Introduction

• While many evidence-based clinical guidelines exist for diagnosis and treatment, there are few evidence-based clinical care guidelines addressing life-long follow-up care for survivors by cancer type.

• This guideline was developed to provide recommendations to enhance the quality of clinical follow-up care for those who have completed initial treatment for female breast cancer.

• Most patients remain at risk indefinitely for local and/or systemic recurrence of their breast cancer and for complications of their previous cancer treatment.
ACS/ASCO Guideline Development Methodology

• Methods used to develop this guideline reflect an evolving process that was influenced by ACS screening and survivorship guidelines.

• This guideline builds upon the recently published ASCO symptom-based guidelines for adult cancer survivors.

• A multidisciplinary expert workgroup was formed with members with expertise in primary care, gynecology, surgical oncology, medical oncology, radiation oncology, and nursing.
  – In addition a cancer survivor was included to provide a patient perspective.

• A systematic review of the literature was conducted using PubMed through April 2015. Studies on childhood cancers, qualitative studies, and non-English publications were excluded.

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Clinical Questions

- This clinical practice guideline addresses five key areas of breast cancer survivorship to provide recommendations on best practice in the management of adult women after breast cancer treatment, focusing on the role of primary care clinicians and other clinicians who care for post-treatment breast cancer survivors.

- The five areas covered include:
  1. Surveillance for breast cancer recurrence
  2. Screening for second primary cancers
  3. Assessment and management of physical and psychosocial long-term and late effects of breast cancer and treatment
  4. Health promotion
  5. Care coordination and practice implications.

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Target Population and Audience

Target Population
Female adult breast cancer survivors

Target Audience
Primary care providers, medical oncologists, radiation oncologists, and other clinicians caring for breast cancer survivors

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## Level of Evidence

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<tr>
<td><strong>I</strong></td>
<td>Meta analyses of RCTs</td>
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<tr>
<td><strong>IA</strong></td>
<td>RCT of breast cancer survivors</td>
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<td>RCT based on cancer survivors across multiple cancer sites</td>
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<td>RCT not based on cancer survivors, but on general population experiencing a specific long-term or late effect (e.g., managing menopausal symptoms, sexual dysfunction, etc.)</td>
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<td>Non-randomized clinical trials based on breast cancer survivors</td>
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<td><strong>IIC</strong></td>
<td>Non-randomized clinical trials not based on cancer survivors, but on general population experiencing a specific long-term or late effect</td>
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<td><strong>III</strong></td>
<td>Case-control study or prospective cohort study</td>
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<td>Expert opinion, observational study (excluding case-control and prospective cohort studies), clinical practice, literature review, or pilot study</td>
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<td><strong>2A</strong></td>
<td>NCCN guideline</td>
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Summary of Guideline Recommendations

SURVEILLANCE FOR BREAST CANCER RECURRENT

History and Physical
• Recommendation 1.1: It is recommended that primary care clinicians
  a) Should individualize clinical follow-up care provided to breast cancer survivors based on age, specific diagnosis and treatment protocol and as recommended by the treating oncology team (LOE=2A).
  b) Should make sure the patient receives a detailed cancer-related history and physical examination every 3 to 6 months for the first 3 years after primary therapy, every 6 to 12 months for the next 2 years, and annually thereafter (LOE=2A).

Screening the breast for local recurrence or a new primary breast cancer
• Recommendation 1.2: It is recommended that primary care clinicians
  a) Should refer women who have received a unilateral mastectomy for annual mammography on the intact breast and for those with lumpectomies an annual mammography of both breasts (LOE=2A).
  b) Should not refer for routine screening with MRI of the breast unless the patient meets high risk criteria for increased breast cancer surveillance as per ACS Guidelines (LOE=2A).

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Summary of Guideline Recommendations

**Laboratory Tests and Imaging**
- Recommendation 1.3: It is recommended that primary care clinicians should not offer routine laboratory tests or imaging, except mammography if indicated, for the detection of disease recurrence in the absence of symptoms (LOE=2A).

**Signs of Recurrence**
- Recommendation 1.4: It is recommended that primary care clinicians should educate and counsel all women about the signs and symptoms of local or regional recurrence (LOE=2A).

**Risk Evaluation and Genetic Counseling**
- Recommendation 1.5: It is recommended that primary care clinicians
  a) Should assess your patient’s cancer family history.
  b) Should offer genetic counseling if potential hereditary risk factors are suspected (e.g., women with a strong family history of cancer [breast, colon, endometrial], or age 60 or younger with triple negative breast cancer) (LOE=2A).
Summary of Guideline Recommendations

Endocrine Treatment Impacts, Symptom Management

• Recommendation 1.6: It is recommended that primary care clinicians should counsel patients to adhere to adjuvant endocrine (anti-estrogen) therapy (LOE=2A).

Screening for Second Primary Cancers

Cancer Screenings in the Average Risk Patient

• Recommendation 2.1: It is recommended that primary care clinicians
  a) Should screen for other cancers as they would for patients in the general population.
  b) Should provide an annual gynecological assessment for post-menopausal women on selective estrogen receptor modulator therapies (SERMs).

Assessment and Management of Physical and Psychosocial Long-Term and Late Effects of Breast Cancer and Treatment

Body Image Concerns

• Recommendation 3.1: It is recommended that primary care clinicians
  a) Should assess for patient body image/appearance concerns (LOE=0).
  b) Should offer the option of adaptive devices (e.g. breast prostheses, wigs) and/or surgery when appropriate (LOE: 0)
  c) Should refer for psychosocial care as indicated (LOE=IA).
Summary of Guideline Recommendations

**Lymphedema**
- Recommendation 3.2: It is recommended that primary care clinicians
  a) Should counsel survivors on how to prevent / reduce risk of lymphedema, including weight loss for those who are overweight or obese (LOE=0).
  b) Should refer patients with clinical symptoms or swelling suggestive of lymphedema to a therapist knowledgeable about the diagnosis and treatment of lymphedema, such as a physical therapist, occupational therapist, or lymphedema specialist (LOE=0).

**Cardiotoxicity**
- Recommendation 3.3: It is recommended that primary care clinicians
  a) Should monitor lipid levels and provide cardiovascular monitoring, as indicated (LOE=0).
  b) Should educate breast cancer survivors on healthy lifestyle modifications, potential cardiac risk factors, and when to report relevant symptoms (shortness of breath or fatigue) to their health care provider (LOE=I).

**Cognitive Impairment**
- Recommendation 3.4: It is recommended that primary care clinicians
  a) Should ask patients if they are experiencing cognitive difficulties (LOE=0).
  b) Should assess for reversible contributing factors of cognitive impairment and optimally treat when possible (LOE=IA).
  c) Should refer patients with signs of cognitive impairment for neurocognitive assessment and rehabilitation, including group cognitive training if available (LOE=IA).
Summary of Guideline Recommendations

Distress, Depression, Anxiety

• Recommendation 3.5: It is recommended that primary care clinicians
  a) Should assess patients for distress, depression, and/or anxiety (LOE=I).
  b) Should conduct a more probing assessment for patients at a higher risk of depression (i.e.,
     young patients, those with a history of prior psychiatric disease, and patients with low
     socioeconomic status) (LOE=III).
  c) Should offer in-office counseling and/or pharmacotherapy and/or refer to appropriate
     psycho-oncology and mental health resources as clinically indicated if signs of distress,
     depression, or anxiety are present (LOE=I).

Fatigue

• Recommendation 3.6: It is recommended that primary care clinicians
  a) Should assess for fatigue and treat any causative factors for fatigue, including anemia,
     thyroid dysfunction, and cardiac dysfunction (LOE=0).
  b) Should offer treatment or referral for factors that may impact fatigue (e.g. mood disorders, 
     sleep disturbance, pain, etc.) for those who do not have an otherwise identifiable cause of
     fatigue (LOE= I).
  c) Should counsel patients to engage in regular physical activity and refer for cognitive 
     behavioral therapy as appropriate (LOE= I).
Summary of Guideline Recommendations

**Bone Health**
- Recommendation 3.7: It is recommended that primary care clinicians
  a) Should refer post-menopausal breast cancer survivors for a baseline DEXA scan (LOE=0).
  b) Should refer for repeat DEXA scans every 2 years for women taking an aromatase inhibitor, premenopausal women taking tamoxifen and/or a GnRH agonist, and women who have chemo-induced premature menopause (LOE=0).

**Musculoskeletal Health**
- Recommendation 3.8: It is recommended that primary care clinicians
  a) Should assess for musculoskeletal symptoms, including pain, by asking patients about their symptoms at each clinical encounter (LOE=0).
  b) Should offer one or more of the following interventions based on clinical indication: acupuncture, physical activity, referral for physical therapy or rehabilitation (LOE=III).
Summary of Guideline Recommendations

Pain and Neuropathy

• Recommendation 3.9: It is recommended that primary care clinicians
  a) Should assess for pain and contributing factors for pain with the use of a simple pain scale and comprehensive history of the patient’s complaint (LOE=0).
  b) Should offer interventions, such as acetaminophen, nonsteroidal anti-inflammatory drugs, physical activity and/or acupuncture, for pain (LOE=I);
  c) Should refer to an appropriate specialist depending on the etiology of the pain once the underlying etiology has been determined (e.g., lymphedema specialist, occupational therapist, etc.). (LOE=0);
  d) Should assess for peripheral neuropathy and contributing factors for peripheral neuropathy (LOE=0) by asking the patient about their symptoms, specifically numbness and tingling in their hands and/or feet, and the character of that symptom;
  e) Should offer physical activity for neuropathy;
  f) Should offer duloxetine for patients with neuropathic pain, numbness and tingling (LOE=IB).

Infertility

• Recommendation 3.10: It is recommended that primary care clinicians should refer survivors of childbearing age who experience infertility to a specialist in reproductive endocrinology and infertility as soon as possible (LOE=0).

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Summary of Guideline Recommendations

**Sexual Health**
- Recommendation 3.11: It is recommended that primary care clinicians
  a) Should assess for signs and symptoms of sexual dysfunction or problems with sexual intimacy (LOE=0).
  b) Should assess for reversible contributing factors to sexual dysfunction and treat, when appropriate (LOE=0).
  c) Should offer nonhormonal, water-based lubricants and moisturizers for vaginal dryness (LOE=IA).
  d) Should refer for psychoeducational support, group therapy, sexual counseling, marital counseling or intensive psychotherapy, when appropriate (LOE=IA).

**Premature menopause/Hot Flashes**
- Recommendation 3.12: It is recommended that primary care clinicians should offer selective serotonin-norepinephrine reuptake inhibitors (SNRIs), selective serotonin reuptake inhibitors (SSRIs), gabapentin, lifestyle modifications and/or environmental modifications to help mitigate vasomotor symptoms of premature menopause symptoms (LOE=IA).

**HEALTH PROMOTION**
**Information**
- Recommendation 4.1: It is recommended that primary care clinicians
  a) Should assess the information needs of the patient related to breast cancer and its treatment, side effects, other health concerns, and available support services (LOE=0).
  b) Should provide or refer survivors to appropriate resources to meet these needs (LOE=0).

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Summary of Guideline Recommendations

Obesity

• Recommendation 4.2: It is recommended that primary care clinicians
  a) Should counsel survivors to achieve and maintain a healthy weight (LOE=0.)
  b) Should counsel survivors if overweight or obese to limit consumption of high-calorie foods and
     beverages and increase physical activity to promote and maintain weight loss (LOE=IA, III).

Physical Activity

• Recommendation 4.3: It is recommended that primary care clinicians should counsel survivors to
  engage in regular physical activity consistent with the ACS guideline and specifically:
  a) Should avoid inactivity and return to normal daily activities as soon as possible following
     diagnosis (LOE=III).
  b) Should aim for at least 150 minutes of moderate or 75 minutes of vigorous aerobic exercise per
     week (LOE=I, IA).
  c) Should include strength training exercises at least 2 days per week. Emphasize strength training
     for women treated with adjuvant chemotherapy or hormone therapy (LOE= IA).

Nutrition

• Recommendation 4.4: It is recommended that primary care clinicians should counsel survivors to
  achieve a dietary pattern that is high in vegetables, fruits, whole grains, and legumes, low in
  saturated fats, and limited in alcohol consumption (LOE= IA, III).

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Summary of Guideline Recommendations

Smoking Cessation

• Recommendation 4.5: It is recommended that primary care clinicians should counsel survivors to avoid smoking and refer survivors who smoke to cessation counseling and resources (LOE= I).

CARE COORDINATION / PRACTICE IMPLICATIONS

Survivorship Care Plan

• Recommendation 5.1: It is recommended that primary care clinicians should consult with the cancer treatment team and obtain a treatment summary and Survivorship Care Plan (LOE=0, III).

Communication with Oncology Team

• Recommendation 5.2: It is recommended that primary care clinicians should maintain communication with the oncology team throughout your patient’s diagnosis, treatment and post-treatment care to ensure care is evidence-based and well-coordinated (LOE=0).

Inclusion of Family

• Recommendation 5.3: It is recommended that primary care clinicians should encourage the inclusion of caregivers, spouses, or partners in usual breast cancer survivorship care and support (LOE=0).

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Health Disparities

- Many patients have limited access to medical care.
- Racial and ethnic disparities in health care contribute significantly to this problem in the United States.
- Many other patients lack access to care because of their geographic location and distance from appropriate treatment facilities.
- Awareness of these disparities in access to care should be considered in the context of this clinical practice guideline, and health care providers should strive to deliver the highest level of cancer care to these vulnerable populations.

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Multiple Chronic Conditions

• Patients with MCC are a complex and heterogeneous population, making it difficult to account for all of the possible permutations to develop specific recommendations for care.

• Clinicians should review all other chronic conditions present in the patient and take those conditions into account when formulating the treatment and follow-up plan.
Discussion

• There are few prospective, RCTs testing interventions among breast cancer survivors, although studies in breast cancer survivors dominate the survivorship literature.

• The majority of the citations characterizing the risk and magnitude of risk of late effects and management recommendations relied predominantly on case-control studies with fewer than 500 participants and reviews that combined studies with various outcome measures. There were several cohort studies that used population-based data to estimate the risk of late effects.

• Another limitation is the reliance on previous guidelines for surveillance and symptom management.

• Recommendations are based on current evidence in the literature, but most evidence is not sufficient to warrant a strong recommendation. Rather, recommendations should be largely seen as possible management strategies given the current limited evidence base.
Additional Resources

More information, including a Data Supplement, a Methodology Supplement, slide sets, and clinical tools and resources, is available at

www.asco.org/guidelines/breastsurvivorship

A free, innovative online continuing education program to educate primary care clinicians about how to better understand and care for survivors in the primary care setting, is available at

www.cancersurvivorshipcentereducation.org

Patient information is available at www.cancer.net and

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