

# An Internist's Guide to the Care of the Patient Who Has Survived Cancer

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# GOALS

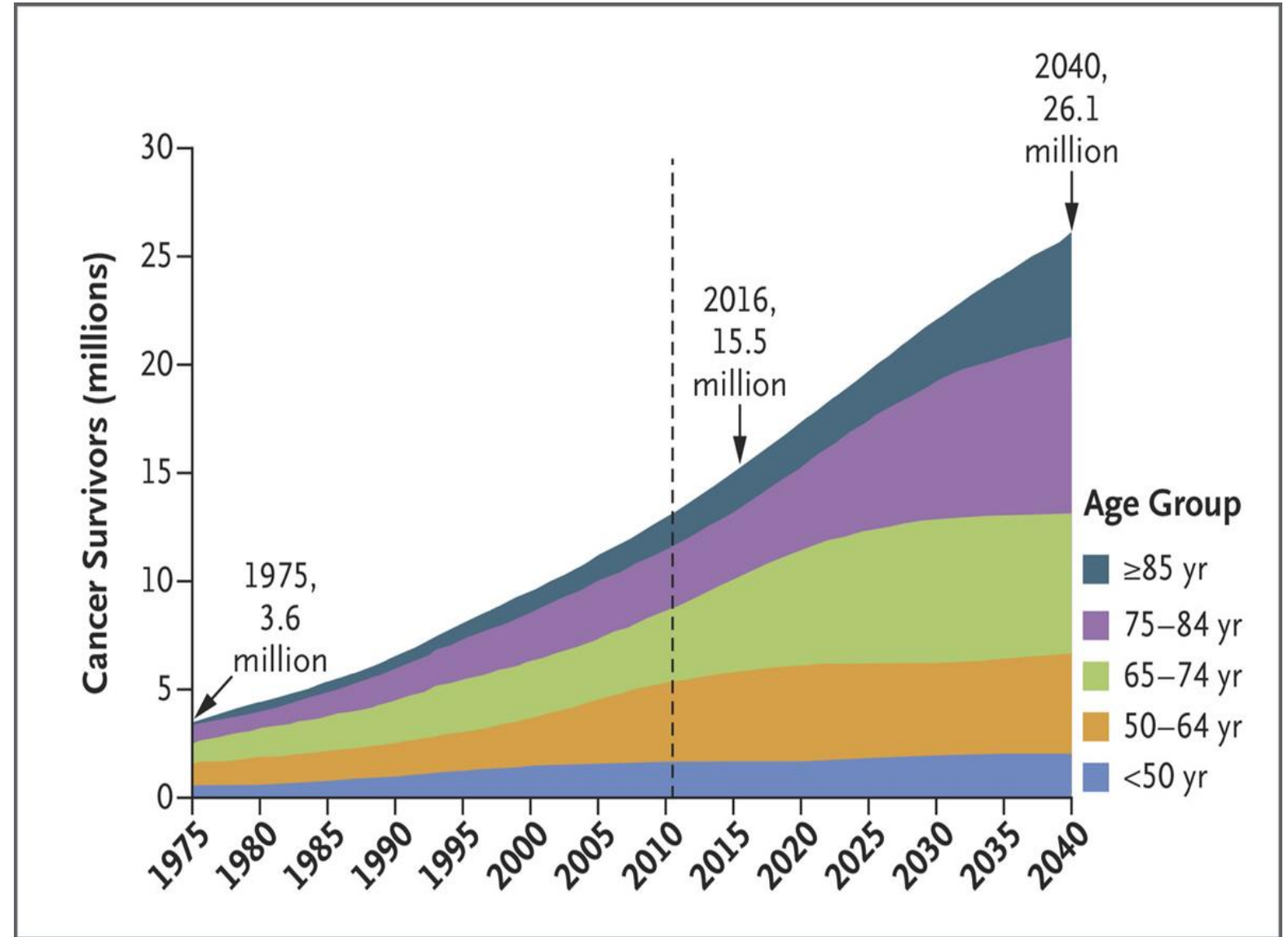
- Learn about the field of Cancer Survivorship
- Understand the Current State of Survivorship Care and the Role of Primary Care Providers
- Learn about the Late Effects of Cancer and its Treatments and Diagnose and Manage Comorbidities

# OVERVIEW OF SURVIVORSHIP

- Historically, 5 years after diagnosis
- From the moment of diagnosis through the balance of life Including family and caregivers
- After active treatment

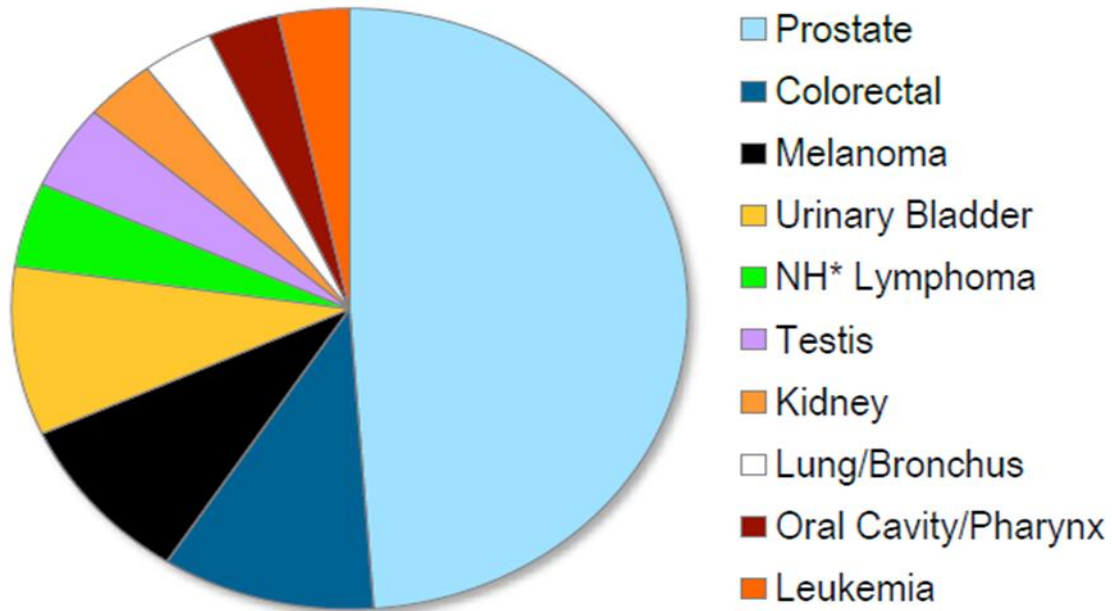


# CANCER SURVIVORS IN MILLIONS



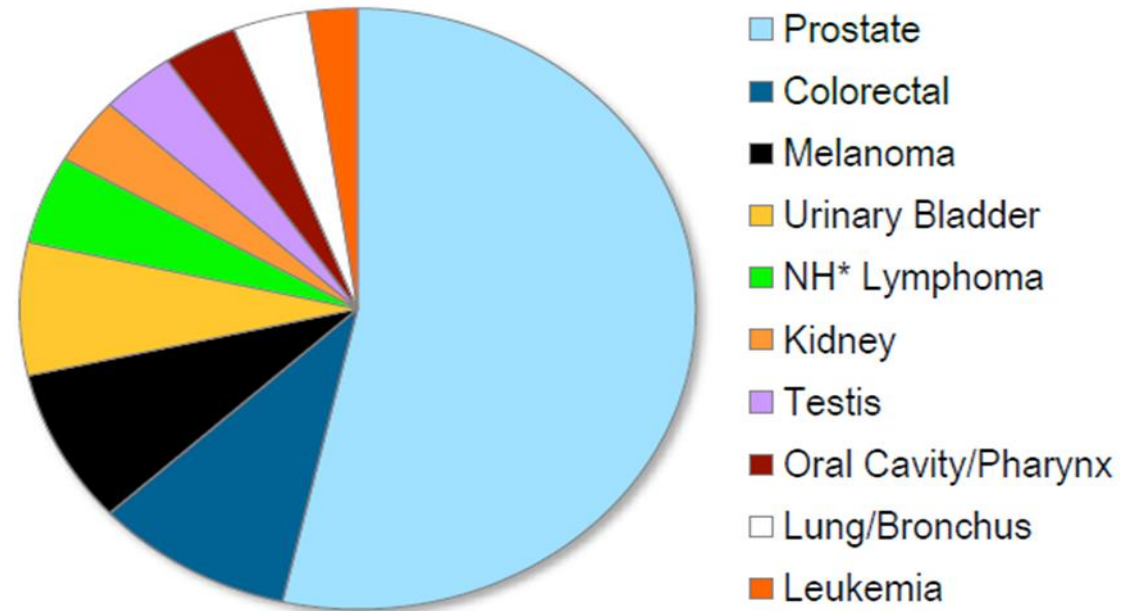
# MALES

2014



\*Non-Hodgkin

2024

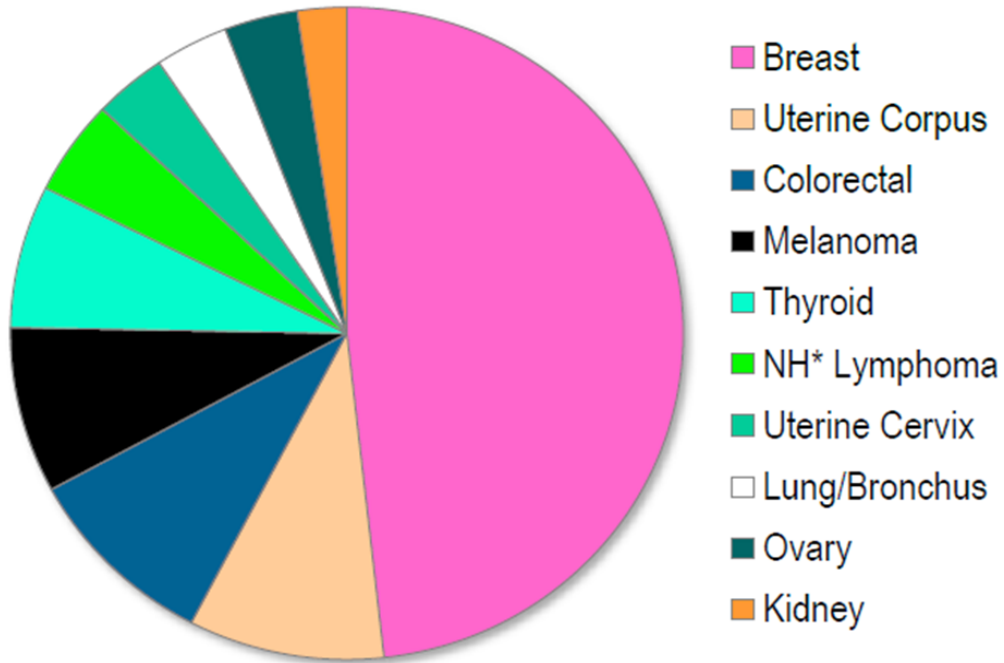


American Cancer Society, 2014a

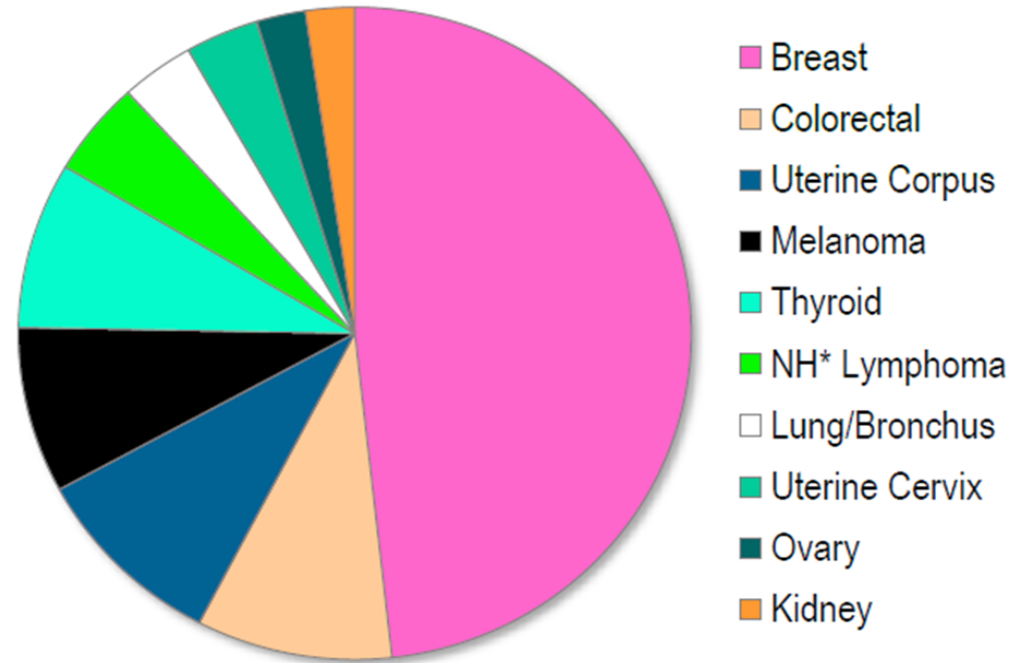


# FEMALES

2014



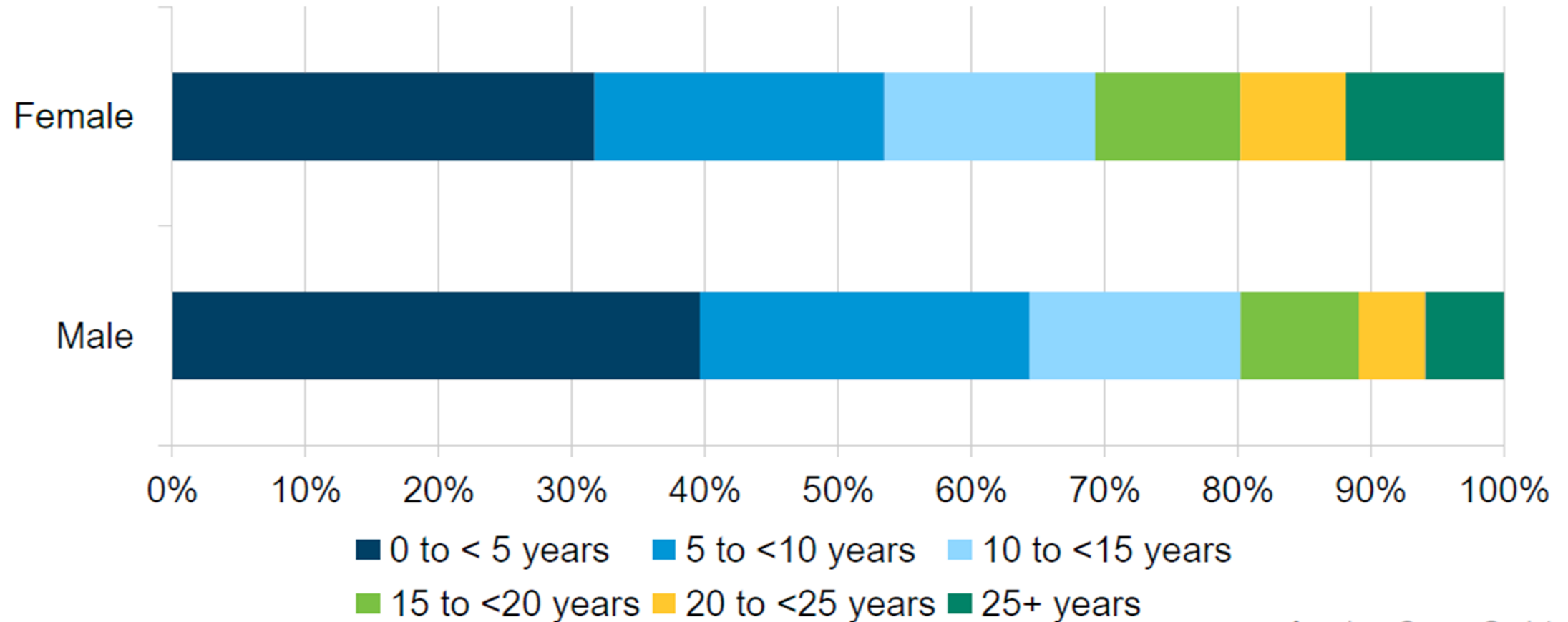
2024



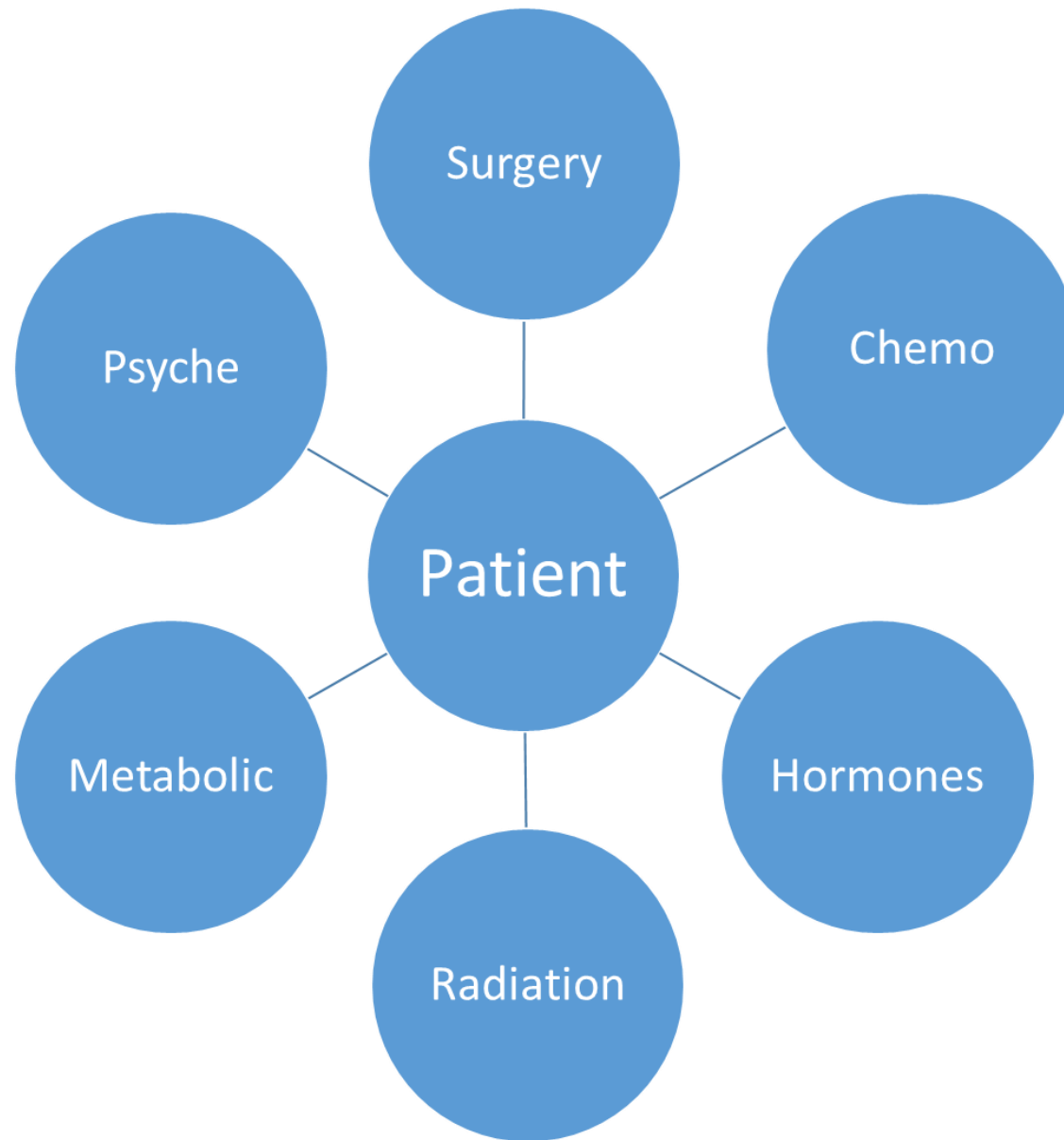
\*Non-Hodgkin

American Cancer Society, 2014a

# SURVIVORSHIP IN RELATIONSHIP TO DX



*American Cancer Society, 2014*





- Functional status
- Fatigue and sleep
- Overall physical health
- Fertility
- Pain



- Control
- Anxiety
- Depression
- Fear of recurrence
- Cognition/attention

- Family distress
- Roles and relationships
- Affection/sexual function
- Appearance
- Isolation
- Finances / employment

- Meaning of **illness**
- Religiosity
- Transcendence
- Hope
- Uncertainty
- Inner strength

# Psychosocial

**Table 3.** Risk Factors and Interventions for Psychosocial Issues.

| Psychosocial Issue                             | Risk Factors  | Frequency | Interventions  |
|--|---|-----------|--|
| Depression <sup>54</sup>                       | Female sex, higher number of coexisting conditions, negative body image, financial concerns, history of depression, sedentary lifestyle, loneliness   | Common    | Drugs: SSRIs, SNRIs, atypical antidepressants<br>Nondrug interventions: cognitive behavioral therapy, mindfulness practice and stress-reduction therapy, hypnosis, physical activity, self-directed web-based interventions                        |
| Anxiety <sup>54</sup>                          | Female sex, higher number of coexisting conditions, younger age, shorter time since diagnosis, living alone, financial concerns, history of anxiety, lower functional status  | Common    | Drugs: anxiolytics, gabapentin<br>Nondrug interventions: largely the same as for depression  |
| Post-traumatic stress disorder <sup>55</sup>   | Prior traumatic experience, unemployment, younger age at diagnosis, shorter time since diagnosis, depression, less social support, lower income, greater perceived negative impact of cancer  | Common    | Drugs: hydrocortisone<br>Nondrug interventions: largely the same as for depression   |
| Fear of recurrence <sup>56</sup>               | Increased anxiety, less-effective coping skills, higher reassurance-seeking behaviors, increased family distress, lower educational level, knowledge of a survivor who had a recurrence   | Common    | Nondrug interventions: largely the same as for depression  |
| Issues concerning return to work <sup>57</sup> | Older age, lower income, lower educational level, lower self-rating of health, chronic pain, depression, greater physical job demands (i.e., heavy labor), cancer treatment that causes physical limitations, cancer site that interferes with work | Common    | Nondrug interventions: psychoeducational interventions (patient education and lessons in self-care), vocational services, and physical activity resulting in improved health-related quality of life and a greater likelihood of returning to work |

# DEFINITIONS

- **Long-term effects** are medical problems that develop during active treatment and persist after the completion of treatment
- **Late effects** are medical problems that develop or become apparent months or years after treatment is completed

| Treatment         | Long-term side effects  | Late side effects   |
|-------------------|---|---|
| Chemotherapy      | Fatigue<br>Premature menopause<br>Sexual dysfunction<br>Neuropathy<br>“Chemo brain”<br>Kidney failure | Vision/cataracts<br>Infertility<br>Liver problems<br>Lung disease<br>Osteoporosis<br>Reduced lung capacity<br>Secondary primary cancers                           |
| Radiation therapy | Fatigue<br>Skin sensitivity<br>Lymphedema   | Cataracts<br>Cavities and tooth decay<br>Cardiovascular disease<br>Hypothyroidism<br>Infertility<br>Lung disease<br>Intestinal problems<br>Second primary cancers |
| Surgery           | Sexual dysfunction<br>Incontinence<br>Pain  | Body image disturbance<br>Functional disability<br>Infertility  |



# SUGGESTED SITE-SPECIFIC SURVEILLANCE RECOMMENDATIONS FOR CANCER SURVIVORS

**Table 1. Suggested Site-Specific Surveillance Recommendations for Cancer Survivors.\***

| Disease Site                             | Recommendations  | Comments   |
|--|--|--|
| Head and neck cancer <sup>5,†</sup>      | Physical examination every 1–3 mo for 1 yr, then every 2–6 mo for 2–5 yr and annually after 5 yr<br>Baseline imaging 6 mo after completion of treatment<br>Indirect laryngoscopy performed by an ENT physician periodically<br>Low-dose CT scans for lung-cancer screening, indicated for persons at high risk because of a history of smoking | If new or persistent symptoms develop, imaging is performed as appropriate to the clinical situation   |
| Breast cancer <sup>6,†</sup>             | Physical examination every 3–4 mo for 3 yr, then every 6 mo for 2 yr, and annually after 5 yr‡<br>Breast imaging annually  | Imaging or measurement of tumor markers is not indicated in women without symptoms; if new or persistent symptoms develop, imaging is indicated as appropriate to the clinical situation |
| Prostate cancer <sup>7,§</sup>           | Digital rectal examination annually for 5 yr<br>PSA test every 6–12 mo for 5 yr  | Imaging in men without symptoms is not indicated; if new or persistent symptoms develop, imaging is indicated as appropriate to the clinical situation                                   |
| Colorectal cancer <sup>10,§</sup>        | Physical examination and CEA test every 3–6 mo for 5 yr<br>CT imaging of chest, abdomen, and pelvis annually for 3 yr<br>Colonoscopy annually for 6 yr after surgery   | If new or persistent symptoms develop, imaging is indicated as appropriate to the clinical situation   |
| Non–small-cell lung cancer <sup>12</sup> | History taking and physical examination every 3–6 mo for 1–2 yr, then annually for 3–5+ yr<br>Low-dose axial CT scanning every 6 mo for 1–2 yr, then annually for 3–5+ yr¶   | If new or persistent symptoms develop, imaging is indicated as appropriate to the clinical situation   |
| Testicular cancer <sup>13</sup>          | Follow-up guidelines, which depend on histologic features (e.g., seminoma or nonseminoma) and stage  | If new or persistent symptoms develop, imaging is indicated as appropriate to the clinical situation   |
| Gynecologic cancer <sup>14</sup>         | Follow-up guidelines, which depend on histologic features (e.g., endometrial, cervical, or ovarian cancer) and stage   | If new or persistent symptoms develop, imaging is indicated as appropriate to the clinical situation   |
| Lymphoma <sup>15</sup>                   | Follow-up guidelines, which depend on histologic features (diffuse large lymphoma, follicular lymphoma, or Hodgkin's disease) and stage  | If new or persistent symptoms develop, imaging is indicated as appropriate to the clinical situation   |

\* Regarding cancer treated with bone marrow transplantation,<sup>16</sup> virtually every organ system may be affected by high-dose chemotherapy with allogeneic or autologous bone marrow transplantation. Specific surveillance guidelines for long-term and late effects of childhood cancers depend on organ site and exposure risk; in children who receive high-dose chemotherapy with allogeneic bone marrow transplantation, almost every organ system may be affected<sup>11,15</sup> (<https://childrensoncologygroup.org/index.php/survivorshipguidelines>). CEA denotes carcino-embryonic antigen, CT computed tomography, DXA dual-energy x-ray absorptiometry, ENT ear, nose, and throat, and PSA prostate-specific antigen.

† The American Society of Clinical Oncology practice guidelines are available at [www.asco.org/practice-guidelines/cancer-care-initiatives/prevention-survivorship/survivorship-compendium](http://www.asco.org/practice-guidelines/cancer-care-initiatives/prevention-survivorship/survivorship-compendium).

‡ The recommendations are for women receiving antiestrogen therapy.

§ American Cancer Society surveillance guidelines for survivors of prostate and colorectal cancers are available at [www.cancer.org/health-care-professionals/american-cancer-society-survivorship-guidelines/prostate-cancer-survivorship-care-guideline.html](http://www.cancer.org/health-care-professionals/american-cancer-society-survivorship-guidelines/prostate-cancer-survivorship-care-guideline.html) and [www.cancer.org/health-care-professionals/american-cancer-society-survivorship-guidelines/colorectal-cancer-survivorship-care-guidelines.html](http://www.cancer.org/health-care-professionals/american-cancer-society-survivorship-guidelines/colorectal-cancer-survivorship-care-guidelines.html), respectively.

¶ Surveillance with low-dose CT for more than 5 years is controversial.

# ACS NUTRITION AND PHYSICAL ACTIVITY GUIDELINES FOR CANCER SURVIVORS

- Achieve and maintain a healthy weight: If overweight, limit consumption of high-calorie foods and beverages and increase physical activity to promote weight loss
- Engage in regular physical activity: Avoid inactivity and return to normal daily activities as soon as possible following diagnosis; Aim for aerobic exercise at least 150 minutes per week; Include strength training exercises at least 2 days per week
- Achieve a dietary pattern that is high in vegetables, fruits and whole grains
- Follow the guidelines for American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention



# REHABILITATION FOR CANCER SURVIVORS

- Rehabilitation can significantly improve: Physical outcomes
- Psychological outcomes
- Quality of life outcomes
- Survivors have unmet needs related to rehabilitation
- Rehabilitation can be incorporated across the care continuum, even at diagnosis (prehabilitation)
- Patients should be referred to licensed/board certified rehabilitation health care professionals

# CARE COORDINATION

**Table 4. Models of Care Delivery for Cancer Survivors.\***

| Model   | Primary Responsibility  | Pros  | Cons  |
|---|---|---|---|
| In-clinic care  | Oncologist who provided cancer treatment also provides follow-up care   | Patients prefer specialist care   | Insufficient preventive health care   |
| Care provided by midlevel clinician (NP or PA) at disease-site clinic | NP or PA provides cancer site-specific care in clinic where survivor received cancer treatment  | Provider has experience with the specific cancer and has access to disease-site expert in real time; model is most suited to academic centers with cancer site-specific oncologists and clinics | Not well suited to general oncologists in community practices   |
| Care provided by midlevel practitioner in separate clinic             | NP or PA provides care for all cancer survivors in a separate clinic  | Most efficient model in terms of use of resources; most suited to general oncologists who practice in academic settings, large community practices, or hospital-based practices                 | Providers must be familiar with surveillance guidelines and late and long-term effects of different cancers; access to disease-site experts may be limited and not in real time |
| Shared provision of care <sup>73,74</sup>                             | PCP and oncologist provide coordinated care   | Better communication between the oncologist and PCP results in improved care  | Substantial barriers identified by PCPs†  |
| Care provided in multispecialty clinic                                | Multiple specialists provide care in the same clinic (e.g., mental health practitioners, pain specialists, specialists in rehabilitation, and endocrinologists) | Patients prefer multispecialty care   | Most inefficient model in terms of specialists' time  |

\* Information is from Nekhlyudov et al.<sup>73</sup> and Halpern et al.<sup>74</sup> NP denotes nurse practitioner, PA physician assistant, and PCP primary care physician.

† Barriers include lack of expertise, skills, and knowledge to provide care for cancer survivors and lack of standards for delivering such care.<sup>75,76</sup>

# SURVIVORSHIP CARE PLANS

- Key survivorship component
- Road map for post-treatment care
- Tool for care coordination and communication
- Treatment Summary Follow-up**



# BOTTOMLINE

- Learn about the field of Cancer Survivorship
- Understand the Current State of Survivorship Care and the Role of Primary Care Providers
- Learn about the Late Effects of Cancer and its Treatments and Diagnose and Manage Comorbidities

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  - Colorectal at [bit.ly/acscolorc](https://bit.ly/acscolorc)
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  - Prostate at [bit.ly/ACSPrCa](https://bit.ly/ACSPrCa)
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