Improving rehabilitation services following cancer treatment: a service evaluation of ‘Cancer Transitions’

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Potential consequences of cancer treatment

**PHYSICAL**
- Weight gain or loss
- Decreased CV fitness
- Decreased muscle mass, strength and endurance
- Reduction in ROM and mobility
- Fatigue
- Pain
- Hot flushes

**PSYCHOLOGICAL**
- Fear of recurrence
- Anxiety
- Low mood
- Loss of confidence
- Decreased self-efficacy
- Altered body image
- Diminished emotional well-being
Supportive Care needs
(Armes et al. 2009)

- Multi-centre (n=66), prospective longitudinal study, mixed cancer types but majority had breast cancer
- Measures: Supportive Care Needs Survey, Hospital Anxiety and Depression Scale, Positive Affect and Negative Affect Schedule, end of treatment and 6mths later
- 30% of all patients reported more than 5 unmet needs at baseline; for 60% no improvement
- Most frequent needs were psychological and fear of cancer recurrence
- Patients want rehabilitation issues addressed!
Quality of Life survey (DH 2012)

- The largest survey of cancer survivors in Europe
- Used EQ-5D to assess overall quality of life in 4 groups at 4 time points
- Also used tumour specific questions from FACT questionnaires

Headline findings:
- Between 8% (self care) and 22% (mobility and usual activities) reported moderate or severe problems
- Overall quality of life was significantly associated with:
  - The presence and number of concurrent long term conditions
  - Disease status
  - Age (with 65-74 year olds having the best quality of life)

Importantly: Increasing physical activity was associated with improved quality of life as measured by EQ5D!
The importance of physical activity for people living with and beyond cancer:
A concise evidence review

Executive summary

This review provides commissioners and health professionals with an overview of the evidence for integrating the promotion of physical activity within the cancer care pathway.

The evidence is growing to support the role of physical activity during and after cancer treatment.

Physical activity is important for cancer patients at all stages of the cancer care pathway. There is evidence to support the role of physical activity for the following stages of the cancer care pathway:

1. During cancer treatment – physical activity improves, or prevents the decline of physical function without increasing fatigue.
2. After cancer treatment – physical activity helps recover physical function.
3. During and after cancer treatment – physical activity can reduce the risk of cancer recurrence and mortality for some cancers and can reduce the risk of developing other long term conditions.
4. Advanced cancer – physical activity can help maintain independence and wellbeing.

Promoting physical activity at all stages of the cancer care pathway has the potential to reduce NHS expenditure.

Cancer survivors* should be advised to gradually build up to the health-related physical activity guidelines for the general population. The evidence shows that if an activity recommendation is carefully tailored to the individual, it is likely to have a positive impact on the patient.

There is a clear need for mechanisms within the cancer care pathway to support people in maintaining or initiating physical activity during and after treatment.

*For the purpose of this report we are using the term ‘cancer survivor’ to refer to people both living with and beyond cancer.
Map of patient pathway

Family doctor/health centre

Goes to

Routine screening

Goes to

Referred to

Local hospital or cancer centre to undergo tests

Referred to

Cancer not diagnosed

Diagnosis of cancer

Treatments

Palliative care

End of treatment

Continuing treatment

Relapse

Terminal care

Long-term monitoring and follow up

Cure

Long-term survival

Key points in the cancer journey

† Supportive care is provided at all stages of the pathway from pre-diagnosis onwards
Evolution of our project

• Small Therapies ‘Survivorship’ steering group
• Funding for scoping work from Public Health: Project manager post for 3 months
  – Scoping exercise locally
  – Visit to centres of excellence in USA
  – Completion of a final report
• Successful business case: new commissioned funds of 50k/year
• Appointment and training of Band 7 x 0.7 WTE Survivorship Educational Specialist with Macmillan designation
Outline of Cancer Transitions

- Group programme for end Rx (excluding palliative care) inc. 6 x weekly sessions; 2.5 hrs per session with 1 ‘booster’ session
- Developed in the USA (2006) by the Wellness Community® and LIVESTRONG™
- Extensively piloted throughout the USA and across Canada and now extending worldwide.

Each session provides 40 min. of circuit based exercise followed by educational sessions from:
- Physiotherapist
- Dietician
- Oncologist/CNS
- Psychologist

Aims:
- To provide an “active patient” programme for cancer survivors to ease the impact of the transition from active treatment to follow up care.
- This is achieved through education, practical experience and peer support with the ultimate goal of empowering participants to better manage their condition

Evaluation:
1. Clinical Audit
2. Health Equity Assessment
3. Evaluation of four PROMs
   - Health Related Quality of Life Questionnaire (SF-12)
   - Impact of Cancer Scale (IOC)
   - International Physical Activity Questionnaire (IPAQ)
   - Fat- and Fibre-Related Diet Behaviour Questionnaire (FFB)
Exercise component
(facilitated by Physiotherapist)

- **Theoretical session provides**
  - Evidence base for exercise in cancer rehab
  - Principles of physical activity & structuring of formal exercise programmes
  - Exploration of physical activity and lifestyle changes beyond formal exercise uptake

- **Practical exercise sessions cover**
  - Warm up phase
  - Circuit training including strengthening, cardio-vascular and coordination exercises i.e. push ups, stair walking, boxing, cycling, squats and weights, slalom and rope ladder parcours
  - Cooling down and stretches

- **Practice of mindfulness based relaxation technique**
Emotional Health & Wellbeing

(facilitated by Clinical Psychologist)

• Explores common experiences, anxieties and coping strategies
• Provides a platform for sharing
• Offers concepts of viewing and addressing emotional difficulties
• Encourages goal orientated problem solving
Nutrition beyond cancer

(facilitated by Dietitian)

- Educates participants on guidelines for healthy eating: the healthy eating plate!
- Highlights diet and weight related risk factors
- Individual discussion of dietary habits and recommendations for improvement
- Explores myths and misconceptions about diet
Medical management beyond cancer
(facilitated by Oncologist)

- Purpose and structure of follow up intervention
- Exploration of medium and long term effects of cancer treatment
- Advise on how to best communicate with healthcare teams
- Medical and psychological reassurance on how to deal with concerns regarding recurrence
- Exploration of commonalities and opportunity for informal dialogue about health concerns
- Feedback to clinicians about the experience and quality of cancer services at Barts
Results: Clinical Audit
(Period from 02 March 2011 – 6 Nov 2012)

• 113 participants admitted to 9 groups following phone screening
• Feedback from 81 participants who completed ≥ 3 sessions was included in the audit
• 78 completed ≥ 4 sessions
• 66 completed ≥ 5 sessions

- Dropped out: 20 (17.7%)
- Completed ≥3 sessions: 81 (71.7%)
- Did not attend at all: 32 (28.3%)
- Dropped out after 1st session: 12 (10.6%)
Q.8 Was the programme delivered in a way that you understood what was said?

Outcome target 100% to say either “yes, often” or “yes, always”
Q.14 Would you recommend the programme to a friend based on your experience?

Outcome target 100% stating either “yes, definitely” or “maybe”
Q.15 How would you rate the overall experience?

Outcome target 100% stating either “Good” or “excellent”
Q.17 As a result of the programme, I am more positive about meeting the challenge of my cancer experience.

Outcome target: 100% stating either “extremely”, “quite a bit” or “somewhat”
Health Equity Assessment

• Public Health Question: Does the service contribute towards reducing inequalities in cancer survival and mortality in Tower Hamlets?
• Our question: Are we providing an equitable service to Tower Hamlets residents with regards to ethnicity, age, gender, language needs and cancer type
• Audit was undertaken on referrals (N=155) between February 2011 and April 2012 and was audited against 12 months of all Barts Hospital cancer registrations

Results:
• Referrals reflect the geographical mix of Barts Health patients
• Patients with breast and gynaecological cancers were more likely to be referred and to complete than all other groups.
• Men and older people were under-represented, as were some common cancers e.g. urological
• Relatively high attendance and completion rates, suggesting a high quality service which meets service users’ needs.
• Less than 50% of Barts cancer patients had ethnicity recorded on Somerset database

Recommendations:
• Reasons for under-representation of some patient groups should be explored. In particular:
  – Men
  – Urological cancer (especially prostate) patients
  – Non English speaking
Participants’ voices

• “I can’t believe what a difference it has all made to my energy and outlook”

• “This group has been amazing! It has given me the confidence to get back exercising again. It has really made a difference to my well-being.”

• “Yes, this programme has made me more confident within myself regarding cancer, promoted my exercise tolerance and my future life”

• “I made friends with others in the group and I have become fitter and more equipped for healthy living”
The future

• Dissemination of final Macmillan report
• Addressing recommendations from stakeholders
• Develop services across and beyond Barts health
• Things to consider:
  – Outcome measurement
  – Location, timing, mode of delivery
  – Patient information
Timing is everything!