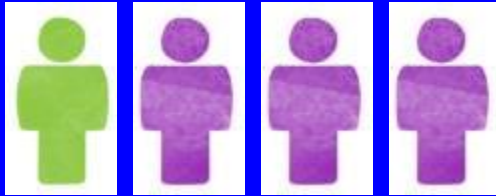


***Evaluation of MoveMore:
A Physical Activity Behaviour Change
Intervention for People affected by Cancer***

Professor Anna Campbell
Edinburgh Napier University
anna.campbell@napier.ac.uk
Twitter: @canrehab

LIVING WELL?



3 in 4 people living with cancer are in the survivorship stage¹



1 in 4 of them deal with consequences of their treatment²



1 in 5 of cancer survivors may have unmet needs³

1. Maher J and McConnell H. New pathways of care for cancer survivors: adding the numbers. Br J Cancer. 2011. 105: S5-S10

2. Macmillan Cancer Support. *Throwing light on the consequences of cancer and its treatment*. 2013. London

3. Armes J et al. Patients' supportive care needs beyond the end of treatment: A prospective, longitudinal survey. Journal of Clinical Oncology. 2009. 27:36 6172-6179

The problem...

Chronic / late appearing side effects of cancer treatment:

Physical

- **Fatigue**
- Weight changes
- Reduced fitness - C/V & MSE
- Endocrine problems
- Osteoporosis
- Cardiotoxicity
- Lymphoedema
- Limited range of movement
- Pain and arthralgia
- Sexual dysfunction
- Incontinence

Psychological

- **Lack of confidence**
- Loneliness
- Social isolation
- Changes in body image
- Anxiety
- Depression
- Cognitive dysfunction
- Loss of control
- Self esteem
- Helplessness

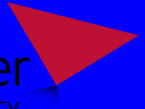
THE UNDERRATED 'WONDER DRUG'



PROFESSOR

JANE MAHER

MACMILLAN CHIEF MEDICAL OFFICER



MACMILLAN PHYSICAL ACTIVITY BEHAVIOUR CHANGE CARE PATHWAY

WE ARE
MACMILLAN.
CANCER SUPPORT

A formative evaluation.

Authors: Jon Adamson¹, Alex Stutz², Neil Richards³, Dr Melvyn Hillsdon², Prof. Jenny Roberts³, Rhian Harlock⁴, Sarah Worbey⁴, Jo Foster⁴, Justin Webb⁴
¹CFE Research, ²University of Exeter, ³University of Sheffield, ⁴Macmillan Cancer Support



LOTTERY
FUNDED



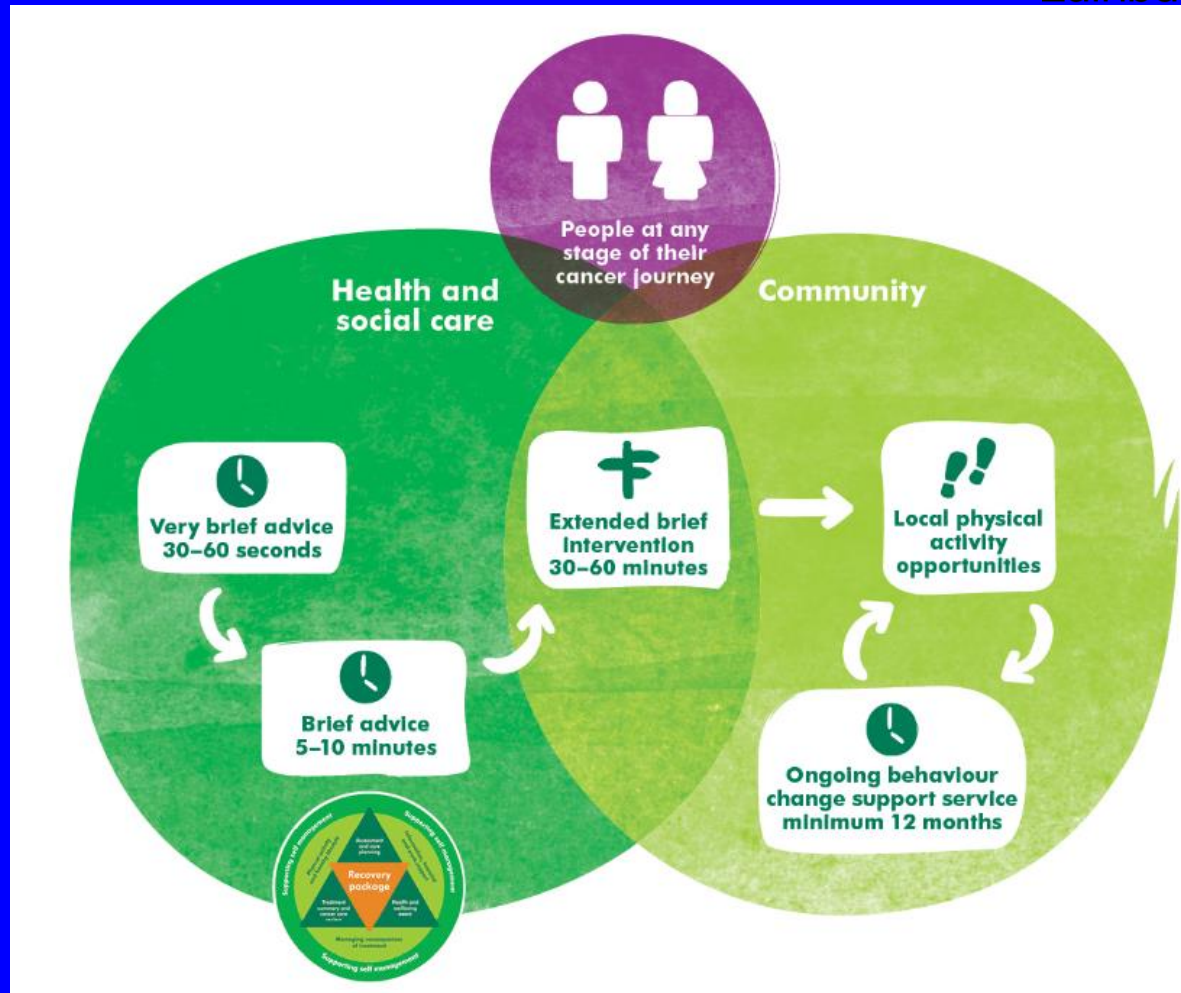
SPORT
ENGLAND



CFE
research

MACMILLAN PHYSICAL ACTIVITY PATHWAY

Edinburgh Napier
UNIVERSITY



“Everyone living with and beyond cancer is aware of the benefits of physical activity and enabled to choose to become and to stay active at a level that’s right for them”

A framework for physical activity behaviour change



- Based on Based on NICE Public Health Guidance 49 : Behaviour change - individual approach
- Macmillan invested £6 million 2012-2018 in MoveMore Intervention in Scotland, England, Northern Ireland and Wales

Raise awareness (Very brief advice / Brief intervention)

Awareness raising

- Health and wellbeing events (attend, present)
- Attend patient support groups
- Social media
- Local media (radio, newspaper articles)
- Banners, posters and leaflets
- Engagement with other services (for example, Macmillan Information Services, other charities)
- Holistic Needs Assessment (as part of the Recovery Package)
- Champions, former service users
- Events, campaigns

Referral

Key referral routes

- Self-referrals
- Healthcare professionals
 - CNS
 - Consultant
 - GP
 - Physiotherapist
 - Practice Nurse
 - Occupational therapist
 - Oncologist
- Electronic referral possible
- Feedback provided to HCPs

Behaviour Change (Extended brief intervention)

Principles

- Lasts at least 30 minutes
- Needs assessment
 - Activity levels
 - Contraindications
 - Cancer status
 - Safety and appropriateness
- Address barriers to change
- Instils confidence to change
- Uses MI
- Sets goals

Delivery

- Face-to-face / telephone / group
- Healthcare / community / leisure setting
- Practitioner trained in motivational interviewing and level 4 cancer rehabilitation

Local physical activity opportunities

Minimum offer

- Access to Macmillan Move More DVD
- Access to health walks
- Encouragement to increase activity in daily life
- Access to sports
- Access to community activity
- Access to cancer specific sessions

Signposted or delivered directly

Support during activity

- Long term support agreed at start
- Review progress
- Informal support

Ongoing behaviour change support

Support post activity

- Long term support agreed at intervention
- System in place to review progress during activity
- Informal support offer

The evaluation (2014-2017)

- Phase 1: 6 pilot sites
- Phase 2: final total of 14 sites
- Quantitative data on outcomes
- Ethnographic observations of services
- Qualitative interviews with staff, stakeholders and service users
- Formative process evaluation
- Economic analysis

Cost of £600,000!



National Evaluation Methodology

CaPASEF: Outcome Measures

Repeated Measures, Before & After Intervention 3, 6 + 12 month follow up

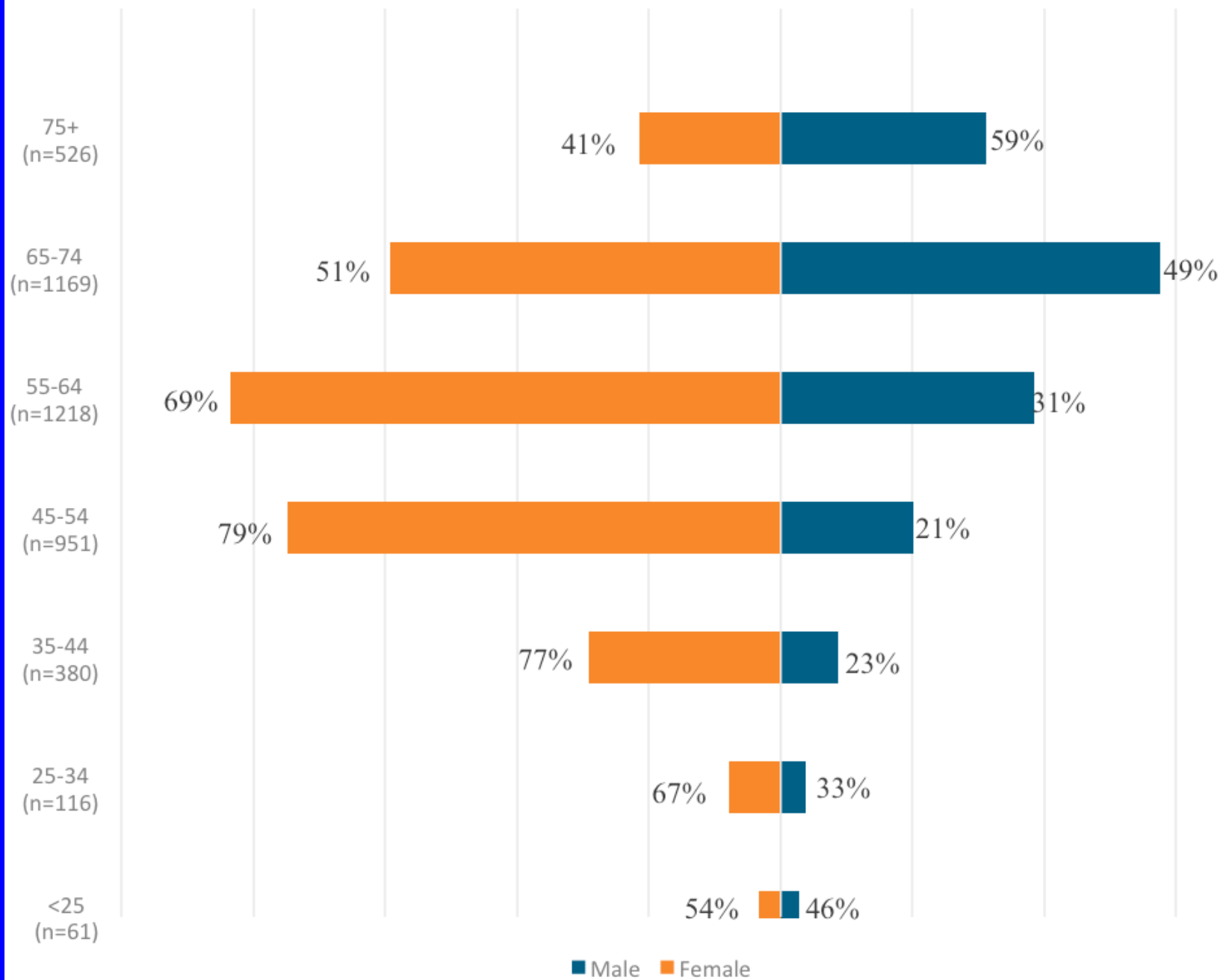
1. Outcome measures

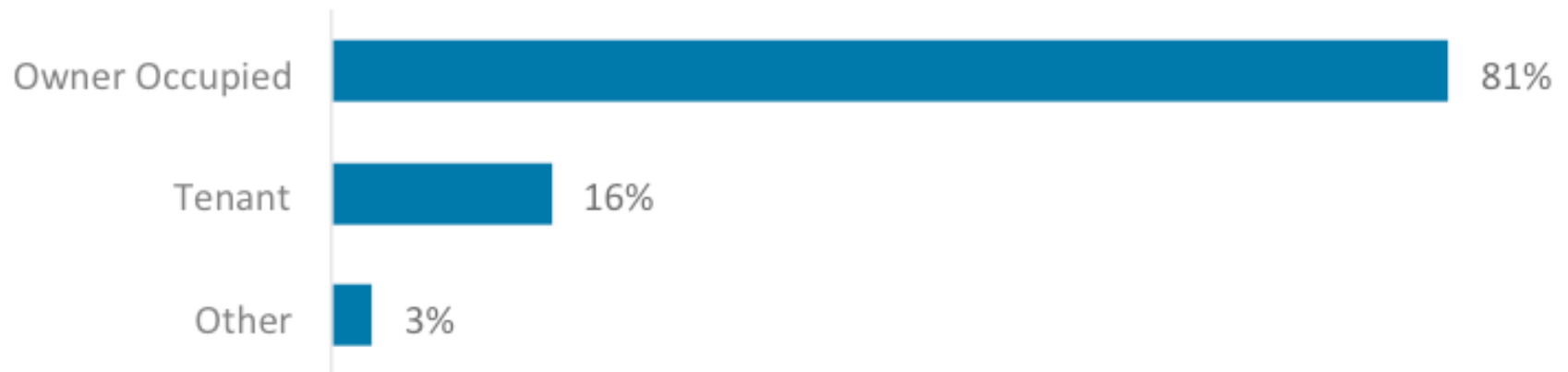
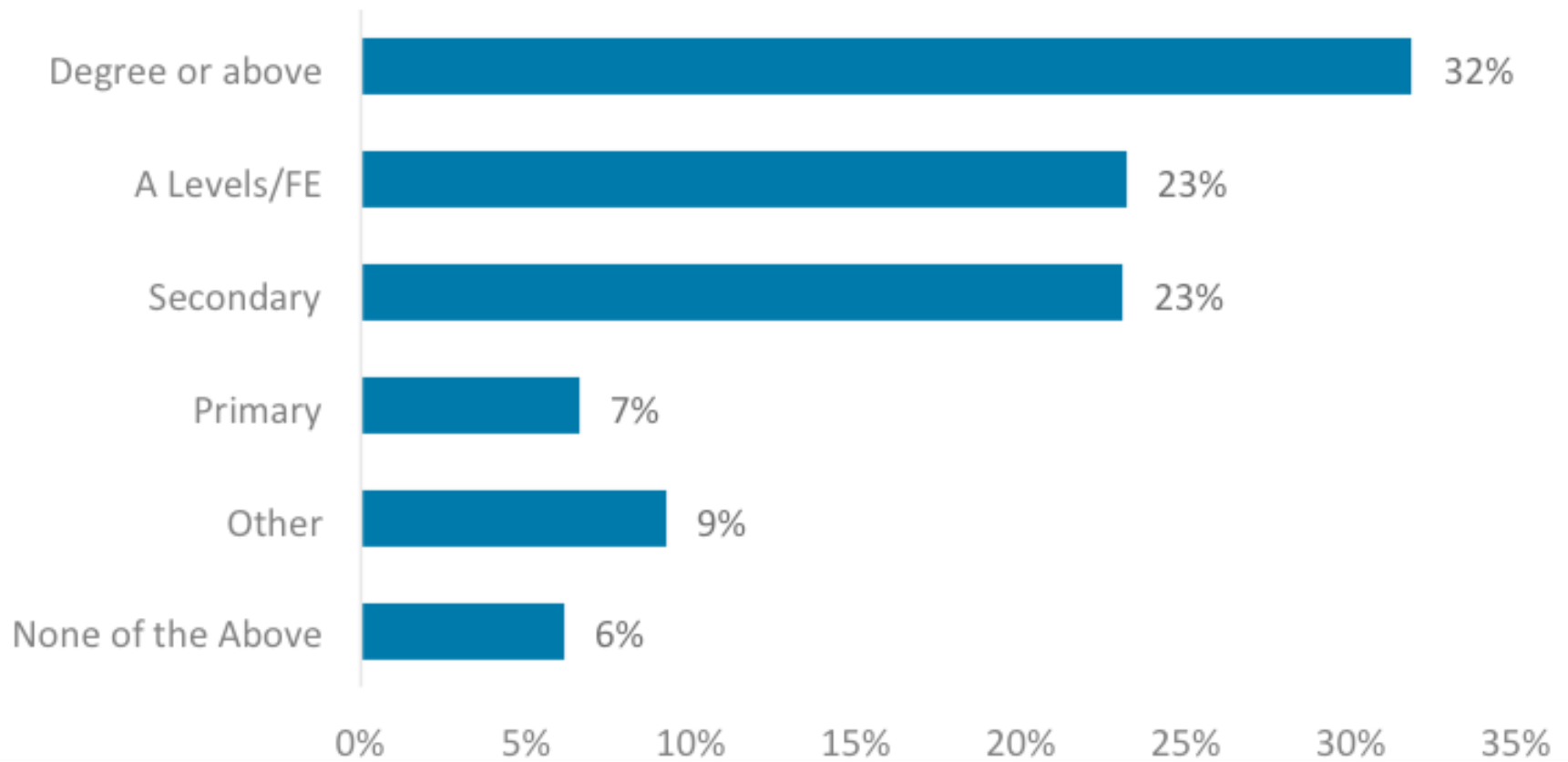
Levels of Physical Activity	Scottish Physical Activity questionnaire (SPAQ)
Fatigue	FACIT -F
Health Status Quality of Life	EQ5D
Self Efficacy	General Self efficacy questionnaire

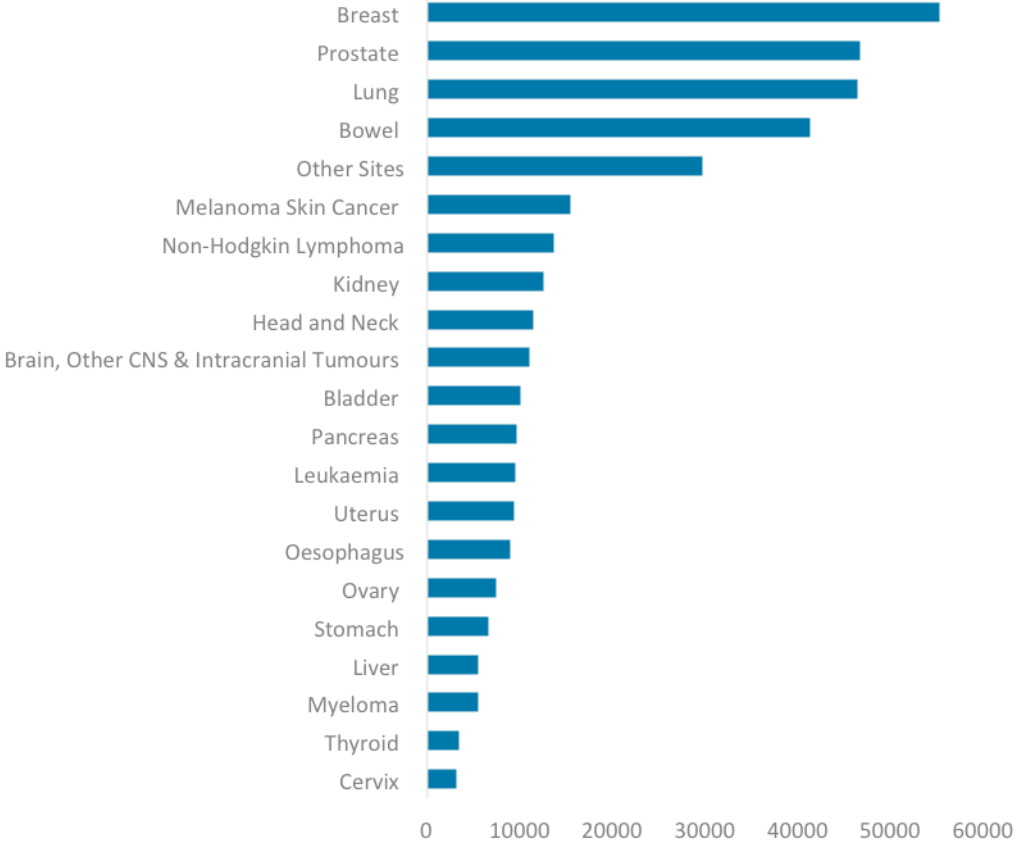
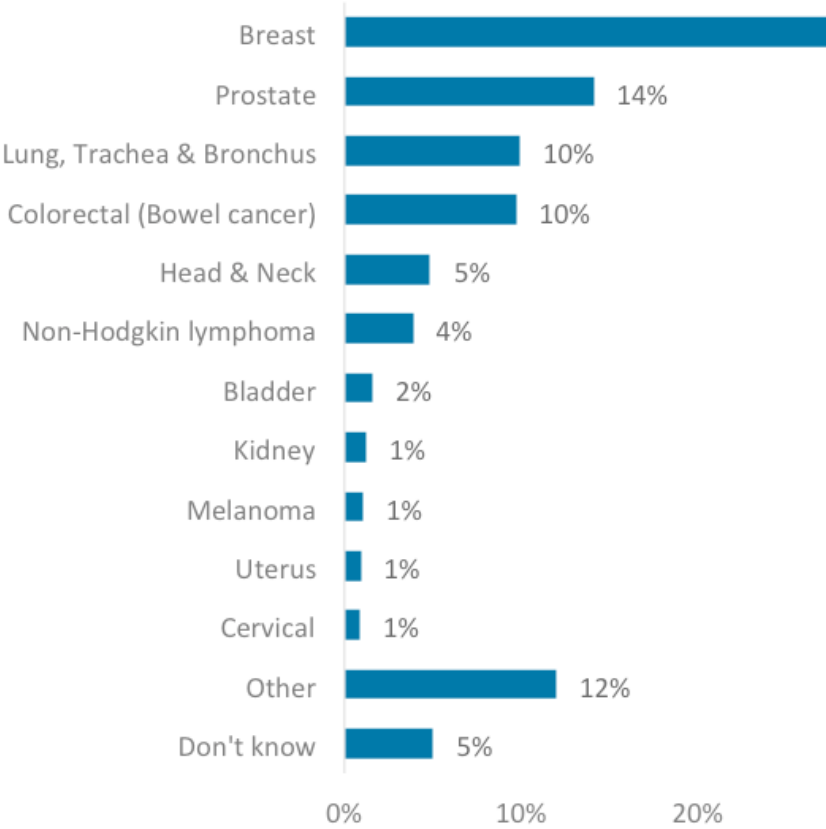
2. Demographic and Costs Monitoring and Evaluation

Gender, age, ethnicity, disability, socio-economic status, cancer status, stage of treatment, previous levels of physical activity levels, costs, resources

3. Objective Measure - accelerometer







MoveMore Participants

Cancer Incidence

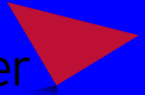
Behaviour change intervention

- Practitioners' BECCI score*: 22.8 out of 44 (page 80)
- “Going through the motions” (in some services)
- Closed questions
- No summary statements
- If a motivated client – assumption was behaviour change intervention not required
- Goal setting good (confidence score 1-10)
- No true personalised offer
- Face to face was better than telephone based approach
- Group based BCI – worth considering
- Move More practitioner – MI training

WE ARE
MACMILLAN.
CANCER SUPPORT

MOVE MORE NORTHERN IRELAND

Edinburgh Napier
UNIVERSITY



**LIVING WITH
CANCER?
WE'LL
HELP YOU
GET
ACTIVE**

WE ARE
MACMILLAN.
CANCER SUPPORT



**CONSULTATION WITH
MOVE MORE
COORDINATOR**

**DIVERSE MENU OF
PHYSICAL ACTIVITY
OPPORTUNITIES TAILORED TO YOUR NEEDS**

**MINIMUM OF
12 MONTHS
FOLLOW UP SUPPORT**

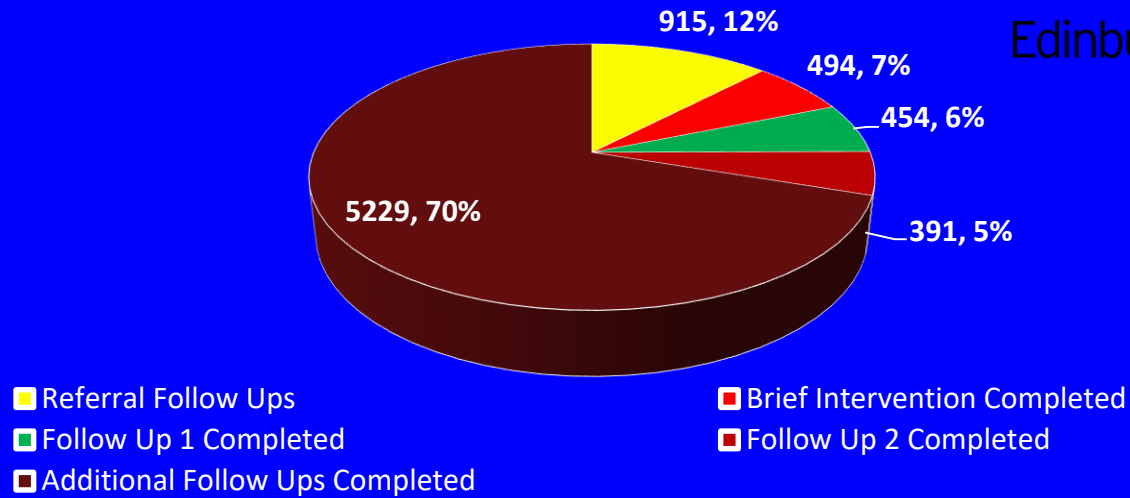
**WALKING, SPORTS,
GYM, SWIMMING
ACTIVE AT HOME**

**GROUP-BASED
OR
INDIVIDUAL**

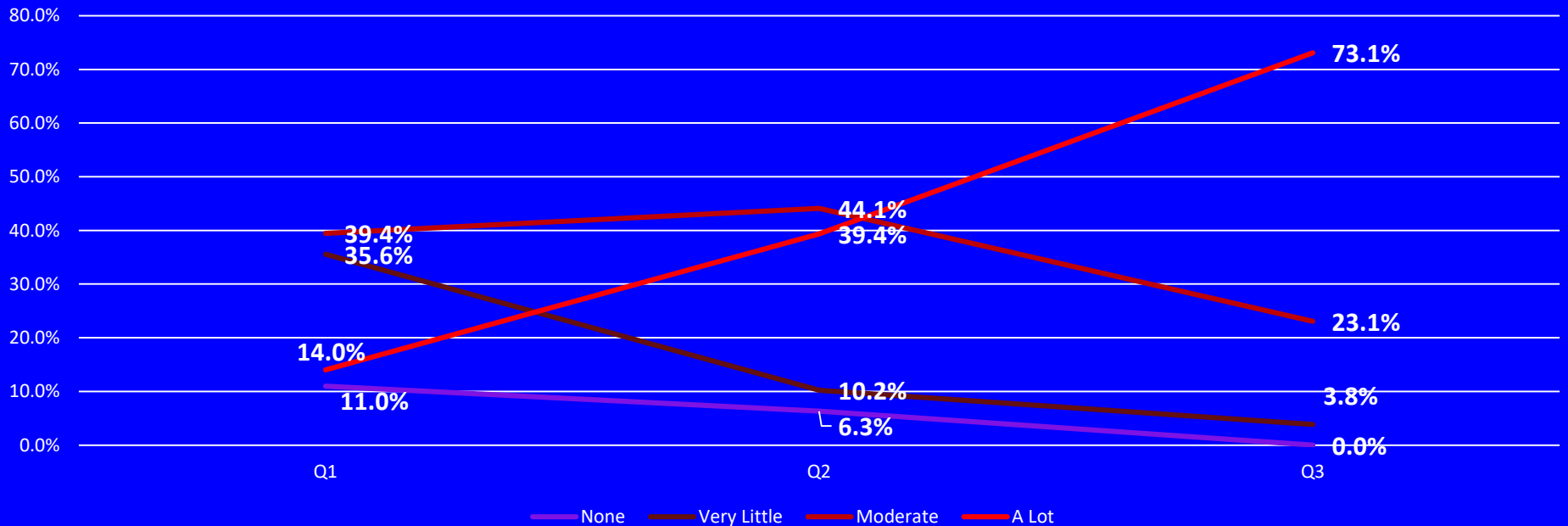
**CANCER SPECIFIC
OR
NON-CANCER
SPECIFIC**

**INCENTIVES:
FREE SESSIONS,
DISCOUNTED RATES,
MOVE MORE EVENTS**

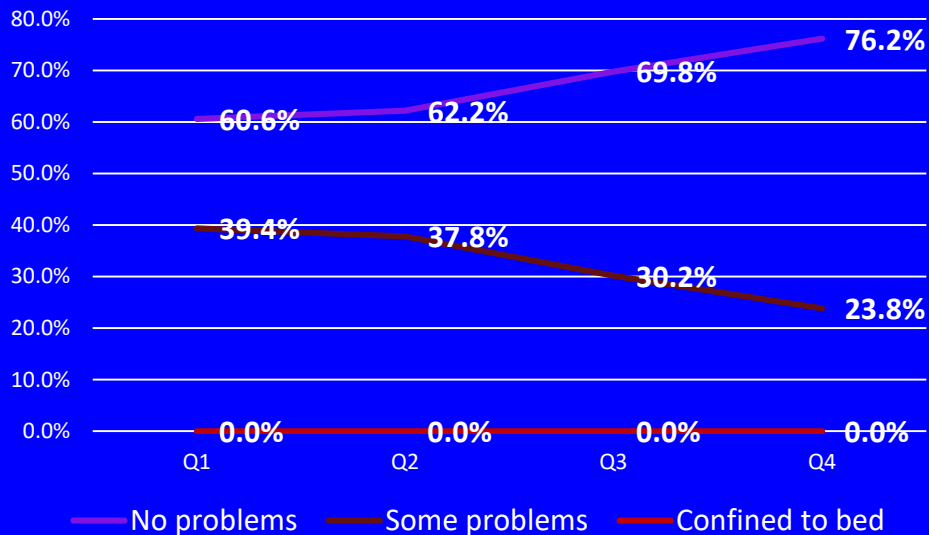
Behaviour Change Support Provided



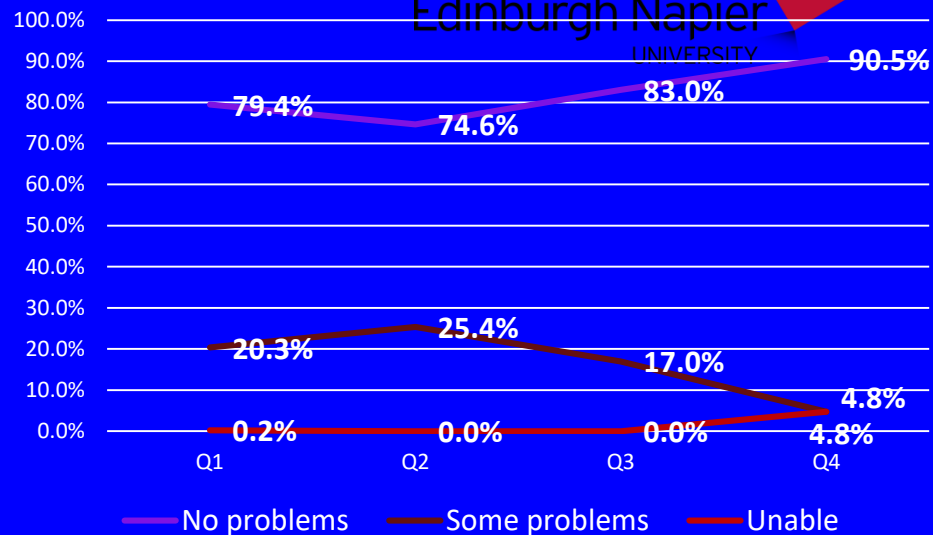
Physical Activity Levels



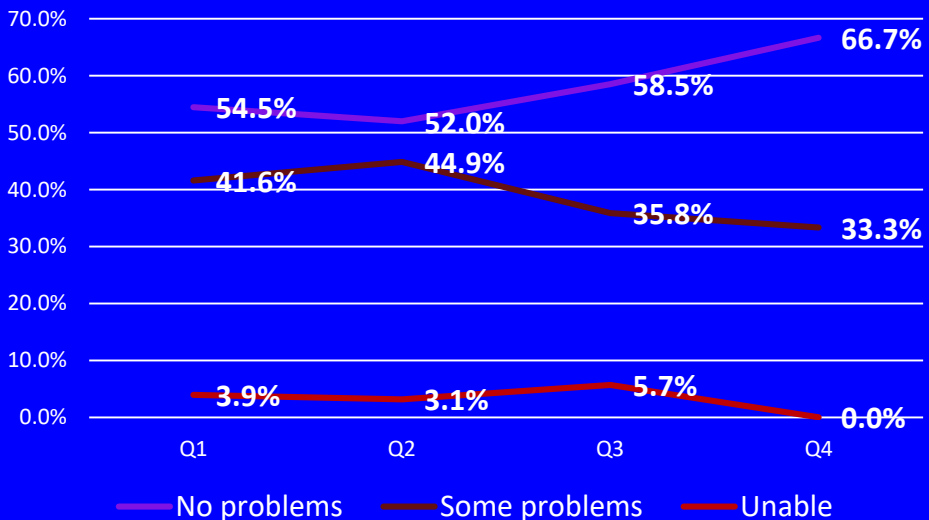
Mobility (EQ5D)



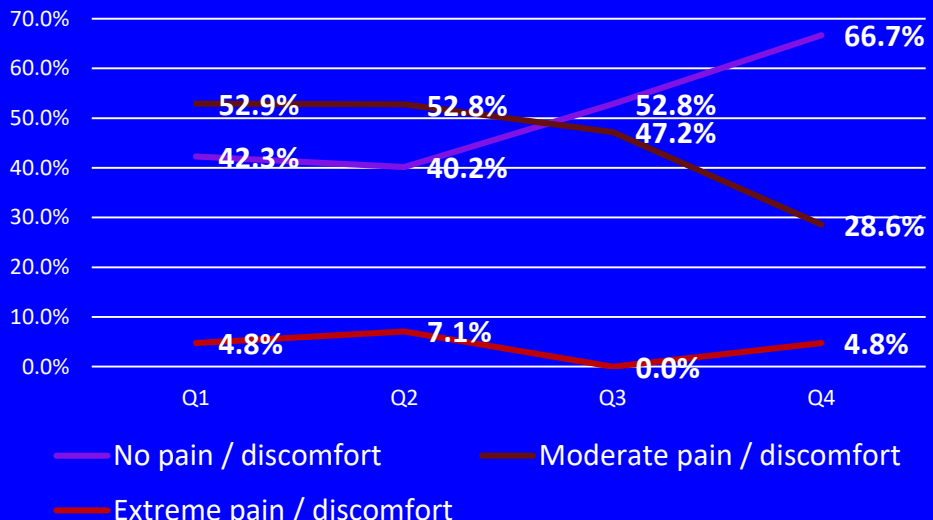
Self Care (EQ5D)



Usual Activities (EQ5D)



Pain / Discomfort (EQ5D)



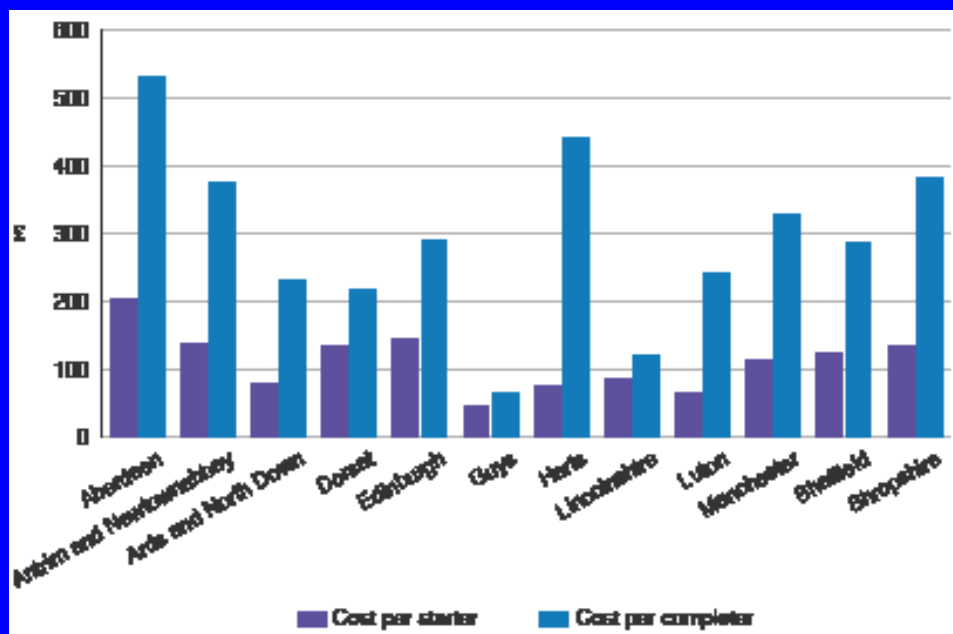
3.3 Cost per service user and cost per completer

If costs are averaged across all starters⁶, the mean cost per service user is £111 (£101 excluding set-up costs). However, taking the (recommended) cost per completer approach results in a mean cost per completer of £291 (£265 excluding set-up costs). There are alternative ways to average costs and further information can be found in the *Evaluation of the Macmillan Physical Activity Behaviour Change Care Pathway*.

This cost estimate is similar to that found in previous studies. **The Let's Get Moving feasibility study found a mean cost per participant of between £124 and £630²¹**. Also, a recent systematic review of exercise referral schemes (which underpins the NICE Public Health guideline: Physical activity: exercise referral schemes (PH54) found an average cost per service user of £225.²² Mean costs per completer vary substantially across services. These are also shown in Figure 7 (together with costs averaged across all starters).



Figure 7: Cost per service user (starters and three-month completers) based on three-month running costs



In terms of delivery models, the costs for signposting only and direct delivery are similar.

In terms of setting, the healthcare setting has the lowest mean cost per service user. This is partly due to the fact that this setting achieves higher follow-up rates – 59% compared to 41% for the community setting.



Edinburgh Napier
UNIVERSITY

Thankyou for listening!
Twitter: @canrehab