Physiotherapy as standard care in Oncology

Alexander Grant, PT, MScPT

Registered Physiotherapist at Koonar Physiotherapy

Certified Lymphedema Therapist

Chair, Oncology Division, Canadian Physiotherapy Association

Former Clinical Lead, Rehabilitation Oncology, Alberta Health Services



A Division of the Canadian Physiotherapy Association



## Where I'm Coming From

Publicly funded, multi-disciplinary rehabilitation program with occupational therapy, physiotherapy, physiatry, and speech-language pathologist.

Mostly outpatient based with some inpatient services.

Rehabilitation Oncology



Physiotherapy, occupational therapy, physiatry and speech language support for people with cancer



## Evidence supporting Physiotherapy as part of Oncology Care

Cancer and cancer treatment can have very individual effects often resulting in the patient being deconditioned and well below baseline functional capacity.

Literature review in 2014 examined 14 Systematic Reviews and Meta-Analyses on the effectiveness of physiotherapy to improve functional capacity and mobility.



#### Summary of Results

Conclusion: there exists a large body of evidence supporting physical therapy and rehabilitation to restore strength, muscle mass, and physical function posttreatment in all tumor groups examined.

Physiotherapy interventions conducted both pre and post-surgery in NSCL cancer patients vs control is associated with improved cardiopulmonary capacity, muscle strength, and reduced fatigue. Resulting in reduced post-operative complications and hospital length of stay.

## The overall cost effectiveness of rehabilitation is favourable.

Decreased hospital stay and less emergency room visits post-treatment.

Exercise versus usual care after nonreconstructive breast cancer surgery (UK PROSPER): multicentre randomised controlled trial and economic evaluation – 2021, n=392 breast cancer patients

- Publicly funded physiotherapy program cost \$357£ less per patient compared to providing home exercises alone.



#### Need for Oncology Physiotherapy/Rehabilitation

#### Supportive Care Framework – Sunnybrook Hospital, Toronto (MI Fitch, 2013)

All patients in the cancer program should undergo routine monitoring for rehabilitation needs.

35-40% of patients will require *specialized professional intervention* for symptom management

- 10-15% will require **complex care from multi-disciplinary team** 

This is the same model used in the 2022 Cancer Care Alberta Supportive Care Framework



# Case Study

65 y.o. female

Left side breast ca. (stage 2, invasive ductal ca)

Underwent bilateral mastectomy and ALND 4 weeks ago,

Awaiting consult with medical oncology in 2 days

No referral to RT yet

5 lymph nodes examined, all negative

Reports no advice on post-op exercises was given, was getting advice and exercises from internet searches with little success.

Self-referred for physiotherapy – because husband had a good experience doing physiotherapy for a knee problem in the past.



- Presented with Axillary cording and myofascial restrictions in pectoral and thoracolumbar fascia.

-Left side most limited (side of axillary node dissection). Unable to abduct the left arm past 90 degrees without pain. Could not reach behind her head to wash hair with the left arm.

-Did not have range of motion necessary to undergo radiation therapy if required.



Outcome:

Improved to full range of motion and function pain free with 6 weeks of physiotherapy (using protocols developed by Alberta Health Services).

Without intervention this patient might still be suffering 6 months or longer and complete resolution of symptoms would be unlikely.



## How Do We Create More Success Stories Like This One?

Should be easily possible:

-Presentation is typical post-operatively

-No significant comorbidities

-Treatment is protocol based and evidence informed guidelines are well established

-In practice however, many patients are not getting care



#### Barriers to Comprehensive Oncology Rehabilitation

NIH special report 2016 - Toward a National Initiative in Cancer Rehabilitation: Recommendations From a Subject Matter Expert Group

Identified 3 primary barriers to access



#### Barriers to Comprehensive Oncology Rehabilitation

- Insufficient workforce capacity (in 2016 less than 5% of PTs in USA had expertise in Cancer Care)
- 2. Challenges in Screening Rehabilitation Needs
- 3. Lack of awareness among patients and caregivers



#### Barrier -Workforce

Dunphy, Colleen MSc; McNeely, Margaret L. PT, PhD, Growing the Workforce in Oncology Physical Therapy: From Entry Level to Specialist Care, Rehabilitation Oncology: January 2022 - Volume 40 - Issue 1 - p 5-6

Large variation in Oncology content taught in entry to practice PT programs across Canada

Most common tumor groups learned about are breast and lung.

## Conclusion

"The way forward is likely through increasing capacity through progressive cancer-specific courses and encouraging post-graduate specialist certification, while also raising the standards of cancer-specific education in the physical therapy entry-to-practice curriculum."

## Local Community Provider Survey

Preliminary Data: Response rate= 17/30

11 physiotherapy providers in Windsor-Essex County with experience in Oncology.

4 physiotherapy providers in Windsor-Essex County who've received formal post-graduate training in Oncology.

There are approximately 200 registered physiotherapists in Windsor-Essex County area.

13/17 indicated they would be interested in receiving further training in Oncology if offered through collaboration with the Cancer Centre.

### Barrier: Screening

Clinical integration of rehabilitation into Oncology Care is still quite rare, ad hoc services developed around a single impairment (ei: lymphedema, pelvic floor therapy, exercise program) are much more common which leads to biases for screening.



# Even when we have integrated care....

#### CancerCare Alberta 2016 Gap Analysis

- 25-40% of patients treated within a CCA site would have benefited from rehabilitation for at least one cancer related impairment.
- 9% of patients received individual treatment from at least one specialized rehabilitation provider



In 2019 the data from Putting Patients First screening tool (part of routine screening within Cancer Care Alberta) was being entered directly into the EMR.

Generated automatic referral to providers based on specific responses or ongoing symptom clusters.

Solution: Automatic Screening

Predictable sharp increase in the number of referrals to all rehabilitation and psychosocial professionals.

#### Barrier 3: Lack of Awareness

Cancer and cancer treatment will effect many aspects of a person's health and well-being that it's unlikely one provider has the tools to address all these facets. A multi-disciplinary team is needed.

Self-referrals from social media, word of mouth, and google searches are outpacing oncologist referrals for oncology physiotherapy in some Canadian Centres.

Current research will help better understand oncology rehabilitation gaps in Windsor-Essex.



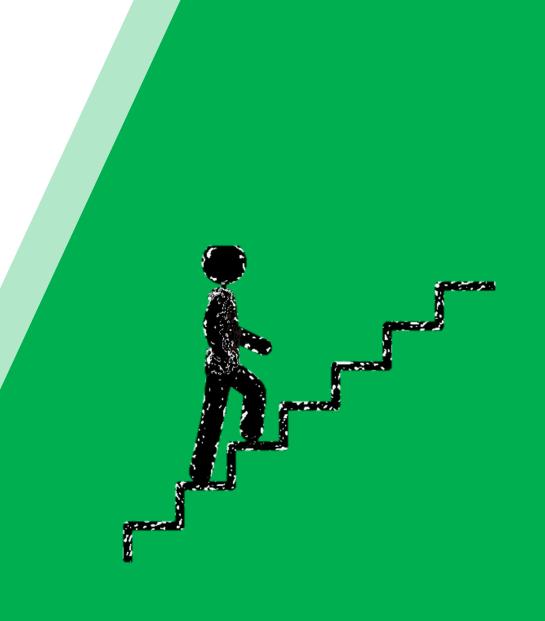
## Next Steps

Windsor-Essex Oncology Rehabilitation Community Provider Directory – COMING SOON!

Training programs to help build local expertise

Piloting Oncology rehabilitation interventions in the Windsor-Essex community

Integrating Rehabilitation into standard care for some types of cancer



### Take home message

With a better educated workforce, systematic screening, and improved awareness we can help more people to access physiotherapy. This will reduce expenses for the healthcare system and greatly improve their quality of life.