



# The physical aCtivity Counselling for young adult canCER SurvivorS (ACCESS) trial: A protocol for a parallel, two-arm pilot randomized controlled trial

Jennifer Brunet, PhD<sup>1,2</sup>, Jenson Price, MA<sup>1</sup>, Amirrtha Srikanthan, MD, MSc<sup>3</sup>, Fiona Gillison, PhD<sup>4</sup>, Martyn Standage, PhD<sup>4</sup>,  
Monica Taljaard, PhD<sup>2</sup>, Mark R. Beauchamp, PhD<sup>5</sup>, Jennifer Reed, PhD<sup>1,6</sup>, Amanda Wurz, PhD<sup>7</sup>



uOttawa

<sup>1</sup> University of Ottawa; <sup>2</sup> Ottawa Hospital Research Institute; <sup>3</sup> The Ottawa Hospital; <sup>4</sup> University of Bath; <sup>5</sup> University of British Columbia; <sup>6</sup> University of Ottawa Heart Institute; <sup>7</sup> University of the Fraser Valley

## Benefits of Physical Activity (PA)



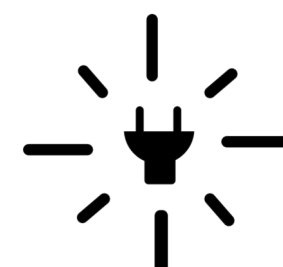
Promotes overall health and wellbeing



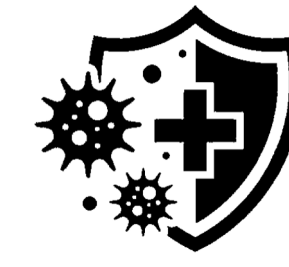
Improves relationships & feelings of social support



Enhances cognitive functioning



Increases energy



Boosts immune system



Improves flexibility, strength, & endurance



Enhances mood



Increases self-efficacy, confidence, & competence

## Background and Rationale

- Globally, 1.2 million young adults (≥18 years) are diagnosed with cancer each year
- Many survivors report persistent side effects that impair their quality of life
- PA holds promise as a behavioural intervention to mitigate persistent side effects and improve quality of life post cancer treatment
  - Few young adult cancer survivors are active enough to incur benefits
- PA behaviour change is challenging and supportive cancer care focused on promoting PA is not always prioritized, particularly in non-urban areas
- The ubiquity of the Internet means interventions offering support for PA could be implemented across and beyond urban areas to promote PA in young adult cancer survivors

## Current Project & Objectives

- We developed a **novel and theoretically-informed behaviour change support intervention (i.e., the ACCESS intervention)** to promote PA via videoconference in young adult cancer survivors
- As a first step, we want to establish if the ACCESS intervention, and the methods we propose to use to evaluate its effects, are feasible and acceptable
  - If so, then future research may then look at its effectiveness and costs to support the identification of a quality, cost-effective intervention to promote PA

### Objectives

- Assess intervention and trial feasibility and acceptability
- Generate data on PA behaviour

## Methods

### Study and intervention design

- Parallel, two-arm pilot randomized controlled trial (RCT) with 1:1 allocation ratio (stratified by biological sex) to intervention group or usual care (i.e., no intervention)
- Intervention consists of 6 x 60 min real-time sessions delivered biweekly via videoconferencing by trained PA counsellors



### Participants

- Young adult survivors across Canada are recruited via healthcare providers' referral and self-referral
- Inclusion criteria:**
  - Currently 18–39 years
  - Received a first diagnosis of invasive, non-metastatic cancer between 18–39 years
  - Completed primary treatment for cancer <5 years
  - Able to read/speak English
  - Have access to videoconferencing technology
- Exclusion criteria:**
  - Evidence of current cancer
  - Physical impairments precluding participation in PA
  - Self-report ≥150 min/week of moderate-to-vigorous intensity aerobic PA in the month prior to screening
  - Non-ambulatory status

### ACCESS Intervention (see Table 1)

- Targets self-determination theory (SDT) constructs, focusing on:
  - Providing autonomy support, structure, and interpersonal involvement;
  - Increasing perceptions of autonomy, competence, and relatedness; and
  - Increasing autonomous motivation
- Includes content & relational techniques to augment SDT constructs and facilitate behaviour change
- PA counsellors use motivational/behaviour change techniques and motivational interviewing techniques that align with SDT to support the delivery of the content

Table 1

Sessions	Theme	Topics
1	Introduction & Discovery	<ul style="list-style-type: none"> <li>Welcome and introductions</li> <li>Discuss the benefits of PA and risks of inactivity</li> <li>Discuss goal setting for PA and create initial action plan</li> <li>Discuss PA self-monitoring techniques</li> </ul>
2	Setting up for Success	<ul style="list-style-type: none"> <li>Discuss what is/is not PA</li> <li>Discuss PA barrier identification and management</li> <li>Update action plan</li> </ul>
3	Getting Going	<ul style="list-style-type: none"> <li>Discuss social support for PA</li> <li>Discuss time management</li> <li>Update action plan</li> </ul>
4	Adjusting your Perspective	<ul style="list-style-type: none"> <li>Discuss how PA is related to mood</li> <li>Discuss environmental restructuring</li> <li>Update action plan</li> </ul>
5	Reinforcing New Behaviours	<ul style="list-style-type: none"> <li>Encourage self-identifying of self as a PA role model</li> <li>Discuss framing/reframing PA</li> <li>Update action plan</li> </ul>
6	Keep Going!	<ul style="list-style-type: none"> <li>Review topics covered throughout the program</li> <li>Explore how PA fits into life long-term</li> <li>Revise/create a new action plan for future</li> <li>Discuss strategies for managing stress</li> <li>Re-iterate that PA journey is not linear</li> </ul>

## Data Collection & Analysis

- Feasibility** outcomes (i.e., enrollment, allocation, follow-up, analysis) are tracked by study staff
- Acceptability** is assessed through interviews with persons receiving (i.e., young adult cancer survivors) and delivering (i.e., PA counsellors) the intervention
- PA behaviour** is measured using accelerometers
- Assessments schedule:** pre-randomization, post-intervention period, and 24 weeks post-baseline
- Quantitative analyses** will involve descriptive statistics and linear regression analysis
- Qualitative analyses** will involve content analysis

## Conclusion

- Feasibility and acceptability data will help to determine which refinements, if any, are required to the intervention, implementation approach, and proposed evaluation methods prior to advancing to a large, full-scale RCT
- PA behaviour data collected will inform the sample size calculation for a large, full-scale RCT

## Acknowledgements



Chaires de recherche du Canada

Canada Research Chairs

Canada



uOttawa

Faculté des sciences de la santé  
Faculty of Health Sciences