The Healthy Living after Cancer Partnership Project: *Telephone Health Coaching and Additional SMS Support for Cancer Survivors.*

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Cancer Council NSW
Healthy Living after Cancer

★ Partnership Project – Australian National Health & Medical Research Council (2014 – 2018)

- Research that informs health policy/health service delivery
- Foster collaboration between university and (health) industry partners
- $-for-$ matching scheme (cash & in-kind partner contributions)

★ Partners: Australian Cancer Councils (NSW, VIC, SA, WA) and the Cancer Prevention Research Centre in the School of Public Health at the University of Queensland

★ Integrating an evidence-based, telephone health coaching intervention for cancer survivors into an existing national Cancer Information and Support Service
Chief Investigators

- Professor Elizabeth Eakin – University of Queensland
- Professor Sandi Hayes – Queensland University of Technology
- Professor Marion Haas – University of Technology Sydney
- Associate Professor Marina Reeves – University of Queensland
- Professor Janette Vardy – University of Sydney
- Professor Frances Boyle – University of Sydney
- Professor Janet Hiller – Swinburne University of Technology
- Professor Gita Mishra – University of Queensland
- Associate Professor Michael Jefford – Peter MacCallum Cancer Centre
- Professor Bogda Koczwara – Flinders University
Healthy Living after Cancer Team Members

UQ – Liz Eakin, Natasha Reid and Jenny Job

CC NSW – Liz Hing

CC Vic – Clare Sutton, Clem Byard & Amanda Vittiglia

CC SA – Ann Branford, Polly Baldwin and Bonnie Wiggins

CC WA – Rosemerry Hodgkin and Nina Graham
Cancer Survivors in Australia

Figure 1  Trends in incidence and mortality of all cancers combined, Australia

![Graph showing trends in incidence and mortality of all cancers combined, Australia.]

Cancer Australia Strategic Plan 2014–2019
Program Overview

- 6 months of telephone health coaching plus 6 months text messages
- Delivered by Cancer Council health coaches/nurses
- Any adult (post-tx with curative intent)
- Physical activity, healthy eating, weight loss
Healthy Living after Cancer

Translating evidence into practice
Evidence-based Lifestyle Guidelines

- Maintain a healthy body weight
- 30 minutes moderate activity daily + resistance exercise 2x/wk
- 5 serves veg and 2 serves fruit daily
- Limit (<2 drinks/day) or avoid alcohol
Target Group

- Adults
- All cancers (treated with curative intent)
- Upon treatment completion
Accrual Estimates

- Approx. 50 completions/year/Cancer Council
- 3 years of service delivery
- n = 600
Healthy Living after Cancer Referrals

 Via Cancer Council referral pathways

- Self-referrals
- Cancer Support and Information Service
- Clinician/health professional referrals
- Cancer support/advocacy orgs
- Media

Emphasis on regional recruitment
Eligibility Screening

- Adults (18+ years)
- Diagnosed with potentially curative cancer
- Having completed treatment (i.e., surgery, chemotherapy, radiation; hormonal treatment or Herceptin are OK to enrol)
- No contraindications to unsupervised physical activity
- Without cognitive or mental health impairments
- Able to speak and read English
- Wanting support for healthy living
## Participant Demographics

<table>
<thead>
<tr>
<th></th>
<th>HLaC (n = 203)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of cancer</td>
<td>breast, prostate, bowel, lymphoma, kidney, cervical, leukaemia, ovarian, thyroid, endometrial, BCC skin cancer, Ewings’ sarcoma, base of tongue</td>
</tr>
<tr>
<td>Gender</td>
<td>89% female</td>
</tr>
<tr>
<td>Age</td>
<td>57 ± 11 yrs</td>
</tr>
<tr>
<td>BMI</td>
<td>29.0 ± 6.0 kg/m²</td>
</tr>
<tr>
<td>Time since diagnosis</td>
<td>2 ± 3 yrs</td>
</tr>
<tr>
<td>Education (High school or higher)</td>
<td>90%</td>
</tr>
<tr>
<td>Ethnicity - Caucasian</td>
<td>95%</td>
</tr>
<tr>
<td>Regional / rural</td>
<td>25%</td>
</tr>
</tbody>
</table>
## Implementation

<table>
<thead>
<tr>
<th>Referrals to date</th>
<th>700+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible following screening</td>
<td>76%</td>
</tr>
<tr>
<td>Program Uptake (of those eligible)</td>
<td>90%</td>
</tr>
<tr>
<td>Median # of calls</td>
<td>11</td>
</tr>
<tr>
<td>Average call length</td>
<td>30 minutes</td>
</tr>
<tr>
<td>Program Completion</td>
<td>59%</td>
</tr>
<tr>
<td>Adverse Outcomes</td>
<td>nil</td>
</tr>
</tbody>
</table>
Effectiveness (participant-reported outcomes)

-2.4 kg / -3.1%  
-0.9 kg/m²  
129 min/week  
0.3 serves/day  
0.9 serves/day  
0.3 units  
0.2 units  
7.0 units  
1.7 units  
-0.9 units  
-1.3 units  
-3.7 units

Standardised improvement from baseline (SD)
Effectiveness (participant-reported outcomes)

- **Fear of cancer recurrence (CARQ-4), 0-40**
  - Standardised improvement from baseline (SD): -1.3 units
  - Improvement size: Very Large
  - n = 203

- **BMI, kg/m²**
  - Standardised improvement from baseline (SD): -0.9 kg/m²
  - Improvement size: Medium
  - n = 203

- **MVPA (AAS), min/week**
  - Standardised improvement from baseline (SD): 0.3 units
  - Improvement size: Small
  - n = 203

- **Fruit (NHS), serves/day**
  - Standardised improvement from baseline (SD): 0.9 serves/day
  - Improvement size: Large
  - n = 203

- **Vegetables (NHS), serves/day**
  - Standardised improvement from baseline (SD): 0.2 serves/day
  - Improvement size: Very Large
  - n = 203

- **Fat Score (FFBQ), 0-5**
  - Standardised improvement from baseline (SD): 0.3 units
  - Improvement size: Small
  - n = 203

- **Fibre score (FFBQ), 0-5**
  - Standardised improvement from baseline (SD): 0.9 units
  - Improvement size: Medium
  - n = 203

- **Physical Quality of Life (SF-12), 0-100**
  - Standardised improvement from baseline (SD): 7.0 units
  - Improvement size: Very Large
  - n = 203

- **Mental Quality of Life (SF-12), 0-100**
  - Standardised improvement from baseline (SD): 1.7 units
  - Improvement size: Medium
  - n = 203

- **Symptom Severity (MDASI), 0-10**
  - Standardised improvement from baseline (SD): -0.9 units
  - Improvement size: Small
  - n = 203

- **Symptom Interference (MDASI), 0-10**
  - Standardised improvement from baseline (SD): -1.3 units
  - Improvement size: Medium
  - n = 203

- **Vegetables (NHS), serves/day**
  - Standardised improvement from baseline (SD): 0.3 serves/day
  - Improvement size: Small
  - n = 203

- **Fruit (NHS), serves/day**
  - Standardised improvement from baseline (SD): 0.9 serves/day
  - Improvement size: Large
  - n = 203

- **MVP A (AAS), min/week**
  - Standardised improvement from baseline (SD): 129 min/week
  - Improvement size: Very Large
  - n = 203

- **Weight, kg**
  - Standardised improvement from baseline (SD): -2.4 kg / -3.1%
  - Improvement size: Very Large
  - n = 203

- **BMI, kg/m²**
  - Standardised improvement from baseline (SD): -0.9 kg/m²
  - Improvement size: Medium
  - n = 203

- **Physical Quality of Life (SF-12), 0-100**
  - Standardised improvement from baseline (SD): 7.0 units
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Post Program feedback
Participant feedback

“My eating habits have improved immensely. Things are easier getting around. Not struggling to catch my breath. Feeling lighter - both mentally and physically. Positive experience.”

“Before I started this program, I was really anxious about my weight, food, exercise and diet and now after completing the program I feel 'normal'. I feel this program has helped me overcome my anxiousness towards these things.”

“It has brought attention of my health to the forefront. I needed to focus on my health as it was weighing me down. It was good to have someone there to motivate me.”

“I felt more supported, especially after my treatment. Even though people thought I was OK after my treatment, I actually wasn’t. So it was so beneficial for me in participating in this program because I felt so supported.”
Participant feedback

“Made the difference between re-setting my life post-cancer and still being in that dark hole. Having the regular consultation to eat healthy and be active has made a complete difference in my life and I am extremely grateful for it.”

“I'm fitter, I feel more confident in my future prognosis as I'm doing something that is proven to help ward off recurrence. I'm happier with weight and fitness. I'm just happier. Absolutely. I'm so pleased that I was invited to participate in the program.”

“I didn't join it because I wanted to get healthier or improve myself. I rang the Cancer Council because I was feeling very down after finishing my treatment and the program was offered to me. Even though it was being a bit depressed that was my reason for contacting the Cancer Council, doing this program helped get me out of that. It helped me get out and get fitter and do things.”
Outcomes following 6-months no-contact

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Baseline</th>
<th>6 months</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fat Score</td>
<td>63%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Weight or BMI</td>
<td>0%</td>
<td>0%</td>
<td>49%</td>
</tr>
<tr>
<td>Physical Activity</td>
<td>100%</td>
<td>100%</td>
<td>53%</td>
</tr>
<tr>
<td>Fibre score</td>
<td>45%</td>
<td>43%</td>
<td>42%</td>
</tr>
<tr>
<td>Fruit intake</td>
<td>42%</td>
<td>43%</td>
<td>45%</td>
</tr>
<tr>
<td>Vegetable intake</td>
<td>20%</td>
<td>40%</td>
<td>60%</td>
</tr>
</tbody>
</table>
Text message program

- **Initial Tailoring telephone call**
  - SMS for 12 weeks
  - Week 12 Tailoring telephone call
  - SMS for 12 weeks

- **6 months**

- **1 x weight goal (optional)**
- **1-2 x physical activity and/or diet goals**
- **Barriers and solutions to reaching goals**
- **Planned activities to reach goal**
- **SMS timing & frequency preferences**
# Text message program

<table>
<thead>
<tr>
<th>SMS Type</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>Weight self-monitoring reminders</td>
<td>1 per fortnight (optional)</td>
</tr>
<tr>
<td>Goal check of behavioural goals</td>
<td>Fortnightly for each goal</td>
</tr>
<tr>
<td>Prompting behavioural cues</td>
<td>Optional, maximum 4 per fortnight</td>
</tr>
<tr>
<td>Goal re-set</td>
<td>Once in weeks 6, 18</td>
</tr>
</tbody>
</table>

**SMS dose:** 1 – 11 per fortnight

Hi Jane, its important to keep weighing yourself. Find time to jump on the scales & write it down in ur weight tracker. Jenny

On top of things Sue? Did u eat 5 serves fruit/day this week? Text me back yes or no & let me know. Jenny

John u wanted 2 walk 10,000 steps/day this week. I know u can achieve ur goals so go for it! Jenny

Its important 2 re-set ur weight goals Tim. Ur currently aiming 2 lose 2 kgs. If u have a new weight goal 4 the next 6 weeks then reply 2 let me know. Jenny
To date, 75% of those who completed the telephone coaching & were eligible, consented to the text message program

To date 32 participants are receiving text messages

Feedback from participants:
“makes me feel more determined to stay with it”
“keeps me on track”
“makes me accountable”
“keeps me focused”
“good reminders”
“prevents me slipping back”
Get Healthy Stay Healthy Service

• Offered to completers of the Get Healthy Information & Coaching Service® 6-month telephone coaching program (10 calls) $^{1,2}$

• Lifestyle focus program, weight loss goals are optional$^{3}$

• Text message program (6 months, 3-13 texts/fortnight) offered to support maintenance of lifestyle changes$^{2,28}$ healthy participants (114 each in intervention and control groups)

Summary of Behavioural Risk Factors Get Healthy, Stay Healthy

<table>
<thead>
<tr>
<th>Anthropometric</th>
<th>GHSH</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight *</td>
<td>Improved 🙂</td>
<td>Maintained</td>
</tr>
<tr>
<td>Waist circumference</td>
<td>Improved 🙂</td>
<td>Maintained</td>
</tr>
<tr>
<td>Physical activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accel MVPA mins/wk *</td>
<td>Maintained</td>
<td>Worsened 😞</td>
</tr>
<tr>
<td>Moderate sess/wk *</td>
<td>Maintained</td>
<td>Worsened 😞</td>
</tr>
<tr>
<td>Dietary behaviours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vege serves/wk</td>
<td>Maintained</td>
<td>Worsened 😞</td>
</tr>
<tr>
<td>Fruit serves/wk</td>
<td>Maintained</td>
<td>Worsened 😞</td>
</tr>
</tbody>
</table>

 🙂 Significantly improved   😞 Significantly worsened
Maintained = no significant change, no meaningful worsening

* Significant difference (GHSH vs control)
Healthy Living after Cancer

Supporting you to improve your health and well-being after cancer treatment

A free program brought to you by Cancer Council Western Australia to help you make healthy lifestyle changes, get active and eat better
Call Cancer Council NSW, Victoria, SA or WA on 131120

Email Cancer Council NSW on hlac@nswcc.org.au

Visit Cancer Council Website for the online referral forms
Thank you!