Best Practices in Oncology Rehabilitation Models of Care

Lisa VanHoose, PhD, MPH, PT
Learning Objectives

• Discuss the key concepts in oncology rehabilitation program development and growth

• Describe the latest national mandates regarding oncology rehabilitation

• Compare and contrast certification, specialization, and accreditation within the field of oncology rehabilitation.

• Discuss reimbursement opportunities and threats associated with high quality rehabilitation programs
Does your organizational model know how to support this patient?

Traditional Models of Care

• Acute care hospital
• Military based facilities
• Hospital owned outpatient physical therapy clinic
• Physical therapist owned outpatient practice
• Skilled nursing facility
• Home health

http://www.apta.org/SupervisionTeamwork/Models/
Emerging Models of Care

• Health and wellness integrations
  • Gym partnerships
  • Massage therapists
  • Chiropractors

• Concierge or subscription services
  • Navigation

• Corporate services

• Cash based models

http://www.apta.org/InnovationsinPractice/
Oncology Rehab: The Reality Show
Identifying Healthcare Providers

(modified from Courneya & Friedenreich, 2007; Schmitz et al., 2010)
• Triage model
• Expanded privileges

So how do we change?

• Empower you with a history of oncology care and rehabilitation
  • Informative learning
• Challenge your current thinking about cancer prevention and care, rehabilitation, and reimbursement models
  • Destabilization
• Redefine our definitions of “experts”, views of diversity, and our inclusion culture
  • Disorientation
• Inspire yourself and other key stakeholders to expand existing cancer survivorship programs into innovative, comprehensive, evidence based, patient driven care models
  • Facilitating environment
• Encourage expeditionary learning
  • Reorientation
Contemporary Issues in Cancer Rehabilitation

A Brief Historical Perspective of Cancer Rehabilitation and Contributions From the National Institutes of Health

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Destabilization – Primary Prevention

- Improving access to clinical preventive services.
- Providing basic coverage for preventive services in federal, state, and public health plans.
- Providing reimbursement incentives for the provision of wellness and preventive care.
- Streamlining and promoting the work of preventive service entities within the federal government, including the US Preventive Services Taskforce, the Agency for Healthcare Research and Quality, and the Institute of Medicine.
- Expanding programs such as the National Health Services Corps to include physical therapists for incentivizing work in community health centers and rural health clinics.
- Unrestricted direct access to physical therapist services.


**Figure** Ten recommendations for cancer prevention.6,7 Adapted with permission of World Cancer Research Fund/American ...

<table>
<thead>
<tr>
<th>General Recommendations of the 2007 WCRF/AICR Diet and Cancer Report</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BODY FATNESS</strong></td>
</tr>
<tr>
<td>Be as lean as possible within the normal range of body weight</td>
</tr>
<tr>
<td><strong>PHYSICAL ACTIVITY</strong></td>
</tr>
<tr>
<td>Be physically active as part of everyday life</td>
</tr>
<tr>
<td><strong>FOODS AND DRINKS THAT PROMOTE WEIGHT GAIN</strong></td>
</tr>
<tr>
<td>Limit consumption of energy-dense foods</td>
</tr>
<tr>
<td>Avoid sugary drinks</td>
</tr>
<tr>
<td><strong>PLANT FOODS</strong></td>
</tr>
<tr>
<td>Eat mostly foods of plant origin</td>
</tr>
<tr>
<td><strong>ANIMAL FOODS</strong></td>
</tr>
<tr>
<td>Limit intake of red meat and avoid processed meat</td>
</tr>
<tr>
<td><strong>ALCOHOLIC DRINKS</strong></td>
</tr>
<tr>
<td>Limit alcoholic drinks</td>
</tr>
<tr>
<td><strong>PRESERVATION, PROCESSING, PREPARATION</strong></td>
</tr>
<tr>
<td>Limit consumption of salt</td>
</tr>
<tr>
<td>Avoid mouldy cereals (grains) or pulses (legumes)</td>
</tr>
<tr>
<td><strong>DIETARY SUPPLEMENTS</strong></td>
</tr>
<tr>
<td>Aim to meet nutritional needs through diet alone</td>
</tr>
<tr>
<td><strong>BREASTFEEDING</strong></td>
</tr>
<tr>
<td>Mothers to breastfeed; children to be breastfed</td>
</tr>
<tr>
<td><strong>CANCER SURVIVORS</strong></td>
</tr>
<tr>
<td>Follow the recommendations for cancer prevention</td>
</tr>
</tbody>
</table>
Where do we start?

• High risk populations
  • Substantial evidence
    • Colon cancer
    • Breast cancer
    • Endometrial cancer

• Limited evidence
  • Esophageal adenocarcinoma
  • Liver cancer
  • Gastric cardia cancer (a type of stomach cancer)
  • Kidney cancer
  • Myeloid leukemia
  • Myeloma
  • Head and neck
  • Rectum
  • Bladder

Screening Recommendations

• American Cancer Society

• US Preventive Services Task Force
  • https://www.uspreventiveservicestaskforce.org/Page/Name/tools-and-resources-for-better-preventive-care

• Centers for Disease Prevention and Control
  • https://www.cdc.gov/cancer/dcpc/prevention/screening.htm
Destabilization – Secondary Prevention

Figure 2. Best Practices Cancer Care
Screening patients for physical and psychological problems is a critical part of quality cancer care. Survivors with physical impairments should be referred for rehabilitation services.

New Cancer Diagnosis → PREHABILITATION → Acute Cancer Treatments → (No Impairments) General Exercise/Wellness → REHABILITATION

(If impairments exist) Impairments → REHABILITATION

Silver, 2013
Prehabilitation

“...occurs between the time of cancer diagnosis and the beginning of acute treatment and includes physical and psychological assessments that establish a baseline functional level, identify impairments, and provide interventions that promote physical and psychological health to reduce the incidence and/or severity of future impairments.”

Enhanced Recovery After Surgery (ERAS)

**Pre-surgery**
- Goal-directed fluid management
- Judicious use of opioid pain medications
- Shorter incisions and use of laparoscopic approach when possible
- Careful consideration of blood transfusions
- Patient education and pre-surgery counseling
- Meeting with a surgeon or nurse
- Carbohydrate drink prior to surgery
- Use of epidurals for pain control

**During Surgery**
- Early post procedure mobilization
- Early removal of tubes and drains
- Early transition to oral pain medications
- Early allowance of food intake

**Post-Surgery**
- Increased patient satisfaction with care
- Decreased perioperative complications
- Decreased length of hospital stay
- Improved use of hospital resources

**Better Outcomes**

https://www.med.unc.edu/anesthesiology/enhancedrecovery/overview/components-of-enhanced-recovery/
Prospective Surveillance Models

• Baseline assessments
• Regular screenings
  • Every 3-6 months for the first 3 years
  • Every 6-12 months for the next 2 years
  • Annually thereafter
• Early identification and treatment of side effects
• Multidisciplinary team approach
• Model has been recommended
  • Breast cancer survivorship (Khatcheressian et al 2006; Stout et al 2012)
  • CIPN (Stubblefield 2012)
  • American Cancer Society
Prospective Surveillance Models

**Pros**
- Increased patient education and satisfaction
- Early identification
- Early treatment
- Reduced risk of disability
- Builds patient’s trust
- Builds patient’s self-management skills

**Cons**
- Extra Encounters
- Financial Costs
- Human Capital
- Referral Points
- Documentation
- Hypervigilance
CARF

• Commission on Accreditation of Rehabilitation Facilities
• Accredits service
• providers and organizations
  • Aging Services
  • Behavioral Health
    • Opioid Treatment Programs
  • Business and Services Management Networks
  • Child and Youth Services
  • Employment and Community Services
    • Vision Rehabilitation
  • Medical Rehabilitation
    • DMEPOS (Durable Medical Equipment, Prosthetics, Orthotics, and Supplies)
• Cancer rehabilitation specialty programs
  • 2014 Medical Rehabilitation Standards Manual
• Commission on Cancer (CoC) American College of Surgeons (ACS)

• Recognized by several organizations: The Joint Commission, American Cancer Society, Aetna, CMS, NQF, and National Cancer Institute

• ~1500 CoC-accredited cancer programs in the US and Puerto Rico

• Survivorship care plan and psychological distress screening standards required for accreditation of in 2015
National Standards—Commission on Cancer (CoC)

- 2012 Commission on Cancer (CoC)
  - A policy or procedure is in place to access rehabilitation services either on-site or by referral.
So how do we change?

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  • Disorientation
• Inspire yourself and other key stakeholders to expand existing cancer survivorship programs into innovative, comprehensive, evidence based, patient driven care models  
  • Facilitating environment
• Encourage expeditionary learning  
  • Reorientation
Disorientation

• We have a need.....
• Who are the preferred providers?
• Who are the experts?
Current status

• Rehabilitation providers are not mandatory members of the cancer committee (Standard 1.2)

• Rehabilitation services are not a mandatory area of the cancer conference activities (Standard 1.7)

• Pain and non-pain symptom management are components of palliative care (standard 2.4)
  • More than 90% of all patients reported symptoms 1 year after diagnosis
    • American Cancer Society's Study of cancer survivors I (2007)
Current status

• All cancer survivors must be screen for psychosocial distress at least once during a pivotal medical visit (standard 3.2)
  • Medical staff identified for administration or interpretation does not include rehabilitation professionals (standard 3.2)

• Programs must offer at least one cancer prevention program (standard 4.1)
Guidelines

• Cancer related fatigue is a common side effect of cancer treatment
  • “distressing, persistent, subjective sense of physical, emotional and/or
cognitive tiredness or exhaustion related to cancer or cancer
treatment that is not proportional to recent activity and interferes with
usual function”
    • National Comprehensive Cancer Network (NCCN)
• 14% to 96% of patients during active treatment (NCI)
• 19% to 82% of patients post-treatment (NCI)
• Last longer than any other side effect (nccn, 2015)
• The only level 1 intervention
  • Exercise (NCI)

“Survivors at higher risk of injury (e.g., those living with neuropathy, cardiomyopathy, or other long-term effects of therapy) and patients with severe fatigue interfering with function should be referred to a physical therapist or exercise specialist. “

American Society of Clinical Oncology Clinical Practice Survivorship Guidelines, Endorsements and Adaptations: Summary of Recommendations Tables (2014)
Current status

• “Cancer programs must develop and implement processes to monitor the formation and dissemination of a SCP for analytic cases with Stage I, II, or III cancers that are treated with curative intent for initial cancer occurrence and who have completed active therapy. “ (standard 3.3)

• Patients excluded (ineligible) from Standard 3.3 requirement include:
  • Patients with Stage 0 or IV or metastatic disease, though survivors by varying definitions are not required to receive a SCP under Standard 3.3. However, programs may choose to provide SCPs to metastatic patients.
  • Patients who are pathologically diagnosed but never treated or seen for follow-up by the accredited program are not required to receive a SCP from the facility providing diagnosis.
• Implementation of the standard and required percentage of SCPs provided must follow the schedule as outlined:
  • January 1, 2015–December 31, 2015: Implement process to provide SCPs to ≥ 10 percent of eligible patients who have completed treatment.
  • End of 2016: Provide SCPs to ≥ 25 percent of eligible patients who have completed treatment.
  • End of 2017: Provide SCPs to ≥ 50 percent of eligible patients who have completed treatment.
  • End of 2018 and on: Provide SCPs to ≥ 75 percent of eligible patients who have completed treatment.
<table>
<thead>
<tr>
<th>Unmet Need Domain</th>
<th>n</th>
<th>%</th>
<th>Codebook Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Physical</td>
<td>578</td>
<td>38.2</td>
<td>Needs and issues experienced in or affecting the body, including pain, symptoms, sexual dysfunction, and care of body (such as diet, exercise, and rest).</td>
</tr>
<tr>
<td>2. Financial</td>
<td>307</td>
<td>20.3</td>
<td>Needs related to money, insurance, and the affordability of needed services and products.</td>
</tr>
<tr>
<td>3. Education/Information</td>
<td>295</td>
<td>19.5</td>
<td>Needs related to unanswered questions and the lack of knowledge regarding what to expect as a cancer survivor, follow-up care, self-care, cancer and health research, and cancer risks, causes, and prevention.</td>
</tr>
<tr>
<td>4. Personal control</td>
<td>249</td>
<td>16.4</td>
<td>Needs related to an individual’s ability to maintain autonomy in terms of the physical self (sexual function, evacuation, and ambulation) and the social self (disclosure about cancer and ability to make plans and socialize). Also includes wishes to return to “normal” and finding a “new normal.”</td>
</tr>
<tr>
<td>5. System of care</td>
<td>235</td>
<td>15.5</td>
<td>Needs related to the health care system, including constraints and flaws that affect early detection, diagnosis, treatment, follow-up care, continuity of care, and inadequate response from health care providers.</td>
</tr>
<tr>
<td>6. Resources</td>
<td>209</td>
<td>13.8</td>
<td>Needs related to availability and access to supplies, equipment, therapies and medications (including alternative and complementary), and transportation services.</td>
</tr>
<tr>
<td>7. Emotions/mental health</td>
<td>207</td>
<td>13.7</td>
<td>Needs related to psychological issues, including fear (recurrence, new cancers, death, and dying), depression, anxiety, and negative feelings (mistrust toward body, anger, and guilt).</td>
</tr>
<tr>
<td>8. Social support</td>
<td>193</td>
<td>12.7</td>
<td>Needs related to psychosocial and interpersonal issues, including intimacy, access to support groups, opportunities to use one’s own experiences to help others, and participation in social situations</td>
</tr>
<tr>
<td>9. Societal</td>
<td>151</td>
<td>10.0</td>
<td>Needs revealed from respondents’ commentary about conditions and issues related to society’s response to cancer, including social norms, discrimination, misinformation, policies, and resource allocation (insurance coverage).</td>
</tr>
</tbody>
</table>

• In 2016 the APTA House of Delegates approved board certification in the area of oncology.

• The first oncology specialist certification examination was administered in spring 2019.

• Candidates will be notified in June 2019 and recognized at CSM 2020.
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Service Model Considerations

Best model for the institution
- Population of survivors to be served
- Resources available at the facility (physical, personnel, financial)
- Model may vary from patient to patient
- Not all lymphedema!

Identify Parameters
- How many survivors will be cared for?
- Geographic area to be served?
- Convenience of the setting?
- Diversity of population?
- Complexity of treatment exposures?
- Time frame (at time of diagnosis, completion of treatment, no evidence of disease)?
Identifying Healthcare Providers

(modified from Courneya & Friedenreich, 2007; Schmitz et al., 2010)
<table>
<thead>
<tr>
<th>Organization</th>
<th>Qualifications</th>
<th>Country</th>
<th>Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>American College of Sports Medicine</td>
<td>500 Hours of experience training older adults or individuals with chronic conditions</td>
<td>United States</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>American College of Sports Medicine–or National Commission for Certifying Agencies–accredited health and fitness certification</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Qualifying practical exam</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Wellspring Cancer Support Network</td>
<td>Rehabilitation professional in the field of physiotherapy, kinesiology, exercise physiology, and occupational therapy</td>
<td>Canada</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>University of Northern Colorado</td>
<td></td>
<td>United States</td>
<td>NA</td>
</tr>
<tr>
<td>Cancer Rehabilitation Institute</td>
<td></td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Clinical Cancer Exercise Specialist</td>
<td>Exercise physiologists, physical therapists, nurses, nurse practitioners, rehabilitation specialists, personal trainers, and other medical professionals</td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Thrive Health Services</td>
<td>QEP</td>
<td>Canada</td>
<td>NA</td>
</tr>
<tr>
<td>American Council on Exercise</td>
<td></td>
<td>NA</td>
<td></td>
</tr>
<tr>
<td>Cancer Exercise Specialist</td>
<td>National Commission for Certifying Agencies–accredited health and fitness certification</td>
<td>United States</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>Completion of online module</td>
<td>Required</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Qualifying theory exam</td>
<td>Required</td>
<td></td>
</tr>
</tbody>
</table>
Building Staff and Teams

**Move beyond traditional rehabilitation philosophy**
- Historical view: Recovery or adaption to neurological and musculoskeletal deficits
- Expand to management of any impairment that interferes with optimal physical or social function
- Prevention, restoration, adaption, and palliation

**Broaden educational resources**
- Expand rehabilitation curriculums
- Develop resources for existing clinicians
- Promote research and evidence-based practice
- Cultivate community knowledge
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Are or will we be ready?

- QUANTIFIED SELF-TRACKING
- ALTERNATIVE PAYMENT SYSTEM
  - VALUE BASED PAYMENT
  - SPECIALTY
- ONCOLOGY SPECIALIZATION
- EXPERT PATIENT
- PERSONALIZED GENOMICS
- REHABILITATION RESEARCH NEEDS
- RESPONSIBILITY OF BEING A DOCTORING PROFESSION

Model of care and referral pathway. PT = physiotherapy; OT = occupational therapy.
## Integrated Care Model

**Education**
- Guidelines Physical Activity (74%)
- All other Education (62%)
  - Fatigue management (37%)
  - Postural correction (31%)
  - Gait/Transfer training (15%)
  - Fracture/Fall prevention (12%)
  - Pain management (13%)
  - Lymphedema risk reduction (10%)
  - Strategies for neuropathy management (2%)
  - Skin/scar management (4%)

**Physical Activity Interventions**
- Wellness Centre (55%)
- Home exercise programs (51%)
- Community centre (2%)

**Rehabilitation Interventions**
- PT-OT Department in hospital (2%)
- Specialized Clinics (16%)
- Rehabilitation Hospitals (0.5%)
- Local Community Service Centres (3%)
- ActivOnco Manual Mobilizations (4%)
- Palliative care (0.5%)
- Private sector (1%)

**Evaluation & Coordination**
- Paratransit Services (2%)
- Disabled Parking Permits (0%)
- Mobility Aids (4%)

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FIGURE 1  Cancer survivors can enter the pathway at any point after diagnosis. In addition, for those receiving palliative care or living with advanced cancer, the pathway could be instrumental for well-being and overall quality of life. QEP = qualified exercise professional; PA = physical activity.
Barriers to Expeditionary Learning

• Too Busy Adulting
  • Productivity
  • Burnout
  • Tradition
  • Fear
  • Big problems require big solutions
  • Resources
  • Any others??
Change is Coming

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Lisa VanHoose (501) 852-0903, lvanhoose@uca.edu
The only way to deal with an unfree world is to become so absolutely free that your very existence is an act of rebellion.

---ALBERT CAMUS