deep venous thrombosis (DVT) requiring formal anticoagulation 03 - Pulmonary embolism (PE) requiring formal anticoagulation 04 - Acute myocardial infarction (MI) requiring anticoagulation +/- thrombolysis Select all that apply	Mandatory	New definitions	MBR7.8
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Section 8 - Tumour characteristics data

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	Unique Ref
8.1	TUMOUR LATERALITY	Side on which breast cancer is present - bilateral synchronous tumours to be excluded from audit	To identify laterality of tumour and operation	R – right L – left	Mandatory	NCDS	NCDS 4.3
8.2	INVASIVE STATUS (BASED ON HISTO- PATHOLOGY)	Invasive status of breast tumour from pathology report	Casemix description and risk adjustment	01 – invasive 02 – DCIS (ductal carcinoma in situ)	Mandatory	New definition	MBR8. 2
8.3	INVASIVE LESION SIZE (BASED ON HISTO- PATHOLOGY)	Maximum diameter of invasive component of tumour (in millimetres) (microscopic size if under or equal to 20mm)	Casemix description and risk adjustment	Numeric entry in millimetres	Mandatory if 8.2=01	NCDS / NHS DD	NCDS 8.8
8.4	GRADE OF DCIS OR INVASIVE CARCINOMA (based on histopathology)	Grade of tumour (Range 1-3) from pathology report	Casemix description and risk adjustment	1 – low (DCIS) or well differentiated (invasive) 2 – intermediate (DCIS) or moderately differentiated (invasive) 3 – high (DCIS) or poorly differentiated (invasive)	Mandatory	NHSBSP; Nottingham modification of the Bloom Richardson system	NCDS 4.6 / 8.11
8.5	LYMPH NODE INVOLVEMENT	Number of positive axillary nodes / total number of axillary nodes found in pathology specimen (expressed as a fraction)	Casemix description and risk adjustment	XX / YY – numeric with no decimal places	Mandatory	New definition	MBR8. 5
8.6	RECORDED NOTTINGHAM PROGNOSTIC INDEX SCORE	NPI = (0.2 x invasive lesion size in cm) + tumour grade (1-3) + lymph node score / status (1-3)	Casemix description and risk adjustment	Numeric entry to one decimal place	Optional	Haybittle JL	MBR8. 6

Section 9 – Site/organisation data

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	NCDS / OPCS Ref.
9.1	ORGANISATION CODE (CODE OF PROVIDER WHERE CONSENT WAS OBTAINED)	Unique code of NHS Trust / Private Healthcare provider	Identify service provider at corporate governance level / Casemix description	Full Trust code or Private Sector Provider code	Populate automatical ly from login after registration defines options	NCDS / private sector	NCDS1.3
9.2	SITE CODE (HOSPITAL WHERE SURGERY WAS PERFORMED)	Unique code of hospital / Unit / treatment centre i.e. physical site of surgery	Identify site at which operation was performed by service provider / Casemix description	Full hospital code or private unit code	Populate automatical ly from login after registration defines options	NCDS / private sector	NCDS 7.1

Section 10 – Post-discharge patient address and mortality status data

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	NCDS / OPCS
10.1	Date of death (if applicable)	Date at which patient is deceased (ONS/STS)	To measure mortality and exclude from PRO study	Dd/mm/yyyy	Mandatory	New definition	MBR10 .1
10.2	Address at time of 3 month questionnaire distribution	Address to which questionnaire is to be sent	To allow receipt of questionnaire	Free text	Mandatory	NCDS	NCDS 1.7
10.3	Postcode at time of 3 month questionnaire distribution	Address to which questionnaire is to be sent	To allow receipt of questionnaire	Postcode	Mandatory	NCDS	NCDS 1.8
10.4	Address at time of 18 month questionnaire distribution	Address to which questionnaire is to be sent	To allow receipt of questionnaire	Free text	Mandatory	NCDS	NCDS 1.7
10.5	Postcode at time of 18 month questionnaire distribution	Address to which questionnaire is to be sent	To allow receipt of questionnaire	Postcode	Mandatory	NCDS	NCDS 1.8

Sections 11 and 12 describe data items collected by the patient-reported outcomes questionnaires rather than the online, prospective system.

Section 11 – Patient-reported outcome data at 3 months

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	Unique Ref
11.1	Date form completed	Date on which questionnaire is completed by the patient	To confirm timing	Dd/mm/yyyy	Mandatory	New definition	
11.2	Date of primary surgery	Date of mastectomy or reconstruction	To confirm timing	Dd/mm/yyyy	Mandatory	NCDS	NCDS 7.9
11.3	Demographic data	Only those items considered relevant to reconstruction access and information provision	To confirm and further case mix description	To be confirmed after literature search	Optional	New definition	
11.4	Satisfaction with pre- operative information provision – format / content / timing	N/a	To assess information provision	To be confirmed	Mandatory	New definition	
11.5	Satisfaction with choice – options / timing / availability	N/a	To assess choices provided	To be confirmed	Mandatory	New definition	
11.6	Satisfaction with care pathway / providers	N/a	To assess quality of care	To be confirmed	Mandatory	New definition	_
11.7	Treatments / Surgery undergone AFTER primary admission	N/a	To assess / confirm clinical data	To be confirmed	Mandatory	New definition	
11.8	Post-operative morbidity (in and out patient)	N/a	To assess / confirm complications	To be confirmed	Mandatory	New definition	
11.9	Treatments / Surgery planned in future (and timing)	N/a	To assess planned duration of pathway	To be confirmed	Mandatory	New definition	

Section 12 – Patient-reported outcome data at 18 months

Dataset Reference	Data item	Definition	Purpose	Format/options	Status	Source of definition	NCDS / OPCS
12.1	Date form completed	Date on which questionnaire is completed by the patient	To confirm timing	Dd/mm/yyyy	Mandatory	New definition	
12.2	Treatments / Surgery undergone after 3/12 questionnaire	N/a	To assess / confirm clinical data	To be confirmed	Mandatory	New definition	
12.3	Post-operative morbidity (in and out patient) after 3/12 questionnaire	N/a	To assess / confirm complications	To be confirmed	Mandatory	New definition	
12.4	Treatments / Surgery planned in future (and timing)	N/a	To assess planned duration of pathway	To be confirmed	Mandatory	New definition	
12.5	Quality of life measures	Measures relating to QOL at 18 months post mastectomy or reconstruction	To measure outcomes	To be confirmed	Mandatory	N/a	