


Identifying and Advocating Occupational Therapy's Vital Role in Oncology Rehabilitation

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WROTSS-Las Vegas-2023


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Disclosure

Lisa Marshall, OTR/L, CLWT is the Founder and CEO of Specialty Rehabilitation Inc. Her division of Oncology Consulting and Education provides continuing education courses and consulting services.



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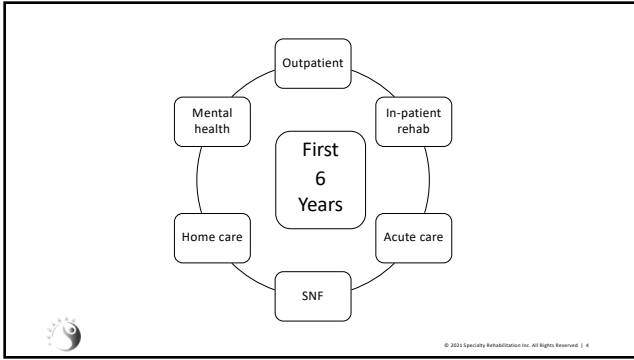
Course Objectives:

- The participants will be capable of identifying the need and benefits of oncology rehab in acute care, outpatient, skilled nursing, and home care settings.
- Attendees will be able to discuss OT's unique role from pre-habilitation through palliation for the person living with cancer.
- Upon completion, attendees will be able to advocate for OT services with other multidisciplinary team members.



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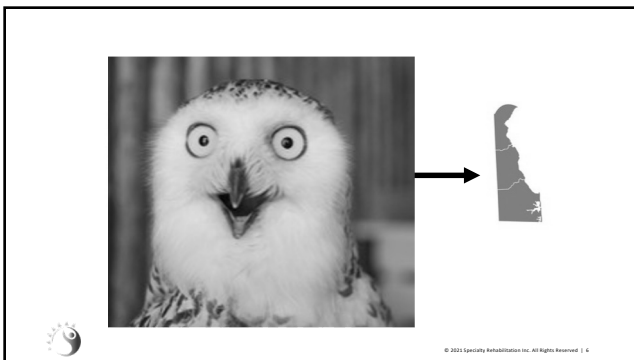
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Independent contractor oncology

- Homecare
- Outpatient

• Lymphedema

• Developing cancer Rehab programs

Contracted with outpatient clinics for cancer patients

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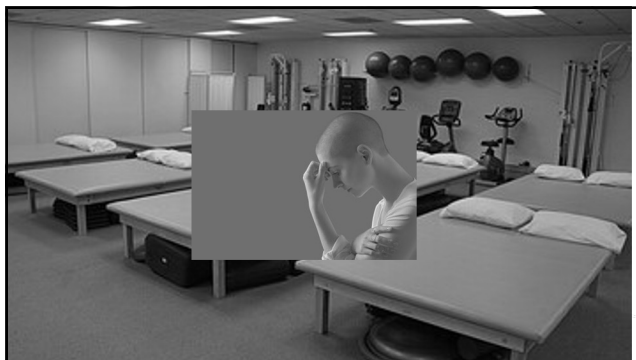
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Lymphedema Treatment

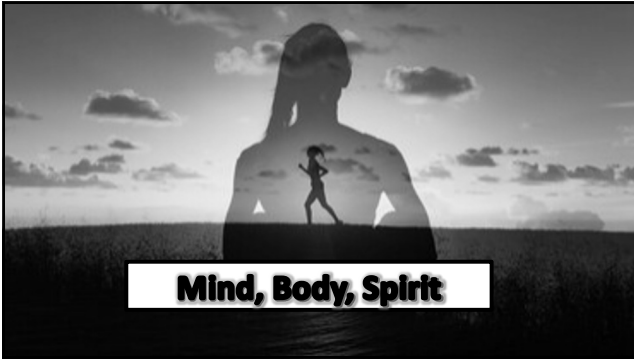
A Small Portion of Oncology Rehabilitation

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Provide Specialty Services In My Community

Lymphedema

Oncology

Pelvic Floor


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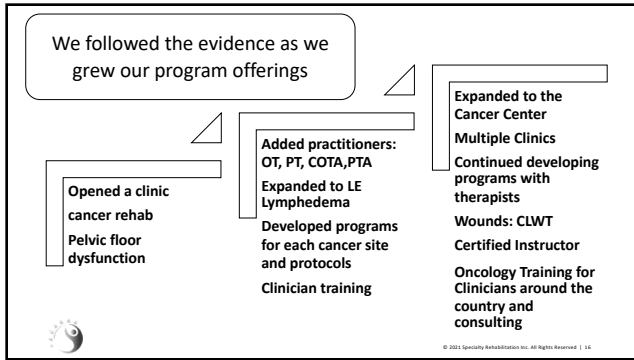
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Statistics ⁽³⁾



39.6% lifetime risk


2019 an estimated 16.9 million survivors, projected growth to 26 million by 2040



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Statistics ⁽³⁾



Cancer Healthcare Costs in USA

- 190.2 billion in 2015
- 208.9 billion in 2020





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Statistics ^(21, 24)

Increasing Survival Rates

- Improved prevention and detection strategies
- Improved treatment strategies and Immune and Targeted Treatments.

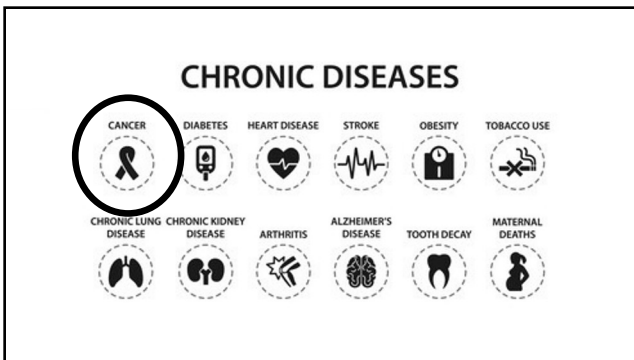
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Gap in Rehab Care (5, 21, 24)

- 65 to 90% would benefit only 5% get referred
- 65% of patients had modifiable deficits-only 9% received intervention
- 2% of inpatients received intervention

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Oncology Healthcare Reform

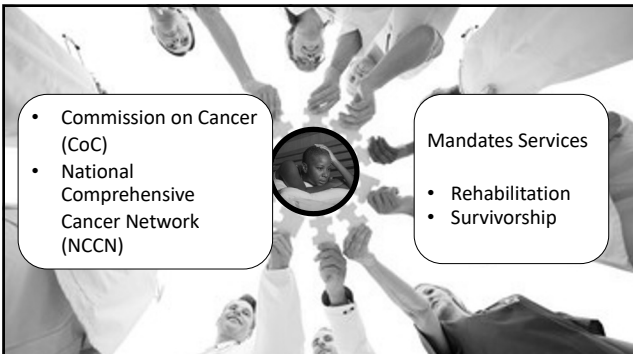
OT Practitioner's Role

Patient Centered Care

- Reducing Healthcare Costs
- Improving: Function, Outcomes, QOL

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- Commission on Cancer (CoC)
- National Comprehensive Cancer Network (NCCN)

Mandates Services

- Rehabilitation
- Survivorship

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Need for Oncology Rehabilitation

Interventions: function based, meaningful goals, address the person living with cancer and the caregivers



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↑ Sense of control ↑ Increase QOL



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Research indicates we need to train clinicians on the cancer experience and interventions to match the increasing demand.



- Outpatient
- SNF
- Home care
- Inpatient
- Acute Care



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Side Effects

Cancer

Treatments

- Surgery
- Radiation
- Hormone Therapy
- Chemotherapy
- Immunotherapy
- Targeted Therapies






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Surgery Side Effects

- Fatigue
- Pain
- Scar tissue/Fibrosis
- Range of Motion Deficits

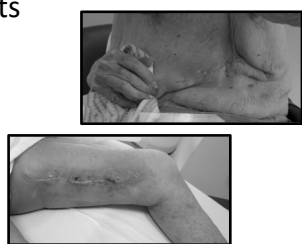




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General Side Effects

- Strength Deficits
- Postural Changes
- Lymphedema
- Axillary Webbing
- Disfigurement

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Radiation Side Effects

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Hormonal Therapy

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**Chemotherapy Effects
General Side**

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Immunotherapy Targeted Therapy Side Effects 30, 36, 56


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Cancer-Related Musculoskeletal Impairments

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Let's Claim It! OT Practitioners' Unique Skill Set




- Therapeutic use of self
- Whole person: mind-body-spirit
- Individualize tx meaningful to them
- Manuals, NMR-tech. are always tied to function
- Exercise - ways meaningful to client
- Experts in education
- Mitigate return to the hospital, reduce health care costs
- Leaders-in function-based interventions-(ie)-PTs do gait training, we do functional mobility-simulate or in real environments

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Lifestyle choices affect health and disease

Occupational Therapists Can Make Important Contributions in Education in Prevention



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Lifestyle

- Tobacco
- Diet and Nutrition
- Alcohol
- Sexual and Reproductive Behaviors
- Hormonal Exposure

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Benefits of Exercise and Healthy Habits

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Survivorship

Cancer Survivor
 "Any person with a history of cancer, from the time of diagnosis through the remainder of their life"

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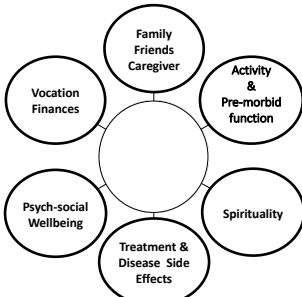
"Rehabilitation of persons with cancer also requires that the rehabilitation specialists have a good understanding of issues related to cancer and its treatment in order to appreciate the unique challenges in managing this particular patient population."

Meryl Wunningham




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Impact of Cancer and Its Treatments



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The Role of Rehabilitation

Origins of cancer rehabilitation
J. Herbert Dietz MD 1981

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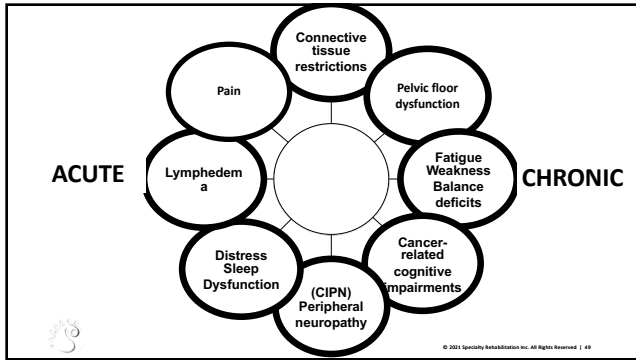
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Throughout the entire continuum of care - diagnosis and beyond

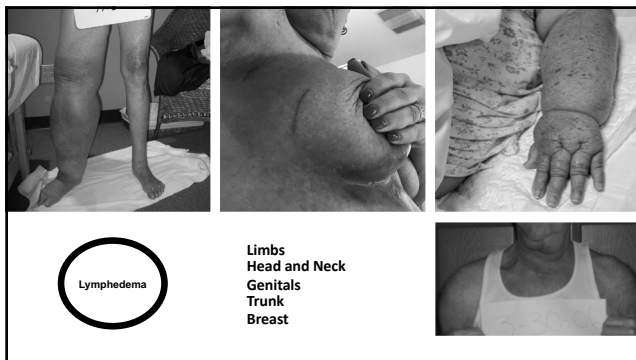
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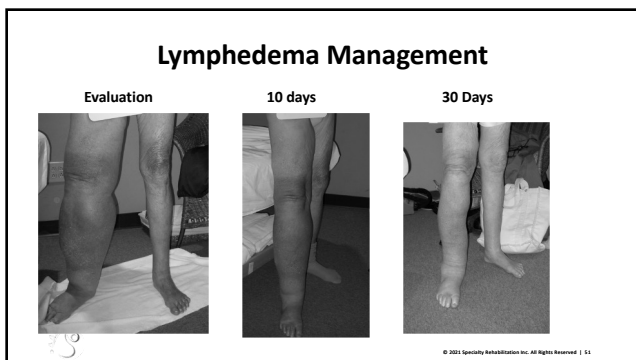
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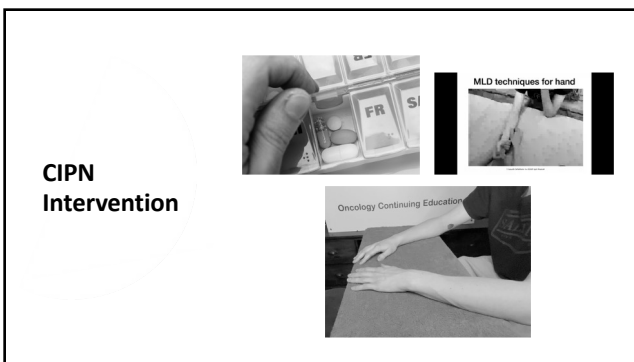
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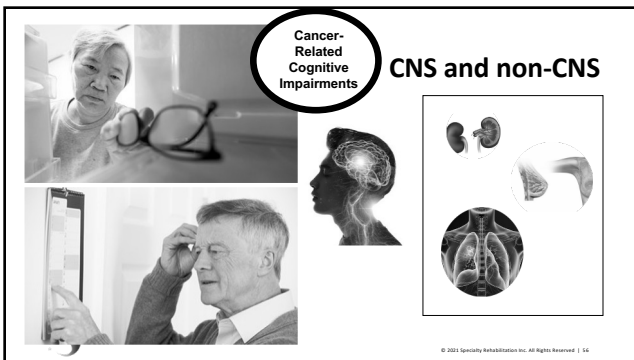
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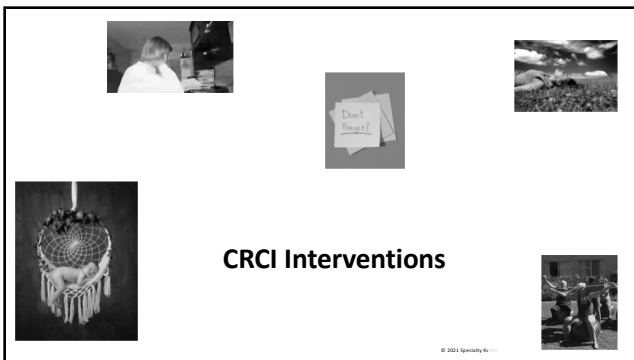
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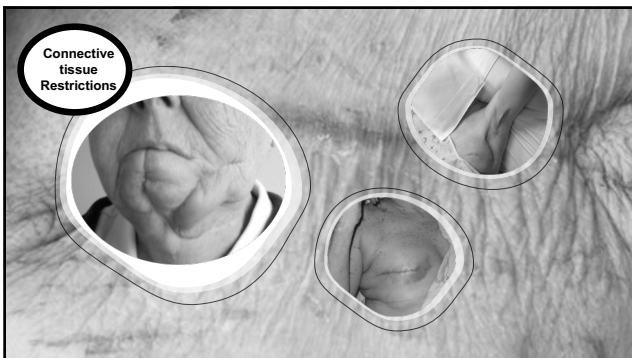
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Pelvic floor & sexual dysfunction

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Interventions

Education
Behavior modifications
Breathwork
Manual techniques
Exercises
Bracing techniques
Biofeedback
Vaginal dilators
Cross refer to other disciplines

Prostate Cancer


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Pain

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Interventions

- Education
- Manual
- Energy conservation
- Sleep Hygiene
- Screening: depression-anxiety
- Cross referral to team members
- Breathwork



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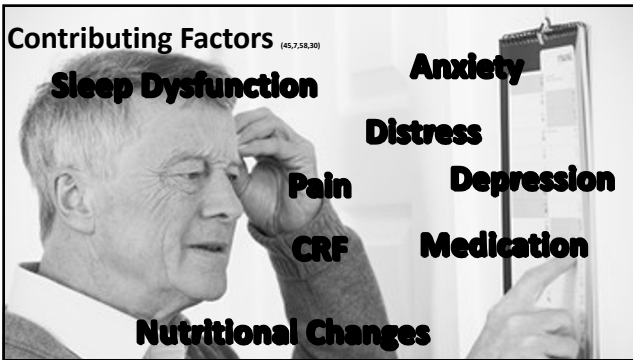
Contributing Factors (45,7,58,30)

Sleep Dysfunction **Anxiety**

Pain **Distress**

CRF **Depression**

Nutritional Changes **Medication**



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Cancer is Family A Disease

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Breast
Gastrointestinal
Genitourinary
Gynecological
Head & Neck
Hematological:
Neuro-oncology
Skin
Thoracic
Bone & Soft Tissue

OT Practitioners
Treat pre-habilitation through palliation for every cancer site

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Breast	
Head & Neck	
Gastrointestinal	GI: colorectal, pancreatic, liver, gastric & esophageal
Genitourinary	Prostate, bladder, Kidney
Gynecological	Cervical, ovarian, endometrial, vulvar, fallopian, vaginal

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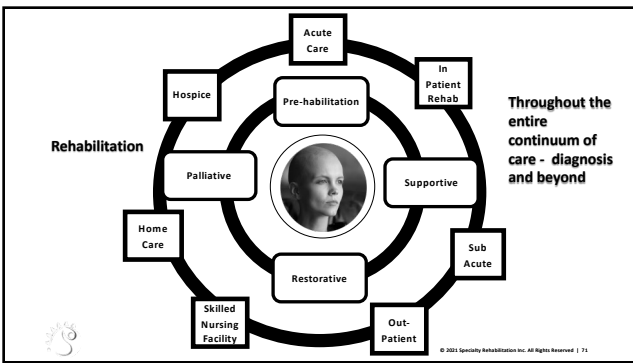
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Hematological:	Leukemia, lymphoma, multiple myeloma
Neuro-oncology	Brain tumors, metastatic tumors to brain, spinal tumors
Skin	Melanoma, basal cell, squamous cell, Merkel cell
Thoracic	Primary lung, metastatic lung
Bone & Soft Tissue	Sarcomas (soft tissue & bone) metastatic cancer to the bone

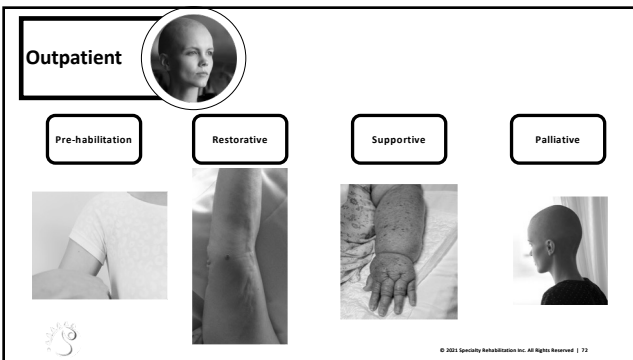
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Acute Care Person Living With Cancer Pre-habilitation Restorative Supportive Palliative

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Home Care Person Living With Cancer Pre-habilitation Restorative Supportive Palliative

Steroid Myopathy **Bone Loss**

CRF **Chemotherapy-Induced Peripheral Neuropathy**

CRCI **(increased risk of falls)**

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Skilled Nursing Facility Person Living With Cancer Pre-habilitation Restorative Supportive Palliative

Sub-Acute

In-patient Rehab

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Acute Care
In-Patient Rehab
School System
Home Care
Out-Patient

Pre-habilitation Restorative Supportive Palliative

- Sarcoma
- Leukemia
- Brain Tumors

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Improve and Maintain QOL

- CRCI
- CIPN
- CRF
- Cardiomyopathy
- Increased Risk of Secondary Cancers

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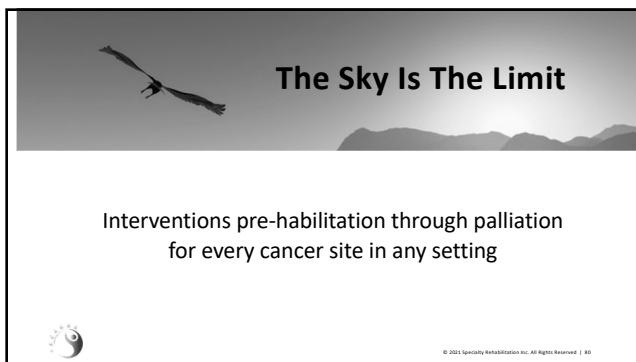
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References

1. Catherine M. Alfano, Andrea L. Cheville, and Karen Mustian. *American Society of Clinical Oncology Educational Book* 2016 :36, 241-249
2. Catherine M. Alfano, Patricia A. Ganz, Julia H. Rowland, and Erin E. Hahn. *Cancer Survivorship and Cancer rehabilitation: Revitalizing the Link*. *Journal of Clinical Oncology* 2012 30:9, 904-906
3. *American Cancer Society Facts & Figures*: <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2021/2022-cancer-facts-and-figures.pdf>
4. Braveman, B., & Newman, R.(Eds.) (2020) *Cancer and occupational therapy: Enabling performance and participation across the lifespan*. North Bethesda, MD: AOTA Press.
5. Cheville AL, Mustian K, Winters-Stone K, Zucker DS, Gamble GL, Alfano CM. Cancer Rehabilitation: An Overview of Current Need, Delivery Models, and Levels of Care. *Phys Med Rehabil Clin N Am*. 2017 Feb;28(1):1-17. doi: 10.1016/j.pmr.2016.08.001. PMID: 27912990.
6. Cheville, A., Martinez, S.,(Ed) (2017). *Adjunctive Rehabilitation Approaches to Oncology,Physical Medicine and Rehabilitation Clinics of North America*, Elsevier. (pages 1-12).
7. Dietz JH. Rehabilitation of the cancer patient: its role in the scheme of comprehensive care. *Clin Bull* 1974; (4): 104-107
8. Eggert, J. (Ed). (2017). *Cancer Basics*, ONS Publications
9. Ferrell, B. et al. Integration of Palliative Care into Standard Oncology Care: American Society of Clinical Oncology Clinical Practice Guideline Update. *Journal of Clinical Oncology*. Vol 35, Jan. 2017. Pgs 96-114.



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References

10. Fu JB, Raj VS & Guo Y. (2017). A guide to Inpatient cancer rehabilitation: Focusing on patient selection and evidence-based outcomes. *PM&R* 9 (S52): S324-S334. <https://doi.org/10.1016/j.pmrj.2017.04.017>
11. Gallegos-Kearin V, et al. (2016). Outcome trends of adult cancer patients receiving inpatient rehabilitation: A 10-year review of the uniform data system for medical rehabilitation. *Arch Phys Med Rehabil*. 97(10):e46.
12. Gerber LH. Cancer-Related Fatigue: Persistent, Pervasive, and Problematic. *Phys Med Rehabil Clin N Am*. 2017 Feb;28(1):65-88. doi: 10.1016/j.pmr.2016.08.004. PMID: 27913001.
13. Hitoshi Okamura, Importance of Rehabilitation In Cancer Treatment and Palliative Medicine, *Japanese Journal of Clinical Oncology*, Volume 41, Issue 6, June 2011, Pages 733-738, <https://doi.org/10.1093/jco/har061>.
14. Institute of Medicine. 2013. *Delivering High Quality Cancer Care: Charting a New Course for a System In Crisis*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/18359/>.
15. Levit L., Balogh, E., Nass, S., Ganz, P., *Delivering High-quality Cancer Care, Charting a New Course for a System In Crisis*. Institute of Medicine(2013).
16. Lester, J., Schmitt, P., (Ed) (2011). *Cancer Rehabilitation and Survivorship: Transdisciplinary Approaches to Personalized Care*. Oncology Nursing Society, Pittsburgh, PA.
17. National Academies of Sciences, Engineering, and Medicine. 2021. *Diagnosing and Treating Adult Cancers and Associated Impairments*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25956>.



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References

18. National Cancer Institute: <https://www.cancer.gov/about-cancer/financial-burdens/cancer-understanding/statistics>; https://progressreport.cancer.gov/other/economic_burden

19. Office of Cancer Survivorship: Statistics; Available from: <https://cancer-control.cancer.gov/ocs/statistics/statistics.html>.

20. Pergolotti M, Deal AM, Williams GR, Bryant AL, Reeve BB, Muss HB. (2015) A randomized controlled trial of outpatient Cancer Rehabilitation for older adults: The CARE Program. *Contemp Clin Trials*.

21. Silver JK, Stout NL, Fu JB, Prats-Chapman M, Haylock PJ, Sharma R. The State of Cancer Rehabilitation in the United States. *J Cancer Rehabil*. 2018;1:1-8. Epub 2018 Dec 30. PMID: 30832090; PMCID: PMC6415687.

22. Silver J, Balma J, & Mayer RS (2013). Impairment-driven cancer rehabilitation: an essential component of quality care and survivorship. *CA Cancer J Clin*; 63(5):295-317. doi:10.3332/caac.21186.

23. Stout N, Santa Mina D, Lyons K, Robb K, Silver J. (2021) A Systematic Review of Rehabilitation and Exercise Recommendations in Oncology Guidelines. *CA Cancer J Clin* 71:149-175

24. Stubblefield, M.D.(Ed). (2019). *Cancer Rehabilitation, Principles and Practice*. Springer Publishing Company.

25. Winningham, M., Barton-Burke, M. (Ed.) (2000) *Fatigue In cancer*. Jones and Bartlett Learning.

26. NIH statistics on aging population: <https://www.nih.gov/news-events/news-releases/worlds-older-population-grows-dramatically>

27. Chowdhury RA, Brennan PJ, Gardiner MD. Cancer Rehabilitation and Palliative Care-Exploring the Synergies. *J Pain Symptom Manage*. 2009;69(5):1239-1252. doi:10.1016/j.jpainsymman.2009.07.030

28. Campbell G, Wolfe RA, Klem ML. Risk Factors for Falls in Adult Cancer Survivors: An Integrative Review. *Rehabil Nurs*. 2018 Jul/Aug;43(4):201-213. doi: 10.1097/mj.0000000000000173. PMID: 29957697; PMCID: PMC6028723.

29. NCCN guidelines Cancer Related Fatigue 2.2022

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