LONDON CANCER
NORTH AND EAST

London Cancer:

Pathway specification for

Breast cancer

FINAL

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Contents

1. Introduction

1.1. *London Cancer*

The cancer care providers of North East London and North Central London and West Essex agreed in July 2011 to develop an integrated cancer system in response to the requirements of London's Strategic Health Authority and commissioners. Since April 2012 this integrated cancer system, *London Cancer*, has been commissioned to provide cancer services for a resident population of 3.2 million. Its mission is to improve outcomes and experience for our patients and local communities, and thereby position its staff as leaders in cancer care – locally, nationally and globally.

London Cancer will be underpinned by patient-empowerment, research, evidence and information sharing. It will radically refocus hospitals into working in partnership with each other, primary care and patients, to deliver coordinated, comprehensive pathways of excellent care for every patient irrespective of where they access our system or the type of cancer that they have.

The agreed priorities of the integrated cancer system are:

- Being patient-focused through listening, communication, involvement, information, education, choice, and personalisation
- Optimising care along a co-ordinated pathway – earlier diagnosis, exceptional treatment for all, local treatment where appropriate, compassionate aftercare and empowering/supporting patient self-management
- Embedding research for personalised care, equitable access to trials, the discovery of new treatments and evaluating new ways of working together with patients
- Increasing value – improve outcomes for patients per pound invested.

In addition to these priorities, *London Cancer* has carried out extensive research on what matters to patients and has distilled this work into ten key themes that will be central to everything that we do:

1. **Diagnosis** – patients are diagnosed at an earlier stage
2. **Ethos** – patients are treated holistically as individuals, and with dignity, sensitivity and respect, so that they do not feel that they are treated as a set of cancer symptoms
3. **Communication** – patients receive written and verbal information about diagnosis and all treatment options, including side effects and quality of life implications
4. **Choice** – patients and carers are fully involved in the choice of hospital and treatment options
5. **Support** – patients are given information on support groups, benefits entitlement and are offered emotional and psychosocial support
6. **Carers** – carers are fully involved and supported throughout the pathway
7. **Holistic assessment** – patients have holistic assessments at appropriate stages throughout the pathway, with action to meet their needs taken as a result
8. **Seamless care** – all patients are assigned a CNS when diagnosed and a community keyworker on discharge
9. **Transport** – patients should only travel when necessary and appropriate arrangements should be made for the immunosuppressed; patients should be provided with free parking or transport vouchers

10. **Discharge** – patients and their GPs should be provided with discharge information and follow-up advice.

1.2. Pathway specifications

London Cancer will deliver a step-change in cancer services in North East London and North Central London and West Essex. It is doing this through empowering clinicians and placing patients at the heart of cancer care. Clinically-led pathway boards have been constituted for each cancer pathway and these boards, under the leadership of a pathway director, lead service improvement and change across the pathway. The focus of pathway boards is the whole patient pathway, including:

- The diagnostic interface with the public
- Primary care and accident and emergency departments
- Initial assessment and appropriate rapid onward referral where necessary
- The provision of various aspects of patient treatment
- Follow-up or supporting end of life care.

To instigate change pathway boards may constitute sub-groups, called technical groups, which are responsible for developing specifications for the future delivery of services along their pathways within the integrated cancer system. The organisations of *London Cancer* that contribute to the pathway will then be invited to demonstrate how they could meet the requirements of these specifications for the components of the pathway that they wish to provide.

1.3. Why we need a breast cancer pathway specification

Breast cancer is a common cancer and there are multidisciplinary breast cancer teams in most acute hospitals. There are a wide range of national and international guidelines on the minimum standards and requirements needed to deliver acceptable breast cancer care.

In *London Cancer*, breast cancer treatment takes place within nine hospital trusts and sometimes at multiple sites within a trust. These services have developed in relative isolation over a number of years and there is great variation between the care that patients can expect to receive depending on where they access them. In some instances, services continue not to meet even the minimum standards for breast cancer care laid out in national guidelines.

Following the formation of *London Cancer*, it was clear that breast cancer clinicians from across the integrated cancer system needed to come together to agree a clear statement of the standard of service that should be expected by any trust or team wishing to deliver breast cancer care in the future.

The *London Cancer* Breast Pathway Board formed a sub-group to develop a pathway specification for the future delivery of breast cancer services. The Breast Technical Group met during a six-month period between the end of September 2012 and March 2013. The technical group delivered its proposed pathway specification to the Breast Pathway Board in March 2013. The pathway board, as the ultimate source of breast cancer expertise and leadership for *London Cancer*, discussed the proposed specification and made a number of enhancements. Final approval of the pathway specification, by the breast pathway board, was granted on 16th July 2014.

The result is found in the following pages. A full list of current and past members of the Breast Pathway Board, and those that sat on the Breast Technical Group, can be found in the appendix.

This pathway specification meets the expectations of all existing national and local clinical guidelines for breast cancer, which are included as references.

1.4. Implementation of the pathway specification

The specification outlines best clinical practice for the management of breast cancer. London Cancer recognises that not all trusts can provide all services. Where trusts do not currently meet the guidelines within this specification, clear pathways need to be in place to ensure all patients have access to the full range of services. *London Cancer* looks for trusts to work together to provide suitable solutions, such as through creating hub and spoke models.

2. Overarching principles and commitments

Before we describe the technical provisions that we would expect services to be able to provide, it is important to identify the over-arching features of a high quality, integrated, patient-focused pathway to which all providers within *London Cancer* should aspire. These include strong leadership and a series of commitments to principles that support the optimum functioning of the pathway. We expect all providers participating within the pathway to commit to and embody these commitments in everything that they do.

Leadership
Each component of the pathway will have a named leader who takes responsibility for leading the local provider team or the specialist team and ensures system-wide collaborative working to ensure availability of relevant specialist expertise at local units and equitable access to best practice and research. In addition, the trust providing breast cancer services will appoint a named leader who will drive and oversee the implementation of the agreed pathway across all providers.

Commitment to partnership working
All providers work together as part of an integrated team, and demonstrate this commitment to partnership from the outset by working collaboratively to develop plans against the pathway specification that are focused on delivering the best outcomes and experiences for patients.

Commitment to audit, data collection and sharing
All providers collect data on clinical outcomes and patient experience (and other relevant metrics), and comply with requirements for submission to national audits (e.g. COSD) and other local/regional requests for performance and outcomes data.

Commitment to gathering and responding to patient feedback
All providers must demonstrate a practical commitment to elicit feedback from patients on a regular basis and use this intelligence systematically and routinely to inform service improvement.

Commitment to research and innovation
All providers within the system participate fully in the clinical trial and research portfolio, and carry out prospective audits of services and publish transparent outcomes data. They participate in tissue banking where relevant and support the use of research nurses, as well as promote research into improving patients' functional outcomes and rehabilitation therapies.

Commitment to education and training

All providers should facilitate access to high quality training and development opportunities for staff and services — with centres working in partnership and undertaking joint training where appropriate in order to deliver education in efficient, joined-up way. Specifically:

- Training should be available for junior medical staff, nursing staff, allied health professionals (AHPs) and MDT co-ordinators.
- Recognition should be given to the importance of education for CNSs, and protected time should be offered to CNSs to enable them to access development opportunities.
- Level 2 psychological training should be available for every member of the MDT — with regular supervision in line with the requirements of Peer Review.
- All relevant staff should be supported to undertake Advanced Communication Skills Training (ACST)
- Education and training activity should be subjected to ongoing monitoring and audit to establish what works and identify opportunities for improvement.

3. Breast Cancer Pathway specification

POINT IN THE PATHWAY		SPECIFICATION
Primary care	Role of GPs	• GPs give advice on risk factors for breast cancer, breast awareness and self-examination • GPs examine patients prior to referral • GPs use NICE 2-week breast referral criteria and *London Cancer* agreed forms and criteria
	Advice for GPs	• Breast teams make specialist breast advice available to GPs by telephone • Breast teams give feedback to GPs on appropriateness of referrals
Screening		• Screening services commissioned from and provided by the three screening units within the *London Cancer* region, with national screening standards and protocols applied • Patients with a screen-detected cancer offered a choice of where they are treated to allow repatriation to local unit where appropriate
Triple assessment clinic	Clinic visit	• All patients seen in triple assessment clinic with facility to carry out clinical assessment, imaging and a needle biopsy at the same visit • Use *London Cancer* information leaflet, which states clearly what the appointment is for, what will happen (for example which tests), that patients should expect to spend around 3 hours on site, when they might have to come back, and that they can bring someone • Appointment letter also states that patients should bring a list of medications and the results of any previous breast assessments
	Clinic setup and environment	• Consultant-led clinic, with cover for leave and absence • Imaging and needle biopsy facilities located in or close to the breast clinic • Patients only move between clinic and imaging facilities in gowns when absolutely necessary, and if so are double-gowned • Patients are able to change in imaging rooms, if appropriate • Clinic receptionists trained in customer service
	Clinical assessment	• Patient seen for history and full clinical assessment • Assessment undertaken by an appropriately trained clinician • Category of all clinical findings (P1-5) recorded in clinical notes • Imaging arranged for patients that require it, according to age and clinical findings • If request for imaging is made then the form includes a clear note about history and category of clinical findings

POINT IN THE PATHWAY		SPECIFICATION
	Imaging facilities	• Capacity to deliver both mammogram and ultrasound, with biopsy if required, undertaken by a breast imaging specialist • Mammography is digital • All equipment meets breast screening standards • All units have the capacity to carry out stereotactic and ultrasound-guided biopsy
	Imaging	• Mammograms only routinely performed for women ≥40years • Mammograms carried out in patients <40 years with clinically suspicious or malignant findings (P4, P5) and are considered in patients with clinically indeterminate lesions (P3) if ultrasound is normal • Report uses recognised and recommended descriptive terminology (M1 to M5 for mammograms and U1 to U5 for ultrasound) and includes details about density, nature, site and imaging size of any abnormality as well as the distance from nipple and between lesions if appropriate and clearly documents which lesion has been biopsied • Report includes an opinion as to the likely diagnoses and image grading as well as recommendations for any further diagnostic procedure or intervention • If cancer is suspected, ultrasound of axilla undertaken at same time as breast assessment and needle biopsy if abnormal nodes seen
	Needle biopsy	• Undertake fine needle aspiration (FNA) cytology of breast or core biopsy in triple assessment clinic setting, as clinically appropriate • Core biopsy undertaken for all M3/U3 to M5/U5 lesions and all discordant triple assessments • FNA is used where: ▪ Cystic fluid is blood stained ▪ There is a P2,U2 mass ▪ In the setting of tumour multifocality, with confirmed histology from first tumour focus (B5b lesion), cytology aspirates from the secondary tumour focus is an acceptable diagnostic method • If an abnormal lymph node is identified this must be sampled either by FNA or core biopsy • Core biopsies reported within 5 calendar days (90% standard) • Arrangements for report of receptor status (ER, PR, HER2) within 7 calendar days
	Communication	• Results discussed with patient on same day • If biopsy of breast has been done then patient advised of imaging results and likely and possible outcomes • Explain MDT process and confirm date of next clinic appointment • Patients with a presumed cancer diagnosis have access to a clinical nurse specialist

POINT IN THE PATHWAY		SPECIFICATION
		• If there is microcalcification a decision is made of when to assess this and the patient is informed of this before leaving the clinic • Majority of patients will have a benign diagnosis and will therefore have no needle biopsy – patient is reassured and discharged, breast awareness discussed with patient and information given, including copy GP letter unless patient opts out
	Radiology workforce	• Breast imaging specialists have the skills required to report mammography, perform and interpret breast ultrasound, interpret breast MRI, supervise specialist mammography techniques, perform image-guided biopsy and localisation of impalpable breast lesions and insertion of markers prior to neoadjuvant therapy • It is recommended that at least one breast specialist per unit participates in the NHSBSP • All breast imaging specialists must be responsible for undertaking regular audit of performance with regards to: annual numbers of mammograms reported (minimum 500), concordance of imaging grading and pathology, and accuracy of US-guided and stereotactic core biopsy. • This audit is be part of the annual appraisal process and required for revalidation • In line with the breast screening national standards, it is desirable that breast MRIs are double reported • Job plans include a minimum number of fixed breast sessions (≥ 3 per week) - participation in regular MDT meetings is compulsory • A minimum of 30% of CPD points to be in breast imaging, and participation in PERFORMS is recommended for all breast specialists
	Pathology workforce	• At least two breast pathology consultants in a unit, competent in the reporting of breast specimens, in order to provide cover for periods of leave • Job plans must include a minimum number of fixed breast sessions (≥ 2 per week) - participation in regular MDT meetings is compulsory • All pathologists participate in the UK breast pathology external quality assessment (EQA) scheme • Breast screening centres should follow the guidelines for pathology reporting as per set by NHSBSP. Symptomatic centres should adhere to the Royal College of Pathology data sets.
Multidisciplinary team	Workload	• Minimum of 100 new cancer diagnoses per multidisciplinary team each year
	Composition	• Membership as per Peer Review measures • Core team members dedicate at least 50% of their time to breast cancer care • A plastic surgeon trained in breast, with sub-speciality skills in breast reconstruction and microvascular procedures as a core member

POINT IN THE PATHWAY		SPECIFICATION
		• Plastic surgeon presence at all meetings • Extended team to include lymphoedema specialist, physiotherapy, clinical psychology, occupational therapy, dietetics and access to social worker
	Clinical nurse specialist	• Every patient has access to a named clinical nurse specialist and cover arrangements exist to ensure that a clinical nurse specialist is always available during normal working hours to provide support and information for patients and carers • Breast clinical nurse specialists work only in breast care, have appropriate post-registration qualifications and are trained in counselling and communication • At least one team member has a post registration qualification in oncology
	Team training	• Team members who work directly with patients are trained in advanced communication skills • At least one clinical core member of the team has completed the training necessary to enable them to practice at level 2 for the psychological support of cancer patients and carers • The MDT nominated lead level 2 practitioner undergoes: ▪ Advanced communication skills training and a 1-day level 2 training course ▪ A 1.5 hour level 2 skills supervision session in a group of 4 or more monthly (minimum 75% attendance)
	Pre-operative MDT meeting discussion	• Discuss all patients who have M3/4 and U3/4 lesions and/or those who have had a needle biopsy to establish concordance of triple assessment
	Treatment recommendation	• Treatment recommendation informed by patient comorbidities and fitness rather than age • All patients suitable for clinical trials identified and trial name recorded
	Rehabilitation	• Rehabilitation service aligned with NCAT rehabilitation pathway and/or Map of Medicine stratified pathway of care • Holistic needs assessment (HNA) and subsequent care plan fully completed to capture rehabilitation needs at all key points in the patient pathway including diagnosis, start of treatment, during treatment, end of treatment, progressive disease and palliative/end of life care • All patients have access to appropriately skilled allied health professionals (including lymphoedema therapists, occupational therapists, physiotherapists, psychologists and dieticians) as identified by the HNA or other assessment • Standardised screening tools and outcome measures (where available and appropriate) • Standardised rehabilitation information issued
	Information and data capture	• Capacity for reliable videoconferencing with other units as required • Capacity for real-time electronic recording of discussions, decisions (including trial eligibility) and staging (for example

POINT IN THE PATHWAY		SPECIFICATION
		Somerset Cancer Registry or Infoflex) • Completed MDT proforma available to inform discussions • Dedicated data management support for MDT co-ordinator[1]
	Teenagers and young adults	• All patients aged 18 years or younger must be referred to a principal treatment centre – for *London Cancer*, this is UCLH • Patients aged 19-24 years should be referred to either the principal treatment centre or a designated TYA hospital. For breast cancer in *London Cancer* this is: Barking Havering and Redbridge University NHS Trust and Barts Health NHS Trust (for Barts and the Royal London). • All patients, irrespective of place of care, should be discussed in the TYA MDT
Second outpatient appointment	Clinic visit	• All relevant patients from triple assessment clinic seen for pathology results (including those with benign disease not given a diagnosis at first appointment) • Takes place within 5 working days of triple assessment clinic
	Diagnosis	• Give patients results of core biopsy and diagnosis if possible • Carry out repeat and additional biopsies if diagnosis has not been possible • If cancer has been diagnosed, arrange appointments for additional investigations as necessary during clinic visit and arrange surgical pre-assessment if surgery is planned • Clinical nurse specialist available at all diagnoses (including disease progression)
	Additional investigations	• Provide access to stereotactic- and ultrasound-guided vacuum biopsy/excision (used in preference to diagnostic surgical excision in suitable cases) either within the local unit or via an established local referral pathway • Stereotactic- and ultrasound-guided biopsy available within 7 calendar days • Provide diagnostic breast MRI imaging with a dedicated breast coil, technical specifications follow NHS breast screening guidelines • Referral pathway to regional centre (that meets the NHS breast screening guidelines) for small number of patients requiring MRI image-guided biopsy • MRI image-guided biopsy performed within 10 calendar days of the referral date (unless delayed for medical reasons or patient choice) • Easy access to standard staging investigations including CT and bone scans
	Additional clinic	• If further investigations are necessary, patient returns to clinic for results before treatment decision

[1] In NICE Improving Outcomes in Breast Cancer: Manual Update, 2002, the MDT co-ordinator needs a 'team secretary' for the documentation of all decisions.

POINT IN THE PATHWAY		SPECIFICATION
	visit(s)	
	Treatment decision	• Offer patients all appropriate treatment options • Treatment recommendation informed by patient comorbidities and fitness rather than age • Immediate breast reconstruction offered to all patients having mastectomy, taking into consideration comorbidities and adjuvant therapy • All options of immediate reconstruction are discussed with the patient, irrespective whether they are locally available or not • Patients offered appointment with plastic surgeon within one week if mastectomy with reconstruction requiring plastics chosen • Co-morbidities taken into account when discussing suitability for certain reconstructive surgical options but age not a factor • All appropriate patients having breast surgery without reconstruction offered surgery with same day discharge or one overnight stay (23-hour model) • Medical and social history taken into consideration when offering day case surgery/single overnight stay • If neoadjuvant therapy is planned, patients have appointment to see oncologist within 1 week
	Management of ductal carcinoma in situ (DCIS)	• Management follows same pathways as invasive cancer • Patients having breast conserving surgery should not have sentinel lymph node surgery • Sentinel lymph node biopsy performed for those patients requiring mastectomy
	Outpatient treatment	• Treatment of appropriate lesions (such as fibroadenoma, papilloma, radial scar) as decided by MDT by vacuum excision rather than surgery is readily available
	Information	• Personalised summary of confirmed diagnosis and treatment plan given to the patient on the day of diagnosis containing all the information confirmed at that time (and copied to GP) • Copy letter to patient of all correspondence to GP unless patient opts out (and throughout rest of pathway) • Nationally available patient information to be used where possible. Any local information to be Trust approved, reviewed regularly and produced to a high standard which is easy to read. • CNS contact card issued • Information given on free prescriptions if patient under age of 60 • Benefits advice offered • Provides information on psychological support services

POINT IN THE PATHWAY		SPECIFICATION	
	Rehabilitation	• All patients choosing reconstruction offered access to specialist physiotherapist within 5–7 days to assist with treatment decision-making[2]	
	Holistic care	• All patients offered holistic needs assessment to assess their holistic needs, when considering treatment plan and before treatment commences • CNS discusses lymphoedema with patient prior to treatment, if appropriate • Patients referred to a relevant service when a score above 7 is rated on the distress thermometer (for example psychological support)	
	Quality of diagnostic service	• >90% of patients have a diagnosis within 2 outpatient visits[3] • <1% of cancers diagnosed between 3 and 12 months after triple assessment	
Fertility preservation		• Fertility preservation discussed as early as possible in pathway for women who will need chemotherapy and especially those being referred for neoadjuvant chemotherapy • Refer all childless women under 42 who wish it to appropriate fertility preservation service	
Timeliness of treatment		• Capacity to assess and treat patients with minimum delay and at least within 62 days of urgent referral and 31 days of decision to treat	
Surgery service organisation		• Breast surgery provided by two different levels of service as per ABS guidelines: ▪ Oncoplastic units ▪ Oncoplastic centres • Rapid access pathways are in place between oncoplastic units and centres	
		ONCOPLASTIC UNIT	**ONCOPLASTIC CENTRE**
Surgery	Service	• Provide all core oncoplastic breast surgery procedures	• Provide all core oncoplastic breast surgery procedures as well as a full range of complex procedures

[2] Association of Breast Surgery & British Association of Plastic Reconstructive and Aesthetic Surgeons, Oncoplastic Breast Reconstruction: Guidelines for Best Practice, 2012 states 'physiotherapy and psychological reviews take place at key points, including pre- operatively and before discharge'.

[3] Association of Breast Surgery at BASO, Surgical guidelines for the management of breast cancer 1998. Now replaced with 2009 version.

POINT IN THE PATHWAY		SPECIFICATION	
	Workload	• Unit provides a breast service for a local population of 250,000 or more • Unit performs 25 or more major oncoplastic procedures a year (see 'breast reconstruction casemix' for definition)	• Major referral centre serving a large regional or subregional population • Centre carries out at least 100 major oncoplastic procedures a year (see 'breast reconstruction casemix' for definition)
	Surgeon workload	• Breast cancer surgery only performed by surgeons with a specialist interest in breast disease • Surgeons see 10 screening cases per year averaged over 3 years • Breast surgeons perform a minimum of 50 NHS cases per year[4]	
	Skills, workforce and environment	• Lead surgeon with expertise in core oncoplastic procedures and onward referral • Supporting surgeon(s) with competence in management of oncoplastic complications • Appropriate anaesthetic support for day case surgery • Anaesthetic and pain team clinicians experienced in anaesthetic and pain management strategies in oncoplastics • Coordinator with responsibility for oncoplastic audits and trials • Theatre team skilled in the preparation and use of equipment, instruments, implants and expanders for oncoplastic surgery and in maintaining an implant bank • Dedicated equipment (for example digital specimen radiography cabinet) available so that a radiograph of the specimen taken and reported to or by the surgeon within 20 minutes • Patients always accommodated on single sex wards	• A lead surgeon with overall responsibility for organisation and delivery of the service and with expertise in complex oncoplastic surgery • At least 3 other supporting surgeons with expertise in complex oncoplastic surgery - at least 2 are plastic surgeons with sub-specialty skills in breast reconstruction, including a range of microvascular procedures • A nominated radiologist skilled in advanced vascular imaging, such as magnetic resonance angiography • Appropriate anaesthetic support for day case surgery • A nominated anaesthetist(s) with regular sessions working with surgeons performing oncoplastic surgery, to optimise the perioperative care of these patients in conjunction with ward staff and surgeons • A nominated theatre team with expertise in the preparation and use of equipment and materials required for microvascular surgery and other major reconstructive

[4] Minimum numbers of cancer cases per surgeon are defined by the ABS as at least 30 surgically treated NHS cases per year. This does not take into account the type of operations performed, nor how these figures relate to other guidance regarding the number of new cases an MDT sees per year, oncoplastic numbers (per unit), screening numbers (averaged over three years) and so on. Given the increasing complexity of the surgery, the minimum number of cancers each MDT should be managing, and published European guidance on minimum surgical numbers, breast surgeons in London Cancer should perform a minimum of 50 NHS cases per year.

POINT IN THE PATHWAY		SPECIFICATION	
		• Wards have dedicated, elective beds not shared with patients undergoing potentially contaminated surgery (such as emergency general surgery or urology) • Ward team with expertise in patient monitoring, management and mobilisation following oncoplastic procedures	procedures including primary, revision and salvage surgery • Dedicated equipment (for example digital specimen radiography cabinet) available so that a radiograph of the specimen taken and reported to or by the surgeon within 20 minutes • A nursing team which includes a clinical nurse specialist appropriately trained in supportive care with specialist knowledge of oncoplastic techniques. In addition a specialist nurse with plastics training will also be involved in managing complex dressings and nipple tattooing • Patients always accommodated on single sex wards • Wards have dedicated, elective beds not shared with patients undergoing potentially contaminated surgery (such as emergency general surgery or urology) • A nominated ward team with expertise in monitoring, management and mobilisation of patients following microvascular surgery • A specialist physiotherapist with experience in minimising and treating problems arising from complex reconstructive surgery • Trained outpatient nurses with oncoplastic experience
	Surgical pre-assessment	• All patients undergo a pre-operative assessment process prior to admission and are provided with information about their operation and recovery, particularly if undergoing surgery as a day case or with one overnight stay • All patients have the opportunity to meet their surgeon and clinical nurse specialist again prior to admission • Patients have the chance to discuss the details of the operation they are planning to have and the expected post-operative recovery, and to ask further questions • Neoadjuvant chemotherapy is completed 4-6 weeks prior to breast surgery and the levels of neutrophils and lymphocytes must be within safe limits	
	Reconstruction pre-assessment	• As surgical pre-assessment plus: ▪ Planned major reconstructive surgery is delayed until any reversible deterioration in systolic ejection fraction has been reversed in patients treated with trastuzamab	

POINT IN THE PATHWAY		SPECIFICATION	
		▪ At least 6 months elapse before delayed breast reconstruction following adjuvant radiotherapy to reduce post-operative complications • CT or MR angiography considered prior to microvascular breast reconstruction • There is no time limit on referral for delayed breast reconstruction	
	Reconstruction support	• Provides links to local support groups to patients undergoing delayed reconstruction	
	Physiotherapy pre-assessment	• Carried out by a physiotherapist, suitably trained rehabilitation assistant or clinical nurse specialist • Includes a minimum of: ▪ measurement of upper limb range of movement and function ▪ provision of information on post-operative rehabilitation ▪ identification of risk factors for future problems ▪ explanation of lymphoedema precautions and provision of written information if having sentinel lymph node biopsy or axillary clearance	
	Surgical treatment	• Provide the full spectrum of breast cancer procedures: ▪ Excision biopsy with and without localisation (see the BASO screening guidelines for surgeons) ▪ Operations on nipples and ducts ▪ Wide local excision with and without localisation ▪ Wide local excision (quadrentectomy) with or without glanduloplasty ▪ Simple mastectomy ▪ Modified radical mastectomy ▪ Radical mastectomy (rarely undertaken) ▪ Sentinel lymph node (SLN) biopsy by using dual technique (radioactive and blue dye) if pre-operative investigations confirm SLN is negative ▪ Intra-operative assessment of the SLN may help to reduce the need for further axillary surgery but which method to use is not currently proven ▪ Axillary clearance if pre-operative investigations confirm involvement • Tumour beds marked with ligaclips during breast conservation surgery	
	Breast reconstruction	• Oncoplastic units casemix: ▪ Immediate and delayed techniques	• Oncoplastic centres casemix: ▪ All procedures carried out by the oncoplastic unit

POINT IN THE PATHWAY		SPECIFICATION	
	casemix	▪ Implants and expanders ▪ Primary procedures - subpectoral/LD reconstruction ▪ Primary procedures - oncoplastic breast conserving surgery ▪ Secondary procedures - symmetrising surgery, nipple reconstruction and pigmentation (with adequate training, and a recall register), elective implant or expander exchange, injection port removal ▪ Tertiary procedures - implant or expander exchange for complications, capsulotomy and capsulectomy, correction of poor cosmetic outcome, lipomodelling for conditions endorsed by the ABS Lipomodelling Guidelines for Breast Surgery • Referral to oncoplastic centre in place where procedures not available locally	▪ A range of pedicle flaps ▪ A range of free flaps ▪ Revisional procedures to correct the broad range of adverse outcomes resulting from oncoplastic breast surgery ▪ Chest wall reconstruction for locally advanced disease ▪ A full range of cosmetic breast surgery ▪ Correction of developmental and acquired breast abnormalities • Lipomodelling for conditions referred by oncoplastic unit and endorsed by the ABS Lipomodelling Guidelines for Breast Surgery
	Second and subsequent operations	• >95% of patients having conservative surgery should have three or fewer operations for re-excision of involved margins • If sentinel lymph node biopsy is positive at first surgery, axillary clearance takes place within 14 calendar days of first MDT discussion in the majority of cases • Re-operation for involved margins is carried out within 14 calendar days to avoid delays in adjuvant therapy	
	Discharge following surgical treatment	• Discharge carried out by skilled discharge professionals • If patients are discharged home with a drain following day case surgery or a single overnight stay it is ensured that they have: ▪ adequate support available in the community ▪ a single point of access to the breast team 24-hours a day, including appropriately breast trained ward nurses (not through A&E) ▪ full written information on the signs to look out for and how to reaccess the team, with local policies in place for drainage of seroma • Discharge letter to GP with all information and contact telephone numbers to be sent within one working day	

POINT IN THE PATHWAY		SPECIFICATION
	Rehabilitation following surgical treatment	• All patients having any axillary surgery with or without mastectomy have access to a physiotherapist (or suitably trained rehab assistant) within 2 days post-operatively or within 2 weeks if having single overnight stay • Physiotherapy to include at a minimum: ▪ graded exercise programme for upper limb ▪ advice on wound care and mobility ▪ information on prevention of lymphoedema ▪ general supportive care ▪ advice on activities of daily living
	Rehabilitation following reconstruction	• All patients have post-operative care delivered by a specialist physiotherapist • Post-operative physiotherapy protocols adhere to the ABS oncoplastic guidelines • Post-operative management to include a minimum of ▪ graded exercise programme for upper limb ▪ advice on wound care and mobility ▪ information on prevention of lymphoedema (as appropriate) ▪ general supportive care ▪ advice on activities of daily living • Patients given a follow up appointment with a specialist physiotherapist within 2-3 weeks
	Pathology	• Specimen turnaround time of 10 calendar days of resection or procedure for 90% of cases (remaining 10% might include cases with tumour multifocality or post neo-adjuvant treatment) • Reporting of both symptomatic and mammographic screening generated specimens follows the UK Guidelines, including staging • Molecular tests used as they become available
	Breast prostheses	• Offers women who have had mastectomy, or have asymmetry following wide local excision or reconstruction, a choice of products from a minimum of two providers • Offers skin tone matched products • Replaces prosthesis if product shows wear or if woman's BMI changes
	Information and audit	• Patients' satisfaction with BR (breast reconstruction) outcome is measured using standardised assessment tools • Regularly audits service and outcomes and publishes results • Takes full part in annual *London Cancer* wide audits

POINT IN THE PATHWAY		SPECIFICATION
	Clinical trials	• Takes full part in all relevant clinical trials
Postoperative MDT	Adjuvant therapy decision	• All patients discussed following surgery • Adjuvant therapy recommendations made in the post-operative MDT meeting or pre-operative MDT meeting where neoadjuvant therapy is being considered • All appropriate systemic therapy options are recommended and the risks and benefits of treatment considered • Treatment recommendation informed by patient comorbidities and fitness rather than age
	Follow-up planning	• Discusses follow-up options of patients • Stratifies patients to follow-up at post-operative MDT discussion
Radiotherapy	Treatment	• Radiotherapy offered to all patients who have undergone breast conservation surgery and those at high risk of recurrence after mastectomy • Not necessary to deliver radiotherapy on site but treatment is available to all patients within 45 minutes of home • Clear referral pathway to radiotherapy unit(s) if not provided on site • Radiotherapy planned using CT • Cardiac sparing techniques should be offered to appropriate patients with left sided breast cancer • Intraoperative radiotherapy only offered in the context of ongoing clinical trials
	Dose fractionation	• Patients who have had surgery for early invasive breast cancer should in general be treated with 40 Gy in 15 fractions over three weeks as a standard with a boost as appropriate • Longer treatment courses are appropriate (for irradiating nodal areas and post reconstruction) • *London Cancer* Guidelines will be reviewed regularly to ensure treatment is up to date and evidence based
	Timeliness	• All patients treated within 31 days of decision to treat
	Rehabilitation	• Urgent referral to physiotherapy for patients unable to achieve the radiotherapy position and patient assessed within 2 working days of referral • All patients have appropriate exercise regime to maintain range of movement and function in upper limb during and after radiotherapy • All patients with side effects which impair function and quality of life to be referred to the appropriately skilled NICE level 3/4 allied health professional
	Skills and workforce	• Oncologists with at least three sessions per week devoted to breast oncology • Meets the recommendations of the Institute for Physics and Engineering in Medicine with regard to staffing and additional

POINT IN THE PATHWAY		SPECIFICATION
		considerations
	Clinical trials	• Radiotherapy centres take full part in all relevant clinical trials
Systemic therapy	Chemotherapy treatment	• Discuss chemotherapy with all medically fit patients in whom it confers a 3% or higher survival benefit, regardless of age • Risks and benefits of treatment are clearly discussed • Benefits can be calculated using predictive tests (such as *adjuvant on line!, PREDICT plus* and others as they become available) • Written information must be provided, including on who to contact and how if problems are experienced following treatment
	Chemotherapy regimens	• Choice of chemotherapy guided by guidelines based on up-to-date research • Anthracycline only or anthracycline and taxane-containing regimens used as standard regimens • Specific treatment protocols are in the *London Cancer* systemic treatment guidelines which will be reviewed regularly to ensure treatment is up to date and evidence based
	Timeliness	• All patients treated within 31 days of decision to treat
	Neoadjuvant therapy	• Offered to all patients with locally advanced and inflammatory disease who are inoperable without downstaging and patients for whom breast conserving surgery is not possible without downstaging • Choice of neoadjuvant therapy (endocrine or chemotherapy) will be based upon tumour features, nodal status and fitness and co-morbidities of patient • Baseline MRI is undertaken prior to treatment • Marker clips inserted in all patients for whom the MDT recommends it, ideally prior to starting treatment • Sentinel node assessment must be done prior to commencing chemotherapy (the current *London Cancer* guidelines support sentinel node biopsy prior to neoadjuvant chemotherapy if node negative with definitive axillary surgery carried out at the time of breast surgery, but the guidelines may alter as evidence emerges)
	Biological therapies	• Herceptin offered to all HER2+ (HER2 3+ or 2+ amplified) patients fit for chemotherapy • Herceptin given concurrently with non-anthracycline components of chemotherapy in both the neo-adjuvant and adjuvant setting • Cardiac monitoring is performed as per standard guidelines • Specific treatment protocols are in the *London Cancer* systemic treatment guidelines which will be reviewed regularly to ensure treatment is up to date and evidence based
	Endocrine treatment	• Endocrine treatment offered to all patients with ER positive cancers - choice of agent will depend predominantly on menopausal status but also co-morbidities and patient preference • Specific treatment protocols are in the *London Cancer* systemic treatment guidelines which will be reviewed regularly to ensure

POINT IN THE PATHWAY		SPECIFICATION
		treatment is up to date and evidence based
	Rehabilitation	• All chemotherapy and neo-adjuvant therapy patients given physical activity guidance (such as the Macmillan Move More pack) when treatment decision is made • All patients nutritionally screened at their pre-chemotherapy appointment and managed as per the nutritional care plan • Establish any unintentional weight loss and use of alternative diets – dietetic referral made if ≥10% weight lost in the last 6 months or a restrictive alternative diet being followed • All high risk patients to be referred for dietetic assessment • All patients weighed monthly during chemotherapy (as a minimum), or sooner if they develop side effects that are influencing dietary intake or have lost weight • All patients with side effects which impair function and quality of life to be referred to the appropriately skilled level 3/4 allied health professional
	Skills and workforce	• Oncologists with at least three sessions per week devoted to breast oncology • Capacity to manage pregnant patients with breast cancer and links to obstetric services with obstetrician experienced in management of these patients
	Hair loss	• All patients likely to have hair loss provided with information on free or subsidised ethnically appropriate wig provision at chemotherapy pre-assessment and given advice on use of other head coverings • Scalp cooling available to reduce hair loss
	Complementary therapies	• Provides, or directs patients to, complementary therapy services
	Support groups	• Directs patients to local or national support groups, including metastatic support groups where appropriate
	Infrastructure	• Capacity to deliver ambulatory chemotherapy in day case facilities • Capacity to recruit into national trials investigating systemic therapy
	Clinical trials	• Unit takes full part in all relevant clinical trials
Post treatment	Completion of treatment	• Provides electronic treatment summaries (including individualised care plans) with accessible record of treatment for local units, GPs and patients • Process in place for rapid reaccess if necessary • All patients provided with appropriate health and wellbeing information to enable self-management of side-effects or access to community-based services and allied health professionals for assistance with managing side-effects or late effects of treatment • Patient reported outcome measures (PROMs) collected and monitored as they are developed

POINT IN THE PATHWAY		SPECIFICATION
	Follow-up	• Carry out annual mammogram on all patients under screening age who have received treatment until screening begins • Carry out annual mammogram for 5 years on all patients of screening age before they return to the screening programme • Patients followed up according to the stratified follow up guidelines, except those in clinical trials • DEXA scanning for all patients with chemotherapy-induced (premature) menopause or commencing aromatase inhibitor therapy, repeated as necessary according to national guidelines • Offer bone health information and other appropriate information from information prescription checklist • Offer holistic needs assessment • All patients scoring >7 on the distress thermometer offered referral to an appropriate service (for example psychological support)
	Rehabilitation	• Referral to physiotherapy for patients with restricted upper limb movement or function (such as cording) with patients assessed within 2 weeks • At presentation with signs of lymphoedema medical examination to exclude thrombosis or recurrent cancer as cause • Interventions for mild to moderate upper limb oedema include: ▪ Simple lymphatic drainage massage taught ▪ Skin care ▪ Exercises ▪ Positioning ▪ Hosiery - 2 skin colour appropriate garments every 6 months as minimum ▪ Written information • Interventions for gross lymphoedema as above plus: ▪ Referral to occupational therapist ▪ Referral to a lymphoedema service which provides a course of manual lymphatic drainage as per extended best practice pathways • All patients followed-up by physiotherapy services at 6 and 18 months post treatment by appointment or telephone as appropriate • All patients receive the appropriate rehabilitation / health and wellbeing programmes (such as Moving On or Cancer Transitions) to facilitate self-management or vocational rehabilitation services - this programme includes a review of the patient's upper limb mobility and function • Specialist rehabilitation services available for patients with significant consequences of treatment (such as fatigue or pain) or

POINT IN THE PATHWAY		SPECIFICATION
		late-effects, with no time limit on access • Access to services for menopausal symptoms and sexual rehabilitation • Patients with a BMI >30 have a referral to a specialist multi-professional obesity service discussed with them • Patients with ongoing dietetic needs have access to specialist dietetic care in the community
Primary care		• Manage patients in follow up in partnership with secondary care with clear referral pathways back for advice and management of problems • Refer patients with symptoms suggestive of metastatic disease directly to oncologist • Refer patients with new breast lumps to triple assessment clinic
Metastatic disease	Diagnostic and treatment planning discussion	• Patients are discussed in the MDT meeting when presenting with metastatic disease as a new presentation • Patients with metastatic disease referred urgently to oncology • Subsequent decisions regarding treatment are made in metastatic MDT meeting • Whenever possible biopsies of metastatic lesions are considered and receptors (ER, and HER2) repeated • All oligometastatic disease discussed in MDT meeting to ensure optimal management and consideration of all therapeutic options • Access to PET/CT for management of bone metastases and staging where conventional imaging is equivocal • Offer holistic needs assessment • All patients scoring >7 on the distress thermometer offered referral to an appropriate service (for example psychological support)
	Skills and workforce	• Oncologists trained in the management of breast cancer • Patients have access to a named clinical nurse specialist who is available for assistance at all decision –making points of the pathway • Breast care clinical nurse specialist has a special interest in metastatic disease and has the additional knowledge and skills to: ▪ provide advice on symptom control ▪ assess patient needs in relation to referrals to other agencies, for example benefits advice, hospice day care, community services ▪ address palliative care choices and refer to specialist palliative care services if needed • Cover arrangements exist to ensure that a clinical nurse specialist is always available during normal working hours to provide support and information for patients and carers

POINT IN THE PATHWAY		SPECIFICATION
	Systemic therapy	• Systemic therapy follows evidence based up-to-date guidelines • Choice of therapy will depend on performance status, type of disease, speed of progression and site of metastatic disease • Full range of options discussed with patients, including the risks and benefits of treatment • Specific treatment protocols are in the *London Cancer* systemic treatment guidelines which will be reviewed regularly to ensure treatment is up to date and evidence based
	Specialist metastatic management	• Access to neuro-oncology MDT meeting for discussion regarding neurosurgery, radiosurgery or other specialised radiotherapy techniques for brain metastases • Systemic therapy with bisphosphonates or denosumab for bone metastases • Access to orthopaedic services for any surgical intervention and management of actual or impending fractures • Clear referral pathways to centres for management of spinal cord compression • Access to cardiothoracic units for pleurodesis for pleural effusion • Access to chest wall MDT for chest wall disease
	Information	• Copy letter to patient of all correspondence to GP unless patient opts out • Information prescriptions implemented as a minimum • Clinical nurse specialist contact card issued • Information given on free prescriptions if patient is under 60 years of age • Benefits advice offered • Provide information on psychological support services • Patients given specific advice on metastatic spinal cord compression with use of *London Cancer* MSCC alert cards at time of diagnosis of bone metastases
	Ongoing management	• All ongoing management is oncologist-led • Recurrences re-biopsied where possible • Tumour markers are not routinely done
	Palliative care	• Clear referral pathways for patients with palliative and specialist palliative care needs • Clear referral guidance for management of: ▪ End of life care ▪ Complex symptom control • GP and multidisciplinary palliative care team to manage patient as appropriate

POINT IN THE PATHWAY		SPECIFICATION
		• Specialist palliative care team is adequately resourced and constituted to agreed national standards • Specialist palliative care team contains specialist physicians, specialist nursing, physiotherapy, occupational therapy and social workers as core members • All patients to have access to local specialist palliative (level 3/4) rehabilitation specialists • 24-hour access to specialist palliative care advice for patients, delivered by phone as a minimum • Clear process to identify and document a patient's preferred place of care and preferred place of death • Equipment provision (including the delivery of hospital beds) within 24 hours if preferred place of care is not hospital or hospice • Inpatient wards use integrated care pathways for end of life care, such as the Gold Standards Framework
Family history services	Primary care	• Women at population risk or near-population risk of developing breast cancer do not require referral to secondary care - they can be managed in primary care with advice from their GP • It is unlikely that primary care staff will have the time or the knowledge to be able to assess complex family histories, draw detailed family pedigrees, have in depth discussions with women at increased risk and be able to make percentage risk assessments based on family pedigrees – in this situation a referral to secondary care is appropriate to carry out a family history risk assessment
	Secondary care	• There is a Family history clinic lead supervised by a named consultant who leads on clinical governance for the service • Lead member of staff appropriately trained (the London Familial Breast Screening Working Group recommend the training course 'Advanced Health Care Practice in Cancer Genetics' run by Kings College London in conjunction with Kingston University and the London Regional Genetics Centres, or equivalent) • Lead member of staff and other staff running risk assessment clinics and supervising consultant attends at least 3-yearly update sessions provided by the regional genetics service (or equivalent) • Clinics run by dedicated members of staff (for example a clinical nurse specialist or an associate specialist) with sufficient cross-cover for absences and under supervision of the designated lead consultant • Family history clinics across *London Cancer* will be designated and GPs informed of where to refer patients • Minimum data collection standardised across *London Cancer*, according to London Familial Breast Screening Working Group (2011)
	Risk assessment in secondary care	• For initial risk assessment, women at moderate or more than moderate risk of developing breast cancer are seen in family history clinics in secondary care, ideally outside of the symptomatic clinic • Postal family history questionnaires administered and non-response followed up with telephone contact

POINT IN THE PATHWAY		SPECIFICATION
		• Patients should have a completed risk assessment within 18 weeks – this should include a clinic appointment if appropriate • Women at population risk or near-population risk of developing breast cancer discharged to primary care with a letter of explanation, sent to the patient with a copy to the GP • Risk assessment of women referred into the family history clinic carried out according to NICE guidance and London Familial Breast Screening Working Group (2011) • Three-generation family history taken • Women offered a personal risk estimate but information also given about the uncertainties of the estimation • Women provided with standard, evidence based information about their breast cancer risk and lifestyle advice (available on the Information Prescription website) • Carrier probability calculation method with demonstrated acceptable performance (calibration and discrimination) used where available, as well as family history, to determine who is offered referral to tertiary care (for example IBIS, BOADICEA and the Manchester scoring system) • Women told to contact the family history clinic for advice if their family history changes • Psychological support for women of moderate or more than moderate risk available to the family history clinic
	Referral to regional genetics services	• Women at more than moderate risk offered a referral to the regional genetics service • Women may be referred direct to the regional genetics service from primary care if: ▪ they are known to carry a cancer predisposing gene ▪ a cancer predisposing gene has been identified in the family ▪ their family history is high risk ▪ they are Ashkenazi Jewish and have a first degree relative with breast or ovarian cancer • For referrals to the regional genetics service, there must be adequate failsafe systems in place to ensure that the referral has been received • Women referred to genetics sent a family history questionnaire and an appointment to see a genetics clinician within 18 weeks of referral • Family histories will be verified by the genetics service through medical or cancer registry records where: ▪ it will affect risk advice given ▪ it will influence the decision to offer a genetic test in a family ▪ a woman is considering risk reducing surgery and no gene has been identified in the family • Formal risk calculation using the BOADICEA/IBIS model is offered where it will affect management

POINT IN THE PATHWAY		SPECIFICATION
		• Genetic testing for BRCA1 and 2 offered where there is a 10% chance (or greater) of identifying a mutation in a family • Genetic testing offered in a family where there is a living affected family member who is willing to have a genetic test - exceptions are certain ethnic groups where there is a higher incidence of BRCA mutations and who may be offered limited testing for BRCA founder mutations in that population (Ashkenazi Jewish, Polish) • Summary of the consultation, including a statement about a woman's level of risk and management recommendations sent to the patient, consultant and GP
	Surveillance	• Robust system in place for recalling women for surveillance mammograms (including maintenance of a database of women) • Each woman under surveillance (and not absorbed into the NHSBSP screening programme) must have a designated clinician who is responsible for ensuring that the mammogram report is received and acted upon and the results relayed to the woman • Women do not necessarily need to be given an outpatient appointment each time and may be sent an appointment for a mammogram and subsequently given their results • Mammographic screening of moderate risk women uses digital equipment and is carried out to the standard of the national breast screening programme (as per NICE guidance) • Mammograms not offered to unaffected women before 40 years unless part of a research study (FHO2) or fully audited service • MRI surveillance in combination with mammography as per the NHSBSP Guidelines reserved for BRCA and TP53 gene carriers (or 30% risk of a BRCA1/TP53 mutation) • Clinical breast exam is not a recommended part of surveillance
	Risk reduction	• Tamoxifen or raloxifene chemoprevention discussed with women at moderate and more than moderate risk and recommendations made in family history clinic • All unaffected women considering risk reducing surgery (risk reducing mastectomy/risk reducing bilateral salpingo-oophorectomy) must be seen in clinical genetics for a formal risk assessment and verification of their family history
Risk-reducing surgery	Referrals	• Unaffected women at high risk (>30% lifetime risk) – separate guidance for affected women requesting contralateral mastectomy • Bilateral mastectomy in unaffected women carried out by teams able to offer access to immediate reconstruction • Risk assessment led by clinical geneticists • Most referrals will come from secondary care to the genetics service • GPs can refer high risk patients directly to clinical geneticist for risk assessment and verification of family history • Any referrals to breast clinic redirected to clinical geneticist if formal risk assessment not already carried out in clinical genetics
	Specialist MDT	• *London Cancer* to constitute a single specialist MDT to meet at least quarterly to discuss all unaffected women considering risk

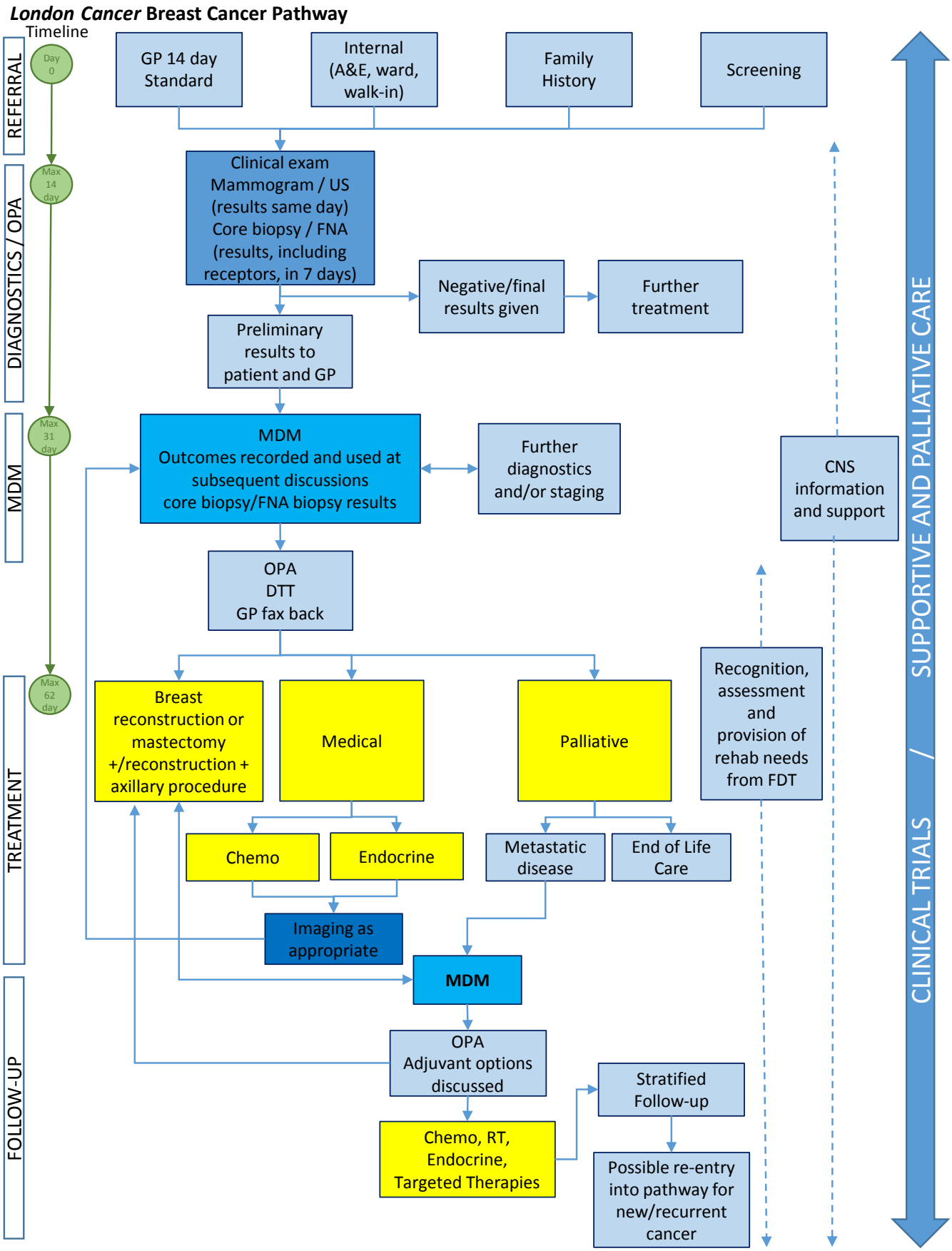
POINT IN THE PATHWAY		SPECIFICATION
		reducing mastectomy prior to surgery • MDT needs robust database and MDT coordinator • Membership from all centres and two thirds attendance from each service: ▪ Clinical geneticists ▪ Oncoplastic breast surgeons ▪ Breast plastic surgeons ▪ Clinical psychologists ▪ Gynaecological oncologists ▪ Risk-reducing surgery CNSs ▪ Rehabilitation professionals
	Treatment decision	• Discuss surgery with BRCA carriers with >30% lifetime risk of breast cancer • Discuss with women with non-identified gene who are at risk providing family history is verified and discussed at the MDT • Patients wishing to pursue surgery are referred to a clinical psychologist before a surgical decision is made • Risk reducing salpingo-oophorectomy (RRSO) needs to be considered where appropriate (e.g. BRCA gene carriers)
	Psychological support	• Women who have a family history or confirmed genetic risk assessed after family and/or genetic risk ascertained • Clinical psychologist will normally meet once or twice with patient • Psychologists highlight to team any psychological factors that may contraindicate prophylactic surgery: ▪ psychological unpreparedness ▪ decision not thoroughly considered ▪ undue distress affecting decision making ▪ individuals capacity to make decision
	Rehabilitation	• Patients who have breast reconstruction following risk reducing mastectomy have the same level of rehabilitation provided as symptomatic patients undergoing mastectomy with reconstruction
	Information	• Patients recorded on a robust database • Records quality of life information for all patients
	Skills and workforce	• Performed by surgeons in centres with access to immediate reconstruction • Patients allocated a breast CNS with an interest in risk reducing mastectomy
	Follow-up	• Open access follow up should be available following discharge

POINT IN THE PATHWAY		SPECIFICATION
Male patients	Patients presenting with symptoms	• Male breast cancer is rare, whereas gynaecomastia is very common in men • Referral to triple assessment clinic is indicated in those with: ▪ clinical suspicion of malignancy ▪ no obvious physiological or drug cause ▪ unilateral lump ▪ persistent pain and swelling ▪ increased risk such as family history; Klinefelter's syndrome; androgen deficiency or oestrogen excess • Triple assessment clinic plus blood tests and investigations as appropriate • If the diagnosis is cancer then management is the same as female patients • If the diagnosis is not cancer then: ▪ Advice provided on the management of symptoms including medical therapy ▪ Assessment of need for referral for endocrine assessment ▪ Referral back to GP with summary of assessment and advice with copy of letter to the patient unless they opt out ▪ Assessment of need for surgery and in consideration of local commissioning rules ▪ Offer of review for severe or unremitting symptoms ▪ Provision of appropriate patient support
	Breast cancer patients	• For male patients confirmed with breast cancer, the pathway is the same as for female patients • Male patients may need additional psychological support due to the difficulties that a diagnosis associated most commonly with women can cause • All men with breast cancer are asked about family history and offered a genetics referral if they have a relative with breast or ovarian cancer, or have Ashkenazi Jewish heritage
Acute oncology		• Full acute oncology service which is easily accessed and has clear guidelines on managing neutropenic sepsis, metastatic spinal cord compression, the management of debilitating side effects and cancer rehabilitation available at all trusts
Patient travel		• Robust patient travel plan in place • Informs patients of support available for travel to oncoplastic units, oncoplastic centres and radiotherapy centres
Research, innovation, education and training		• Research, innovation, education and training underpin the clinical service and are embedded throughout the service. • Patients have access to clinical trials whenever possible and throughout the entire patient pathway • An early phase unit available for referral

POINT IN THE PATHWAY	SPECIFICATION

	• Areas where trials are not currently available, or in areas where traditionally research is less active, are considered areas for active growth and development as the system grows
	• All patients are offered participation in research (for example use of pathological tissues)
	• Prospective audits of the service are regularly undertaken and transparent outcomes data published
	• Increasing engagement and collaboration with basic scientists
	• Provide quality education for trainees of all the medical and surgical specialities, nurses, genetic counsellors and AHPs, specifically:
	  ▪ basic and advanced breast surgical training, including in oncoplastic techniques
	  ▪ training in clinical and medical oncology
	  ▪ training in breast pathology, cytology and molecular diagnostics
	  ▪ training in all aspects of breast radiology
	  ▪ training relating to the breast care specialist role
	  ▪ training in cancer rehabilitation
	  ▪ training in family history
	• All those delivering the service continue to attend relevant training and educational opportunities

4. Breast Cancer Pathway



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Appendix 1: *London Cancer* Breast Pathway Board and Technical Group members

London Cancer Breast Technical Group members

- Rebecca Roylance (Chair) – *London Cancer* Breast Pathway Director and Consultant Medical Oncologist, Barts Health NHS Trust
- Adrian Tookman – Consultant Physician in Palliative Medicine, Royal Free London NHS Foundation Trust
- Andrew Baildam – Professor of Breast and Oncoplastic Surgery, Barts Health NHS Trust
- Ash Mosahebi – Consultant Plastic Surgeon, Royal Free London NHS Foundation Trust
- Clare Stephens – General Practitioner, NHS Barnet
- Constance Ncube – Clinical Nurse Specialist, Whipps Cross University Hospital: Barts Health NHS Trust
- Eliot Sims – Consultant Clinical Oncologist, Barking, Havering and Redbridge University Hospitals NHS Trust
- Emma West – General Practitioner, City and Hackney
- Evangelia Mylona – Consultant Histopathologist, North Middlesex University Hospital NHS Trust
- Ilyena Froud – Screening Director CELBSS Breast Screening Service & Consultant Breast Radiologist, Barts Health NHS Trust
- Julie Heywood – Specialist Breast Radiographer, University College Hospitals NHS Foundation Trust
- Karen Robb – Consultant Physiotherapist, Barts Health NHS Trust
- Laila Parvanta – Consultant Breast Surgeon, Homerton University Hospital NHS Foundation Trust
- Linda Larter – Patient Representative, Independent Cancer Patients' Voice
- Lucy Side – Consultant Clinical Geneticist, Great Ormond Street Hospital for Children NHS Foundation Trust
- Mary Burgess – Consultant Clinical Psychologist, University College Hospitals NHS Foundation Trust
- Mary Falzon – Consultant Histopathologist, University College Hospitals NHS Foundation Trust
- Muhamed Al-Dubaisi – Consultant Breast Surgeon, Barnet and Chase Farm Hospitals NHS Trust
- Philippa Dooher – Clinical Nurse Specialist, Princess Alexandra Hospital NHS Trust
- Ros Crooks – Consultant Breast Radiologist, Whittington Hospital NHS Trust
- Sally Shanley – Clinical Nurse Specialist, Newham University Hospital: Barts Health NHS Trust
- Tim Davidson – Consultant Breast Surgeon, Royal Free London NHS Foundation Trust
- Virginia Wolstenholme – Consultant Clinical Oncologist, Barts Hospital and Newham University Hospital: Barts Health NHS Trust

London Cancer Breast Pathway Board members

- Rebecca Roylance (Chair) – *London Cancer* Breast Pathway Director and Consultant Medical Oncologist, Barts Health NHS Trust
- Andrzej Karmolinski – Consultant Histopathologist, Barts Health NHS Trust (left pathway board from January 2014)
- Antony Pittathankal – Consultant Breast Surgeon, Barking, Havering and Redbridge University Hospitals NHS Trust
- Clare Stephens – General Practitioner, Barnet
- Deborah Glover – Patient Representative (left pathway board from March 2014)
- Emma West – General Practitioner, City and Hackney (maternity leave from September 2013)
- Faye Gishen – Consultant in Palliative Medicine, Marie Curie Hospice Hampstead, Royal Free London NHS Foundation Trust
- Karen Robb – Consultant Physiotherapist, MacMillan
- Lucy Side – Consultant Clinical Geneticist, Great Ormond Street Hospital for Children NHS Foundation Trust
- Mary Burgess – Consultant Clinical Psychologist, University College Hospitals NHS Foundation Trust
- Mary Falzon – Consultant Histopathologist, University College Hospitals NHS Foundation Trust
- Mo Keshtgar – Consultant Breast Surgeon, Royal Free London NHS Foundation Trust
- Muhamed Al-Dubaisi – Consultant Breast Surgeon, Barnet and Chase Farm Hospitals NHS Trust
- Oladapo Fafemi – Consultant Breast Surgeon, North Middlesex University Hospital NHS Trust
- Philippa Dooher – Clinical Nurse Specialist, Princess Alexandra Hospital NHS Trust (representation for PAH ended September 2013)
- Rachel Burrows – Living With and Beyond Cancer Project Manager, *London Cancer*
- Rachel Williams – Women's Health Divisional Manager, University College London Hospitals NHS Foundation Trust needs end date
- Rob Stein – Consultant Medical Oncologist, University College London Hospitals NHS Foundation Trust
- Ros Crooks – Consultant Breast Radiologist, Whittington Hospital NHS Trust
- Tess Cann – Clinical Nurse Specialist, Homerton University Hospitals NHS Foundation Trust (left pathway board June 2013)
- Thomas Pharaoh – Pathway Manager, *London Cancer (left London Cancer September 2013)*
- Virginia Wolstenholme – Consultant Clinical Oncologist, Barts Health NHS Trust
- Sarah How – Pathway Manager, *London Cancer* (September 2013 onwards)
- Ash Mosahebi - Lead for Plastic Surgery, Royal Free Hospital (January 2014 onwards)
- Philip Lunn - Divisional Operations Director, Homerton Hospital (January 2014 onwards)
- Claire Grainger – Breast Cancer Nurse, Princess Alexandra Hospital (May 2014 onwards)
- Patricia Dean – Patient Representative (May 2014 onwards)

Appendix 2: *London Cancer* Service Specification for Psychological Support Services

To access the London Cancer Service Specification for Psychological Support Services please follow this link:

http://londoncancer.org/media/89175/psychological-service-specification-final-2014june-.pdf