



HTA Austria
Austrian Institute for
Health Technology Assessment
GmbH

Oncological Breast Cancer Care in Selected European Countries

Cross-sectoral cancer care models

Project Team

Project leader: Dr. scient. med. Nicole Grössmann-Waniek, MSc

Authors: Dr. scient. med. Nicole Grössmann-Waniek, MSc
Christoph Strohmaier, MSc
Michaela Riegelnegg, BSc, MA

Project Support

Hand search: Dr. scient. med. Nicole Grössmann-Waniek, MSc, Christoph Strohmaier, MSc,

External review: Kerstin Sandlin, MD, PhD, FRCS, FACS(Hon) ISS(Hon) FEBS (Hon);
Karolinska Comprehensive Cancer Center, Department of Breast, Endocrine tumours
and Sarcoma

External review: Dr. Berger Johannes;
FA für Gynäkologie und Geburtshilfe, Leiter Brustzentrum Salzkammergut, Leiter
Brustgesundheitszentrum Tumorzentrum OÖ

Correspondence: Dr. scient. med. Nicole Grössmann-Waniek, MSc; nicole.groessmann@aihta.at

Cover photo: @ Urhebername – stock.adobe.com

This report should be referenced as follows:

Dr. scient. med. Nicole Grössmann-Waniek, MSc, Christoph Strohmaier, MSc, Michaela Riegelnegg, BSc, MA. Oncological Breast Cancer Care in Selected European Countries: Cross-sectoral cancer care models. AIHTA Project Report No.: 162; 2024. Vienna: HTA Austria – Austrian Institute for Health Technology Assessment GmbH.

Conflict of interest

All authors and the reviewers involved in the production of this report have declared they have no conflicts of interest in relation to the technology assessed according to the Uniform Requirements of Manuscripts Statement of Medical Journal Editors (www.icmje.org).

Disclaimer

The external reviewers did not co-author the scientific report and do not necessarily all agree with its content.

Only the AIHTA is responsible for errors or omissions that could persist. The final version and the policy recommendations are under the full responsibility of the AIHTA.

IMPRINT

Publisher:

HTA Austria – Austrian Institute for Health Technology Assessment GmbH

Garnisongasse 7/Top20 | 1090 Vienna – Austria

<https://www.aihta.at/>

Responsible for content:

Priv.-Doz. Dr. phil. Claudia Wild, managing director

AIHTA Project Reports do not appear on a regular basis and serve to publicise the research results of the Austrian Institute for Health Technology Assessment.

AIHTA Project Reports are only available to the public via the Internet at

http://eprints.aihta.at/view/types/hta_report.html.

AIHTA Project Report No.: 162

ISSN 1993-0488

ISSN online 1993-0496

© 2024 AIHTA – All rights reserved

Content

Content.....	6
List of Tables.....	6
1 Appendix.....	7
Tables Place of Health Care Provision and the involved Health Care Professions:.....	7
Austria.....	7
Germany.....	12
Denmark.....	17
Sweden.....	21
The Netherlands.....	25
Belgium.....	29
Summary of the DKG Certification Criteria.....	33
General Information on the Breast Cancer Centre/Network:.....	33
Organ-Specific Diagnostics and Therapy.....	34
Radiology.....	34
Nuclear Medicine.....	35
Surgical Oncology.....	35
Medicinal and Internal Oncology.....	36
Radiation Oncology and Pathology.....	37
Palliative Care and Hospice Work.....	37
Tumour Documentation and Outcome Quality.....	37
Cover Letter.....	39
Englisch.....	39
Deutsch.....	39
Questionnaire – Organisation of Cancer Care.....	41
A) General Information on the Organisation of (Breast) Cancer Care.....	42
B) Cancer Care Decision-Making and Place of Health Care Provision.....	43

List of Tables

Table 1-1: Place of health care provision and the involved health care professions in Austria.....	7
Table 1-2: Place of health care provision and the involved health care professions in Germany..	12
Table 1-3: Place of health care provision and the involved health care professions in Denmark .	17
Table 1-4: Place of health care provision and the involved health care professions in Sweden	21
Table 1-5: Place of health care provision and the involved health care professions in the Netherlands.....	25
Table 1-6: Place of health care provision and the involved health care professions in Belgium ..	29
Table 1-7: Oncological nurse tasks	34

1 Appendix

Tables Place of Health Care Provision and the involved Health Care Professions:

Austria

Table 1-1: Place of health care provision and the involved health care professions in Austria

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/ radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Diagnosis							
Physical examination	hospital outpatient clinic, outpatient setting (GP, gynaecologist clinic)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	gynaecologists, oncologists, surgeons, radiologists, breast care nurses, GPs
Blood sample	hospital outpatient clinic (internal lab) and external laboratories	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	laboratory staff
Diagnostic imaging techniques (X-ray, MRI, etc.)	hospital outpatient clinic, external radiology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	radiologists

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/ radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Staging of disease	hospital outpatient clinic, external radiology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	surgeons, radiologists, oncologists, gynaecologists, breast care nurses
Biopsy for diagnosis/tissue histology	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiologists
Genetic analysis of the tumour	hospital outpatient clinic (internal lab), external laboratory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	human geneticists, laboratory staff, pathologists, oncologists, surgeons
Patient support							
Psycho-oncological care	hospital outpatient clinic, outpatient setting (including Krebshilfe)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	psych oncologists
Fertility counselling	hospital outpatient clinic, outpatient setting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, oncologists, gynaecologists, breast care nurses
Sexual health	hospital outpatient clinic, outpatient setting, Krebshilfe	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	psych oncologist, gynaecologist
Prosthetic devices (e.g., wigs & bras)	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, gynaecologists, breast care nurses
Genetic counselling	hospital outpatient clinic, external laboratory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	surgeon, human geneticist, oncologist, gynaecologist,

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/ radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Clinical social work	hospital outpatient clinic, outpatient setting (including Krebshilfe)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	social workers, breast care nurses
Discharge planning	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	breast care nurses, surgeons, gynaecologists, oncologists
Therapy management							
Multidisciplinary team	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, radiologists, oncologists, gynaecologists, breast care nurses, radio oncologists, psych oncologists, pathologists, plastic surgeons
Treatment plan/ therapy concept	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, radiologists, oncologists, gynaecologists, breast care nurses, radio oncologists, pathologists, plastic surgeons
Blood samples	hospital outpatient clinic (internal lab), external laboratory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	laboratory staff, (breast) care nurse
Geriatric Assessment	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	geriatric medicine personal

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/ radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Bone density measurement	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	nuclear medicine personal, radiologists
Intravenous infusion (e.g. port catheter)	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, radiologists
Sentinel lymph node biopsy	inpatient	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, nuclear medicine personal
Therapy options							
Surgery (lumpectomy or mastectomy)	inpatient	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, gynaecologists, plastic surgeons
Radiotherapy	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radio oncologists,
Medicinal tumour therapy	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	oncologists, surgeons, gynaecologists, (breast) care nurses
Follow-up care							
Rehabilitation	hospital outpatient clinic, outpatient setting, home treatment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	rehabilitation personnel
Palliative Care	inpatient, hospital outpatient clinic, home treatment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	palliative medicine, oncologists

Oncological Breast Cancer Care in Selected European Countries

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/ radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Breast reconstruction/plastic surgery	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	plastic surgeons

Germany

Table 1-2: Place of health care provision and the involved health care professions in Germany

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Diagnosis							
Physical examination	hospital outpatient clinic, outpatient setting (outpatient oncologists), external radiology, screening	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	gynaecologists, general practitioners, radiologists
Blood sample	hospital outpatient clinic (internal lab), external laboratory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	laboratory staff
Diagnostic imaging techniques (X-ray, MRI, etc.)	hospital outpatient clinic, outpatient setting (outpatient oncologists), external radiology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	radiologists
Staging of disease	hospital outpatient clinic, outpatient setting (outpatient oncologists), external radiology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	radiologists, oncologists
Biopsy for diagnosis/tissue histology	hospital outpatient clinic, outpatient setting (outpatient oncologists), external radiology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	radiologists, oncologists & pathologists

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Genetic analysis of the tumour	hospital outpatient clinic (internal lab), external laboratory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	laboratory staff
Patient support							
Psycho-oncological care	hospital outpatient clinic, outpatient setting (outpatient oncologists)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	psychologists
Fertility counselling	hospital outpatient clinic, outpatient setting (outpatient oncologists)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	gynaecologists, reproductive physicians, surgeons, oncologists & nurses
Sexual health	hospital outpatient clinic, outpatient setting (outpatient oncologists)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	psychologists
Prosthetic devices (e.g., wigs & bras)	hospital outpatient clinic, outpatient setting (outpatient oncologists)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	cancer nurse, oncologists
Genetic counselling	hospital outpatient clinic, outpatient setting (outpatient oncologists)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	clinical geneticists

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Clinical social work	hospital outpatient clinic, outpatient setting (outpatient oncologists)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	social workers
Discharge planning	inpatient	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	oncologists, nurses
Therapy management							
Multidisciplinary team	hospital outpatient clinic, outpatient setting (outpatient oncologists), external radiology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	surgeons, gynaecologists, oncologists, radiotherapists, pathologists, radiologists, nurses
Treatment plan/therapy concept	hospital outpatient clinic, outpatient setting (outpatient oncologists)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Surgeons, gynaecologists, oncologists, radiotherapists, pathologists, radiologists, nurses, patients
Blood samples	hospital outpatient clinic (internal lab), external laboratory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	laboratory staff
Geriatric Assessment	hospital outpatient clinic, outpatient setting (outpatient oncologists)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	geriatric staff, physicians

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Bone density measurement	hospital outpatient clinic, outpatient setting (outpatient oncologists)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiologists, physicians
Intravenous infusion (e.g. port catheter)	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	anaesthetists, nurses, surgeons, oncologists, gynaecologists
Sentinel lymph node biopsy	inpatient	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, oncologists, nuclear medicine, physicians, gynaecologists
Therapy options							
Surgery (lumpectomy or mastectomy)	inpatient	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, gynaecologists & plastic surgeons
Radiotherapy	hospital outpatient clinic, outpatient setting (outpatient oncologists), external radiotherapy clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radio-oncologists
Medicinal tumour therapy	hospital outpatient clinic, outpatient setting (outpatient oncologists & gynaecologists) in case of hormonal therapy	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	oncologists, nurses, nurses, gynaecologists
Follow-up care							

Oncological Breast Cancer Care in Selected European Countries

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Survivorship	rehabilitation units	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	rehabilitation personnel
Palliative Care	inpatient, outpatient setting (outpatient oncologists)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	palliative care physician
Breast reconstruction/plastic surgery	inpatient	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons & plastic surgeons, gynaecologists

Denmark

Table 1-3: Place of health care provision and the involved health care professions in Denmark

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Diagnosis							
Physical examination	hospital outpatient clinic, outpatient setting (GP)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	clinician, GP, oncologist
Blood sample	hospital outpatient clinic (internal lab)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	internal laboratory staff
Diagnostic imaging techniques (X-ray, MRI, etc.)	hospital outpatient clinic, external certified private radiology clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	radiologist
Propagation diagnostics (e.g., staging)	hospital outpatient clinic, external certified private radiology clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	radiologist
Biopsy for diagnosis/tissue histology	hospital outpatient clinic, external certified private radiology clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	radiologist, pathologist, oncologist
Genetic analysis of the tumour	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	laboratory staff
Patient support							

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Psycho-oncological care	hospital outpatient clinic, outpatient setting (only systematically organised for children)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	psychologists
Fertility counselling	hospital outpatient clinic (mandatory for patients below the age of 40)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	gynaecologists
Sexual health	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	oncologists, gynaecologists
Prosthetic devices (e.g., wigs & bras)	hospital outpatient clinic (surgical department)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	cancer nurses
Genetic counselling	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	oncologists
Clinical social work	outpatient setting	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	social workers
Discharge planning	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	physician
Therapy management							
Multidisciplinary team	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, gynaecologists, medical oncologists, radiotherapists, pathologists, radiologists, cancer care nurses
Treatment plan/therapy concept	hospital outpatient clinic (discussed in the multidisciplinary team meeting)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, gynaecologists, medical oncologists, radiotherapists, pathologists,

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
							radiologists, cancer care nurses, patients
Blood samples	hospital outpatient clinic (internal lab)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	laboratory staff, nurses
Geriatric Assessment	inpatient, hospital outpatient clinic (not systematically in place)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	oncologists, cardiologists, physicians
Bone density measurement	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	oncologists, endocrinologists, radiologists
Intravenous infusion (e.g. port catheter)	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	anaesthesiologists
Sentinel lymph node biopsy	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeon
Therapy options							
Surgery (lumpectomy or mastectomy)	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeon
Radiotherapy	hospital outpatient clinic, radiotherapy clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiotherapist
Medicinal tumour therapy	hospital outpatient clinic, long-term endocrine therapy: outpatient setting, home treatment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	oncologist, nurses

Oncological Breast Cancer Care in Selected European Countries

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Follow-up care							
Survivorship	outpatient setting, hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	physiotherapists
Palliative Care	inpatient, hospital outpatient clinic, home treatment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	GPs, nurses
Breast reconstruction/plastic surgery	inpatient	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	plastic surgeon

Sweden

Table 1-4: Place of health care provision and the involved health care professions in Sweden

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Diagnosis							
Physical examination	hospital outpatient clinic, outpatient setting (gynaecologist)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	oncologist, surgeon, GP, gynaecologist
Blood sample	hospital outpatient setting (internal lab), external laboratories, and home treatment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	laboratory staff, nurses
Diagnostic imaging techniques (X-ray, MRI, etc.)	hospital outpatient clinic, external radiologic department	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	radiologist
Staging of disease	hospital outpatient clinic (formal staging at the multidisciplinary team meeting)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiologist
Biopsy for diagnosis/tissue histology	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	usually radiologists, sometimes the clinician, if it is not possible to send the patient to mammography
Genetic analysis of the tumour	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	laboratory staff

Oncological Breast Cancer Care in Selected European Countries

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Patient support							
Psycho-oncological care	hospital outpatient clinic (available in each centre)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	trained social workers
Fertility counselling	hospital outpatient clinic (regional university centres that have fertility centres)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	laboratory staff, physicians and nurses
Sexual health	hospital outpatient clinic, or by telephone at home by the contact nurse	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	social workers and contact nurses, oncologists
Prosthetic devices (e.g., wigs & bras)	hospital outpatient clinic (patient is given an address to the shop)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	contact nurses
Genetic counselling	hospital outpatient clinic (each health region has a hospital with a genetic department)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	genetic counsellors and clinical genetics (often have basic training as oncologists)
Clinical social work	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	social workers
Discharge planning	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nurses, oncologists, breast surgeons
Therapy management							
Multidisciplinary team	hospital outpatient clinic (2 pre surgery and 2 post surgery)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, gynaecologists, medical oncologists, radiotherapists, pathologists,

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
							radiologists, cancer care nurses
Treatment plan/therapy concept	hospital outpatient clinic (discussed with the patient and the breast surgeon)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	breast surgeon, oncologist
Blood samples	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	laboratory staff, nurses
Geriatric Assessment	hospital outpatient clinic (no geriatric specialist available if necessary but not formally in place; but discussed in MDT for every patient)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MDT
Bone density measurement	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiologists, nuclear medicine department
Intravenous infusion (e.g. port catheter)	hospital outpatient clinic (sometimes in another hospital on commission)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	vascular, general, breast surgeon
Sentinel lymph node biopsy	hospital outpatient clinic (in conjunction with the surgical procedure)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	breast surgeon
Therapy options							
Surgery (lumpectomy or mastectomy)	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	breast surgeon, plastic surgeon

Oncological Breast Cancer Care in Selected European Countries

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Radiotherapy	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiotherapist
Medicinal tumour therapy	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	oncologist, nurses
Follow-up care							
Survivorship	outpatient setting (rehab centres outside the hospital which are connected to physiotherapists, social workers, psychiatrists, psychologists to enhance the quality of patients)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	physiotherapists, social workers, psychiatrists, psychologists to enhance the quality of patients
Palliative Care	outpatient setting (rehab centres), home treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	physiotherapists, social workers, psychiatrists, psychologists to enhance the quality of patients
Breast reconstruction/plastic surgery	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	breast surgeon, plastic surgeon

The Netherlands

Table 1-5: Place of health care provision and the involved health care professions in the Netherlands

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Diagnosis							
Physical examination	hospital outpatient clinic, outpatient setting (GP, screening)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GPs, nurse practitioners
Blood sample	hospital outpatient clinic (internal lab), external laboratory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	laboratory staff
Diagnostic imaging techniques (X-ray, MRI, etc.)	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiologists
Staging of disease	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiologists, oncologists, nurse practitioners
Biopsy for diagnosis/tissue histology	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiologists, pathologists, nurse practitioners
Genetic analysis of the tumour	hospital outpatient clinic (locally or sent to a bigger hospital)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	laboratory staff, geneticists
Patient support							

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Psycho-oncological care	hospital outpatient clinic, outpatient setting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	psych oncologists
Fertility counselling	hospital outpatient clinic (if not available, patients can be referred to larger hospitals)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nurse practitioners, gynaecologists
Sexual health	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nurse practitioners, sexologists, social workers
Prosthetic devices (e.g., wigs & bras)	hospital outpatient clinic, outpatient setting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	cancer care nurses
Genetic counselling	hospital outpatient clinic (DNA sample is sent to Maastricht)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nurse practitioners, genetic counsellors
Clinical social work	hospital outpatient clinic, outpatient setting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	social workers
Discharge planning	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	cancer care nurse
Therapy management							
Multidisciplinary team	hospital outpatient clinic (often in a virtual setting)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, medical oncologists, radiotherapists, pathologists, radiologists,

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
							cancer care nurses, nurse practitioners
Treatment plan/therapy concept	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, medical oncologists, radiotherapists, pathologists, radiologists, nurse practitioners, patients
Blood samples	hospital outpatient clinic (internal lab)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	laboratory staff
Geriatric Assessment	hospital outpatient clinic (not standardly in place)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	geriatric medicinal personnel
Bone density measurement	hospital outpatient clinic (hormone therapy)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiologists, oncologists, nurse practitioners
Intravenous infusion (e.g. port catheter)	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons
Sentinel lymph node biopsy	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, breast surgeons
Therapy options							
Surgery (lumpectomy or mastectomy)	inpatient, hospital outpatient clinic (depending on the surgery, patients can leave the	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
	hospital on the same day [e.g., lumpectomy] or must stay overnight, mostly one night)						
Radiotherapy	hospital outpatient clinic, outpatient setting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiotherapists
Medicinal tumour therapy	hospital outpatient clinic, outpatient setting (GPs), home treatment (endocrine therapy and, in some regions, e.g. chemotherapy)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	oncologists, nurse practitioners, GPs, home care team (nurses and caretakers)
Follow-up care							
Survivorship	hospital outpatient clinic, outpatient setting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	nurse practitioners
Palliative Care	hospital outpatient clinic, outpatient setting (GPs), home treatment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	palliative care team, home care team, GPs
Breast reconstruction/plastic surgery	inpatient	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, plastic surgeons, nurse practitioners

Belgium

Table 1-6: Place of health care provision and the involved health care professions in Belgium

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Diagnosis							
Physical examination	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	gynaecologist, GP
Blood sample	hospital outpatient clinic (internal lab), external laboratory	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	laboratory staff
Diagnostic imaging techniques (X-ray, MRI, etc.)	hospital outpatient clinic, external radiology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	radiologists
Staging of disease	hospital outpatient clinic (additional breast imaging or CT scan of the chest and the abdomen)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiologists & oncologists
Biopsy for diagnosis/tissue histology	hospital outpatient clinic (internal lab), external laboratories or screening centres	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	radiologists & pathologist
Genetic analysis of the tumour	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	laboratory staff

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Patient support							
Psycho-oncological care	hospital outpatient clinic, outpatient setting, home treatment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	psychologists
Fertility counselling	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	fertility experts (oncologists)
Sexual Health	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	sexologist, gynaecologist
Prosthetic devices (e.g., wigs & bras)	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	breast cancer nurses
Genetic counselling	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	physicians, genetic counsellors
Clinical social work	hospital outpatient clinic, outpatient setting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	social workers
Discharge planning	inpatient	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	physicians
Therapy management							
Multidisciplinary team	hospital outpatient clinic (additional virtual meetings with a satellite centre can be possible before and after surgery)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, gynaecologists, medical oncologists, radiotherapists,

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
							pathologists, radiologists
Treatment plan/therapy concept	hospital outpatient clinic (in the multidisciplinary meeting and discussed with the patient before and after surgery)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, gynaecologists, medical oncologists, radiotherapists, pathologists, radiologists, cancer nurses, patients
Blood samples	hospital outpatient clinic (internal lab)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	internal, external laboratory staff
Geriatric Assessment	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	oncologists, physicians, nurses
Bone density measurement	hospital outpatient clinic (if endocrine therapy is provided)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiologists
Intravenous infusion (e.g. port catheter)	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons, vascular surgeons, anaesthesiologists
Sentinel lymph node biopsy	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeon, breast surgeon, gynaecologists
Therapy options							

Oncological Breast Cancer Care in Selected European Countries

Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient setting (GPs, oncologists, gynaecologists)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologists, cancer nurses)
Surgery (lumpectomy or mastectomy)	inpatient, hospital outpatient clinic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	surgeons
Radiotherapy	hospital outpatient clinic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	radiotherapists
Medicinal tumour therapy	hospital outpatient clinic, home treatment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	oncologists, cancer nurses
Follow-up care							
Survivorship	hospital outpatient clinic, outpatient setting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	physiotherapists
Palliative Care	inpatient, hospital outpatient clinic, home treatment, outpatient palliative care units (who organise with the hospital and GPs, and hospices)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	oncologists, GPs, nurses
Breast reconstruction/plastic surgery	inpatient	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	oncologists, plastic surgeons

Summary of the DKG Certification Criteria

The criteria for certification as a DKG breast cancer centre must be fully met for initial certification [80]. The requirements and criteria for breast cancer centres pertain to ten domains with subdomains, each including structural and procedural requirements:

- General information on the breast cancer centre (Structure of the network; Interdisciplinary co-operation; Co-operation with referring physicians and aftercare; Psycho-oncology; Social work and rehabilitation; Patient participation; Study management; Nursing care; General care areas such as pharmacy, nutritional counselling, speech therapy).
- Organ-specific diagnostics and therapy (Consultation hours and Diagnostics).
- Radiology.
- Nuclear medicine.
- Surgical oncology (Cross-organ surgical therapy and organ-specific surgical therapy).
- Medicinal and internal oncology (Haematology, oncology, and organ-specific drug-based oncological therapy).
- Radiation oncology.
- Pathology.
- Palliative care and hospice work.
- Tumour documentation/quality of results.

General Information on the Breast Cancer Centre/Network:

Generally, the leading clinical cooperation partners, who are responsible for a significant portion of cancer care in an oncological centre or a breast cancer centre, are required to establish written agreements (cooperation agreements) with each of the external cooperation partners. The leading clinical cooperation partners of a breast cancer centre typically include a surgeon, a gynaecological oncologist, a radiologist (excluding cooperating radiologists who solely provide breast MRI services for the breast cancer centre), a pathologist, an internal oncologist, a radiation therapist, and a nuclear medicine specialist.

The agreement regulates the following points:

- Mandatory participation in the MDT conferences (with the exception of nuclear medicine).
- Ensuring availability.
- Description of the treatment processes.
- Obligation to implement designated guidelines (basic requirement S3 guideline).
- Description of the cooperation regarding tumour documentation.
- Declaration of willingness to cooperate in internal and external audits.
- Declaration of commitment to comply with the relevant French-American-British (FAB) classification of acute myeloid leukaemia (AML) and the annual provision of the relevant data.
- Declaration of consent by the cooperation partners to be publicly identified as part of the breast cancer centre (e.g. homepage).
- 24-hour availability of the leading clinical cooperation partners, e.g. for emergency interventions.
- Surgeon, radiologist (except MRI cooperation), oncological drug therapy (gynaecologist or /and internist), radiotherapist.

Agreements that outline the cooperation and interfaces must also be established with other external cooperation partners, including those in psycho-oncology, social services, self-help, genetic counselling, genetic analysis, family history (e.g., BRCA-1, BRCA-2), physiotherapy, laboratory services, and

hospice/palliative care. The contact information of the breast cancer centre, including that of the cooperation partners, must be publicly accessible.

A breast cancer centre/network must have at least 100 primary mamma carcinoma cases (invasive or ductal carcinoma in situ [DCIS]). A primary case is defined as the diagnosis of cancer in one breast in a new patient, based on initial histological findings. A primary case can only be assigned to a cancer centre if there is a responsible MDT for therapy planning and the implementation of the primary therapy. Cooperating breast cancer centres with more than two locations are no longer approved, although there are exceptions to existing cooperations.

All patients must have the opportunity to participate in scientific studies and patient surveys, with a minimum survey response rate of 30% every three years. Patients must be informed of MTC recommendations, and their decisions must be documented. At least one oncology nurse (cancer nurse) must be actively employed on day duty at the breast cancer centre. The oncological nurse is responsible for patient-oriented and superordinate tasks listed in Table 1-7.

Table 1-7: Oncological nurse tasks

Patient-centred tasks	Superordinate tasks
<ul style="list-style-type: none"> ■ Assessment of symptoms, side effects and stress ■ Determining the need for interventions according to nursing standards ■ Implementation and evaluation of nursing and therapeutic measures ■ Determination of individual patient-related counselling needs (already defined as part of the nursing concept of the breast cancer centre) ■ Continuous information and counselling of patients (and their relatives) during the entire course of the disease ■ Implementation, coordination and verification of structured counselling sessions and guidance for patients and relatives ■ Participation in the tumour board ■ Initiation of and participation in MDT conferences/care visits (at least 12 case discussions/care visits per year and centre) 	<ul style="list-style-type: none"> ■ Development and Implementation of a care concept considering organ-specific characteristics of oncological care in the breast cancer centre ■ Creation of specialised, in-house standards based on evidence-based guidelines ■ Peer counselling/supervision ■ Networking in a joint quality circle and participation in the quality circle of the breast cancer centre ■ Interdisciplinary exchange with all professional groups involved in treatment

Organ-Specific Diagnostics and Therapy

At least one surgeon at the breast cancer centre should participate in the mammography screening program as a cooperating hospital physician. Staging must follow the latest S3 guidelines, with procedural instructions in place. Consultation hours must occur at least weekly, ensuring patients are informed through shared decision-making (SDM) about their diagnosis, therapy plan, treatment options, and supportive care. Waiting times during consultations should not exceed 60 minutes, and appointments should be available within two weeks. Histological findings should be provided within two days of a punch biopsy, with the final diagnosis available within one week and discussed in a personal consultation. The interval between receiving histological findings and surgery should allow at least three days for reflection and consultation and should not exceed two weeks.

Radiology

A certified breast cancer centre must provide specific imaging services, including mammography, mammary sonography, CT, and MRI. These services can be supplemented by external cooperating radiologists who are part of the centre's oncology agreement. The centre must have at least two specialists in

mammary diagnostics, two medical technologists for radiology (MTR) with expertise in mammary diagnostics, and an expert in medical physics.

All diagnostic mammograms must be assessed by a qualified radiologist or a specialist in gynaecology and obstetrics with the "X-ray diagnostics of the breast" qualification [257]. The minimum volume standard is 1,000 mammograms per year, or regular assessment of at least 500 mammograms per year with successful participation in a case collection audit every two years. External case collections may supplement this requirement. If minimum standards are not met, supervision and a second assessment by a qualified physician are required, and double diagnosis is necessary for asymptomatic patients and follow-up care.

The centre must perform at least 25 procedures per year (sonographic, mammographic, MRI-supported pre-surgical wire marking, localisation biopsy, and minimally invasive procedures). Medical and radiological staff involved in quality-relevant activities must attend at least one breast diagnostics-specific training course annually, ideally conducted by relevant professional societies. Additionally, quality circles focused on breast-specific topics must be held at least four times per year.

Nuclear Medicine

Concerning nuclear medicine services, at least one specialist in nuclear medicine, two medical-technical assistants in radiology and an emergency plan must be available. For sentinel node biopsy (scintigraphy), ≥ 20 annual scintigraphies (for initial certification) and ≥ 30 annual scintigraphies (after three years) must have been performed per treatment centre in order to receive or retain the DKG certificate. The proportion of sentinel lymph nodes detected in relation to the examinations conducted for...

- Sentinel node biopsy probe measurement must be $\geq 90\%$.
- Sentinel node scintigraphy (optional, if performed, then:) must be $\geq 90\%$.

The same training modalities apply to staff providing nuclear medicine services as to radiology staff (one breast diagnostics-specific training course of > 0.5 days per year and four quality circles in which breast-specific topics are dealt with).

Surgical Oncology

The DKG certificate defines specific structural requirements for inpatient surgical care. The following criteria must be satisfied for each breast surgeon and applied per surgical site with a DKG certificate [80]:

- **Structural requirements:**
 - The minimum number of operating rooms regularly available for breast surgery is one, and beds for breast patients must be available.
 - At least one breast surgeon, including documentation of their surgical experience in the last year.
 - If only one surgeon is named, there must be a proven substitution arrangement.
 - Qualification in ablative procedures, removal of the axilla (incl. sentinel node technique), management of complications following surgery, reconstruction, reduction surgery, corrective surgery, breast-preserving therapy procedures (sectoral resections, skin-sparing mastectomy, subcutaneous mastectomy, if necessary, intramammary flap, oncoplastic surgery and autologous surgery), and removal of localised recurrences.
 - Same requirements for training and quality circles as for radiology and nuclear medicine.
 - Resection and reconstruction: Immediate perioperative care after reconstruction must be provided under the supervision of a specialist trained in the surgical technique used, and the 24-hour availability of a surgeon with appropriate expertise must be ensured.
- **Procedural requirements:**
 - At least 50 breast surgeries per year per named surgeon.
 - If more than 150 procedures have been performed in the last five years, annual demonstration of minimal volumes is no longer required.

- Extension of senior breast surgeons: at least 150 procedures in the last five years.
- Training of new breast surgeons: Per centre location and 100 primary cases, training of one new breast surgeon must be organised. Breast surgeons in training must provide proof of at least 20 operations per year.
- Admission of new breast surgeons: at least 60 procedures in the last three years.
- Resection and reconstruction: Documentation of indication and number of the reconstructions performed for each procedure, pre- and post-operative photo documentation, communication of advantages and disadvantages of the breast reconstruction surgery to the patient, documentation of patients' decision must be documented, and regulated handling of implants (implant selection, provision of measuring prostheses, traceability, storage, entry in the implant register).
- Breast cancer centres must offer the following breast reconstruction procedures: Onco-plastic and glandular rotation flaps, implant reconstruction, and expander reconstruction.
- **Outcome requirements:**
 - The stay for a patient should not be less than four days.
 - The share of breast-conserving procedures for tumours up to 2 cm in the largest extension must be between 70-90% of all procedures (exceeding the 90% value should be viewed critically).
 - Revision operations due to intraoperative or postoperative complications must be $\leq 5\%$.

For centres using external partners for breast reconstruction, adherence to S3 guidelines is mandatory. External partners must ensure prompt care, proper therapy decision coordination, and thorough patient education, including aftercare and cosmetic outcome assessments [258].

Medicinal and Internal Oncology

For drug-based oncological treatment, the treating specialist must be trained in internal medicine/haematology and oncology, or in gynaecology and obstetrics with specialization in gynaecological oncology or the additional qualification in "drug-based tumour therapy". The assigned specialist is responsible for monitoring oncological drug therapy, which cannot be delegated to unqualified physicians. Patient consultations must cover treatment concepts, the option of second opinions, and include a discharge discussion.

The physician must be proficient in endocrine, immunological, neo-/adjuvant, palliative, and supportive therapy concepts, as well as managing treatment side effects.

Inpatient, day-care, or outpatient facilities administering drug-based therapies must be supervised by an oncological nurse, with at least two treatment rooms available. Nurses administering chemotherapy must have one year of oncology experience, have conducted at least 50 chemotherapy applications, and have completed training as recommended by the Oncological Nursing and Paediatric Nursing Conference (KOK). Nursing responsibilities include emergency treatment, managing comorbidities, and documenting patient education.

The treatment unit must administer at least 50 medicinal tumour therapies annually per breast cancer patient or 200 therapies across various tumour types. The centre must offer equivalent outpatient and inpatient oncological therapy, potentially in cooperation with other centres or DKG-certified outpatient haematologists and oncologists. Cooperation partners must meet the criteria outlined in the "Outpatient Internal Oncology Survey Form", ensuring cross-organ services are provided consistently [259].

Therapy alternatives must include cytostatic monotherapy, combination therapy, immunotherapy, antibody therapy, hormone therapy, and bisphosphonate therapy. The cytostatic workstation must comply with legal guidelines, including waste disposal and an on-call service. Supportive measures, side effect recognition, and therapy modifications must be thoroughly documented for each patient, with emergency equipment and a written emergency plan available.

For metastasised cancer drug therapy, regular toxicity assessments and therapy evaluations must be conducted and documented every three months. Access to pain therapy and supportive measures is required, with a cooperation agreement in place if an external pain therapist is involved.

Access to a specialised pain therapist is mandatory. If pain management is overseen by an external specialist, a cooperation agreement must be established.

Medical and other staff associated with medicinal oncological therapy must attend at least one breast diagnostics-specific training course (lasting > 0.5 days) per year if they carry out quality-relevant activities for the breast cancer centre. Ideally, the training should be conducted by the DKG, German Society for Pain Medicine (Deutsche Gesellschaft für Schmerzmedizin, DGS), German Society for Gynaecology and Obstetrics (Deutsche Gesellschaft für Gynäkologie und Geburtshilfe, DGGG), German Society for Radiation oncology (Deutsche Gesellschaft für Radioonkologie, DEGRO) or other relevant professional societies. In addition, quality circles must be held at least four times a year, during which breast-specific topics are dealt with as one of the main topics.

Radiation Oncology and Pathology

The “radiation oncology survey” and the “pathology survey” summarise the requirements that the (leading) radiation oncology or pathology cooperation partner in DKG-certified oncology centres and/or organ cancer centres must fulfil [78, 79]. Regardless of the number of organ cancer centres collaborating with a radiation oncology or pathology department, this survey only needs to be completed once and updated once per audit year.

Palliative Care and Hospice Work

Palliative care must be organised according to the S3 guideline on palliative care for non-curable cancer [97]. A physician with an additional qualification in palliative medicine must be available for consultations and, if necessary, participating in the MDT conference. Access to nutritional counselling, occupational therapy, psycho-oncological and psychosocial care and pastoral care must be regulated.

According to the DKG requirements, palliative care is organised in different settings [67, 80]:

- Inpatient hospices: Support for the seriously ill, mainly by GPs,
- Daycare hospices (partly inpatient): Support for home care (part of inpatient hospices),
- Outpatient hospice services: Psychosocial support for patients and relatives,
- Palliative care units in hospitals: Mainly for incurable patients for whom a stay is indicated,
- Palliative services in hospitals: Palliative services for general hospital wards,
- Specialised outpatient palliative care (Spezialisierte ambulante Palliativversorgung, SAPV): Outpatient care with a focus on pain therapy and symptom management for patients with special needs,
- General outpatient palliative care (Allgemeine ambulante Palliativversorgung, AAPV): Outpatient care for palliative patients in the sense of routine care.

Tumour Documentation and Outcome Quality

The requirements for tumour documentation and tasks to assure outcome quality comprise the following:

- Adequately available resources for documentation: 0.5 FTE per 200 primary cases and 0.1 FTE per 200 after-care cases,
- Tumour documentation system with at least three months of patient data at the time of initial certification,
- Data set according to the oncological minimal data set by the Working Group of German Tumour Centres and the Society of Epidemiological Cancer Registries in Germany (Gesellschaft der epidemiologischen Krebsregister in Deutschland, GEKID),

- Cooperation with the cancer registry (www.tumorzentren.de), including continuous and complete data transfer, with avoidance of parallel data systems,
- Appointment of a documentation officer with the following competences and duties:
 - Ensuring and monitoring the timely, complete, comprehensive and correct transmission and quality of the patient data relevant for certification by all cooperation partners to the cancer registry,
 - Motivation for cross-sectoral cooperation between the participating specialities in the cancer registry (pathological findings, radiotherapy and drug treatments)
 - Ensuring and monitoring the timely, complete and correct recording of patient data,
 - Qualification and support of the staff responsible for data recording and
 - Regular analysis of the evaluations, especially over time.
- Possibility to filter according to specific characteristics (age, TNM classification, form of treatment, etc.) and availability of Kaplan-Meier-Curves with outcomes such as overall survival (OAS), progression-free survival (PFS), disease-free survival (DFS), etc.
- Data analysis: Data in the tumour documentation system must be evaluated and analysed at least once a year, and the results must be discussed on an interdisciplinary basis and in a network of breast cancer centres.
- Recording of the follow-up and description of the aftercare of each patient

Cover Letter

Englisch

Dear XXX,

We have been tasked by the Austrian Ministry of Health and Austrian Hospital Organizations to systematically compare the organisation (centralisation and decentralisation) of cancer care provision in different countries. This initiative is driven by the political aim to enhance ambulatory and outpatient care, including home care, in Austria.

In order to gain a comprehensive understanding of cancer care organisation, focusing on breast cancer as an example, we have developed a set of questions concerning the infrastructure of cancer care (e.g., decision-making processes in tumour boards, inpatient and outpatient service delivery) and the professionals involved in care provision (oncologists, clinicians, outpatient oncologists, cancer nurses, etc.). Additionally, we are interested in exploring cross-sectoral communication (IT infrastructure) and care coordination. We are also seeking published materials/documents describing your country's cancer care organisation.

Attached is our research protocol with a more detailed project description, research questions, and objectives.

As part of our research on breast cancer care structures, we have identified you as an expert in the field. Therefore, we have developed a questionnaire to gain deeper insights into breast cancer care, and we would greatly appreciate your participation in our survey through a virtual meeting lasting approximately 1 hour.

Your insights and expertise are crucial to our research, and we would be grateful for your contribution to our questionnaire. Should you be unable to participate, we would highly appreciate it if you could recommend another expert who might be interested.

Thank you very much for considering our request.

Best regards,

Nicole Grössmann-Waniek

Deutsch

Sehr geehrter XXX,

Im Auftrag des österreichischen Gesundheitsministeriums und der österreichischen Krankenhausträger wurden wir beauftragt, die Organisation der Krebsversorgung (Zentralisierung und Dezentralisierung) in verschiedenen europäischen Ländern systematisch zu vergleichen. Diese Initiative wird von dem politischen Ziel angetrieben, die ambulante und stationäre Versorgung, einschließlich der Home-Treatment, in Österreich auszubauen.

Um ein umfassendes Verständnis der Organisation der Krebsversorgung zu erlangen, sind wir insbesondere an der Infrastruktur der Krebsversorgung (z.B. Entscheidungsprozesse in Tumorboards, stationäre und ambulante Versorgung) und den daran beteiligten Professionen (Onkologen, Kliniker, ambulante Onkologen, Krebskrankenpfleger usw.) interessiert. Ein weiterer Fokus liegt auf der sektorenübergreifenden Kommunikation (IT-Infrastruktur) und der Versorgungskoordination. Schlussendlich sind veröffentlichte Publikationen/Dokumente, welche die Organisation der Krebsversorgung in Ihrem Land beschreiben, ein weiterer wichtiger Aspekt für unsere Arbeit.

Eine detaillierte Projektbeschreibung, Forschungsfragen und Ziele finden Sie auf unserer Website: AIHTA - Versorgung onkologischer Patient*innen am Beispiel Brustkrebs: Patient*innenpfade, Versorgungsstrukturen und Leistungserbringung in ausgewählten Europäischen Ländern

Im Rahmen unserer Recherche zur Organisation der Brustkrebsversorgung haben wir Ihre Organisation als wichtigen Akteur auf diesem Gebiet identifiziert. Wir haben einen Fragebogen entwickelt, um umfassende Einblicke in die Versorgung von Brustkrebs zu gewinnen, und würden uns sehr über Ihre Teilnahme an unserer Umfrage (virtuell ca. 1 Stunde) freuen.

Ihre Expertise wäre für uns von großem Wert. Sollten Sie nicht teilnehmen können, wären wir Ihnen außerordentlich dankbar, wenn Sie einen Kontakt empfehlen könnten, der möglicherweise interessiert wäre.

Vielen herzlichen Dank im Voraus!

Mit freundlichen Grüßen,

Nicole Grössmann-Waniek

Questionnaire – Organisation of Cancer Care

Dear experts,

The following questions will help address the aims of our report, which focuses on the organisation of breast cancer care in selected European countries. We are specifically interested in the available health care infrastructure and the professions involved in medical care provision. Additionally, cross-sectoral coordination, communication, and the available IT infrastructure will be relevant.

For items that request a document, please indicate whether such a document exists. Please insert the link or attach the file in your email response and indicate the file name in the provided field.

Please complete the questionnaire to the best of your knowledge and belief. Please note that the questionnaire aims to provide an overview of oncological care in different countries and the involved professions. The information collected will be presented descriptively and published in a final report. The questionnaire is divided into the following sections:

- A) General information on the organisation of (breast) cancer care
- B) Cancer care decision-making and place of health care provision

Thank you once again for your valuable contribution.

A) General Information on the Organisation of (Breast) Cancer Care

Name: Click or tap here to enter text.

Institution: Click or tap here to enter text.

Date: Click or tap here to enter text.

1. How is (breast) cancer care organised in your country? <i>Please describe the cancer care infrastructures (e.g. comprehensive cancer centres) available in your country, outlining the responsibilities and competencies across in- and outpatient settings.</i>
Click or tap here to enter text.
2. What types of (breast) cancer care infrastructures are particularly available in the outpatient setting, and which health care professionals are involved? <i>Please indicate what health care infrastructures are available in your country's outpatient setting and which health care professionals (outpatient oncologists, cancer nurses, etc.) are involved.</i>
Click or tap here to enter text.
3. Is there a central electronic system for patient records in place? <i>Please indicate if patient records can be accessed centrally in the in- and outpatient sector.</i>
Click or tap here to enter text.
4. How is cross-sectoral care coordinated in your country? <i>Please indicate if coordinating centres for the in- and outpatient sectors are in place.</i>
Click or tap here to enter text.
5. Are there any initiatives available for outpatient cancer care in your country? <i>Please indicate if any programmes or initiatives are available that support care shift from the in- to the outpatient sector.</i>
Click or tap here to enter text.
6. Are you aware of any publications, documents, or reports on the organisation of (breast) cancer care? <i>Please indicate if you know any published information on the organisation of cancer care in your country, independent of the language.</i>
Click or tap here to enter text.
7. Could you please recommend another expert who could provide us with further information on the organisation of breast cancer care in your country or other European countries? <i>We would appreciate it if you could connect us to other experts in this field and provide us with contact information.</i>
Click or tap here to enter text.

B) Cancer Care Decision-Making and Place of Health Care Provision

8. Where and by whom are treatment decisions made? *Please indicate in which health care setting (in-/outpatient) and by whom (e.g. multidisciplinary team) treatment decisions are made.*

Click or tap here to enter text.

9. Is there any kind of shared decision-making involving patients, such as advance care planning, implemented in your country? *Please indicate if and how patients are involved in making treatment decisions.*

Click or tap here to enter text.

10. Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient (GPs, radiology, gynaecologist)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologist, cancer nurses)
Diagnosis							
Physical examination		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Blood sample		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Diagnostic imaging techniques (X-ray, MRI, etc.)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Propagation diagnostics (e.g., staging)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Biopsy for diagnosis/tissue histology		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Genetic analysis of the tumour		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Patient support							
Psycho-oncological care		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Fertility counselling		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sexual health		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Protheses & wigs (e.g. specialised bras, prostheses)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Genetic counselling		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

10. Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient (GPs, radiology, gynaecologist)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologist, cancer nurses)
Clinical social work		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Discharge planning		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Therapy management							
Treatment plan/therapy concept		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Multidisciplinary team		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Geriatric Assessment		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bone density measurement		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Blood samples		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Intravenous infusion (e.g. port catheter)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sentinel lymph node biopsy		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Therapy options							
Surgery (lumpectomy or mastectomy)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Radiotherapy		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
medicinal tumour therapy		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

10. Where and by whom are the following health care services provided? Please indicate where the subsequent medical services are provided in your country (e.g. in- and outpatient settings, ambulatory care) and what medical professions are involved.							
Health care services for breast cancer patients	Health care infrastructures (e.g., hospitals, laboratories, home treatment)	Inpatient	Hospital outpatient clinic	Outpatient (GPs, radiology, gynaecologist)	Home treatment	External laboratory/radiology	Health care professions (e.g., oncologists, clinicians, cancer nurses, outpatient oncologist, cancer nurses)
Follow-up care							
Survivorship (e.g. rehabilitation)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Palliative Care		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Breast reconstruction/plastic surgery		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

11. Considering these medical services, is anything missing from the list (Question 10)? *If so, please indicate which medical services are missing, where they are provided, and who should ideally offer them.*

Click or tap here to enter text.

12. Are the chosen categories (diagnosis, patient support, therapy management, therapy options, follow-up care) correct and complete? *Please indicate if the names of the categories are accurate and if the medical services are appropriately assigned.*

Click or tap here to enter text.

13. Are there any digital health technologies available in the care pathway of breast cancer patients? *If so, please indicate which digital devices or services are in place in your country.*

Click or tap here to enter text.

14. Is home treatment for immunotherapy or chemotherapy available in your country? *If yes, please indicate how it is organised and by whom.*

Click or tap here to enter text.