

Management of Long Term Survivors of Hematological Malignancies

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No disclosures

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Growing rates of Survival

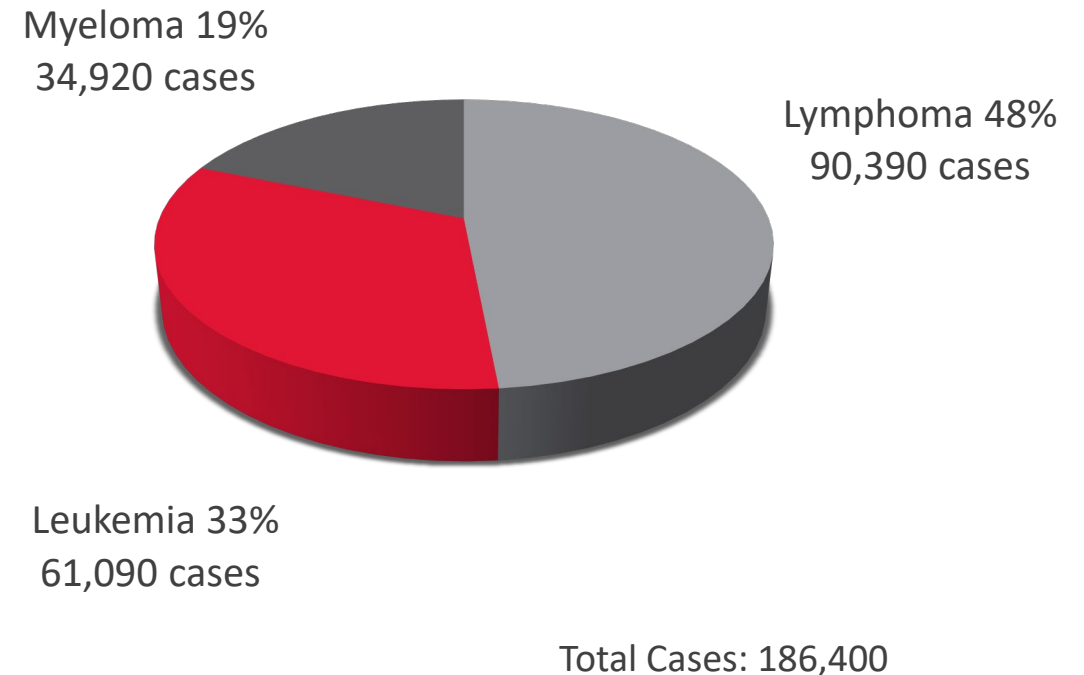
Survivorship begins at diagnosis

- As of January 2022, it is estimated that there are 18.1 million cancer survivors in the United States. This represents approximately 5.4% of the population.^{[1](#)}
- Over the next decade, the number of people who have lived 5 or more years after their cancer diagnosis is projected to increase approximately 30%, to 16.3 million.^{[1](#)}
- The number of cancer survivors is projected to increase by 24.4%, to 22.5 million, by 2032.^{[1](#)}

Blood cancer in the United States

- New cases diagnosed every 3 minutes
- An estimated 1,519,907 people in active treatment or remission for leukemia, lymphoma, myeloma and myelodysplastic syndromes.

Estimated New Cases (%) of Leukemia, Lymphoma and Myeloma, 2021



The Survivors

- Comparing survival rates over the last 50 years
- Leukemia: rates are > 4x longer
- Lymphoma: rates are >2x longer
- MDS- minimal data prior to 2010
- No data prior to 1963

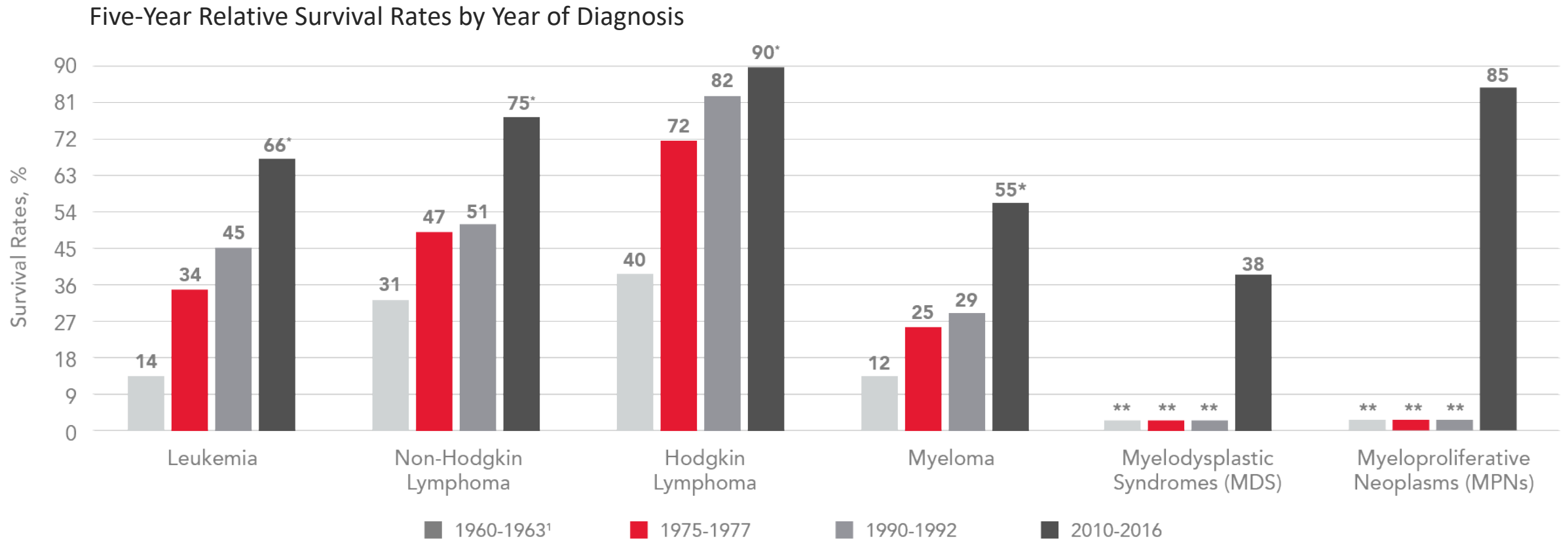


Figure 2. Source: SEER (Surveillance, Epidemiology, and End Results) Cancer Statistics Review, 1975-1977. National Cancer Institute; 2020.

* The difference in rates between 1975-1977 and 2010-2016 is statistically significant ($P < .05$)

** Due to shorter reportability period, long-term survival statistics are not available.

¹ Survival rate among whites

Long Term relative survival

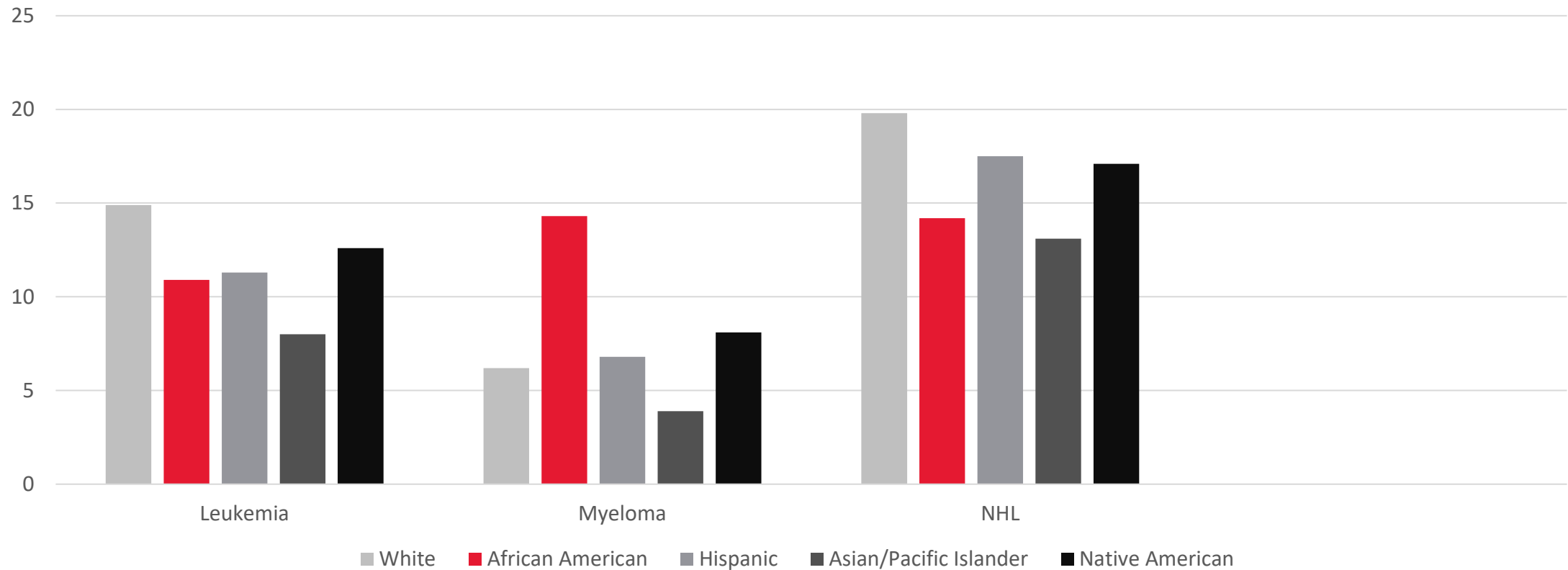
10 yrs and 20 yrs post diagnosis ages 15-64

	10 yr (2002-2006)	20 yr (2012-2016)	10 yr (2002-2006)	20 yr (2012-2016)
Multiple Myeloma	18.1%	8%	34.9%	19.3%
Acute lymphoblastic leukemia	13%	5.6%	29%	16.5%
Acute myeloid leukemia	16.1%	10.1%	19%	14.5%
Chronic lymphocytic leukemia	67.8%	37.3%	77.1%	55.9%
Chronic myeloid leukemia	39%	NA	62.1%	NA
Hodgkins Lymphoma	50.6%	NA	63.9%	NA
Non-Hodgkins Lymphoma	56.5%	41.5%	64.5%	42%
Diffuse large B-cell lymphoma	56.9%	NA	63%	NA

Diagnosis rates by race

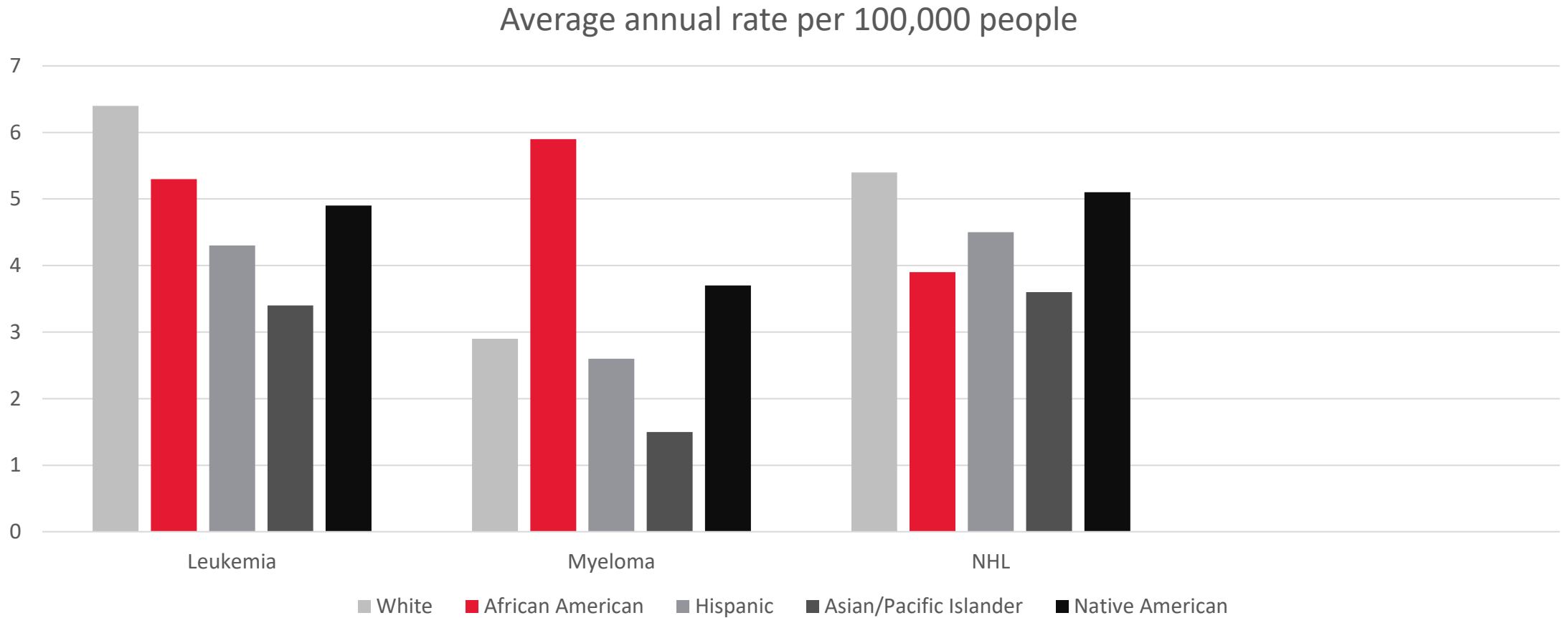
North American Association of Central Cancer Registries (NAACCR), 2022

Average annual rate per 100,000 people



Death rates by race

National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention, 2022



Preventing disparities in oncology

- Enhance knowledge and skills of staff
 - Understand implicit bias, disparity, issues specific to minority communities
- DRIVE – Diversity, Ranking, Individual equity/inclusion, Verification of study diversity, Elevate and Enhance training in research
- Work with community leaders – American Cancer Society, Cancer Care Community, Pharmaceutical companies, NCCN.
- Educate patients- Bristol Myers “Standing in the Gaap” – Multiple Myeloma patients- Aims to raise awareness of racial disparities. Use patient materials to initiate communication.
- Diversity action teams in your institution

Preventing disparities in survivorship

- **ACCURE** program-Cone Health Center of NC
 - RN navigators trained on issues faced by minority groups in their community. (transportation, finance, time off work) met with patient regularly. Accessed resources needed to combat these issues. Built relationship bonds with patients, increased communication.
 - Program alerted RN when milestones were missed (visits, imaging, screening)
 - Monthly accountability reports showed task completion by nursing in each racial group.

5-Year Survival for Breast Cancer		
	Before ACCURE	With ACCURE
White	91%	94%
Black	89%	94%

5-Year Survival for Lung Cancer		
	Before ACCURE	With ACCURE
White	43%	56%
Black	37%	54%

Living with Blood Cancer

Screening | Monitoring | Health Maintenance | Coordination of Care | Support and Education

National Comprehensive Cancer Network Guidelines for Survivorship 2022

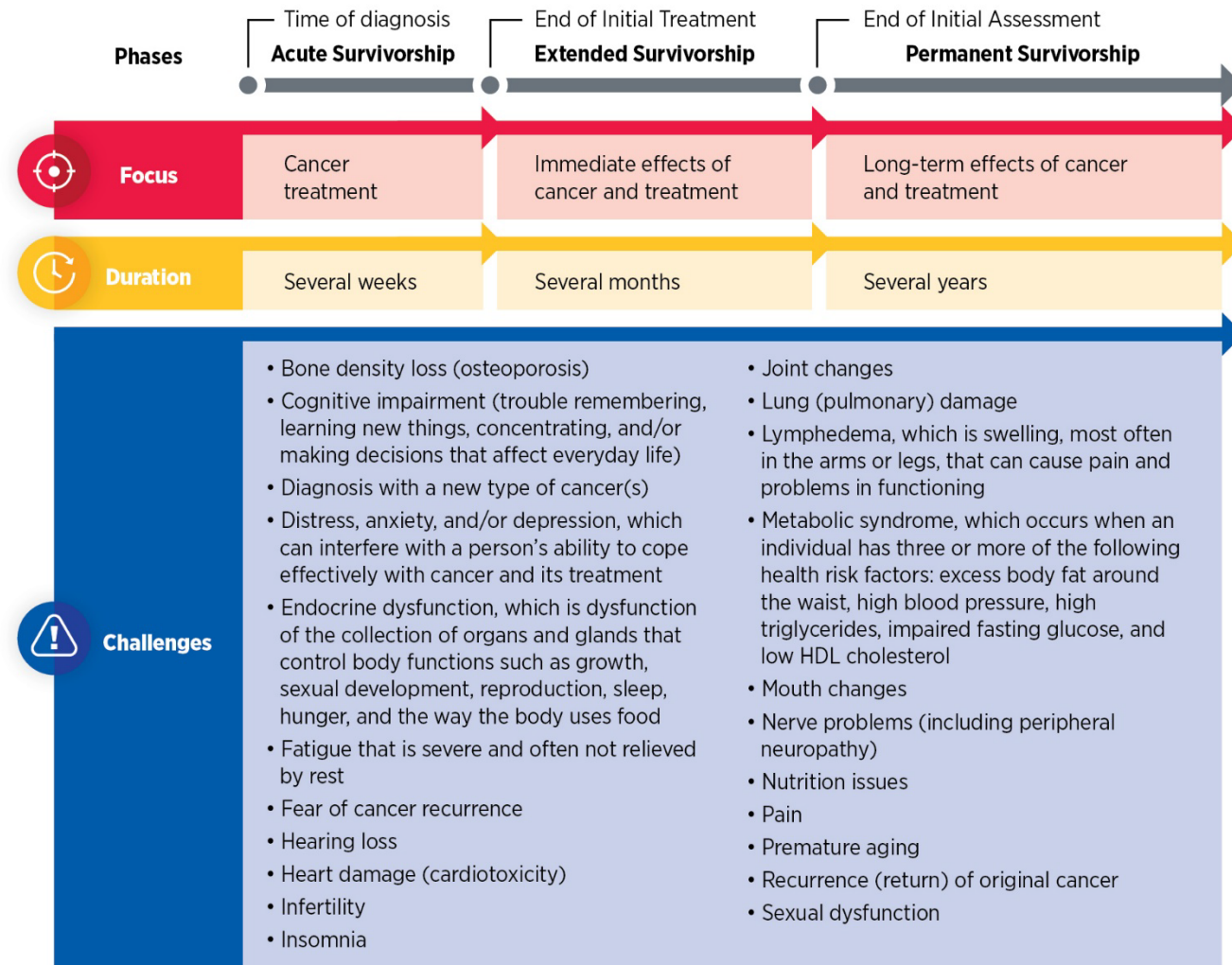
- Screening for recurrence, progression or additional cancers
- Monitoring long-term effects of cancer and treatment
- Health Maintenance and management
- Coordination of Care, referral to specialists
- Support and Education in survivorship

Nursing Care plans

- Survivorship care plans are recommended by The Institute of Medicine
- Oncology Nursing Society conducted extensive literature review of the use and outcomes of care plans
 - Evidence and evaluation of the effectiveness of survivorship care plans in hematology care plans is lacking especially in comparison to those of solid tumors
 - Nurses have expertise in health promotion, information, support, resource provision and can develop and disseminate survivorship care plans to facilitate communication and action between patient and medical team.
 - Current evidence shows benefit to well structured care plan in survivorship

Taylor K, Monterosso L. Survivorship Care Plans and Treatment Summaries in Adult Patients With Hematologic Cancer: An Integrative Literature Review. *Oncol Nurs Forum*. 2015 May;42(3):283-91.

Phases of Cancer Survivorship



Although all cancer survivors face challenges, survivors of cancer diagnosed during childhood, adolescence, and young adulthood (from ages <1 to 39) are particularly at risk for severe long-term and late effects. The Children's Oncology Group's "Long-Term Follow-Up Guidelines for Survivors of Childhood, Adolescent, and Young Adult Cancers" were developed to help standardize and enhance the lifelong follow-up care of individuals who were diagnosed with cancer as children, adolescents, or young adults. For more information, see <http://survivorshipguidelines.org/>.

NCCN
Standards of
Survivorship
Care

Screening

Monitoring

Health
Maintenance

Coordination
of Care

Support and
Education

Interventions for long term challenges

NCCN
Standards of
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Screening

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of Care

Support and
Education

- Bone density-screening, antiresorptive therapy, dental care, weight bearing exercise
- Cognitive impairment- neurology referral, medications
- Endocrine dysfunction- endocrinology, monitoring, medication management
- Fatigue- check TSH, Anemia, nutritional deficiencies, exercise, insomnia, sleep hygiene
- Cardiotoxicity- cardiac rehab, cardiology referral, heart disease prevention, echo, EKG
- Pulmonary damage- pulmonary rehab, smoking cessation, pulmonary referral, PFTs
- Chronic kidney disease- nephrology, diet management, BP control, anemia
- Nutrition-dietician referral, vitamin and protein supplementation
- Fertility- Sperm/egg banking, fertility clinic, alternate avenues (adoption, surrogacy)
- Peripheral neuropathy- podiatry and neurology referral, gabapentin, acupuncture
- Risk for other cancer recurrence- screening, primary care involvement
- Continuing education- conferences, events, “Evening with the Experts”

Opportunity for health maintenance

- Post diagnosis "teachable moment" during 1st year of remission
- Cross sectional study showed (Malalur et al)
 - 82% of patients will quit smoking
 - 10% reduced or stopped alcohol consumption
 - Efforts to increase exercise and healthy eating
 - No significant differences noted in mental healthcare

Physical Health Maintenance and Wellness

- Healthy weight, exercise and sleep- seek wellness programs
- Primary care screening
- Cancer screenings and genetic testing
 - [Cancer Screening Guidelines by Age | American Cancer Society](#)
- Review current medications
- Immunizations
- Supplement use – alternative therapies
 - [About Herbs, Botanicals & Other Products | Memorial Sloan Kettering Cancer Center \(mskcc.org\)](#)
 - Includes herbal supplement database, mobile app, education

Psycho-social Issues

- Anxiety and Depression- Health Counseling with or without medication
- Hypervigilance to potential symptoms
- Post-traumatic stress disorder- more prevalent among young patients
- Insomnia / fatigue can contribute
- Sexual dysfunction- assess medication, fatigue, relationship counseling
- Assess for addictive substances
- Support groups- Cancer Support Community
- Loss of identity, change of role in relationships
- Financial toxicity- job loss, medication, lack of insurance
- Ensure health equity in assessment and management of psychosocial issues

Fostering Hope, Strengthening Patients

- Cultivating self esteem
- Unconditional acceptance, validate feelings
- Supporting spiritual beliefs
- Compassion
- Advocate
- Active listening
- Envision happiness
- Gaining knowledge for living

Case Studies

Remission | Maintenance Therapy

Case Study 1



Patient: 66 year-old white male

Diagnosis: Acute myeloid leukemia with monocytic differentiation associated with a poor prognosis in 2019

Pathology: showed mutations of DNMT3A, MP1, and NRAS, in addition to RAD21

- Achieved remission after induction and one cycle of consolidation therapy of fixed-dose liposomal daunorubicin and cytarabine
- Evaluated for stem cell transplant but declined
- Comorbid conditions include hyperlipidemia, mild anemia, peripheral neuropathy and anxiety

Case Study 2



Patient: 76 year-old African-American female

Diagnosis: Multiple Myeloma

Pathology: 15% plasma cells, consistent with IgG Kappa multiple myeloma

- Monoclonal gammopathy monitored since 2008, bone marrow biopsy in 2014 due to rising M-protein showed MM but asymptomatic
- Lost to follow up and returned in 2019 with acute thrombocytopenia- diagnosed with immune thrombocytopenic purpura and also met CRAB criteria for multiple myeloma.
- Partial remission of MM achieved after 3 cycles of bortezomib, lenalidomide and dexamethasone. Autologous stem cell transplantation in August 2020.
- On maintenance therapy with lenalidomide, denosumab ; romiplostim for ITP.
- Comorbidities- A-fib, CAD, CKD, HTN, HPL, DMII, poor dentition, lack of social support

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