



Cancer Rehab Across Kentucky

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9/9/2023





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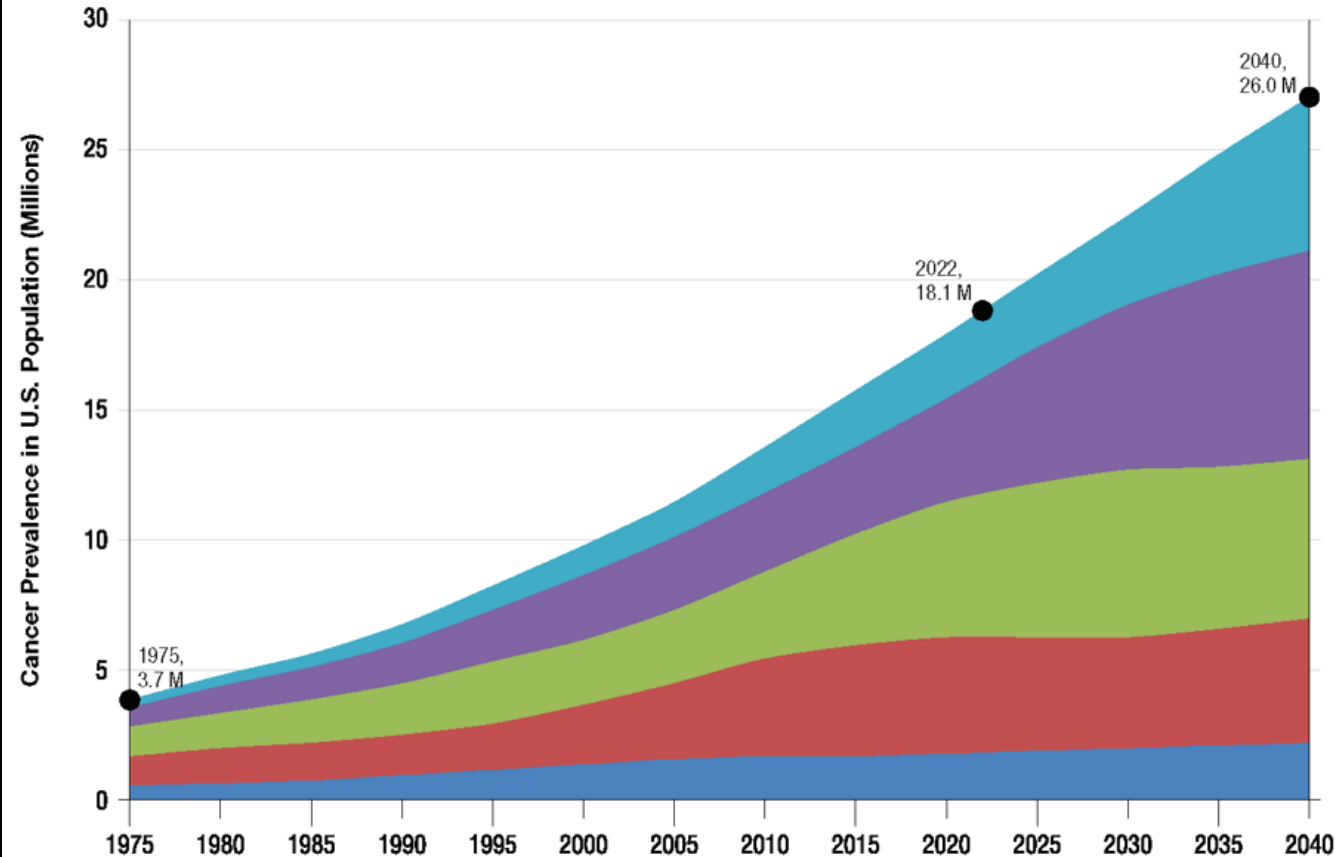


Objectives

- Understand the mission and vision of the statewide initiative to expand cancer rehabilitation across Kentucky
- Learn about the importance of cancer rehabilitation specialty certification and how to achieve a certification
- Learn how to connect with cancer rehabilitation specialized providers across Kentucky and how to locate these providers
- Learn where cancer rehabilitation providers are needed across the state of Kentucky



Cancer Prevalance and Projections in U.S. Population from 1975–2040



KEY

Age

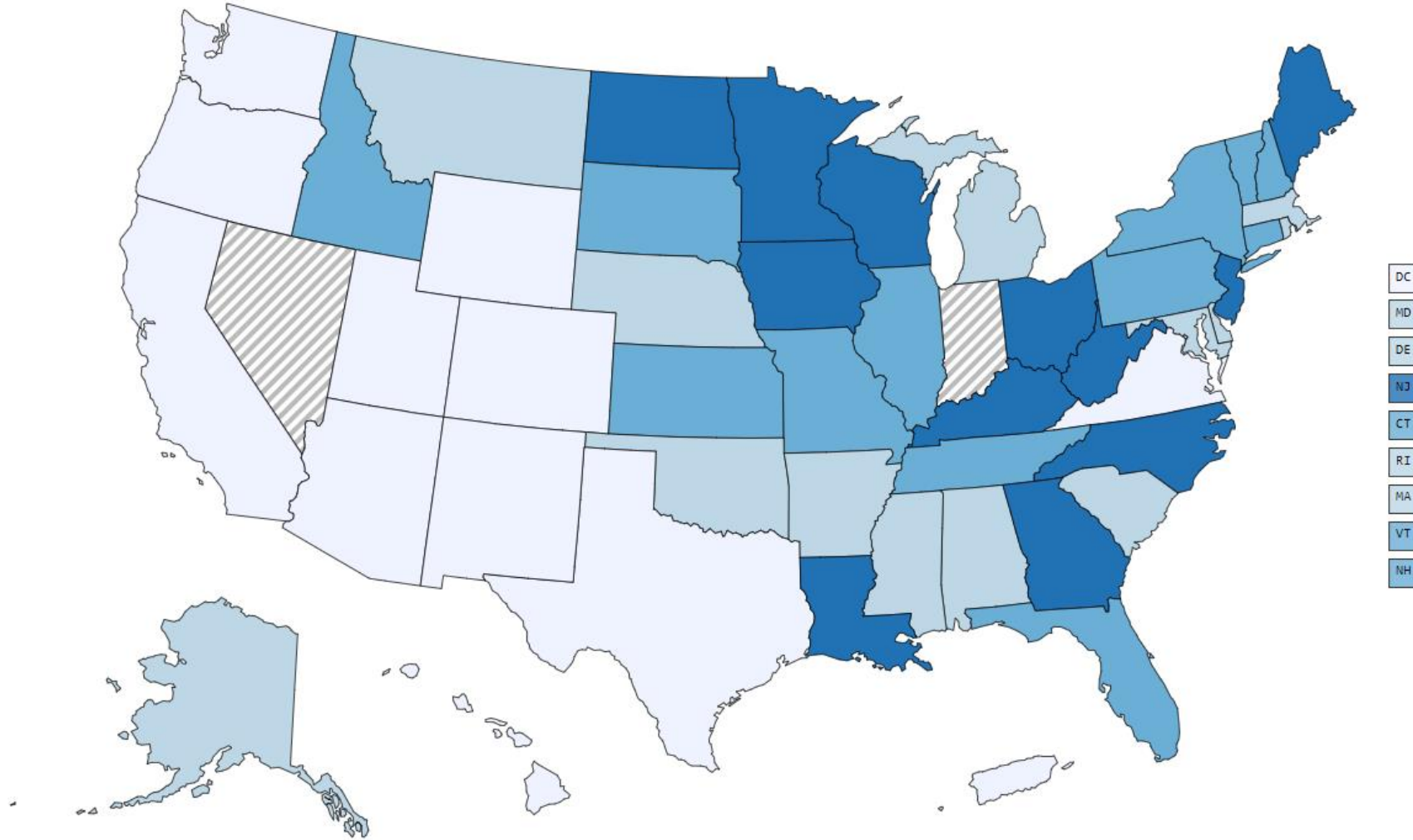


REFERENCES:

Bluethmann SM, Mariotto AB, Rowland JH. Anticipating the “Silver Tsunami”: Prevalence Trajectories and Comorbidity Burden among Older Cancer Survivors in the United States. *Cancer Epidemiol Biomarkers Prev.* 2016 Jul;25(7):1029-36.

Miller KD, Nogueira L, Devasia T, Mariotto AB, Yabroff KR, Jemal A, Kramer J and Siegel RL. *Cancer Treatment and Survivorship Statistics.* *CA A Cancer J Clin.* 2022.

Cancer Incidence Rate - CDC



<https://gis.cdc.gov/Cancer/USCS/#/AtAGlance/>, Accessed 9/6/23



Estimated new cases, 2023

Kentucky, by cancer type

Lung and bronchus



Breast (female) ⓘ



Prostate



Colorectum ⓘ



Melanoma of the skin



Kidney and renal pelvis



 EXPAND TO SEE ALL DATA

Estimated deaths, 2023

Kentucky, by cancer type

Lung and bronchus



Colorectum ⓘ



Breast (female) ⓘ



Pancreas



Prostate

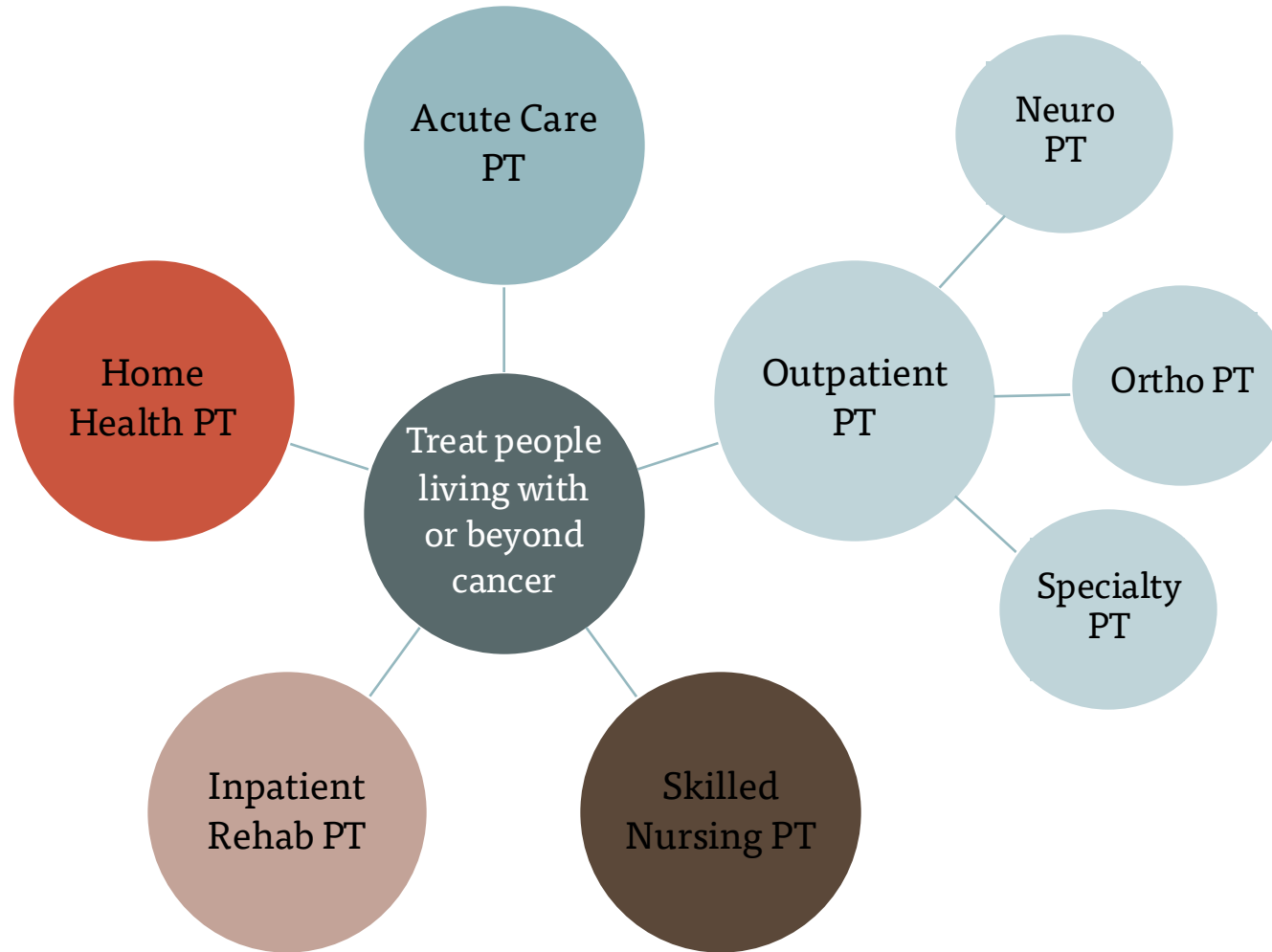


Leukemia



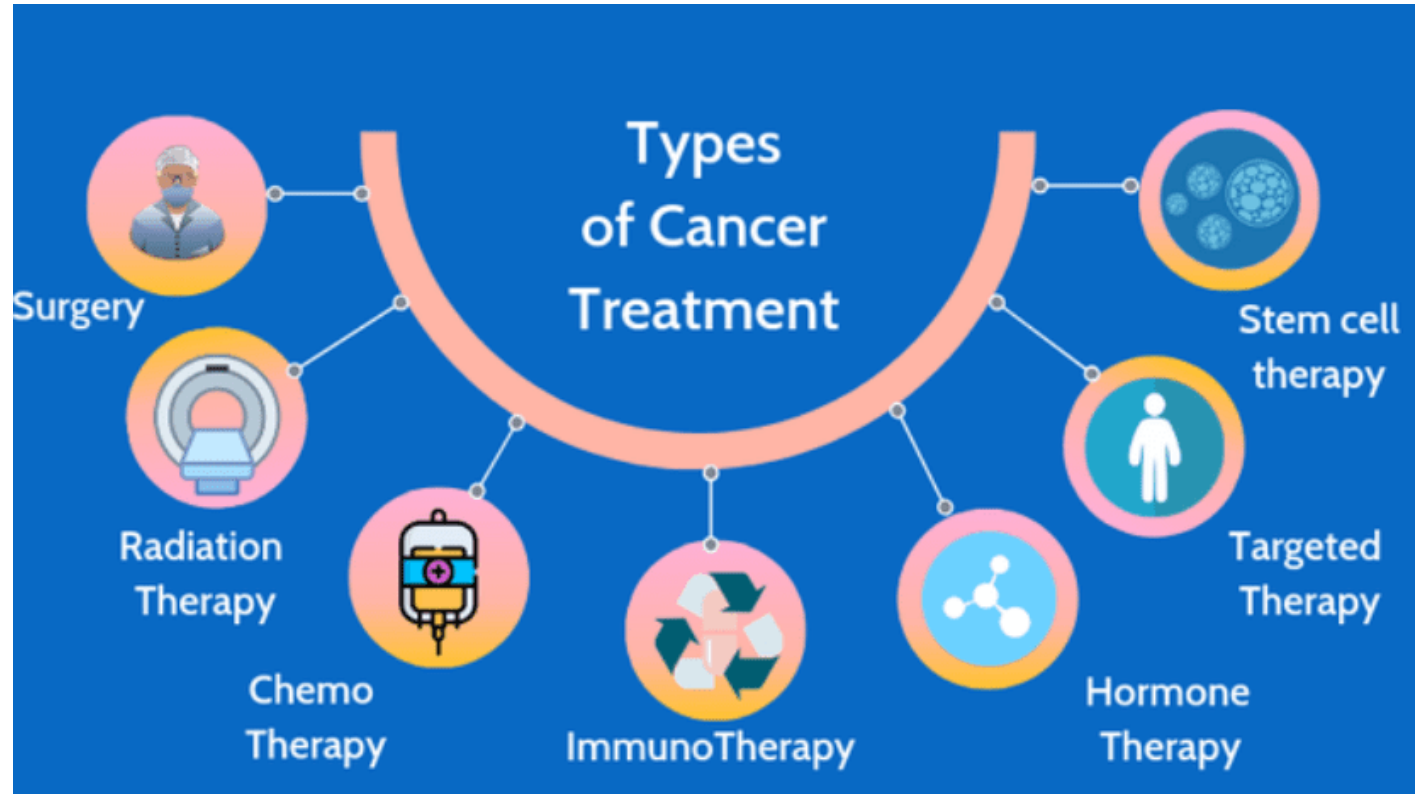
 EXPAND TO SEE ALL DATA

Why Every PT Should Know About Cancer...



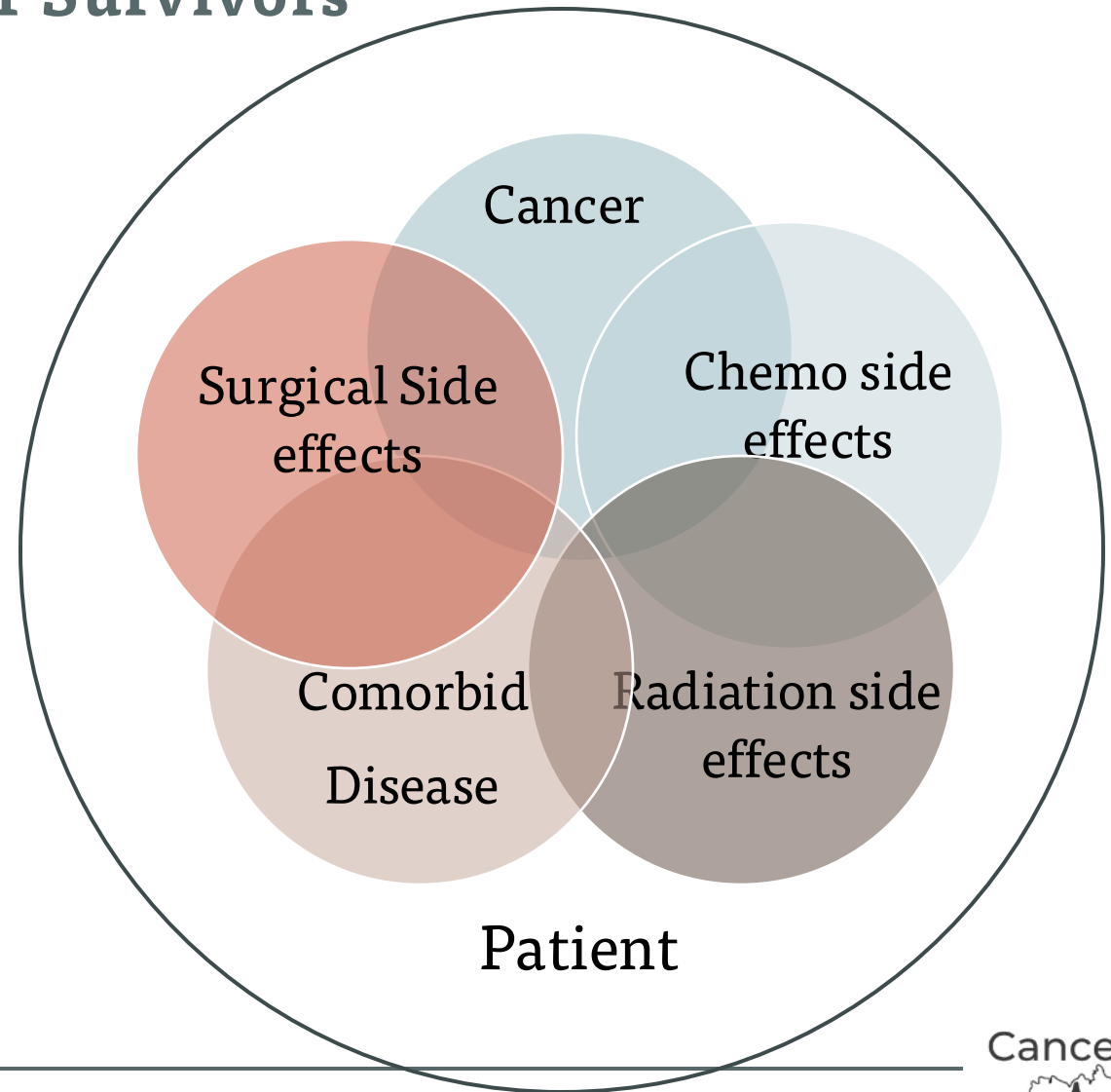
Causes of Impairments in Cancer Survivors

- Tumor
- Systemic Therapy
 - Chemotherapy
 - Hormonal Therapy
- Biologic Therapy
- Targeted Therapy
- Radiotherapy
- Surgery
- Transplants
 - Stem cell
 - Bone Marrow
- Other

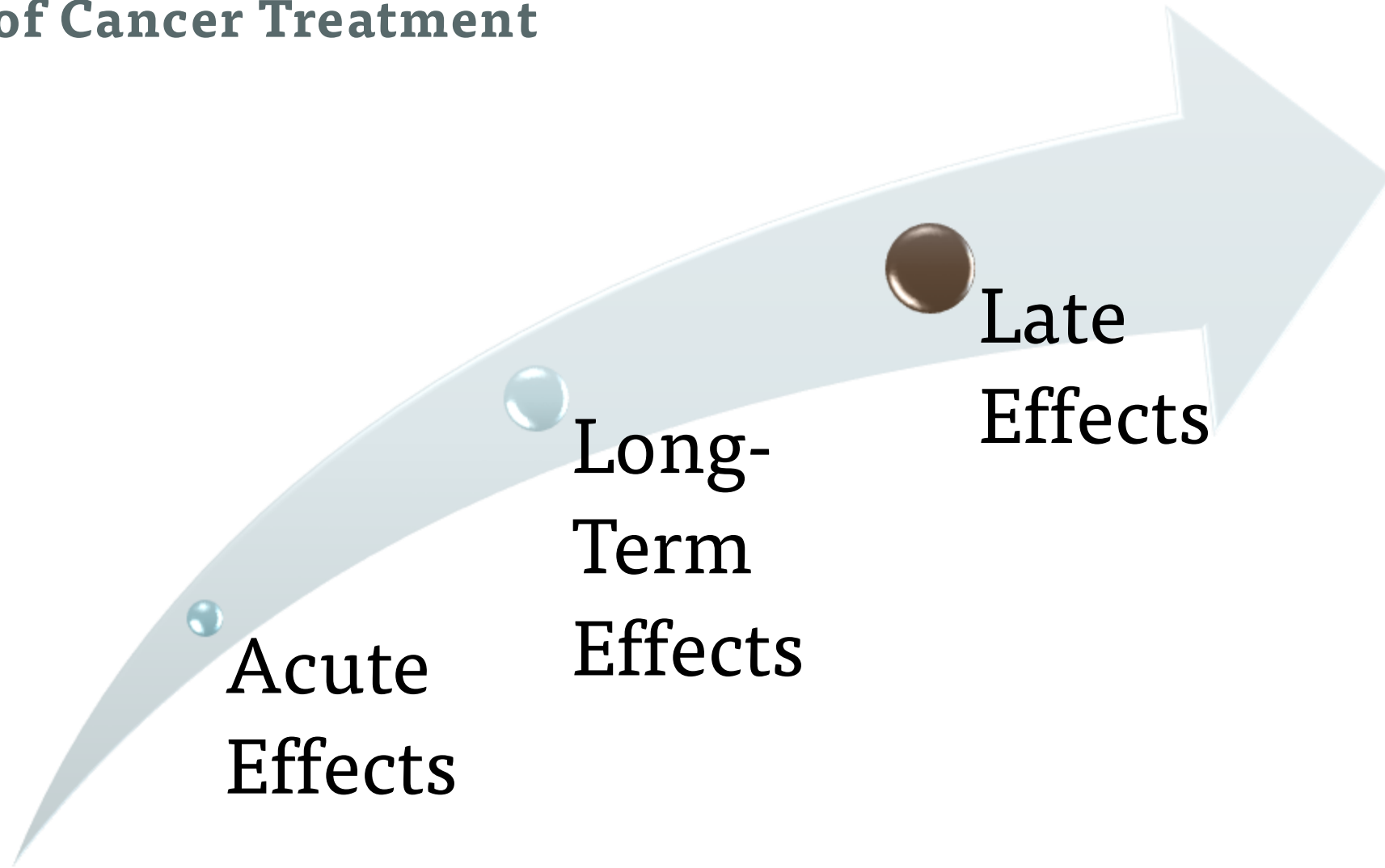


<https://drsalunkhe.com/how-many-options-are-there-to-treat/>, Accessed 9/6/23

Causes of Impairments in Cancer Survivors



Effects of Cancer Treatment

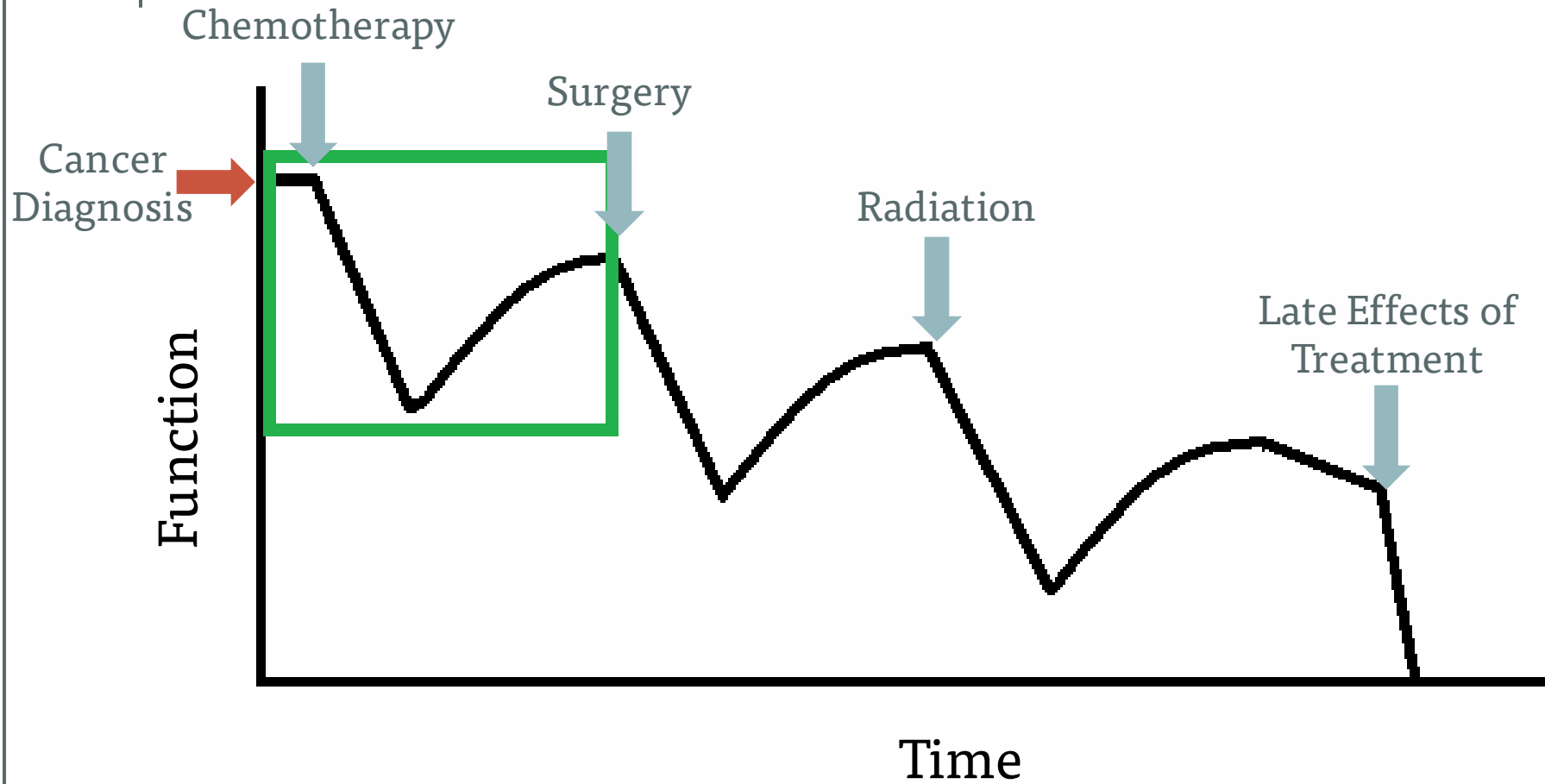


Acute
Effects

Long-
Term
Effects

Late
Effects

Functional Decline in Cancer Survivors

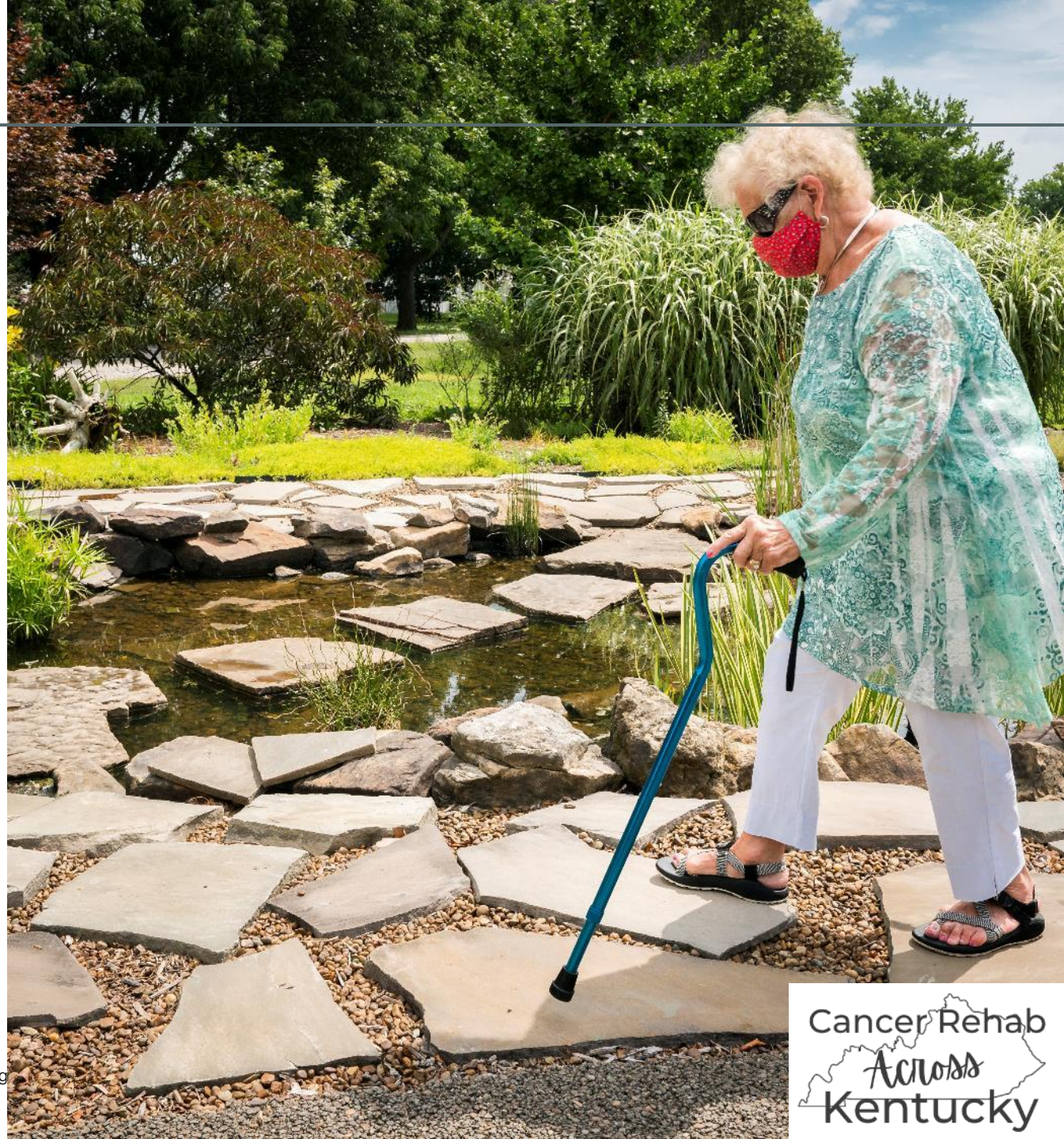


Cancer Rehabilitation Needs: Impairments

- Pain
- Cancer-Related Fatigue
- Physical weakness
- Deconditioning
- Neuropathy or Sensory disturbance
- Impaired balance
- Musculoskeletal complaints
 - Pain
 - Impaired range of motion
 - Soft tissue changes (scarring, radiation fibrosis)
- Spasticity
- Amputation
- Cognitive deficits
- Dysphagia
- Aphasia
- Lymphedema
- Bowel/Bladder – Incontinence
- Sexual dysfunction

Overall Adults with Cancer:

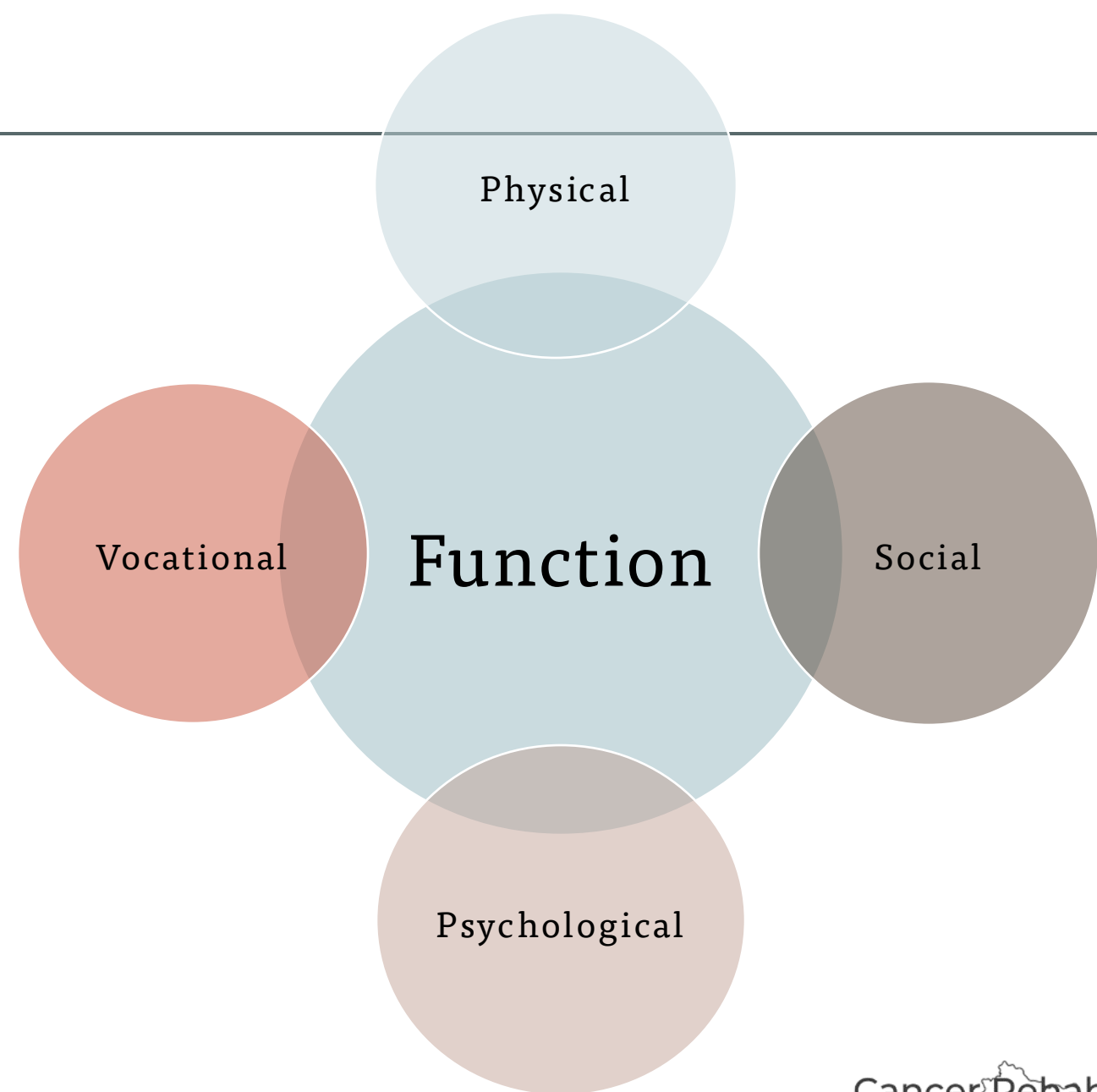
- 1/3 have difficulties with basic activities of daily living (ADLs)
- 1/2 need assistance to perform instrumental activities of daily living (IADLs)
- Walking, transfers, housework, shopping, & transportation most commonly affected



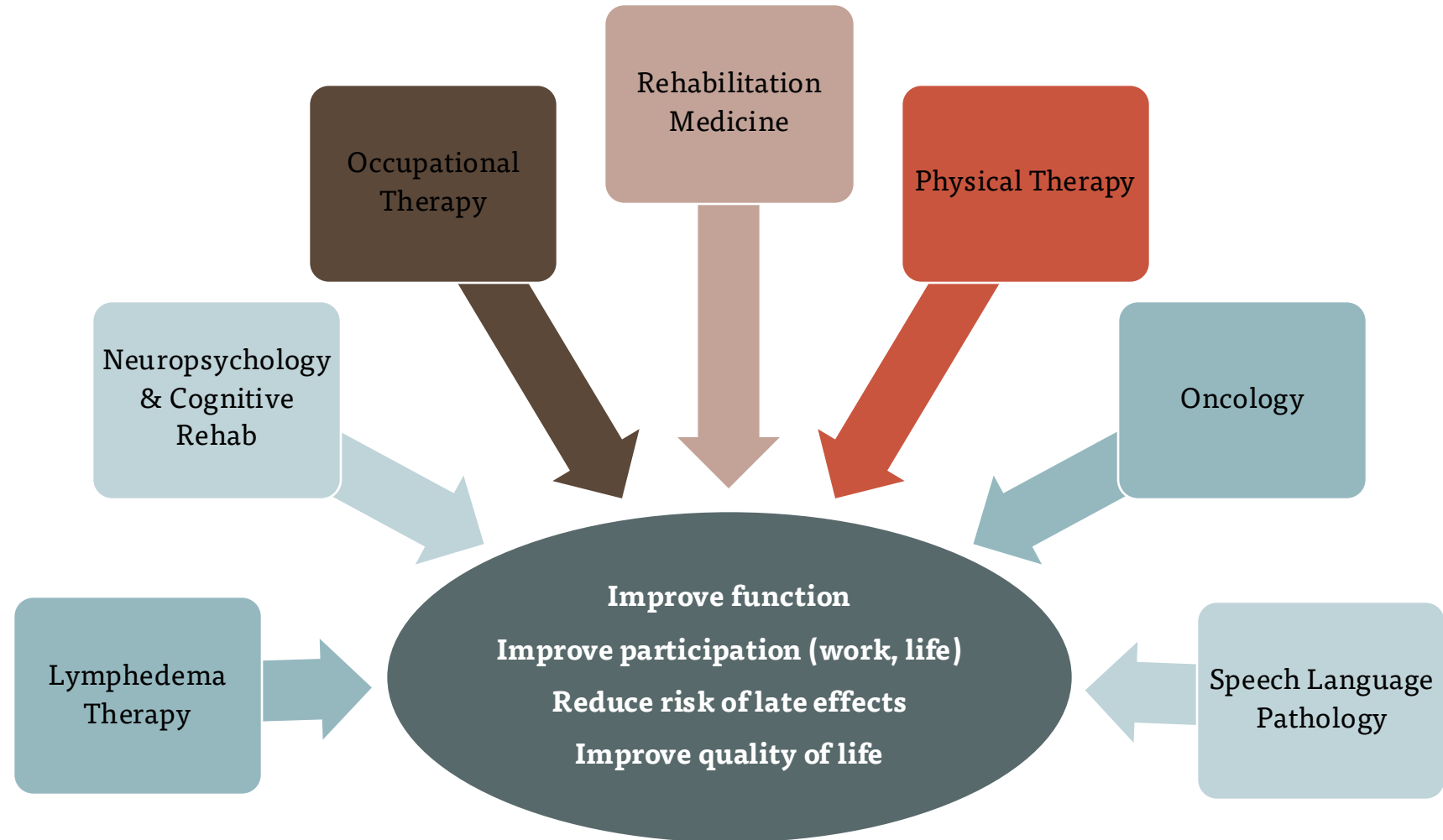
Cancer Rehabilitation: What is it?

Silver et al. proposed a new definition:

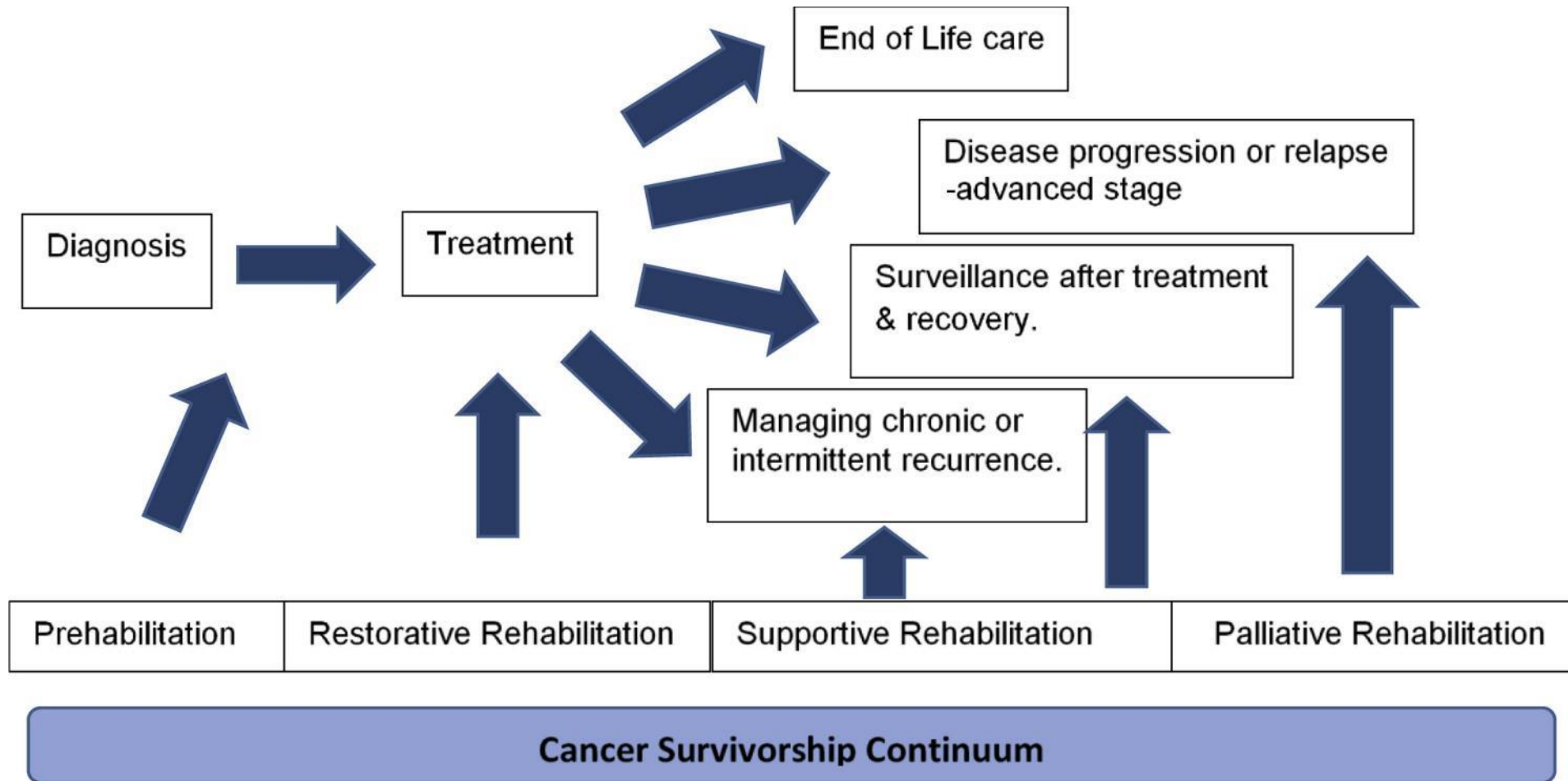
“Cancer rehabilitation is medical care that should be integrated throughout the oncology care continuum and delivered by trained rehabilitation professionals who have it within their scope of practice to diagnose and treat patients’ physical, psychological, and cognitive impairments in an effort to maintain or restore function, reduce symptom burden, maximize independence and improve quality of life in this medically complex population.”

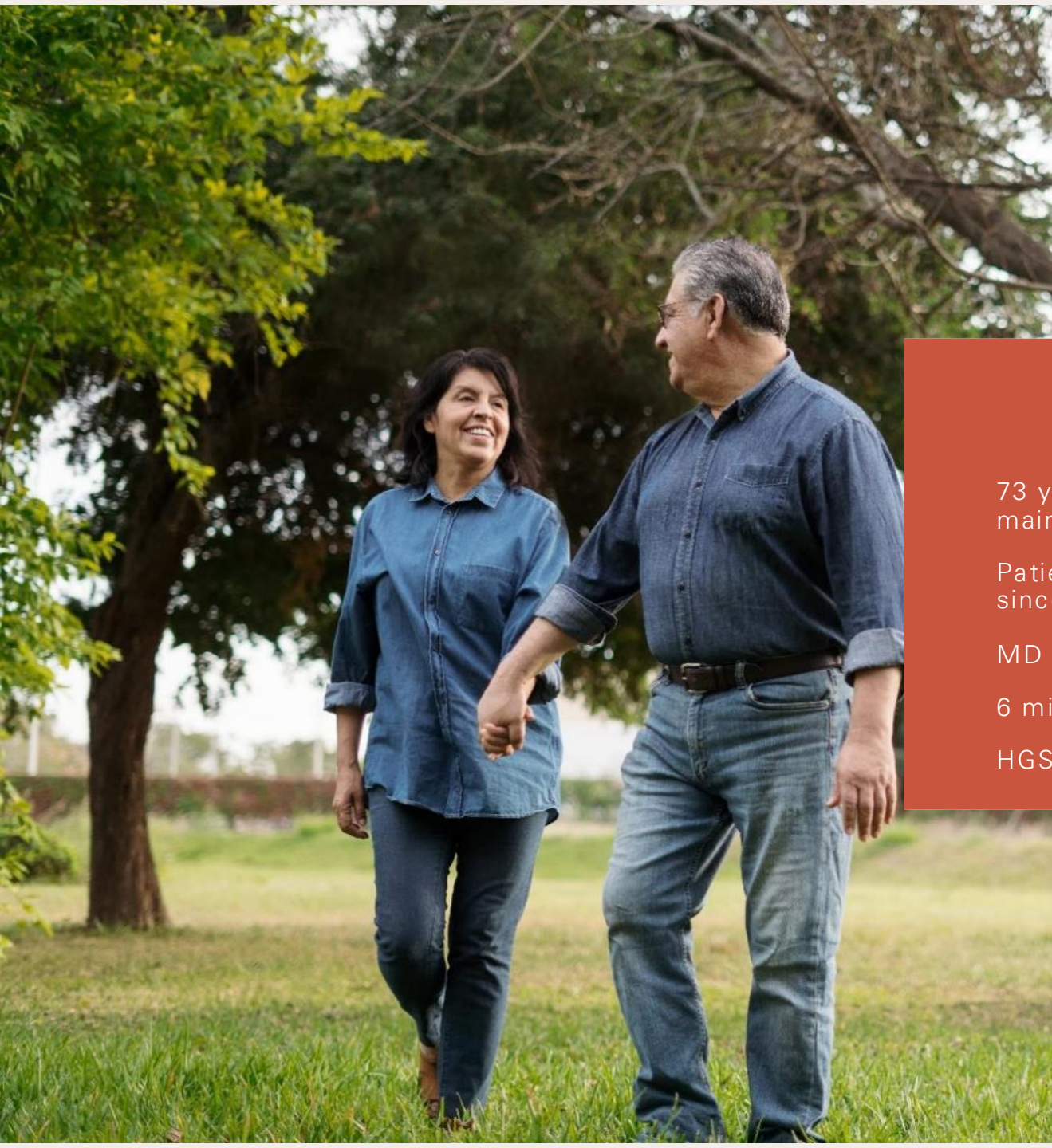


The Role of Cancer Rehabilitation



Cancer Rehabilitation Across the Continuum





Patient – Lung Cancer

73 yo male completed chemotherapy (Carboplatin), now on maintenance immunotherapy

Patient reports significant fatigue, weakness, and SOB with exertion since starting cancer treatments

MD ordered PT to improve strength and function

6 min walk test – 952 ft (norm for sex/age: 1729 ft)

HGS – 65# average on dominant R hand (norm for sex/age: 83#)

Cancer Related Fatigue (CRF)

“ Distressing, persistent, subjective sense of physical, emotional and/or cognitive tiredness or exhaustion related to cancer or cancer treatments that is not proportional to recent activity and interferes with usual functioning. ”

Cancer Related Fatigue (CRF)

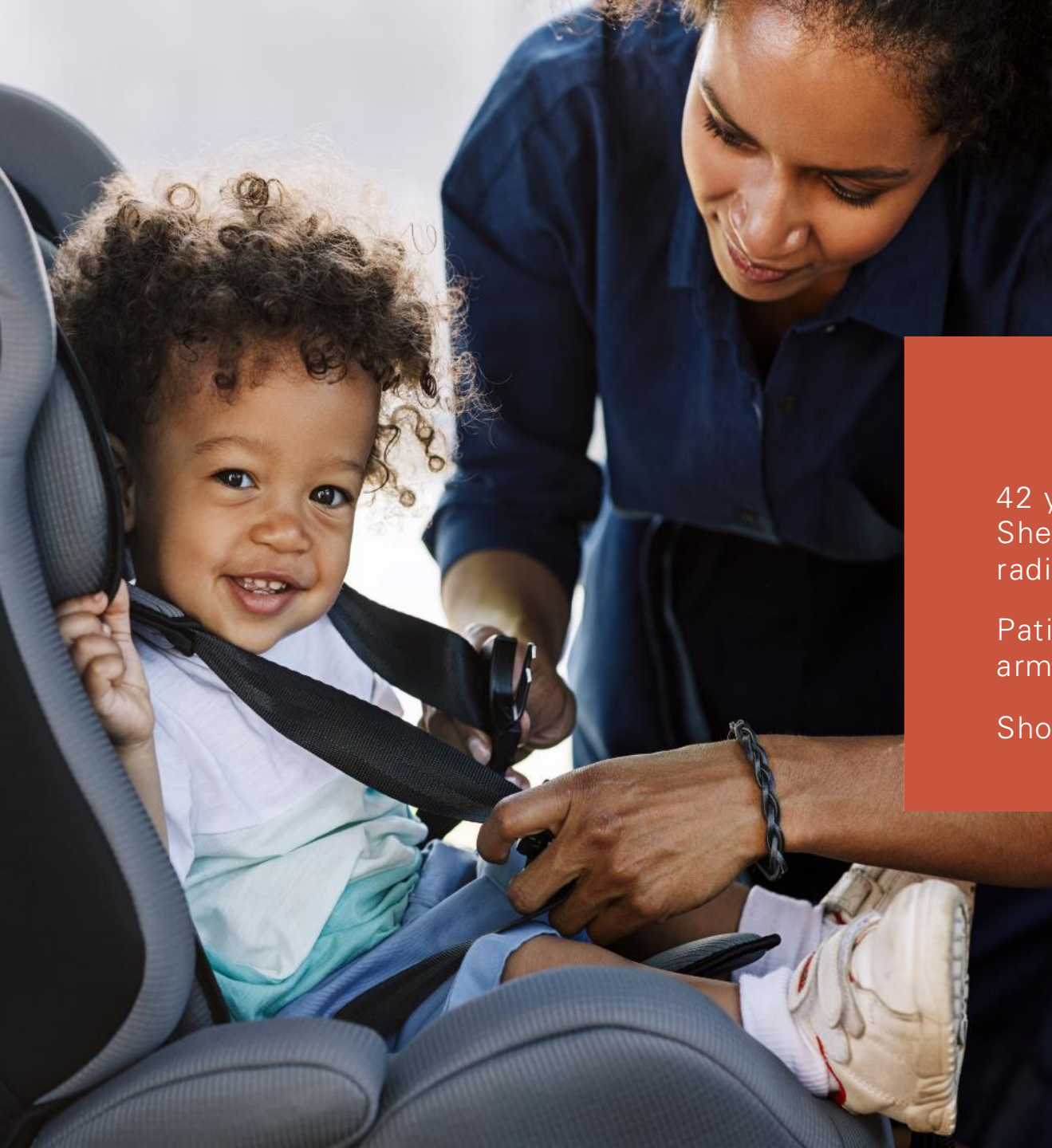


- Fatigue $\geq 4/10$ warrants referral to rehab
 - PT/OT for exercise-based interventions
 - OT/SLP and behavioral therapists for cognitive therapies, counseling and energy conservation interventions
- Exercise recommendations:
 - Moderate intensity exercise, 150 min weekly (low intensity also endorsed)
 - Multi-modal: aerobic and strength exercises
 - Supervised exercise recommended

Physical Therapy Treatment for CRF

- Aerobic exercise
- Strengthening exercises
- Posture education
- Body mechanics education
- Stretching
- Relaxation techniques
- Mindfulness training
- Sleep hygiene
- Energy conservation education



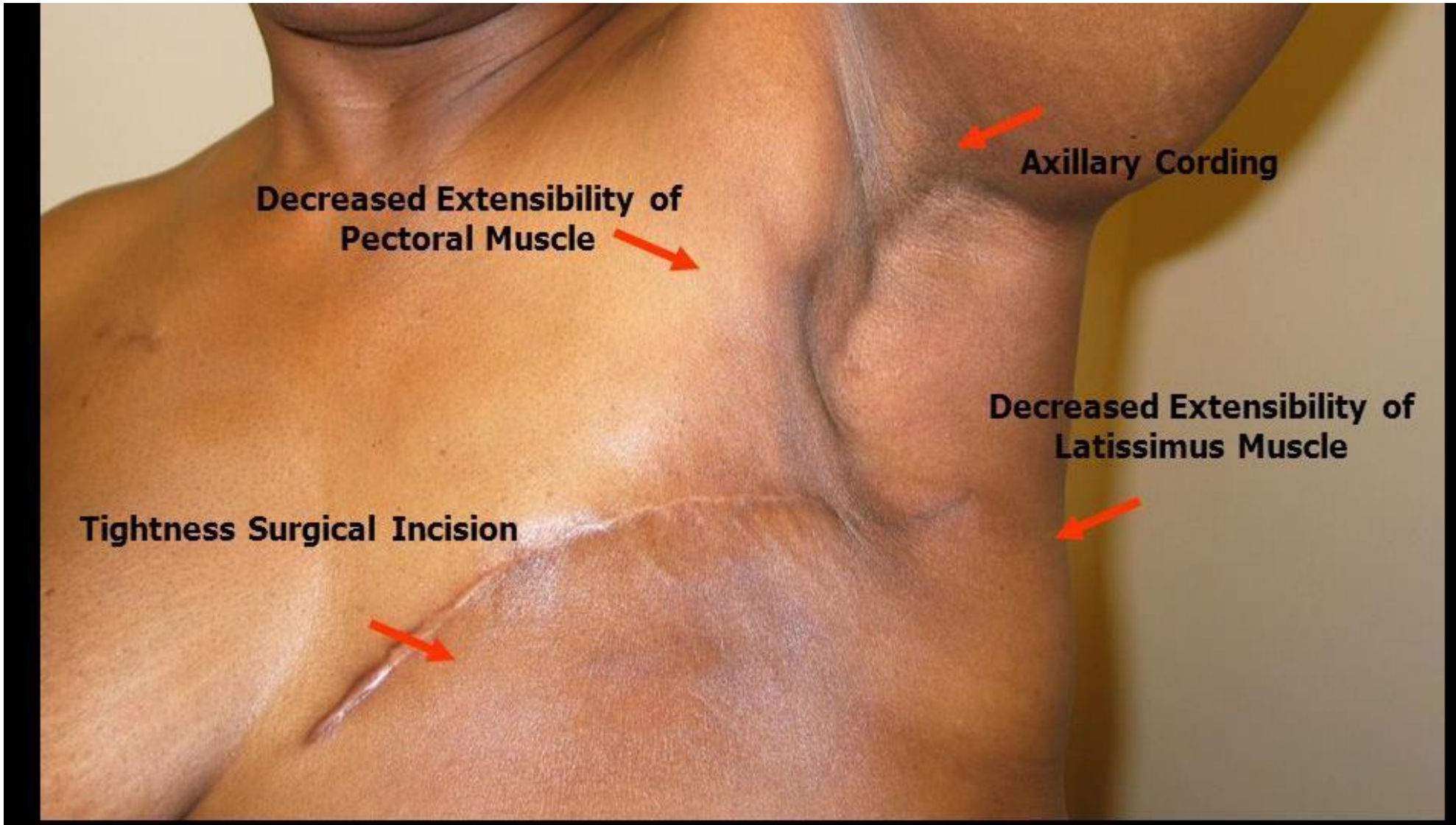


Patient – Breast Cancer

42 yo female underwent unilateral mastectomy and ALND. She completed adjuvant chemotherapy and 6 weeks of radiation.

Patient having trouble with pain and mobility of shoulder and arm

Shoulder flexion AROM – 120°, abduction AROM – 110°



Decreased Extensibility of Pectoral Muscle

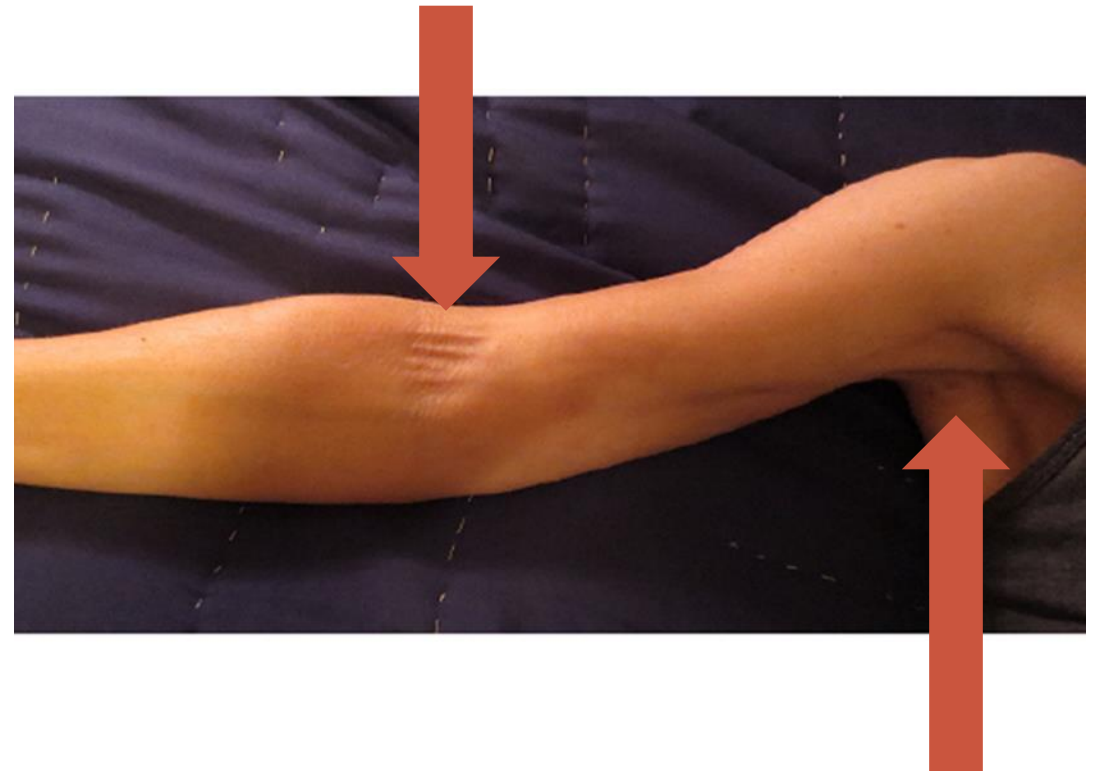
Axillary Cording

Tightness Surgical Incision

Decreased Extensibility of Latissimus Muscle

Axillary Web Syndrome(AWS)

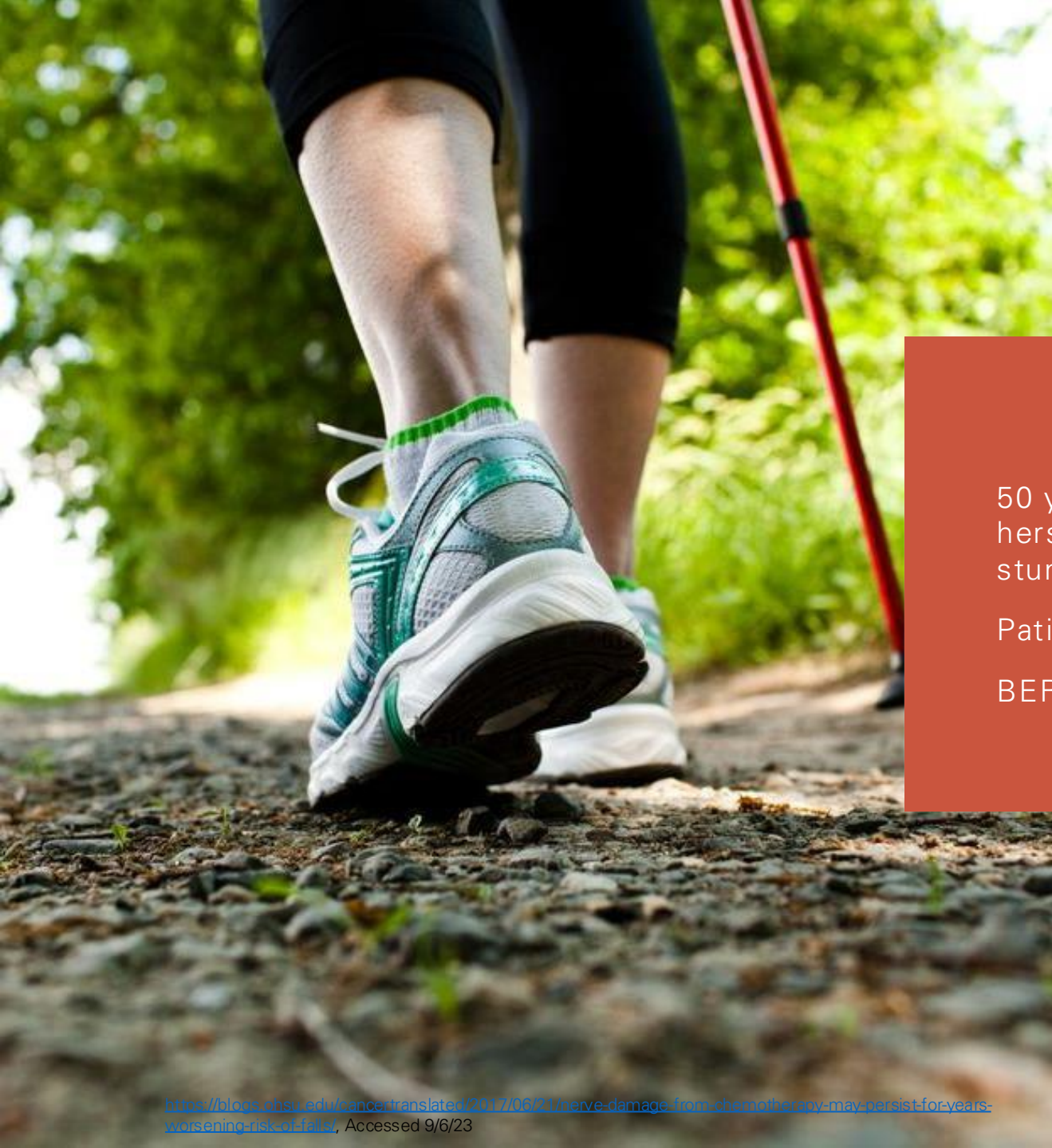
- Presence of tightening of connective tissue around vessels
- Often seen in the axilla but can extend to elbow, wrist, and thumb
- Can occur along any vessel structure (lymphatic, vascular, nerve)



Physical Therapy Considerations

- Soft tissue mobilization
 - Scar mobilization
 - Myofascial movement
 - MWM
- ROM exercises
- Flexibility and muscle lengthening
- Desensitization techniques
- Postural mechanics
- Thoracic mobility & rib cage expansion
- Strengthening scapular stabilizers and core





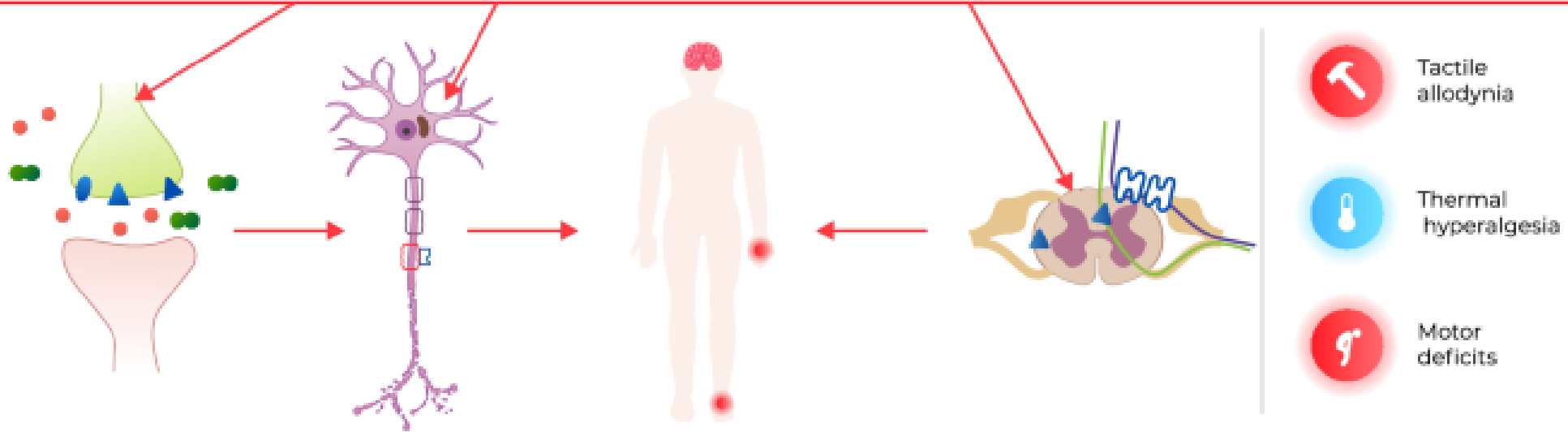
Patient – Colon Cancer

50 yo female completed chemotherapy (oxaliplatin), and finds herself using walking sticks for her typical exercise now and stumbling.

Patient requested PT to get back to her normal self

BERG - 40

• platinum derivatives, • vinca alkaloids, • taxanes, • bortezomib, • thalidomide, • epothilones, • eribulin, • ipilimumab, • pembrolizumab, • nivolumab



CIPN

CIPN = most prevalent neurologic complication of cancer treatment & dose-limiting effect

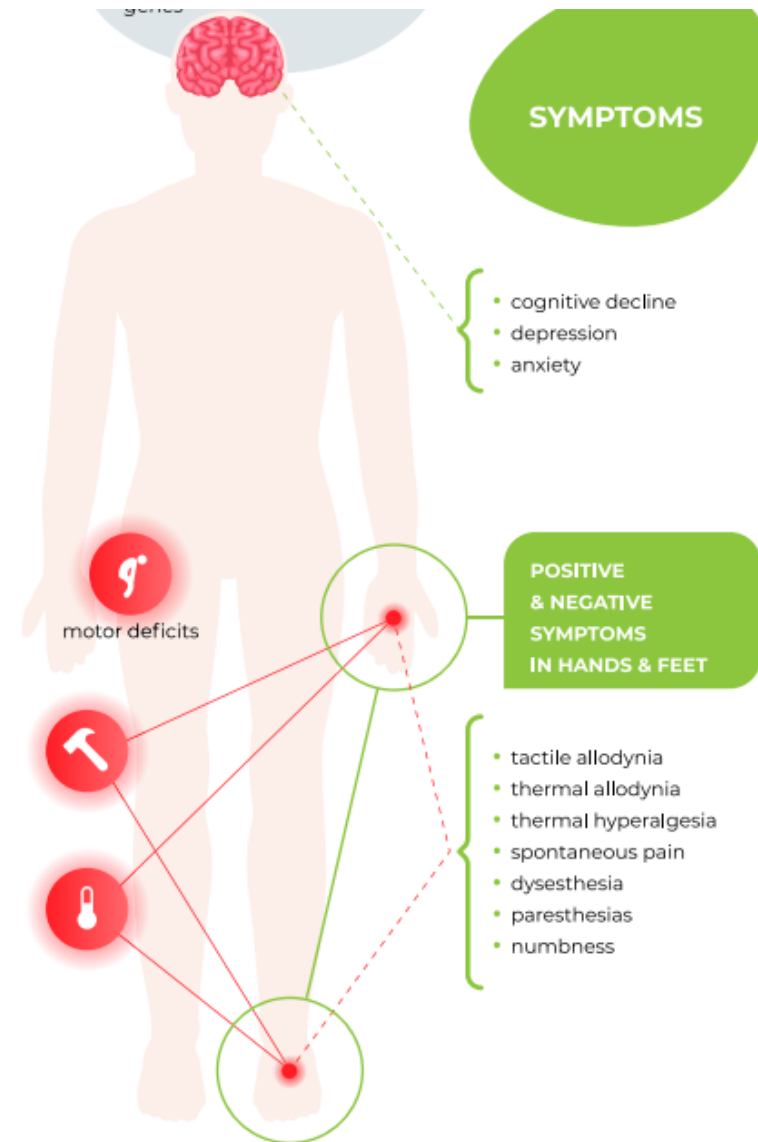
estimated ~70% of patients develop CIPN
during the first month of treatment

Chemotherapy-Induced Peripheral Neuropathy (CIPN)

Distal & symmetric

Proprioception may be only deficit

Fall risk is 2-3x greater for those with h/o neurotoxic chemotherapeutic agents



Rehabilitation Interventions for CIPN: Overview



CIPN Symptoms
-pain
-numbness
-tingling
-muscle cramping

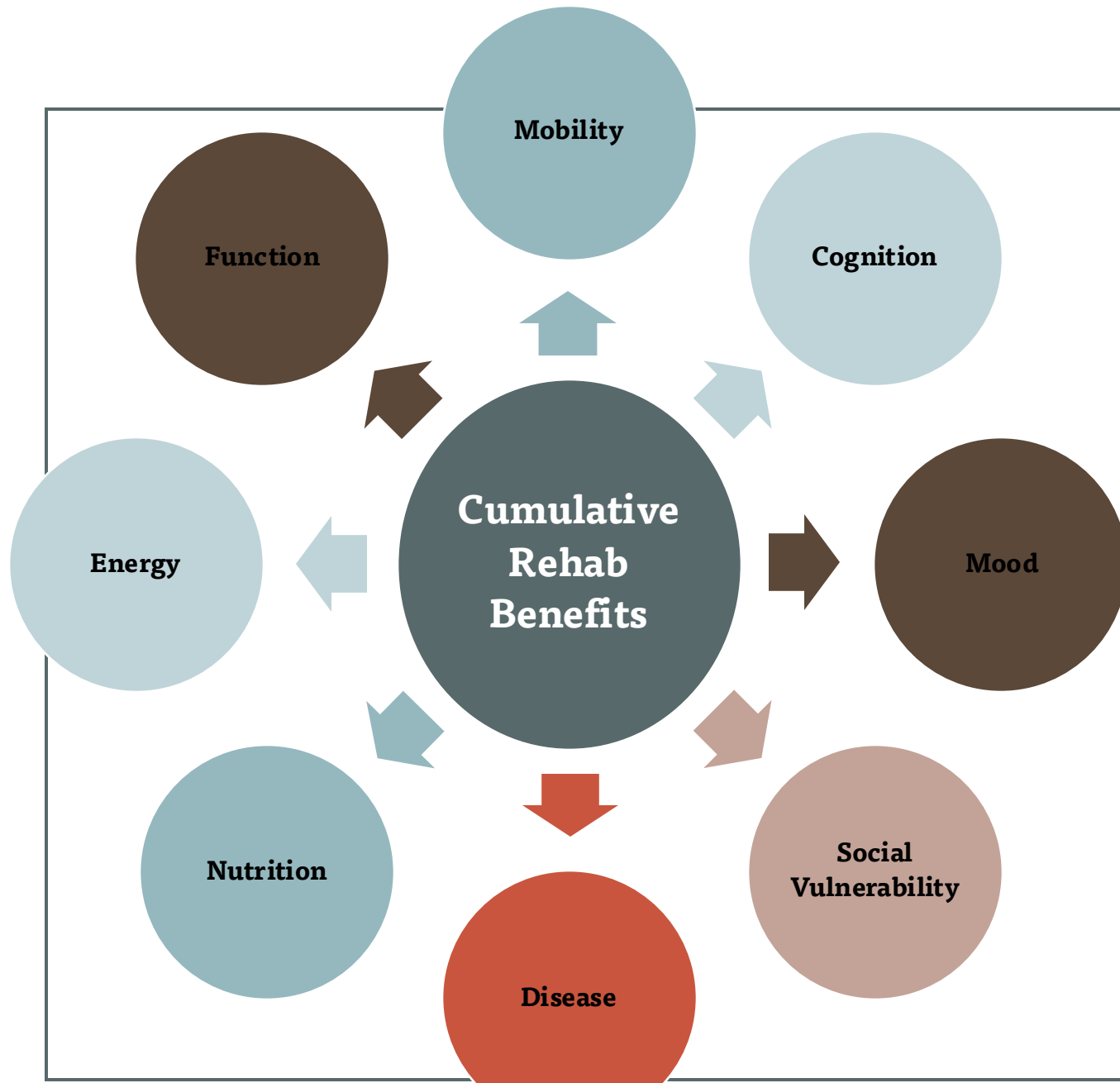
Balance/Gait

Fine motor and coordination

UE function

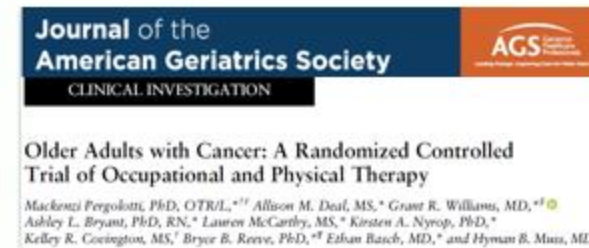
Multi-Modal Exercise Intervention in Patients with Colorectal Cancer

- Supervised 8-week (2x/week x 60 minutes) multimodal exercise in patients with metastatic colorectal cancer as they were undergoing chemotherapy
- Outcomes were measured:
 - at baseline
 - at completion of 8-week program
 - 4 weeks post-program completion
- Self-reported neuropathy scores:
 - remained stable in the intervention group over time
 - significantly worsened in the control group
- Significantly improved strength and balance in the intervention group



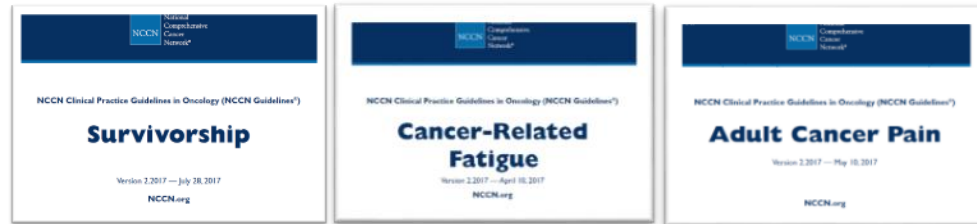
Cancer Rehab impact on cancer outcomes:

- Performance status
- Suitability for cancer treatment
- Length of hospital stay
- Frailty level & determinants
- Physical functioning
- Functional capacity
- Dyspnea
- Physical activity level



Silver JK (2015) Cancer prehabilitation and its role in improving health outcomes and reducing health care costs. *Semin Oncol Nurs* 31:13-30. <https://doi.org/10.1016/j.soncn.2014.11.003>; Goldsmith I, Chesterfield-Thomas G, Toghiani H (2020) Pre-treatment optimization with pulmonary rehabilitation in lung cancer: Making the inoperable patients operable. *EClinicalMedicine* 0:100663. <https://doi.org/10.1016/j.eclinm.2020.100663>; Chen BP, Awasthi R, Sweet SN, et al (2017) Four-week prehabilitation program is sufficient to modify exercise behaviors and improve preoperative functional walking capacity in patients with colorectal cancer. *Support Care Cancer* 25:33-40. <https://doi.org/10.1007/s00520-016-3379-8>

Cancer Rehab Aligned to Established Guidelines



A QUALITY PROGRAM
of the AMERICAN COLLEGE
OF SURGEONS



Why Cancer Rehabilitation



60-90% of individuals impacted by cancer have at least one need for specialized rehabilitation



Less than 2% of rehabilitation needs are addressed



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Our Mission:

For cancer patients in any Kentucky community to have access to and choice of quality rehabilitation care to assist with the functional needs prevalent in patients with or beyond cancer.

Our Vision

Create and expand a central access point for Kentucky patients to identify qualified cancer rehabilitation providers for their rehabilitation needs.

Empower patients to choose cancer rehabilitation in a convenient location in their community and region within Kentucky.

Educate rehabilitation providers across our state of Kentucky about the rehabilitation needs of cancer patients.

Cancer Rehab Across Kentucky

- Pathfinder updated with Specialized Cancer Rehabilitation Therapists
- Searchable by specific region



KCP Pathfinder Cancer Rehab Provider List



Welcome to the **Pathfinder**, provided by the Kentucky Cancer Program. This Directory can help you find information and services for cancer prevention, screening, treatment, and support services.



The **Pathfinder** covers all 120 Kentucky counties, with links to help you find a broad range of services, organizations and providers. Information on national resources is also found here. Members of your health care team - including your doctor, nurse, social worker, or navigator — can also assist in finding services.

Local Resources Choose a category below to begin »

| | | | | |
|---|---|--|---|---|
| <p>Cancer Screening Tests / Tobacco Use</p> <p>Find cancer screening test locations and tobacco use cessation resources. Facilities that can help you with screening, including breast and colon cancers are found here. Also listed are any available tobacco cessation classes and tobacco treatment programs. More >></p> | <p>Information, Referral, and Navigation</p> <p>Many local and regional hospitals, cancer centers, and cancer resource centers have printed materials and access to current information that can help you learn about various cancers, as well as how to find cancer care, assess treatment options, and navigate your way through recovery. More >></p> | <p>Patient Assistance</p> <p>Find complementary therapy, counseling and rehabilitation, financial assistance and legal services, medical supplies and equipment, prosthesis and wig supplies, temporary housing and transportation. More >></p> | <p>Medical Care</p> <p>Cancer Rehabilitation</p> <p>Cancer Resource Centers Clinical Trials Genetics Home Health Agencies Hospice/Palliative Care Hospitals/Cancer Centers Oncologists</p> <p>Pain Management</p> <p>Public Health Centers/Health Departments</p> <p>pain management, physical therapy, and public health centers. More >></p> | <p>Survivorship and Support Groups</p> <p>to a type of cancer, for either men or women, or center around a particular hobby or interest. More >></p> |
|---|---|--|---|---|

National and State Resources Find more information »

KCP Pathfinder is a service of the Kentucky Cancer Program

State Resources

Select your county from the drop-down menu or click on your county to create a list of nearby resources.

Kentucky Counties ▾



Jefferson County
KORT Physical Therapy-Rehab @ Home @ Home and Louisville, KY 40291
Ph: 855-315-5095
Web: <https://www.kort.com/services/revital-cancer-rehabilitation>
Email: KORT-AdminCentralizedScheduling@kort.com
Referral Required: No
Janelle Caudill, ReVital

Jefferson County
KORT Physical Therapy-Springhurst
Specialty in: Pelvic floor Rehab
3584 Springhurst Boulevard
Louisville, KY 40241
Ph: 502-339-4700
Fax: 502-339-7050
Web: <https://www.kort.com/services/revital-cancer-rehabilitation>
Email: KORT-AdminCentralizedScheduling@kort.com
Referral Required: No
Robin Ensor, ReVital, Jackie Neuman, ReVital

Jefferson County
UofL Health
Specialty in: Speech and language pathology, speech and swallow impairments, laryngectomy rehab and cognitive dysfunction from cancer treatments
530 South Jackson St.
Louisville, KY 40202
Ph: 502-562-3406
Fax: 502-562-4030
Web: <https://uoflhealth.org>
Email: kelly.clements@uoflhealth.org
Referral Required: No
Kelly Clements, Summit Certification

Jefferson County
KORT Physical Therapy-Shively
Specialty in: upper extremity lymphedema and breast/trunkal, lower extremity lymphedema and groin
4420 Dixie Highway
Shively, KY 40216
Ph: 502-447-2750
Fax: 502-449-9062
Web: <https://www.kort.com/services/revital-cancer-rehabilitation>
Email: KORT-AdminCentralizedScheduling@kort.com
Referral Required: No
Jane Murphy, ReVital, Kristin Oliverio, ReVital

Jefferson County
University of Louisville Hospital
Specialty in: Occupational Therapy, Lymphedema trained in upper extremity lymphedema and breast/trunkal, lower extremity lymphedema, face and neck lymphedema.
401 E Chestnut St
Louisville, KY 40202
Ph: 502-562-3457
Fax: 502-562-4030
Referral Required: No
Rosemarie B. Mabutas, Summit Certification

Jefferson County
UofL Health-Frazier Rehab
Owlsley Brown Frazier Sports Medicine Center
Specialty in: Upper extremity lymphedema and breast/trunkal and lower extremity lymphedema and groin
215 Central Avenue
Louisville, KY 40207
Suite 200
Louisville, KY 40208
Ph: 502-637-9913
Fax: 502-635-6317
Web: <https://www.uoflhealthnetwork.org/com-based-rehab>
Referral Required: No
Kristen Wilson

Jefferson County
University of Louisville Outpatient Rehab
Specialty in: Oncology and Cognitive Rehab
401 E Chestnut Street
Suite 270
Louisville, KY 40202
Ph: 502-562-3457
Fax: 502-562-4030
Web: <https://uoflhospital.org/outpatient-rehabilitation-services>
Referral Required: No
Humera Bashir, Cathy Gerrish, Sonal Sutaria

Jefferson County
UofL Health-Frazier Rehab Institute
Specialty in: Occupational Health, Speech and language pathology, speech and swallow impairments and cognitive dysfunction from cancer treatments
3920 Dutchmans Lane
Louisville, KY 40207
Ph: 502-259-6608
Fax: 502-259-6605
Web: <https://www.uoflhealthnetwork.org/com-based-rehab>
Referral Required: No
Jill Dyer, Samuel Levy Stout, Summit Cancer Rehab Certification Series

Go to the [KCP Pathfinder website](#)

- Click on *Medical Care*
- Click on *Cancer Rehabilitation*

This will pull up a map of KY by county

- Click the county for resources available





Future Goals & Directions:

*Rehabilitation
Clinicians*

Patients

*Healthcare
Providers*

Provider/Institution Application Process

Options:

- Fill out our [Google Docs](#) form
- Contact the Cancer Rehab Across Kentucky Team for an application form
 - Jamie Smith: Jamie.Smith.3@louisville.edu
 - Audrey Stockwell: stockwea@kort.com



Provider/Institution Application Process



Organization/Certified Cancer Therapist Data Form

The Kentucky Cancer Program is partnering with the Cancer Rehab Across Kentucky project to list certified cancer therapists on our Pathfinder, an online guide to cancer related resources in Kentucky. Please complete this form to be included in our directory to help guide cancer patients to your services.

Submit completed forms to: vanessa.goble@louisville.edu

BASIC INFORMATION

Date: _____ Resource Type: New Update

County office/organization/resource is located in: _____

CONTACT INFORMATION

Organization Name: _____

County and/or counties served in Kentucky (if county specific): _____

Organization Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ Fax Number: _____ Toll Free: _____

Organization email (if applicable): _____

Website: <https://> _____

Therapist Name: _____ Cancer Rehabilitation Certification: _____

Discipline of Practice: Occupational Therapy Physical Therapy Speech and Language Pathology

Additional Specialty focus you can provide cancer patients:

Pelvic floor Rehab Speech and Swallow impairments Laryngectomy rehab

Cognitive dysfunction from cancer treatments

Lymphedema trained [check also body area(s) you are able to treat for lymphedema]:

Upper extremity lymphedema and breast/truncal

Lower extremity lymphedema and groin

Face and neck lymphedema

NOTE:

The information requested below is for Kentucky Cancer Program and Cancer Rehab across Kentucky initiative ONLY to be able to contact you directly should updated information be needed or for sending you information regarding statewide/community Cancer Rehabilitation efforts. Your personal information WILL NOT BE SHARED with patients or any other institutions.

Personal Phone: _____

Personal/Work Email: _____

- Fill out the application form for each oncology rehab provider to be listed on the website
- Provider to indicate:
 - Demographic information
 - Oncology rehab courses taken (list under "Cancer Rehabilitation Certification")
 - Any specialty areas of focus
- Provider will be sent a survey after completion to determine how CA Rehab Across KY can best serve the needs of the provider community



Interested in Learning more about Cancer Rehabilitation?

- Observe...Observe...Observe
- Clinical Rotations with Oncology Therapists:
<https://oncologypt.org/education/#ClinicalInternships>
- APTA Oncology Section Mentorship Program:
<https://oncologypt.org/>
- Oncology Rehabilitation Con Ed and Graduate Certificate Courses
- Textbook Resources
- Oncology residency: <https://oncologypt.org/residency/>
- APTA Board Certification in Oncology:
<https://oncologypt.org/specialization/>

Coursework and Resources to get started

- [APTA Oncology Courses](#)
- [ReVital Cancer Rehabilitation](#)
- [PORi Oncology Rehabilitation Certificate](#)
- [Graduate Certificate in Oncology Rehabilitation \(GCOR\) – Oakland University](#)
- [Summit Cancer Rehabilitation Certification](#)
- [Comprehensive Oncology Rehabilitation Expert \(CORE\) Certification-ILWTI \(International Lymphedema & Wound Training Institute\)](#)

Textbooks:

- [“Oncology Rehabilitation: a Comprehensive Guidebook for clinicians”](#)
by Deborah Doherty, Chris Wilson, and Lori Boright
- [“Cancer Rehabilitation”](#)
by Michael Stubblefield



Questions?