

# 2022 CBCN® Test Content Outline



## I. Care Continuum - 26%

### A. Breast health, screening, and early detection

1. Issues related to special populations (culture, ethnicity, disability, elderly, sexual and gender minorities, healthcare disparities, male, pregnancy)
2. Breast health
  - a. Breast anatomy
  - b. Hormonal influence
  - c. Breast development and changes
3. Benign pathology
  - a. Anomalies (e.g., asymmetry, nipple deviation)
  - b. Conditions (e.g., mastodynia, fibroadenomas, infection, nipple discharge)
4. Screening and early detection
  - a. Imaging modalities
  - b. Imaging results (e.g., Breast Imaging Reporting and Data System [BI-RADS], breast density)
  - c. Screening recommendations based on risk
5. Elements of a clinical breast exam and lymph node examination
  - a. Abnormal physical findings
  - b. Education related to breast awareness

### B. Risk and predisposition assessment

1. Risk assessment
  - a. Epidemiology (population based risk factors)
  - b. Breast cancer risk prediction models (e.g., Tyrer-Cuzick, Gail Model)
  - c. High-risk lesions (e.g., lobular carcinoma in situ [LCIS], atypical ductal hyperplasia [ADH])
  - d. Genetic testing
2. Risk factors
  - a. Modifiable (e.g., lifestyle behaviors)
  - b. Non-modifiable (e.g., age, family history, prior radiation)
3. Risk reduction
  - a. Interventions to modify risk (e.g., chemoprevention, prophylactic surgery, clinical trials)
  - b. Health promotion to reduce risk

### C. Patient navigation process

1. Advocacy
2. Barriers to care (e.g., financial, cognitive, language, transportation)
3. Multidisciplinary collaboration

### D. Survivorship

1. Familial risk assessment and implications for genetic counseling
2. Survivorship care plan
3. Physical issues
  - a. Bone health (e.g., fracture, bone density, bone modulating agents)
  - b. Breast/chest wall changes (e.g., cosmesis, skin changes, scarring, reconstruction complications)
  - c. Cardiopulmonary toxicity
  - d. Fatigue
  - e. Lymphedema
  - f. Neuropathy (e.g., peripheral, brachial, chest wall, breast)
  - g. Range of motion limitations
  - h. Sexual and reproductive issues (e.g., infertility, menopausal symptoms)
  - i. Weight gain

4. Surveillance
  - a. Breast cancer screening (e.g., local recurrence, new primary)
  - b. Symptom-directed work-up
  - c. Physical examinations
  - d. Surveillance for subsequent malignancies
- E. End-of-life care
  1. Legal and ethical issues (e.g., advance directive, medical power of attorney, do-not-resuscitate order [DNR])
  2. Philosophy of hospice care
  3. End-of-life care principles (e.g., pathophysiology, symptom management, family and caregiver support, cultural variations, education)
  4. Spirituality, grief, and bereavement

## II. Diagnosis and Staging - 17%

- A. Process of carcinogenesis
- B. Diagnostic procedures and tests
  1. Imaging modalities
  2. Imaging results
  3. Biopsies (e.g., fine needle aspiration [FNA], core, surgical)
- C. Pathology
  1. Cellular (e.g., grade, histology)
  2. ER/PR receptor
  3. HER2 receptor
  4. Ki-67 (MIB or MIB-1) receptor
  5. Gene assay
  6. Prognostic features (e.g., lymphovascular invasion, extranodal extension)
- D. Staging criteria (AJCC)
  1. Clinical
  2. Pathologic
  3. Prognostic
  4. Additional studies (e.g., positron-emission tomography [PET], bone scan, computed tomography [CT] scan)

## III. Treatment Modalities - 17%

- A. Surgery
  1. Treatment considerations (e.g., performance status, comorbidities)
  2. Breast (e.g., breast conservation, tumor localization, mastectomy)
  3. Axilla (e.g., sentinel lymph node biopsy, axillary lymph node dissection)
- B. Surgical reconstruction
  1. Autologous
  2. Implant
  3. Treatment considerations (e.g., delayed v. immediate, comorbidities, risk factors)
- C. Radiation therapy
  1. Treatment considerations (e.g., range of motion, wound healing, comorbidities, extent of disease)
  2. External beam
  3. Brachytherapy
- D. Systemic (e.g., hormonal, chemotherapy, targeted therapy)
  1. Treatment considerations (e.g., cardiac status, vascular access, bone health, fertility, comorbidities)
  2. Neoadjuvant

3. Adjuvant
  4. Metastatic
- E. Special treatment considerations for
1. Triple negative disease
  2. HER2 receptor status
  3. Inflammatory breast cancer
  4. Paget disease
  5. Phyllodes tumor (malignant and benign)
  6. Targetable mutations (e.g., PI3K, PD-L1)
  7. Androgen receptor status
- F. Treatment consideration for special populations (e.g., culture, ethnicity, disability, elderly, healthcare disparities, male, young adult, fertility preservation)

#### **IV. Nursing Practice - 30%**

- A. Symptom management (assessment, risk factors, pathophysiology, prevention, education, and management)
1. Surgical
    - a. Wound complications
    - b. Decreased range of motion
    - c. Cording
    - d. Lymphedema
    - e. Pain
    - f. Neurosensory changes
  2. Medical
    - a. Alopecia
    - b. Fatigue
    - c. Gastrointestinal complications
    - d. Myelosuppression
    - e. Menopausal symptoms (e.g., vaginal dryness, hot flashes)
    - f. Cardiovascular complications
    - g. Peripheral neuropathy
    - h. Cognitive dysfunction
    - i. Skin and nail changes
    - j. Pulmonary complications
    - k. Musculoskeletal issues
    - l. Pain
    - m. Psychiatric concerns (e.g., anxiety, depression, sleep disturbances)
  3. Radiation
    - a. Skin and tissue changes
    - b. Pain
    - c. Fatigue
    - d. Range of motion
    - e. Cardiopulmonary issues
    - f. Lymphedema
    - g. Infection
    - h. Esophagitis
  4. Complementary and integrative modalities
    - a. Exercise (e.g., walking)
    - b. Nutrition

- c. Rehabilitation (e.g., physical therapy, occupational therapy)
  - d. Movement therapy (e.g., yoga, Tai Chi, aquatic therapy)
  - e. Other modalities (herbs and supplements, mindfulness, hypnosis, massage, chiropractic treatment, acupuncture)
- B. Oncologic emergencies (anaphylaxis, extravasation, hypercalcemia, hypersensitivity, pleural effusion, sepsis, spinal cord compression, thromboembolic events)
- C. Palliative care
- D. Professional performance
    - 1. Professional practice guidelines (e.g., Oncology Nursing Society [ONS], National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology [NCCN Guidelines®], American Society of Clinical Oncology [ASCO], American College of Radiology [ACRO])
    - 2. Teaching and learning principles (e.g., adult learning)
    - 3. Community needs assessment, program planning, and health promotion
    - 4. Accreditation standards (e.g., National Accreditation Program for Breast Centers)
    - 5. Advocacy and legislative issues impacting breast care delivery and access
    - 6. Patient resources (e.g., local, state, federal, institutional, and internet)
    - 7. Clinical trials (e.g., phases, accessing trials, elements of informed consent)
    - 8. Quality improvement process (e.g., evidence-based practice)
    - 9. Regulatory requirements (e.g., mammography standards, compliance issues)

**V. Psychosocial Dimensions of Care - 10%**

- A. Influence of culture, spirituality, gender/gender identity, sexual preference, age and healthcare disparities on psychosocial response across the continuum of breast care
- B. Family dynamics
- C. Altered body image
- D. Reproductive and sexual health
- E. Emotional state (e.g., anxiety, depression, fear, grief, stress, survivorship guilt)
- F. Socioeconomic considerations related to screening, diagnosis, treatment, and follow up
- G. Coping strategies
  - 1. Patient
  - 2. Family/caregiver
  - 3. Healthcare provider
- H. Crisis management (e.g., domestic violence, suicidal ideation)
- I. Psychosocial assessment (e.g., related to spirituality, sexuality, distress, coping, family function, relationship role changes, and quality of life)
- J. Communication strategies and issues (e.g., active listening, clarification, language barriers)
- K. Financial issues (e.g., benefits, insurance, reimbursement)
- L. Social support