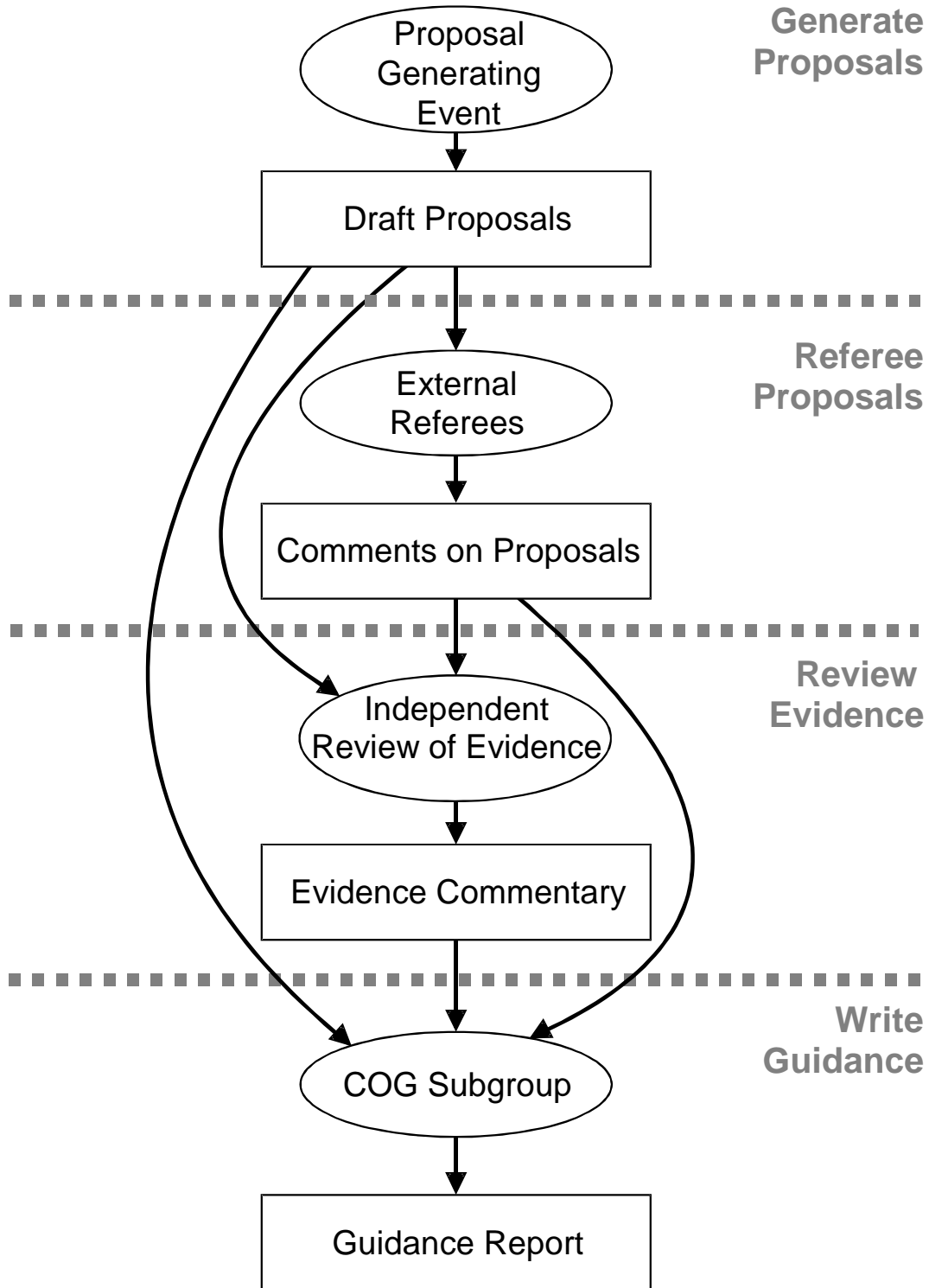


CANCER GUIDANCE METHODOLOGY

What did we do?



It is important that the methodology used for the production of this, and ensuing, guidance documents is explicit. Both the process and the identities of those involved (lists in appendix II), need to be open to scrutiny. The methodology, which was developed specifically for this work, is summarised in the figure which identifies the four main stages. The process is sequential with each of the first three stages contributing a body of material from which the final document is then drawn. A particular feature is the openness of the process to external views allowing proposals to be challenged and fresh evidence introduced.

The initial stage is a residential event at which people from a range of disciplines and organisations identify what they believe to be the most important attributes of a breast (or other site of cancer) service necessary to deliver good outcomes. These are set out in a common format and constitute a set of 'proposals'. Each proposal includes key elements such as the evidence on which it is based, implications for the NHS, and relationships to outcome.

These proposals are then subject to 'refereeing', involving a spectrum of clinical opinion, those likely to use the eventual guidance, and organisations representing the concerns of cancer patients. The comments of referees are collated for use in committee, but the full comments, together with the original proposals, go into the evidence review stage.

Evidence reviews are commissioned through the NHS Centre for Reviews and Dissemination at York University and separately funded by the Research and Development Directorate. The task of the reviewers is to prepare a systematic assessment of the nature and strength of the evidence underlying the proposals and arising from comments by referees. This work is summarised in the supporting Evidence document to this manual and in the August 1996 Effective Health Care bulletin.

The synthesis of the three strands of work into a coherent report is overseen by the whole Cancer Guidance Subcommittee, most of whom are not involved in the earlier stages of any one site-specific report. The shaping of the document is assisted by feedback from Purchasers on issues of style and content. Draft reports are submitted to the full Clinical Outcomes Group for comment and approval.

Appendix II

People and Organisations Involved in Production of the Guidance

1. COG Cancer Sub-group
2. Members of the proposal generating group
3. People/organisations invited to comment on original proposals
4. Researchers carrying out literature reviews
5. Members of purchaser focus groups

Guidance synthesis and writing

Dr. A Melville Research Fellow
Professor T A Sheldon Director NHS Centre for Reviews and Dissemination,
University of York

People/organisations invited to comment on drafts of the guidance

Members of COG
COG Cancer Sub-group
Various professional organisations
DoH
Dr K Dickersin Director, Baltimore Cochrane Centre,
Dept of Epidemiology & Preventive Medicine
University of Maryland, USA

Appendix II.1

Membership of the COG Cancer Sub-group

Chairman

Professor R A Haward Professor of Cancer Studies, University of Leeds

Members

Dr S Atkinson	Regional Director of Public Health, NHS Executive - South Thames
Dr J Austoker	University of Oxford, Department of Public Health and Primary Care
Dr J Barrett	Consultant Clinical Oncologist, Royal Berkshire Hospital
Mr M Bellamy	Chief Executive, Ealing, Hammersmith and Hounslow Health Authority
Professor J Hardcastle	Chair, Royal College of Surgeons Cancer Committee
Mrs S Hawkett	Nursing Officer, Department of Health, Eileen House
Professor R Mansel	Chair, Royal College of Surgeons working group on Guidelines for Cancer
Mrs R Miles	Regional Cancer Adviser, NHS Executive - West Midlands and Chairman of National Cancer Alliance
Mrs G Oliver	Director of Nursing, Clatterbridge Centre for Oncology
Professor M Richards	Sainsbury Professor of Palliative Medicine, St Thomas's Hospital
Mr H Ross	Chief Executive, United Bristol Healthcare Trust
Professor P Selby	Professor of Cancer Medicine, University of Leeds
Professor T A Sheldon	Director, NHS Centre for Reviews and Dissemination, University of York
Professor J Sloane	Professor of Pathology, University of Liverpool
Mr E Waterhouse	Assistant Secretary, Department of Health, Eileen House
Professor I Williams	Professor of General Practice, Kendal
Dr E Wilson	Senior Medical Officer, Department of Health, Eileen House

Appendix II.2

Participants in the Breast Cancer Proposal Generating Event

Dr M Armitage	Patient, Bournemouth
Professor M Baker	Medical Director, North Yorkshire Health Authority
Mr H M Bishop	Consultant Surgeon, George Eliot Hospital NHS Trust, Nuneaton
Professor R Blamey	Professor of Surgical Science, City Hospital, Nottingham
Ms S Denton	Clinical Nurse Specialist, St Bartholomew's Hospital, London
Dr L Fallowfield	Reader in Psycho-Oncology, CRC Communication and Counselling Research Centre, University College London Medical School
Professor A Faulkner	Education Consultant, Trent Palliative Care Centre
Ms K Gerard	Lecturer in Health Economics, Department of Epidemiology/Public Health, University of Newcastle-upon-Tyne
Dr P Harvey	Consultant Clinical Psychologist, Birmingham Oncology Centre
Mr K Horgan	Consultant Surgeon, The General Infirmary at Leeds
Dr A Howell	Consultant Medical Oncologist, Christie CRC Research Centre, Christie Hospital NHS Trust, Manchester
Dr T Hughes	General Practitioner, Kirbymoorside, North Yorkshire
Dr C Keen	Consultant Clinical Oncologist, Mid-Kent Oncology Centre, Kent
Dr S Kelly	General Practitioner, Chichester, West Sussex
Ms M King	Patient, London
Dr R C F Leonard	Consultant Medical Oncologist, Western General Hospital, Edinburgh
Dr P Littlejohns	Director, Healthcare Evaluation Unit, St George's Hospital Medical School, London
Dr I Maher	Consultant Clinical Oncologist, Mount Vernon Hospital, Middlesex
Professor R Mansel	Professor of Surgery, University of Wales College of Medicine
Professor K McPherson	Professor of Public Health Epidemiology, London School of Hygiene and Tropical Medicine
Dr D A L Morgan	Consultant Clinical Oncologist, City Hospital, Nottingham
Dr V Murday	Consultant Clinical Geneticist, St George's Hospital Medical School, London
Mr N Offen	Chief Executive, Essex Rivers Healthcare
Dr T Perren	Consultant Cancer Physician, Institute for Cancer Studies, St James's University Hospital, Leeds
Professor M Richards	Sainsbury Professor of Palliative Medicine, St Thomas's Hospital, London
Mr R Sainsbury	Consultant Surgeon, Huddersfield Royal Infirmary
Dr N Sykes	Consultant in Palliative Care, St Christopher's Hospice
Ms L Thomson	Chair, Breast Care Nursing Society, Royal College of Nursing
Dr A R Timothy	Consultant Clinical Oncologist, St Thomas' Hospital, London
Dr C Wells	Consultant Pathologist, St Bartholomew's Hospital
Dr R Wilson	Clinical Director, Nottingham National Breast Screening Training Centre

Facilitated by

Professor D Eddy	Senior Adviser for Health Policy and Management, California, USA
Professor R Haward	Professor of Cancer Studies, University of Leeds
Professor T A Sheldon	Director, NHS Centre for Reviews and Dissemination, University of York

Appendix II. 3

Referees of the Breast Cancer Proposals

Invited to comment

Mr B Aisbitt	Chief Executive, South Tyneside Health Care
Mr W Allum	Consultant Surgeon, Epsom General Hospital, Surrey
Dr C Anderson	GP and part-time lecturer at Nottingham Medical School
Dr T Anderson	Consultant Pathologist, University Medical School, Edinburgh
Dr M Armitage	Patient, Bournemouth
Dr D Ash	Consultant Clinical Oncologist, Cookridge Hospital, Leeds
Dr J Austoker	Director of the Cancer Research Campaign, Primary Care Education Group, University of Oxford
Ms C Badger	Macmillan Nurse Consultant in Lymphoedema, St Catherine's Hospice, Surrey
Professor M Baker	Medical Director, North Yorkshire Health Authority
Mr G Barnes	Chief Executive, East Riding Health Authority, Hull
Dr P Barret-Lee	Chair, Breast Group for COIN
Mr T Bates	Consultant Surgeon, William Harvey Hospital, Ashford
Professor M Baum	Professor of Surgery, University College London Medical School
Mr M Bellamy	Chief Executive, Ealing, Hammersmith and Hounslow Health Authority
Professor AJ Bellingham	President, Royal College of Pathologists
Mr D Bennett	Regional Cancer Co-ordinator, NHS Exec - Trent
Mr H Bishop	Consultant Surgeon, George Eliot Hospital, Nuneaton
Professor N Black	Professor of Health Service Research, London School of Hygiene and Tropical Medicine
Professor R W Blamey	Professor of Surgical Science, City Hospital, Nottingham
Dr M Bond	Consultant Clinical Oncologist, Cookridge Hospital, Leeds
Mr T Brennan	Consultant Surgeon, St James's Hospital, Leeds
Ms M Bullen	Macmillan Nurse Consultant, South West Southern Region
Dr J Bullimore	Member of the Expert Advisory Group on Cancer
Professor M Buxton	Director, Health Economics Research Group, University of West London
Sir K C Calman	Chief Medical Officer, DoH
Dr I Capstick	Executive Committee Member of the Association for Palliative Medicine, Weston Hospicecare, Weston-super-Mare
Mr R Carpenter	Consultant Surgeon, St Bartholomew's Hospital, London
Ms J Clark	Consultant Surgeon, Radcliffe Infirmary, Oxford
Dr A Clover	Consultant Homeopathic Physician, Royal London Homeopathic Hospital
Dr R Coleman	Hon.Consultant Medical Oncologist, Western Park Hospital, Sheffield
Professor T Cooke	Professor of Surgery, Royal Infirmary, Glasgow
Professor C Coombes	Professor of Medical Oncology, Charing Cross Hospital, London
Dr B Cottier	Chief Executive, Clatterbridge Centre for Oncology
Dr I G Cox	GP, Birmingham
Ms D Crowther	Wirral Holistic Care Services
Dr J G R Cumming	Member of the Expert Advisory Group on Cancer
Dr R Daniels	The Cancer Help Centre, Bristol
Dr T Davies	Member of the Expert Advisory Group on Cancer
Miss B Dick	Director, Patient Services, Royal Marsden Hospital
Ms S Denton	Clinical Nurse Specialist, St Bartholomew's Hospital, London

Professor A Dixon	Consultant Radiologist, Addenbrooke's Hospital, Cambridge
Dr J Dobbs	Consultant Clinical Oncologist, King's College Hospital, London
Dr G Dublon	GP, Wakefield
Dr F Dudley	GP, Peckham Rye, London
Dr A Dunbar	GP, Craven
Dr R Dunlop	Medical Director, St Christopher's Hospice, London
Mr S Ebbs	Consultant Surgeon, Mayday University Hospital, Surrey
Dr C W Elston	Consultant Histopathologist, City Hospital, Nottingham
Dr G Evans	Consultant Geneticist, Christie Hospital, Manchester
Dr L Fallowfield	Reader in Psycho-Oncology, CRC Communication & Counselling Research Centre, University College London Medical School
Professor J Farndon	Professor of Surgery, Bristol Royal Infirmary
Professor A Faulkner	Clinical Psychologist, Trent Palliative Care Centre
Dr C Faull	Medical Director, St Mary's Hospice, Birmingham
Ms J Fenelon	Regional Cancer Co-ordinator, NHS Exec - Anglia and Oxford
Mr I Fentiman	Consultant Surgeon, Guy's Hospital, London
Dr I Finlay	Chairman of the Association for Palliative Medicine
Dr A Folkes	Consultant in Clinical Oncology, St Luke's Hospital, Guildford
Mr J Fox	Consultant Surgeon, Castle Hill Hospital, Hull
Professor S Frankel	Professor of Epidemiology, University of Bristol
Dr R Garlick	Consultant in Public Health, East London & the City Health Authority
Professor D George	Professor of Surgery, Western Infirmary, University of Glasgow
Dr R George	Hon. Consultant in Palliative Medicine, Camden & Islington Community Health Services NHS Trust, London
Ms K Gerard	Economist, Department of Epidemiology/Public Health, University of Newcastle-upon-Tyne
Mr G Gibson	Chief Executive, Merton, Sutton and Wandsworth Health Authority
Mrs E Gough	Breast Cancer Care Association, Arundel
Mr R Gray	Senior Scientist, ICRF Cancer Studies Unit, Oxford
Mr M Greenal	BASO representative
Lady S Greengross	Age Concern
Mr J Grogono	Consultant Surgeon, The Chiltern Hospital, Bucks
Professor B Gusterson	Professor of Histopathology, Institute of Cancer Research, Sutton, Surrey
Dr P Guyer	Consultant Radiologist, Royal South Hants Hospital, Southampton
Professor J Hardcastle	Professor of Surgery, University Hospital, Nottingham
Dr M Harding	Snr Registrar in Public Health Medicine, St George's Hospital Medical School
Professor A L Harris	Professor of Clinical Oncology, ICRF Clinical Oncology Unit, Oxford
Dr P Harvey	Clinical Psychologist, Birmingham Oncology Centre
Ms A Hayes	Cancerlink
Mr R Heddle	Consultant Surgeon, Kent & Canterbury Hospital
Dr F Hicks	Executive Committee Member of the Association for Palliative Medicine, Leeds
Dr I Higginson	Consultant in Palliative Care, London School of Hygiene and Tropical Medicine
Dr R Hillier	Executive Committee Member of the Association for Palliative Medicine, Countess Mountbatten House, Southampton
Dr D Hine	Chief Medical Officer, Welsh Office
Dr P Hopwood	Hon. Consultant Psychiatrist, Christie Hospital, Manchester
Mr K Horgan	Consultant Surgeon, The General Infirmary at Leeds
Dr A Howell	Consultant Medical Oncologist, Christie Hospital, Manchester

Dr A Hoy	Executive Committee Member of the Association for Palliative Medicine, Princess Alice Hospice, Esher
Dr T Hughes	GP, Kirbymoorside, North Yorkshire
Dr S Humphreys	Consultant Histopathologist, King's College Hospital, London
Dr R Hunter	Director, Radiotherapy Department, Christie Hospital, Manchester
Ms S Hunton	Director, Bradford Cancer Support Centre
Mr D Johnson	Chief Executive, St James's Hospital, Leeds
Dr A Jones	Consultant Medical Oncologist, Royal Free Hospital, London
Professor S B Kaye	Professor of Medical Oncology, CRC Dept of Medical Oncology, Glasgow
Dr C Keen	Clinical Director, Mid-Kent Oncology Centre, Maidstone
Dr S Kelly	GP, Chichester, West Sussex
Ms M King	Patient, Streatham, London
Mr R Kingston	Consultant Surgeon, Trafford General Hospital
Mr M Kissin	Consultant Surgeon, Guildford
Mr T Lennard	Consultant Surgeon, Royal Victoria Infirmary, Newcastle upon Tyne
Professor S J Leinster	Consultant Surgeon, University of Liverpool
Dr R C F Leonard	Consultant Medical Oncologist, Western General Hospital, Edinburgh
Dr P Littlejohns	Director, Healthcare Evaluation Unit, St George's Hospital Medical School
Miss J Lord	Health Economist, St George's Hospital Medical School
Dr M McIllmurray	Consultant Medical Oncologist, Royal Lancaster Infirmary
Professor K McPherson	Professor of Epidemiology, London School of Hygiene & Tropical Medicine
Professor G McVie	Scientific Adviser to the Cancer Research Campaign
Dr P Maguire	Honorary Consultant Psychiatrist, Christie CRC Research Centre
Dr J Maher	Consultant Clinical Oncologist, Mount Vernon Hospital, Middlesex
Dr W Makin	Executive Committee Member of the Association for Palliative Medicine, Christie Hospital, Manchester
Professor R Mansel	Professor of Surgery, University of Wales College of Medicine
Dr H Marsh	Member of the Expert Advisory Group on Cancer
Ms A Maslin	Manager of the Breast Group, Royal Marsden Hospital
Dr M Michell	Consultant Radiologist, King's College Hospital, London
Mrs R Miles	Regional Cancer Adviser, NHS Exec - West Midlands
Ms K Money	Director of Commissioning and Primary Care, East Sussex Health Authority
Dr D Morgan	Clinical Oncologist, City Hospital, Nottingham
Ms J Mossman	BACUP
Dr V Murday	Geneticist, St George's Hospital Medical School
Dr L Newman	President, Royal College of General Practitioners
Mr N Offen	Chief Executive, Essex Rivers Healthcare
Mrs G Oliver	Director of Patient Services, Clatterbridge Centre for Oncology
Dr G Park	GP, Cleveland
Mr M C O Parker	Consultant Surgeon, Joyce Green Hospital, Kent
Dr T Perren	Consultant Cancer Physician, St James's Hospital, Leeds
Dr M Pitman	Regional Cancer Co-ordinator, NHS Exec - South West
Dr T Powles	Consultant Medical Oncologist, Royal Marsden Hospital, Surrey
Mr C Quick	Consultant Surgeon, Hinchingsbrooke Hospital, Cambs
Ms J Raiman	Head of Medical Services, Cancer Relief Macmillan Fund
Dr A Ramirez	Senior Lecturer & Honorary Consultant in Liaison Psychiatry, Guy's Hospital, London
Ms R Rawson	Clinical Nurse Specialist, Farnborough Hospital, Kent
Professor M Richards	Sainsbury Professor of Palliative Medicine, St Thomas's Hospital, London

Dr S Richards	GP, Woodcote, Berkshire
Professor R Rubens	Professor of Clinical Oncology, Guy's Hospital, London
Mr R Sainsbury	Consultant Surgeon, Huddersfield Royal Infirmary
Mr K Salsbury	Chief Executive, Wakefield Health Authority
Dr H Sapper	GP, Acton Health Centre, London
Mr G Saunders	Chief Executive, Harrogate Health Care
Dr E Scott	Regional Cancer Co-ordinator, NHS Exec - Northern & Yorkshire
Professor P J Selby	Member of the Expert Advisory Group on Cancer
Mrs A M Seymour	Patient, North Yorkshire
Professor K Sikora	Member of the Expert Advisory Group on Cancer
Dr K Simpson	Executive Committee Member of the Association for Palliative Medicine, Leeds
Professor J Sloane	Professor of Pathology, University of Liverpool
Dr I Smith	Consultant Medical Oncologist, Royal Marsden Hospital, London
Dr H Smedley	Consultant Clinical Oncologist, Kent & Canterbury Hospital
Dr J Spiby	Director of Public Health, Bromley Health Authority
Dr M F Spittle	Dean, Faculty of Clinical Oncology, Royal College of Radiologists
Miss M A Stebbing	Consultant Surgeon, North Hampshire Hospital, Basingstoke
Dr N S A Stuart	Welsh Cancer Services Expert Group
Sir R Sweetnam	President, Royal College of Surgeons of England
Dr N Sykes	Consultant in Palliative Care, St Christopher's Hospice, London
Professor I Taylor	Professor of Surgery, University of London Medical School
Dr C Thompson	GP, Cardiff
Ms L Thomson	Chair, Breast Care Nursing Society, Royal College of Nursing
Dr A R Timothy	Consultant Clinical Oncologist, St Thomas's Hospital, London
Ms J Todd	Clinical Nurse Specialist, Marie Curie Centre, Ilkley
Dr A Tucker	Consultant Radiologist, The Princess Grace Hospital, London
Ms K Turner	Regional Cancer Co-ordinator, North Thames
Professor Sir L Turnberg	President, Royal College of Physicians
Dame M Tumer-Warwick	Chairman, United Kingdom Co-ordinating Committee on Cancer Research
Dr B Walker	GP, Seascale, Cumbria
Dr M Watson	Consultant Clinical Psychologist, Royal Marsden NHS Trust
Dr I Watt	Dean of the Faculty of Clinical Radiology, Royal College of Radiologists
Dr C Wells	Consultant Pathologist, St Bartholomew's Hospital, London
Dr J Whiteman	GP, Twickenham, Middlesex
Dr R Wilson	Clinical Director, Nottingham National Breast Screening Training Centre
Professor C Woodman	Professor of Epidemiology, Christie Hospital, Manchester
Ms M Woods	Clinical Nurse Specialist, Lymphoedema Services, Royal Marsden Hospital
Dr J Yarnold	Hon. Consultant Academic Radiotherapy Unit, Royal Marsden Hospital
Ms J Young	Cancer Support Services Manager, Linda Jackson Cancer Information Centre, Mount Vernon Hospital, Middlesex
Ms T Younger	Regional Cancer Co-ordinator, NHS Exec - South Thames

Department of Health/NHS Executive representatives

170 people were asked to act as referees, of whom 64% responded.

Appendix II.4

Reviews of the Research Literature: Composition of the Appraisal Team from the Mario Negri Institute, Milan

Overall Co-ordinators:

Dr A Liberati	Clinical Epidemiologist
Dr R Grilli	Health Services Researcher

Appraisal Team.

Professor C Confalonieri	Medical Oncologist
Mrs B D'Avanzo	Epidemiologist
Ms R Ferrario	Oncology Nurse
Dr R Fossati	Statistician, General Practitioner
Ms P di Giulio	Registered Nurse
Dr M Maistrello	Statistician
Dr S Minozzi	Epidemiologist
Dr A Penna	Epidemiologist, Specialist in Obstetrics & Gynaecology
Mrs V Pistotti	Librarian Specialist
Mrs E Sternai	Epidemiologist
Mr A Tinazzi	Computer Scientist
Dr V Torri	Medical Oncologist/Statistician

In collaboration with

Professor T A Sheldon	Director
Dr A Melville	Research Fellow

NHS Centre for Reviews and Dissemination, University of York, Heslington, York

Appendix II.5

Focus Groups: Purchaser Membership

Professor M Baker	Medical Director, North Yorkshire Health Authority
Mr G Barnes	Chief Executive, East Riding Health Authority
Mr M Bellamy	Chief Executive, Ealing, Hammersmith and Hounslow Health Authority
Mr G Bennett	Director of Finance, Birmingham Health Authority
Dr P Bevan	Director of Public Health, Merton, Sutton and Wandsworth Health Authority
Mr D Campbell	Director of Finance, Liverpool Health Authority
Dr A Charlesworth	Consultant in Public Health, North Derbyshire Health Authority
Dr V Hemsall	Deputy Director of Public Health, Dorset Health Authority
Mr J Henly	Director of Health Care Commissioning, Portsmouth and South East Hampshire Health Authority
Dr S Oliver	Senior Registrar in Public Health, Sunderland Health Authority
Dr S Pearson	Director of Public Health, Gloucester Health Authority
Dr F Pitt	Consultant in Public Health, Sheffield Health Authority
Mr R Priestley	Chief Executive, North Staffordshire Health Authority
Dr J Spiby	Director of Public Health, Bromley Health Authority
Dr J Verne	Consultant in Public Health, Barnet Health Authority
Dr P Watson	Director of Acute Services, Cambridgeshire and Huntingdon Health Authority
Dr S Will	Consultant in Public Health, Bury and Rochdale Health Authority

Facilitated by:

Ms S O'Toole

Consultant in Health Policy and Management

Appendix III

Glossary of Terms

Adjuvant chemotherapy/hormone therapy

The use of either chemotherapy or hormone therapy after initial treatment by surgery or radiotherapy. The aim of adjuvant therapy is to destroy any cancer that has spread.

Axilla

The armpit.

Axillary clearance/dissection

Surgery to remove fat and lymph nodes from the armpit. It can be done either at the same time as a mastectomy or as a separate operation, and it can be partial or complete.

BCS

See breast conserving surgery

Biopsy

Removal of a sample of tissue or cells from the body to assist in diagnosis of a disease.

Breast conserving surgery (BCS)

Surgery in which the cancer is removed, together with a margin of normal breast tissue. The whole breast is not removed.

Breast reconstruction

The formation of a breast shape after a total mastectomy, using a synthetic implant or tissue from the woman's body.

Chemotherapy

The use of medications (drugs) that are toxic to cancer cells. These drugs kill the cells, or prevent or slow their growth.

Clinical Oncologist

A cancer specialist who is trained in the use of radiotherapy, and who may also use chemotherapy and hormone therapy.

CMF

The combination of cyclophosphamide, methotrexate and 5-fluorouracil.

Cycle

Chemotherapy is usually administered at regular (normally monthly) intervals. A cycle is a course of chemotherapy followed by a period in which the body recovers.

Cytology

Examination of cells, usually obtained by fine needle aspiration (FNA)

Ductal carcinoma in situ (DCIS)

A malignant tumour which has not yet become invasive but is confined to the layer of cells from which it arose. A form of pre-invasive cancer.

Fine needle aspiration (FNA)

The sampling of cells from breast tissue for examination by a pathologist.

Fraction

Radiotherapy is usually given over several weeks. The dose delivered each day is known as a fraction.

Halstead mastectomy

Total mastectomy with removal of underlying muscles of chest wall and complete clearance of axillary lymph nodes. This operation is now considered obsolete.

Histological grade

The degree of similarity of the cancer cells to normal cells. A grade 1 carcinoma is well differentiated and is associated with a good prognosis. A grade 2 carcinoma is moderately differentiated and is associated with an intermediate prognosis. A grade 3 carcinoma is poorly differentiated and is associated with a poor prognosis. Grade is assessed by a pathologist.

Histology

An examination of the cellular characteristics of a tissue.

Hormone therapy

The use of drugs, or hormones which specifically inhibit the growth of hormone responsive cancer cells.

Immediate reconstruction

The reconstruction of the breast at the time of mastectomy.

Immunotherapy

The use of interventions intended to stimulate the immune system.

Local recurrence

Return of the cancer in the affected breast.

Lumpectomy

Surgical removal of a lump from the breast. See wide local excision.

Lymphnode

A small collection of tissue along the lymphatic system which acts as a filter. White cells and cancer cells, in particular, collect in lymph nodes. They are found in the neck, the armpit, the groin and many other places. Lymph nodes are also known as glands.

Lymphnodema

Swelling in the arm or breast because of a collection of lymphatic fluid.

Mammogram

A soft tissue X-ray of the breast which may be used to evaluate a lump or which may be used as a screening test in women with no signs or symptoms of breast cancer.

Mammography

The process of taking a mammogram.

Margins of resection: surgical margin

The edge of the tissue removed. See wide local excision.

Mastectomy

Surgical removal of the breast. May be total (all of the breast) or partial.

Medical oncologist

A cancer specialist with special expertise in the use of chemotherapy and hormone therapy.

Meta-analysis

A statistical technique used to pool the results from research on a particular issue.

Metastasis

The spread of a cancer from the primary site to somewhere else via the bloodstream or the lymphatic system.

Metastatic cancer

Cancer which has spread to a site distant from the original site.

Necrosis

The death of an individual cell or groups of cells in living tissue.

Nodal status

The presence or absence of cancer in the lymph nodes of the armpit. A woman with cancer in one or more nodes is node positive, or node +ve. A woman with no cancer in her nodes is node negative, or node -ve.

Oestrogen receptor(ER)

A protein on breast cancer cells that binds oestrogens. It indicates that the tumour may respond to hormonal therapies. Tumours rich in oestrogen receptors have a better prognosis than those which are not.

Oncologist

A doctor who specialises in treating cancer.

Oncology

The study of the biology and physical and chemical features of cancers. Also the study of the cause and treatment of cancers.

Ovarian ablation

Treatment which destroys ovarian function.

Palliation

The alleviation of symptoms due to the underlying cancer, without prospect of cure.

Polychemotherapy

The use of more than one drug to kill cancer cells. The most frequently used regime in breast cancer is the combination of cyclophosphamide, methotrexate and 5-fluorouracil (CMF).

Primary breast tumour

Tumour arising in the breast.

Protocol

A well defined program of treatment.

Quality of life

The individual's overall appraisal of her situation and subjective sense of well-being.

Radiotherapy

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

Reconstruction

See breast reconstruction.

Recurrence/disease free survival

The time from the primary treatment of the breast cancer to the first evidence of cancer recurrence.

Staging

Refers to the allocation of categories (0, I, II, III, IV) to groupings of tumours defined by internationally agreed criteria. Staging helps determine treatment and indicates prognosis.

Subcutaneous fibrosis

Thickening of tissue under the skin.

Surgical biopsy

Surgery performed under local or general anaesthetic in which a sample of breast tissue is removed so it can be examined by a pathologist.

Systemic

Involving the whole body.

Triple assessment

The use of three separate procedures (clinical examination, mammography, and needle biopsy - usually fine needle aspiration) in the diagnosis of primary breast cancer. When all three tests give the same result, the diagnosis is almost always correct.

Ultrasound

The use of sound waves to form a picture of internal tissues.

Vascular infiltration

Invasion of veins or lymphatic vessels by carcinoma cells, indicating a propensity for distant spread.

Wide local excision

The complete removal of a tumour with a surrounding margin of normal breast tissue. Also known as breast conserving surgery.

Acknowledgement

This information in this glossary is mainly derived from the Australian National Health and Medical Research Council Clinical Practice Guidelines: The Management of Early Breast Cancer and A Consumer's Guide: Early Breast Cancer (Canberra: Australian Government Publishing Service, 1995). Some entries have been added and others edited for inclusion in this document.