Physiotherapy exercise is clinically effective
Cancer and its various treatments are associated with a wide range of distressing physical and psychological symptoms, which can affect patients for many years following the end of treatment. Exercise can improve quality of life for cancer patients, regardless of the type and stage of their disease. Inclusion of physiotherapy-led exercise within cancer pathways can reduce and prevent disability. Specialist physiotherapy can also alleviate distressing symptoms such as lymphoedema and fatigue, which debilitates 75-95 per cent of all cancer patients. Evidence shows that exercise reduces the risk of cancer recurrence and mortality. Mortality can be reduced by 50 per cent, 40 per cent and 30 per cent in bowel, breast and prostate cancer respectively. In addition to this, disease progression was reduced by 57 per cent in men with prostate cancer who engaged in three hours a week of moderate intensity exercise.

Excessive weight gain and loss can be a problem for many patients dependent on their treatment, stage and type of cancer. Specialist physiotherapists are vital for maintaining healthy weight and preventing muscle wasting in cancer patients.

Size of the problem
- **2 million** people in the UK are living with or after cancer
- **60%** have unmet physical or psychological needs following treatment
- **1.6 million** cancer survivors are not active at levels recommended by UK Chief Medical Officer

3 million people living with or after cancer by 2030

Physiotherapy-led exercise is clinically effective and can help cancer patients improve their quality of life.
Future health
Physiotherapy reduces future health complications, improves body image (3) and can improve an individual's ability to return to work.

Some cancer treatments can reduce bone quality leading to osteoporosis, increased risk of fragility fractures, pain and disability. Physiotherapy exercise can reduce bone loss and the likelihood of falls in patients with poor bone density. (10) Patients with cancer may present with problems managing pain-physical, psychological and spiritual in nature. (1) Pain can lead to a vicious cycle of fear, inactivity and further disability as a consequence and therefore increase length of hospital stay. (11) Physiotherapy has been shown to reduce the length of inpatient stays – with fewer nights as an inpatient representing better quality of life and cost savings to the NHS. (1)

Breast cancer rehabilitation service at Bart’s Hospital, Bart’s Health NHS Trust
This specialist out-patient service provides rehabilitation for all patients who undergo treatment for breast cancer. It is based on best available evidence and recommendations from the National Cancer Action Team breast rehabilitation pathway:

- Patients are assessed by a specialist physiotherapist in the post-operative phase for the main sequelae, including loss of shoulder mobility. Education and advice on self management and referrals for ongoing physiotherapy are provided here as required
- Ongoing physiotherapy care includes manual treatment, exercise and advice on self management and return to work
- Patients are re-assessed at key stages in the cancer pathway including during chemotherapy/ radiotherapy and at end of treatment, when a 6 week group education programme is available to ease the transition

This service has resulted in:
- less delays to radiotherapy due to poor shoulder mobility
- improved self-management

Survivorship and work

- In England, the estimated cost to the economy, from the loss in work productivity of cancer survivors in 2008, was £5.3 billion (12)

Physiotherapy exercise is significant in managing the longer term side effects, helping people return to work, reducing recurrence following remission and increasing survival and quality of life (1)

- A Cochrane review reported exercise and patient education or counseling led to higher return-to-work rates than usual care (odds ratio = 1.87), bringing significant economic benefits (13)

- Cancer survivors are 1.4 times more likely to be unemployed than matched controls. Exercise programmes can result in a significant reduction in medium term economic burden associated with unemployment ad long term sick leave (14)

- In the UK, over 300,000 people are diagnosed with cancer annually, half are of working age (1)

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