

MACMILLAN PHYSICAL ACTIVITY BEHAVIOUR CHANGE CARE PATHWAY

WE ARE
MACMILLAN.
CANCER SUPPORT

A formative evaluation.

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Background

Being physically active can improve clinical and quality of life outcomes at all stages of cancer care, be it prior to treatment, during treatment, after treatment or at end of life.¹ A cancer diagnosis offers a teachable moment where people are inclined to consider changing their lifestyle behaviours.² However, while other healthy lifestyle behaviours improve post-diagnosis, physical activity levels decline.³

Macmillan Cancer Support has taken an evidence-based approach to change this trend and embed physical activity into the Cancer Care Pathway. Following National Institute for Health and Clinical Excellence (NICE) guidance⁴ and Macmillan's own research,^{5,6} and influenced by the NHS Adult Physical Activity Care Pathway 'Let's Get Moving',⁷ the intervention takes a person-centred approach and includes:

- Delivery of very brief advice in 30 to 60 seconds by health and social care professionals at every opportunity to introduce the benefits of physical activity for people living with cancer, and signposting to more support.
- Delivery of a 5 to 10-minute brief intervention – in secondary care, primary care or a cancer support group – to explore the benefits and options in more detail. This could be part of an assessment and care plan, a Health and Wellbeing event included in the 'recovery package',⁸ or take place in an information centre.
- Delivery of a longer intervention (an extended brief intervention) for those interested, lasting 30 to 60 minutes. This is a person-centred behaviour change intervention where a qualified practitioner assesses an individual's needs, motivations and barriers to taking part in physical activity, setting achievable goals and providing support to empower them to take part in an activity that they enjoy at a level that is right for them. This includes all available community-based activities – for example, a health walk, a 'get back into sport' group, activities of daily living or a cancer-specific rehabilitation group.

- Behaviour change support over a minimum of 12 months, reviewing needs and goals and providing ongoing motivational support. This is delivered either face to face or over the phone, with regular follow-up tailored to meet the needs of the individual.

These services are run in partnership with and are governed by local stakeholders, usually including public health, leisure providers, acute care and primary care. The service is initiated in a healthcare setting and, in most cases, delivery of physical activity opportunities and on-going behaviour change support is delivered within the local community.

Figure 1: Macmillan's Physical Activity Behaviour Change Care Pathway



Objective

This evaluation is designed to highlight the efficacy of delivery of the Macmillan Physical Activity Behaviour Change Care Pathway, and the optimum processes for best practice delivery.

This poster reports the impact of the Macmillan Physical Activity Behaviour Change Care Pathway on the lives of people living with cancer.

Method

The evaluation comprises a mixed-method approach, including:

- **Analysis of quantitative service data:** a minimum dataset was agreed with an 'evaluation expert advisory group' and an advisory group of people living with and beyond cancer. It was based on The cancer and physical activity standard evaluation framework⁹ devised by Macmillan,⁹ including:

- Quality of Life (EQ5D-3L)
- Physical Activity (SPAQ)
- Fatigue (FACIT)
- General Self-Efficacy.

- **Interviews with service users:** semi-structured interviews with up to 12 service users within each service, across three sampling points (with 63 completed to date), explored how the service impacts on clients, those around them and broader society.
- **Interviews with key stakeholders:** to date, 49 in-depth interviews have been completed exploring how the Macmillan Physical Activity Behaviour Change Care Pathway has been implemented at a local level.
- **Ethnographic research:** qualitative information has been collected relating to how the services are being delivered to people living with cancer locally and the perceived impact.
- **Cost-effectiveness analysis:** in the future – subject to data provision – quantitative service data will be used to work out the cost per improvement in physical activity across all sites.

Findings

Figure 2: Demographic profile of beneficiaries



Evidence of impact

To December 2015, data have been received from 1,054 participants across six services. Levels of completion have varied from 76% for EQ5D-3L to just 10% for Self-Efficacy. Emerging findings are:

- **Physical Activity levels (SPAQ):** a statistically significant increase in physical activity is reported in people living with cancer. Focusing on data for just those individuals who provided it at all sampling points (n=48), increases in physical activity are statistically significant between start and three months; start and six months; and start and 12 months. The number of participants classified as inactive at the start decreases from 17% overall to less than 1% from three months onward.
- **Quality of Life (EQ5D-3L):** self-reported quality of life improved noticeably between start and three months; three and six months; and six and 12 months. Trends were similar for male and female participants. Respondents generally reported improvements in measures regarding mobility, self-care, their usual activities, pain and anxiety (see figure 3).
- **Health self-assessment:** participants reported a statistically significant improvement in self-assessed health between start and three months, which then largely plateaued at the same level across subsequent sampling points. There was an improvement in self-assessed health between baseline and three months of 21.5 percentage points, from 45.1% to 66.6% (where 0% = the worst state of health imaginable and 100% = the best state of health imaginable).

Figure 3: EQ5D-3L scores

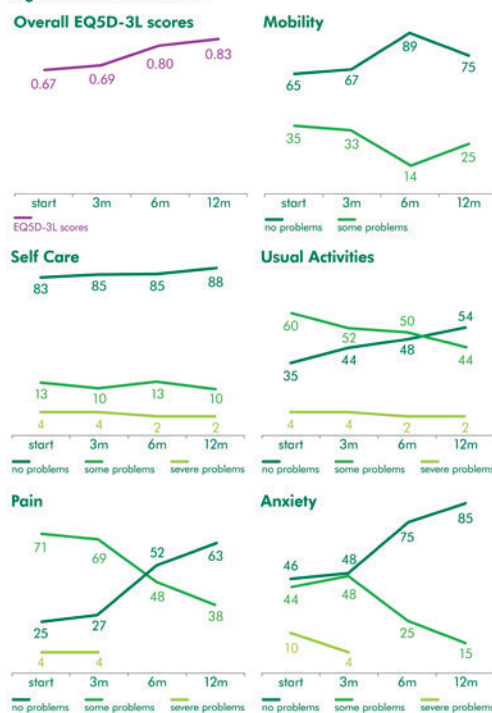
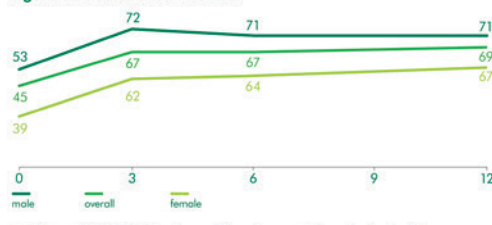


Figure 4: Overall Health Score



- **Fatigue (FACIT):** both males and females reported a reduction in fatigue between start and three months; the increase was statistically significant for females but not for males.
- **General Self-Efficacy:** data on a measure of self-efficacy were provided at the start by only 56 participants out of 1,054 (5.3%). Therefore no analysis has been conducted to date on this measure.

Qualitatively, service users reported improved confidence and control of their lives to service staff:

'Not only for the physical and health side of things, but also confidence and the psychological side as well. They regain their independence, they feel confident to be able to do a number of things [that they could do] before treatment and sort of get their life back on track.'

Sheffield service delivery team

Service staff also reported a link between improvements in wellbeing and the need to access services:

'... [participating in the service] cuts down on the number of times they need to come to the hospital and, hopefully, the number of times they need to see their GP as well because they are starting to take control back.'

Manchester healthcare professional

Conclusions

Interim findings show a correlation between participation in Macmillan's Physical Activity Behaviour Change Care Pathway and an increase in self-reported physical activity, particularly over the first three months of engagement. There is also an improvement in self-reported physical health and quality of life.

Summative findings of the evaluation will be reported in summer 2017. Participating services are set to increase from six to 14, with additional evaluation activity using accelerometers piloted at two services.

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Working together



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