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Association of Chartered Physiotherapists  
in Oncology and Palliative Care

**ACPOPC**

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Joint submission from the Chartered Society of Physiotherapy (CSP) and the Association of Chartered Physiotherapists in Oncology and Palliative Care (ACPOPC)

## Editors' Comment

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Welcome to the 2019 volume of the Journal of the Association of Chartered Physiotherapists in Oncology and Palliative Care (ACPOPC). As a committee it has been a great pleasure to produce this fourth volume of the journal, with a variety of articles from across acute services and the hospice setting.

Our aims for the journal are to assist our members by providing a forum through which they can share the interesting and important service improvement and research work they are leading in the many variety of settings in which we work. Our hope is that sharing our good practice, innovative projects and evaluations through the journal will encourage other members to reach out and connect with each other to develop ideas and learn from each other's contribution to our profession.

Now more than ever, it is important to be innovative in designing, providing and evaluating interventions and services and demonstrate their potential to add value by maximising quality of life and function for the people we support. We hope more members consider the ACPOPC journal for publishing their work and disseminating their findings and experiences across the membership. In sharing our diverse work we contribute to the learning of others across our varied and unique professional network.

It has been truly exciting to see more and more ACPOPC members share their work as posters and presentations at conferences over the last twelve months, including at the European Cancer Rehabilitation and Survivorship symposium in Copenhagen and Physiotherapy UK in Birmingham. As a committee we are proud to offer support for members to share their excellent work at national and international conferences through our Education and Research Grant, details of which can be found on our website (<https://acpopc.csp.org.uk/documents/acpopc-education-and-research-grant-policy>).

We close the journal this year with our contribution towards the NHS Long Term Plan, written in conjunction with the Chartered Society of Physiotherapy. The NHS Long Term Plan will have a huge influence on our clinical and support services over the next ten years and we hope to share members' outputs in response to the plan in future volumes of the journal.

If you are interested in contributing to the next volume of the journal, please visit the guidelines for writing for the journal on the website (<https://acpopc.csp.org.uk/documents/how-write-acpopc-journal>) and make contact on the email below. If you are not sure if your article idea would make a good fit, please get in touch and we would be pleased to discuss it.

We hope you enjoy reading the articles in this volume and we welcome any thoughts or reflections on the journal, please do reach out by email or tweet us @ACPOPC.

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# Physiotherapists' experiences of managing upper limb movement impairments due to breast cancer treatment

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## Abstract

**Background:** Physiotherapy is recommended for upper limb movement impairments (ULMI) following breast cancer treatment. There is limited research into the pathophysiology and management of ULMI. Care is provided in different health-care contexts by specialist and nonspecialist physiotherapists, with referrals set to increase. This study explores physiotherapists' experiences of managing ULMI.

**Design:** Qualitative study using a hermeneutic phenomenological approach.

**Method:** We interviewed six physiotherapists from various UK treatment settings. The data were analysed using interpretative phenomenological analysis.

**Findings:** Four master themes were identified: (1) lack of confidence surrounds various aspects of practice, influenced by limited evidence to guide treatment of ULMI, fear of causing harm, and working in a less-established area of physiotherapy; (2) increasing confidence in practice develops with experience, reinforcing perceptions of the benefits of physiotherapy; (3) physiotherapy is understood to empower and enable patients to regain their sense of self and quality of life; and (4) provision of care is perceived to be subject to many barriers.

**Conclusion:** Physiotherapy for ULMI has professional challenges but is seen as beneficial, encompassing psychosocial and physical effects. Experiences in this area of practice suggest a need for increased professional support, further research to guide treatment, and better patient and health professional awareness of ULMI and the role of physiotherapy.

## Introduction

Physiotherapy is recommended for upper limb movement impairments (ULMI) following breast cancer treatment. There is limited research into the pathophysiology and management of ULMI. Care is provided in different health-care contexts by specialist and nonspecialist physiotherapists, with referrals set to increase. This study explores physiotherapists' experiences of managing ULMI. The aim of this study was to gain insight into physiotherapists' experiences of treating people with ULMI to further understand this relatively new and under-researched area of practice.

## Methodology and methods

This exploratory study used a hermeneutic phenomenological approach. Six physiotherapists from different healthcare contexts were interviewed face-to-face, using in-depth techniques about their lived experiences of treating ULMI: "Can you tell me about a memorable situation of treating a patient with a breast cancer related upper limb movement impairment in as much detail as possible?"

A wide range of responses were elicited, which generated probing questions that differed from interview to interview.

This allowed for the collection of expansive data, and its flexibility meant that it allowed for unexpected themes to emerge. The data was analysed using the Interpretative Phenomenological Analysis method, which has an ideographic focus and uses an inductive, iterative and flexible process of analysis.

## Ethics

Approval granted by the University of Brighton Faculty Research Ethics and Governance Committee (FREGC-14-041.R1).

## Results

Four major themes were identified, which represent the shared meanings of the physiotherapists' experiences of treating ULMI. These themes and the contributing super-ordinate themes are depicted in Figures 1, 2 & 3.

**Master theme 1:** Lack of confidence related to various aspects of practice; influenced by limited evidence to guide treatment of ULMI and working in a less-established area of physiotherapy



Figure 1

**Master theme 2:** Confidence in practice develops through experience, reinforcing perceptions of the benefits of physiotherapy

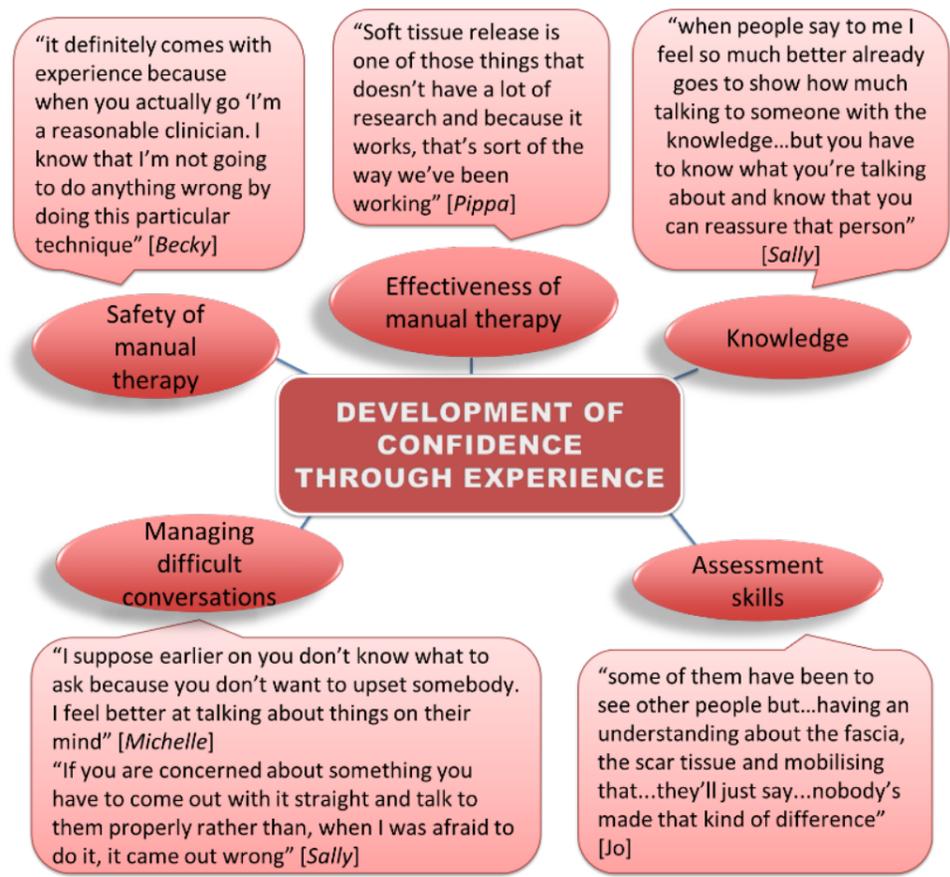
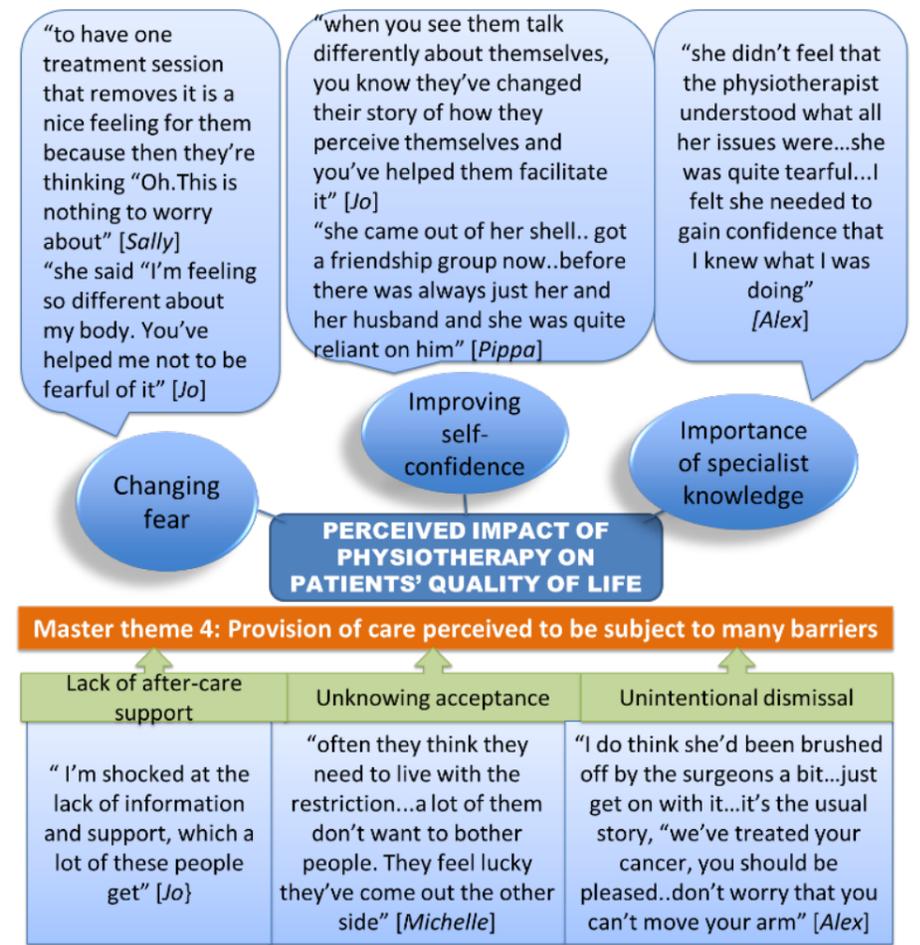


Figure 2

**Master theme 3:** Empowering and enabling patients to regain their sense of self and quality of life



**Master theme 4:** Provision of care perceived to be subject to many barriers

Lack of after-care support	Unknowing acceptance	Unintentional dismissal
"I'm shocked at the lack of information and support, which a lot of these people get" [Jo]	"often they think they need to live with the restriction...a lot of them don't want to bother people. They feel lucky they've come out the other side" [Michelle]	"I do think she'd been brushed off by the surgeons a bit...just get on with it...it's the usual story, 'we've treated your cancer, you should be pleased..don't worry that you can't move your arm' [Alex]

Figure 3

*Table 1. Overview of the participants' demographic data*

Pseudonym (gender)	Years qualified	Work setting and speciality	Specific PT training for Breast Cancer Care (BCC)	Approx. years treating women with breast cancer
Becky (female)	10	NHS Specialist breast service (MSK background)	2-day course with PT expert in manual treatment of CTD (W. Fourie). 1-day lecture with PT expert in BCC rehabilitation (M. Lyons). Additional cancer-related seminars.	2 yrs (full-time BCC practice)
Pippa (female)	10	NHS Specialist breast service (WH background)	1-day lecture with PT expert in BCC rehabilitation (M. Lyons)	1.5 yrs (BCC is part of WH caseload)
Alex (female)	32	NHS Oncology (MSK background)	2-day course with PT expert in manual treatment of CTD (W. Fourie). Additional cancer-related seminars. Post-grad general oncology and breast cancer modules.	10 yrs (BCC is part of Oncology caseload)
Michelle (female)	6	Private practice (MSK background)	Variety of non-breast care specific soft tissue treatment courses.	6 yrs (BCC is part of general MSK caseload)
Jo (female)	33	Private practice (MSK background)	2-day course with PT expert in manual treatment of CTD (W. Fourie).	25 yrs (BCC is part of general MSK caseload)
Sally (female)	15	Private practice (MSK background)	2-day course with PT expert in manual treatment of CTD (W. Fourie). Additional cancer-related seminars.	6 yrs (BCC is part of MSK Oncology caseload)

Legend	
PT	Physiotherapy
BCC	Breast cancer care
MSK	Musculoskeletal
WH	Women's Health
CTD	Connective Tissue Dysfunction

## Conclusion

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Physiotherapy is considered an important aspect of post-treatment care for complications following intervention for breast cancer, particularly ULMI. Although recommended in post-care guidance, there has been only limited research and evidence to support clinical practice, along with limited understanding of pathophysiology and risks of harm associated with treatment related to ULMI and its relationship to lymphoedema. From an in-depth exploration of clinical experiences of treating this population, we found that despite initial uncertainty and significant experiences of feeling unease, physiotherapists become increasingly confident in their practice and in the value and importance of physiotherapy involvement in breast cancer care with increasing experience of treating ULMI. This is underpinned by an understanding that effective treatment encompasses equal consideration of the physical, psychological, emotional, and social elements of ULMI. Our findings extend current understanding of physiotherapy management of ULMI, showing that practice confidence is affected by it being an area of practice that is less well known within and beyond the physiotherapy profession. Practice confidence is further affected by the lack of a robust evidence-base and specific treatment guidelines to support decision-making, particularly concerning manual interventions. Fear of causing harm and vulnerability in practice indicates a need for further research to advance understanding of the long-term effectiveness and safety of manual therapy for ULMI, which should employ sufficiently long follow-up times to capture potential adverse effects of physiotherapy intervention and incorporate outcome measures that capture the breadth of potential improvements in quality of life as well as physical changes. The importance of resources to support specialist knowledge for physiotherapists, including the psychosocial aspects of cancer-related conditions and management of emotions during consultations and difficult conversations, has been highlighted, in addition to the need for the development and delivery of physiotherapy training and education in cancer care and rehabilitation in a broad range of health-care contexts.

Our findings also support the problem of a lack of patient and health-care professional awareness of ULMI and the potential role of physiotherapy in ULMI management. They highlight the need for collaboration with different professional, organizational, and public stakeholders to improve awareness and recognition of the benefits and role of physiotherapy in the management of ULMI in order to support its routine inclusion in breast cancer care pathways.

## Funding acknowledgement

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# The role of acupuncture in palliative care in the management of pain - a case report

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## Abstract

This case study documents the use of acupuncture in the management of pain in a patient with a terminal diagnosis of bronchioalveolar cancer.

The subject was a 50 year old male who initially presented with right sided posterior to anterior rib pain initially thought to be caused by a traumatic injury. Following his initial diagnosis of bronchioalveolar cancer of the right lung in 2005 he received chemotherapy and had a subsequent right pneumectomy in 2011 following recurrence. Approximately 5 years later was diagnosed with recurrence in left lower lobe. The pain was not responsive to pharmacological interventions.

Acupuncture is being increasingly used in the palliative care setting to manage symptoms such as pain, breathlessness and fatigue (Lim et al 2011, Leng 2013).

Acupuncture was provided regularly over a period of a year, improving the patient's pain and quality of life. Treatment was stopped when patient was admitted to hospital.

Other non-pharmacological techniques such as TENS and kinesiotaping were trialled however to no effect.

Visual Analogue Scale was chosen as the outcome measure to reduce burden on the patient.

There appears to be a role for the use of acupuncture in the management of pain in palliative care which this case study will look to explore.

## Introduction

Bronchioalveolar cancer (BAC) used to be defined as a subtype of non-small-cell lung cancer with unique pathological and clinical characteristics. In 2015, the definition was revised by the World Health Organisation. BAC as a term is no longer used and these tumours are now referred to as an adenocarcinoma of the lung that grows in a lepidic fashion and a mucinous BAC is now termed an invasive mucinous adenocarcinoma (Travis et al. 2015).

This type of lung cancer is considered rare, representing 4% of all lung cancers (Raz et al 2006).

A survey carried out by Leng (2013) concluded that acupuncture was a treatment technique being used in 30-60% of hospices and specialist palliative care services within the UK.

Studies suggest that pain experienced by palliative patients is one of the most responsive symptoms to acupuncture (Alimi et al 2003, Pfister et al 2010, Lim et al 2011, Filshie & Rubino 2004).

Paley et al (2011) suggest that acupuncture may be useful in providing background and breakthrough pain relief as an adjunct to pharmacological interventions. Alimi et al (2003) reported that patients experiencing persistent pain despite pharmacological intervention had a significant reduction in pain following acupuncture.

## Case Presentation

The patient was referred in 2016 for consideration of acupuncture to help with pain management. He had also been placed on the waiting list for a nerve block but he wanted to exhaust all other options before this was done.

Past medical history was nil of note.

Mechanism of injury was the right arm being forced back into extension and internal rotation whilst holding on to a dog lead. Patient had been informed that he had fractured ribs 5 and 6 and that these would not heal properly due to the amount of chemotherapy he had received.

Patient reported constant pain and that no conventional pain relief was of benefit. Used cannabis oil which provided some relief. Pain and breathlessness both affecting quality of life but pain was the main presenting symptom.

Sleep reported as poor, waking in pain. Pain was affecting quality of life as finding it more difficult to work and was fatigued from poor sleep.

Had tried morphine and amitriptyline but these made him too drowsy and had minimal effect on pain.

The patient was self-employed and was still able to work albeit at a much reduced level due to decrease in function.

Visual Analogue Scale score was 5-6 at rest, sometimes as high as 10. Visual Analogue Scale was selected due to the decreased burden on the patient.

On examination; Tender on palpation T5,6,7. No paresthesia, no numbness. Limited shoulder range of motion due to pain.

Pneumectomy scar on right - patient reported some feeling of tightness over the scar. Scar slightly raised and 'bumpy' to touch.

Shortness of breath on exertion and at rest were reported as were coughing spasms. Patient presented to clinic with portable oxygen which he used as required.

The benefits and risks of acupuncture were discussed with the patient and whilst he felt that acupuncture was unlikely to be of benefit to him, he was willing to try. The research underpinning the use of acupuncture in pain management (Macpherson et al 2008) was also discussed.

Furthermore a study by Leng (2013) found that there was a need for more palliative care healthcare professionals to be trained in this technique and that awareness should be raised to the benefits of acupuncture in palliative care.

Specific guidelines have been produced for acupuncture in palliative care (Filshie & Hester 2006).

## *Treatment protocol*

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Seirin J needles 0.25x30mm needles used.

Acupuncture points; BL15, BL17, BL18, GV20, LI4 bilaterally. Dull ache at Left LI4 – DeQi obtained.

Needles left insitu 10 mins.

Pain reduced immediately post acupuncture.

The points were chosen in relation to where pain was being experienced with consideration given to the Traditional Chinese Medicine acupuncture points.

BL15, BL17 and BL18 are used to help with ‘unbinding the chest’ and alleviating pain. BL17 is also associated with helping dyspnea and having an effect on the diaphragm (Hecker et al 2007).

LI4 is a strong pain relieving point (Hecker et al 2007).

GV20 is used to pacify the spirit and helps to alleviate cramps (Lian et al 2012).

The patient was seen 10 days later and reported that he had been pain free for 8 days, then the pain started to slowly return. He had 2 nights of improved sleep.

The oncology consultant and the pain team were happy for acupuncture to continue and will keep appointment for nerve block open in case it is needed.

Acupuncture was repeated using the same acupuncture points and needles left insitu for 12 mins as there was no adverse reaction to initial treatment.

Follow up at 1/52 – Better sleep noted, managed to sleep for 8.5 hours undisturbed and awoke refreshed. Pain had changed in nature, now described as a soreness rather than pain.

Symptoms of abdominal discomfort described, especially after eating.

Acupuncture points added GV9, 10, 11, 20 – these points are used to alleviate respiratory and abdominal symptoms (Hecker et al 2007). In addition trigger points were noted in the left upper trapezius muscle, likely caused by use of accessory muscles when breathing. Trigger points were needled as required.

Treatment continued once a week for one year. Gaps of more than this caused symptoms to exacerbate. Treatment times increased to 20 minutes duration. Patient had follow up appointments with his oncology consultant throughout this time who felt that his disease was stable – tumour in left lung had not increased in size.

No explanation given for ongoing abdominal and chest pain after eating. VAS was periodically reviewed and was reported as 2 at rest or on a ‘good day’ 7 on a ‘bad day’.

Alternative treatment methods were considered and trialled in an effort to reduce dependency and increase autonomy. Transcutaneous Electronic Nerve Stimulation (TENS) machine was used to no effect. Kinesiotaping was trialled and gave short term relief but neither modality provided the pain relieving benefits of acupuncture alone.

Approximately 1 year post commencement of acupuncture, symptoms of pain worsened, particularly in the chest region post eating and a medical review by a palliative care consultant was sought. Patient reluctant to try other pain relieving medication but did agree to trialling Gabapentin. This was slowly up titrated as pain became more uncontrolled.

Further radiology imaging showed that the intestines and liver had migrated into the right chest cavity and were pushing the heart to the left. Further medical opinion sought and it was felt that an operation to reposition liver and intestines would be high risk due to the underlying disease and poor respiratory function, however patient felt this was his only option due to his poor quality of life. Acupuncture continued to be provided until emergency admission into hospital for possible bowel obstruction. Patient underwent an operation a few days later and survived the initial post surgery period however died approximately 6 weeks later after developing pneumonia.

## *Discussion and Summary*

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The purpose of this case study was to highlight the benefits of acupuncture in palliative care and complex pain. By having regular acupuncture, this patient was able to have approximately one year of decreased pain, improved sleep and therefore increased quality of life due to non-pharmacological methods and in addition did not require the nerve block that had been initially recommended. This appears to be in line with the literature looking at the benefits of acupuncture in palliative care on symptom control (Alimi et al 2003, Pfister et al 2010, Lim et al 2011, Filshie & Rubino 2004).

Whilst it is not possible to conclude that it was the use of acupuncture alone that controlled the patients pain (as he was using cannabis oil and received some reflexology approximately 9 months after acupuncture starting) – it would be accurate to suggest that it had an impact on his symptoms that pharmacological methods had not been able to. It is important to note that the patient attended appointments weekly without fail and whilst this likely had a very positive influence on the efficacy of the treatment, this may not be realistic for a large proportion of palliative care patients due to other influencing factors (fatigue, other appointments, periods of being unwell etc). It is also important to acknowledge that whilst this patient was seen in a hospice clinic setting, treatments can also be offered in the home environment if this is more agreeable to the patient and would increase concordance with treatment.

On reflection, it was felt that his initial presenting pain was likely a combination of visceral pain and referred pain from trauma to the ribs along with scar tissue from previous surgery.

In conclusion, pain management is a common theme in palliative care and can present challenges to clinicians due to the patient’s complex symptoms. The availability of acupuncture in hospices is variable and therefore more research into the efficacy and decreased ‘tablet’ burden on the patient would be beneficial.

Further studies looking at the financial cost of ongoing pharmacological pain relief vs regular acupuncture in palliative care would be of benefit to patients, clinicians and organisations.

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## Asking “what matters to you?”: How listening to our patients’ voices can enrich Multidisciplinary Team Meetings and improve care.

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## Abstract

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Asking a simple yet powerful question: ‘what matters to you?’ can give healthcare professionals vital insights into the lives of our patients, not always captured in routine assessments. If what matters to a patient is then shared with the whole multidisciplinary team (MDT), it can ensure that ongoing support and treatment is focused around the patients’ priorities, rather than what we think is important as healthcare professionals. Over the past year we have been changing some of our conversations within the in-patient unit at Marie Curie Hospice, Hampstead with a view to promoting a more patient centered approach. We have developed a new suite of questions, including “what matters to you?”, “what’s important to you today?”, “what is worrying or annoying you?” and “how can we best support you?”. The outcome of these new discussions is then fed into the MDT, reviewed by all those involved in the patients’ care and then action points are agreed upon in response.

This collection of questions has now become imbedded in practice and has helped us both to listen to and action what matters to patients. These conversations have significantly changed the focus of the MDT, ensuring that discussions are centred on areas of greatest concern and importance to our patients. In the 2012 *New England Journal of Medicine*, Dr Michael Barry and Susan Edgman-Levitan wrote that if we want to implement shared decision making, we should not only ask patients ‘what’s the matter with you?’, but also ask ‘what matters to you?’ (WMTY). This may seem an obvious question as we all strive to deliver patient centred holistic care. However, as health professionals we can be too caught up in our own agenda to ask WMTY or afraid that if we do ask, we may not be able to address with what we hear.

We can also too easily fall into the habit of assuming we know what's best for our patients and what goals we believe are important for them to achieve. Often what we think matters most to the patient, isn't as much as a priority for them as it is for us. We can be very focused on asking patients questions that relate to our own speciality, whether that's a physiotherapist asking about strength in patient's legs, or a doctor asking about pain, or an OT asking about how they manage at home. By focussing our questioning on our own specialist area, we can sometimes miss the big picture and fail to learn what really matters to our patients. Asking this simple question can help us connect on a different level, carry out our jobs more effectively, and be able to give more meaningful therapy because we have a deeper understanding of what is most important to our patients.

## Aim

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The objective of this project was to improve patient centred care on the inpatient wards at the Marie Curie Hospice in Hampstead. We aimed to ensure that all in-patients were offered a weekly conversation that centred on what mattered to them. Once this information had been gathered from the patient, it was to be shared and discussed every week within the multidisciplinary team meeting to promote holistic, coordinated and relevant care.

Fig 1. Suite of WMTY questions (next page or can be seen on the poster)

## Methodology

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We ran the project using Quality Improvement methodology from the institute of healthcare improvement (IHI) and it was led by the therapy team. We aimed to ask this WMTY suite of questions to every patient who gave their consent and our main outcome measure was the number of patients who had their WMTY conversations discussed in the MDT. We also kept a record of WMTY conversations and the changes in practice that had happened as a result.

In September 2017, we asked one patient on one ward the WMTY suit of questions and then brought the information we had learned to the weekly ward MDT. Once the patient had been discussed using the standard template, we presented the new information we had learned. Much of the information shared was not known to the team and therefore required discussing further. Over the following weeks, the therapy team continued to have WMTY conversations with a growing number of patients and brought the outcome of these meetings into the MDT for discussion.

We have carried out several plan, do, study act (PDSA) cycles to try and improve certain aspects of the project.

### *These have included*

- *Have we got the questions on the form right?*

We have adapted it over the year with feedback from staff, patients, carers and volunteers.

- *Who should have the WMTY conversation with the patient?*

We have trialed using volunteers, nursing staff, therapists and counsellors.

- *When should the WMTY conversation with the patient be presented within the MDT? Beginning or end of the discussion?*

We will continue to run PDSA cycles on this project to ensure that we are continually improving the quality of the conversations and the process by which they occur.

Our main outcome was recording the number of patients who had their WMTY information shared in the MDT meetings. We plotted a graph to see, week on week how many patients were discussed in the MDT. (See poster)

Within 9 months we had reached our goal, every patient on the in-patient unit who could consent was offered a WMTY conversation which was discussed in the MDT. *See graph on poster.*

## Results

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Over the past year, practice has changed and the suite of questions have become embedded in practice. 100% of patients, every week, are offered a 'what matters to you' conversation and this information is brought to the weekly MDT. Patients are now presented in the MDT by stating their name, age and then what matters to them, before even their diagnosis or symptoms are discussed.

Each week the team learns vital pieces of information that we would not have known, had we not asked these important questions. Asking patients WMTY has reframed our MDT's and made them, for the first time, truly patient focused. It has also helped professionals connect on a more personal level with patients and anecdotal evidence has shown an increase in job satisfaction.

## *Discussion*

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Asking patients WMTY is a powerful, simple question that can positively influence care, practice and job satisfaction. It costs no additional money and research is now needed to investigate the financial implication of not asking WMTY.

There has been much to learn during this project.

### *Main Learning Points*

- You can't guess what matters to patients
- Some people find it uncomfortable talking about what matters to them
- What matters to patients can change, so its important to not only ask once
- Asking what matters helps us to see patients more as people and connect with them on a different level
- The quality of the conversation matters, training is helpful to encourage meaningful dialogue.
- Asking WMTY should never be a paper exercise – greater depth of information is learnt by having a conversation.

## *Conclusion*

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At the Marie Curie Hospice in Hampstead, the introduction of questions based around the WMTY concept has improved the conversations we have with patients and positively influenced discussions within the Multidisciplinary Team Meetings (MDT's).

We have learnt that you can't guess what matters to patients but by asking, listening and doing what is important, you can enrich and focus care where it matters most.

## *Acknowledgements*

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Aintree University Hospital  
NHS Foundation Trust



## *Aintree Prehab Service Pilot - Prehabilitation for patients undergoing major cancer surgery*

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### *Background*

Fitter patients with cancer have been shown to have longer survival, better quality of life and reduced cancer recurrence.

Prehabilitation can be defined as prevention of insult or injury before it has occurred. Research trials conducted at Aintree University Hospital (Dunne et al, 2016) demonstrated how a short preoperative prehabilitation programme in liver resection patients can lead to significant improvements in fitness, quality of life and recovery in these patients.

### *Methods*

Having recognised the benefit of prehabilitation from the RCT completed within the trust (Dunne et al 2016) a multidisciplinary prehabilitation steering group was established which included surgeons, anaesthetists, nurse specialists, a physiotherapist and a dietitian. The main objective of this group was to explore how prehabilitation could be implemented as a standard part of the cancer surgical pathway. The group explored various avenues of funding and were successful in gaining support from Macmillan Cancer Support to complete a 12 month pilot service.

The Aintree Prehab Service was launched in August 2017 offering pre-operative physiotherapy and dietetic input to all colorectal and HPB cancer patients undergoing surgical intervention, as well as all MFU major surgical patients. It was decided that minimum length of time between referral and surgical date would be 10 days to allow at least one contact with the prehabilitation team. These patients were referred into the service following notification of planned surgical intervention by their nurse specialist. They were then contacted by the prehabilitation team and invited to an initial prehab clinic to meet with both a physiotherapist and dietitian. At initial assessment a number of outcome measures were completed including nutritional bloods, height, weight, BMI, hand grip, Short Form 36 questionnaire (SF-36), International Physical Activity Questionnaire (IPAQ), Patient Guided Subjective Global Assessment (PG-SGA) and 6 Minute Walk Test (6MWT). This combination of outcome measures looked to gain an understanding of patient physical activity levels, wellbeing and nutritional state throughout their prehabilitation journey.

Initial physiotherapy intervention included exploration of current physical activity levels and any limitations to physical activity that they may have. A personalised activity programme was then discussed and agreed. The patient was also encouraged to attend a prehab group session to increase their activity and to offer supervised exercise and peer support. In addition to this the patients were given information about enhanced recovery and their ward stay as well and being provided with breathing exercises to complete prior to admission. Musculoskeletal assessments were completed as required. The dietetic initial intervention focussed on creating an individualised plan to target the patients key priorities, for example symptoms management, reversing undernourishment or healthy dietary changes. Dietetic elements of the enhanced recovery pathway were discussed as well as general healthy eating advice. Patients were referred to their GP for supplementation if required in the lead up to surgery. Following initial assessment patients opted for either group sessions or individualised follow up by appointment or telephone. They were offered input for as long as required leading up to their surgery, for some patients this was throughout their neoadjuvant chemotherapy and radiotherapy. The group sessions included opportunity for peer discussion as well as informal questioning of staff about their treatment and admission to hospital. The patients then participated in exercise circuit which included both full body strengthening and cardiovascular exercise. There was also a weekly check in by the dietitian in which weight and hand grip was monitored. Individual follow up was completed in a clinic environment or by telephone and didn't include any supervised exercise.

The patients then went for their surgery and were seen by the ward therapists during their admission. Patients were invited back to a post-operative prehabilitation clinic 6 weeks after their operation. In this clinic therapists explored whether the patients had returned to their normal function and nutritional state. At this time all outcome measures were re-assessed with the addition of a Prehab Service survey. Patients who had attended the prehab class prior to their surgery were invited back to the class for 4 weeks. All patients were offered further exercise prescription, diet advice and onward referral to local exercise services. Patients were referred to community dietetic services as required.

## Results

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During the pilot 241 patients were referred into the service. Of these 231 patients were assessed with the rest being excluded due to insufficient time between referral and surgical date. The average age of the patients in attendance was 65. Patients underwent a range of surgeries including liver resection (117), bowel resection (85), synchronous resection (16), bowel and ovarian resection/hysterectomy (2), liver and ovarian resection (3), oesophagectomy (5), MFU majors (2). Of these patients 90% patients attended clinic in person and 10% patients were consulted by telephone due to them residing over 30 miles away from the hospital site. When offered the class 25% of patients opted to attend. Patients reported difficulty in attending classes due to having a high number of appointments, distance travelled to get to the hospital site and access to transport. The average number of classes attended was 4 with a range of 1 to 14 classes attended prior to surgery.

Length of stay reduced from 8.8 days, in the 12 months prior to implementation, to 6.4 days since implementation in the cohort of patients being invited to prehabilitation. There has been no other major change to the surgical pathway during this 12 month period.

Post operatively patients showed an improvement in walking distance on the 6MWT by an average 82m compared to their first prehab attendance pre operatively. Data also showed that 78% of patients had increased or maintained their physical activity levels between starting prehab and at follow up. Although there is no baseline data to compare these outcomes to our findings support the work that was done at Aintree by Dunne et al. that showed a prehab programme improves fitness in the lead up to surgery. 73% participants maintained weight or lost less than 5% from pre-surgical assessment to 6 week follow up. Although this hasn't been analysed for significance, from observation it seems to mirror other studies such as Gillis et al (2018) who reported that prehabilitation attenuates post-surgical lean body mass losses. There was an average 6 % increase in hand grip (0.9kg) in the patients we had pre and post scores for. Pre-surgical PG-SGA indicated that of 67 patients, 61% were classified as risk category A (well-nourished), 22% were classified as risk category B (moderate or suspected malnutrition), 16% were categorised as C (severely malnourished). Post-operatively this changed to 66% in category A, 27% in category B 7% in category C. This suggests a decrease in nutritional risk status overall after surgery.

The SF-36 demonstrated changes in wellbeing with 91% of patients reporting maintenance or improvement in emotional limitations and 65% of patients showing an improvement in emotional wellbeing. Other aspects of the SF-36 showed little change. Feedback has also demonstrated the importance of the service in making people feel more prepared and at ease leading up to their surgery. On an Aintree Prehab Service questionnaire patients reported being 83% more likely to make longer term healthy lifestyle changes and their family 68% more likely to do the same.

## Discussion/Conclusion

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Following this pilot we have learnt that it is feasible to introduce prehabilitation as a standard part of the surgical pathway for cancer patients. The prehabilitation service allows patients to maintain or improve on their physical and nutritional state throughout their surgical journey as well as providing support from both allied health professionals and peers. We have also learnt that at this stage of treatment there is a teachable moment where lifestyle changes are likely to be maintained longer term and have a wider impact not only the patient but to the wider population.

In setting up our service we have learnt that there is a lack of research examining at optimal content of a prehabilitation service. There is good evidence to demonstrate the benefit of supervised exercise but there is a need for more research into the content of these classes. We have learnt of the value of including nutritional support as part of a prehabilitation service but have found research supporting prehabilitation doesn't focus on this.

Throughout the project it has been vital to remain flexible in our approach. It was crucial to have full involvement of the MDT early on in the process in order to fit into an already established pathway. Continued engagement with these professionals has allowed us to ensure timely referral into the service and continued drive for the service to expand and continue past the pilot. It was necessary to adapt to the needs of our local population by including telephone consultations and use of email and an app to provide exercises and patient information at a distance. We also recognised the importance of patient involvement in the development of the service and have used feedback forms, patient stories, patient forums and patient volunteers to assist with this. As we have such positive data on the benefits of prehab for year one we would like to expand on this going forwards to measure the impact of prehab further. We therefore aim to follow our patients up over a longer period to assess the ongoing impact of their attendance to prehab in return to function and work. In order to do this we are reviewing our outcome measures make them more easily completed at home. Aintree Prehab Service plan to develop the service further and aim to expand to include all surgical cancer patients receiving treatment at Aintree Hospital. We would also like to explore providing prehabilitation for non-surgical cancer patients in the future. In order to support expansion and make our service more accessible we aim to explore the option of leading classes in the community.

## Acknowledgements

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I would like to thank the Judith Ashcroft, Joseph Byrne, Hanah Cannon, Declan Dunne, Clare Byrne, Claire Rigby and the members of the prehabilitation steering group including our patient volunteers for their support in the implementation for the prehab service

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## Prehabilitation: can a physical activity intervention for ovarian cancer patients improve outcomes

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## Background

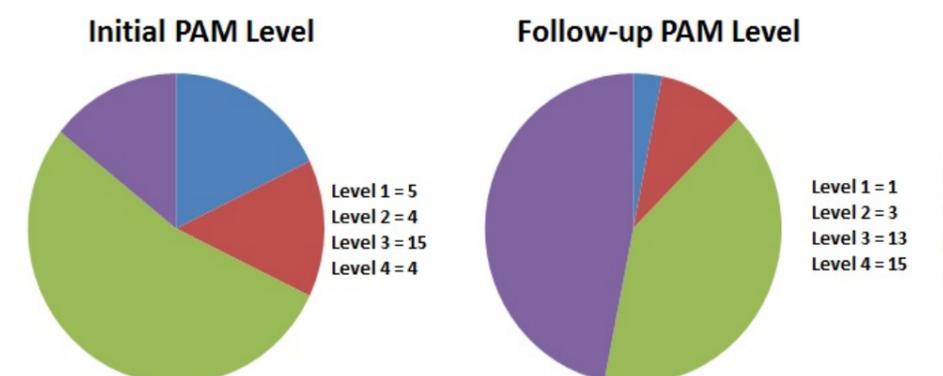
Multiple adverse effects of surgery with and without chemotherapy are reported to have long term consequences such as fatigue, muscle weakness and loss of function. Post-operative rehabilitation can improve outcomes, but adverse effects still prevail. More recent literature has investigated the impact of prehabilitation on post-operative outcomes, demonstrating improvements in post-operative pulmonary complications, fatigue and quality of life. In an ovarian cancer population located in the South West of England it is not known whether a prehabilitation intervention has an impact on post-operative outcomes.

## Method

Adult ovarian cancer patients requiring surgery +/- chemotherapy were included  
Physiotherapy-led assessment & prescription of an Individual exercise programme with agreed goals

Home exercise programme + weekly telephone support at the point of diagnosis up to 12 weeks post-surgery

Outcomes (baseline and on treatment completion) = hand grip strength (HGS); 6-minute walk test (6MWT); Functional Assessment of Cancer Therapy – Ovarian (FACT-O); Patient Activation Measure (PAM)



## Results

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Between February 2017 and March 2018 n = 31 patients were assessed and treated.  
Age range 42 - 83, Mean age = 66  
HGS n = 28; 11 improved from baseline  
6MWT n = 21; 15 improved from baseline  
FACT-O n = 30; 22 improved from baseline  
PAM n = 28; 13 improved from baseline.  
Total physiotherapy contacts = 682  
Face to face contacts = 169  
Average face to face contact length = 70 minutes  
Telephone contacts = 513  
Average telephone contact length = 29 minutes

## Patient Quotes

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“I am so grateful to be where I am now. I intend to make the most of every single day.”

“Just to be able to talk to someone was a release and the prescribed physical activity also helped with my mental health.”

“I just wanted to say thank you for all your kindness, support and help, I’m still going really strong doing more and more each day.”

## Conclusion

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This pilot programme has demonstrated positive physical and psychological outcomes for ovarian cancer patients. The programme was safe and well received by patients. Additional benefits included early identification of treatment side effects, resulting in appropriate interventions to address issues. The model developed supports the need for more investigation into cancer prehabilitation.

## Physiotherapy triage service for cancer patients: a service evaluation

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## Background

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Cancer patients experience a plethora of symptoms from diagnosis, through treatment and beyond into survivorship. Allied Health Professionals are uniquely placed to impact upon these symptoms by engaging patients in rehabilitation. Scoping of rehabilitation services amongst adult cancer patients undergoing haematological and oncological treatment highlighted various issues with fatigue, loss of function, pain and breathlessness. A pilot programme was implemented to address these unmet needs.

## Method

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Adult patients attending outpatient oncology & haematology services were referred by healthcare professionals into the Therapy Treatment Support Service (TTSS).

Physiotherapy-led telephone triage assessment for fatigue management, musculoskeletal issues, exercise programmes and breathlessness advice. Patients were either treated by the TTSS service or referred to other relevant therapy services.

The Functional Assessment of Cancer Therapy – General (FACT-G) was used as an outcome measure on initial and final patient contact.

## Results

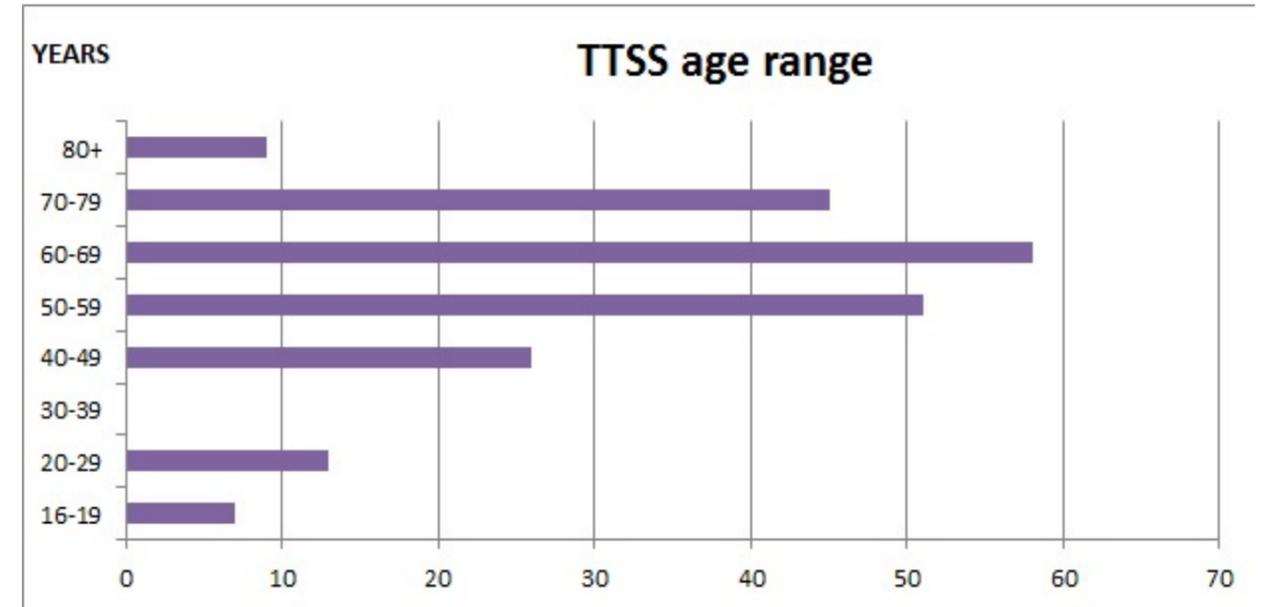
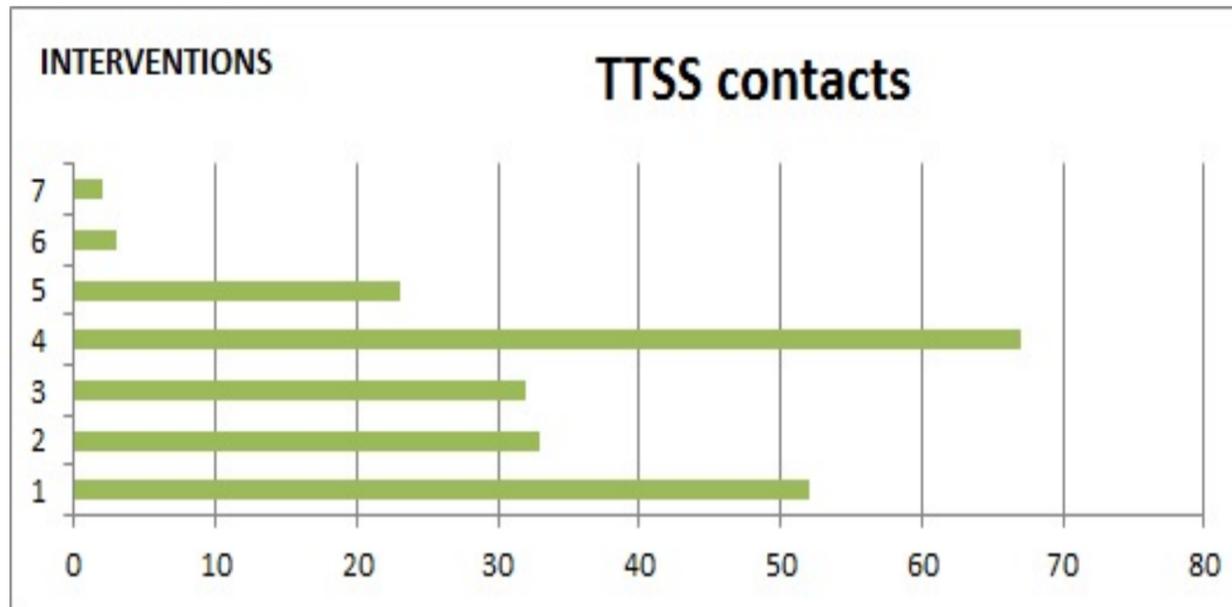
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Between March 2017 and March 2018 220 patients were referred to TTSS. 96 Male : 124 Female; age range - 16 to 89

Referral numbers:

- 81 for fatigue
- 71 for musculoskeletal issues
- 42 for physical activity issues
- 20 for mobility issues
- 6 for breathlessness.

47 of 66 completed datasets. Positive quality of life outcomes demonstrated  
No. of contacts = 629, mode average = 4 interventions, range 1 to 7  
Average time per intervention = 56 minutes.



## Patient Quotes

“This was a really empowering experience for someone who felt nervous about their physical abilities and body image, thank you for support”

“Thank you so much for all the advice you have given, I don't feel like I am waiting around to die any more, I feel like I can live well!”

## Conclusion

Fatigue is the primary reason for referral to TTSS and its interventions have shown a positive impact upon quality of life. With fatigue recognised as the symptom that most impacts upon quality of life, an intervention such as TTSS could have a beneficial effect for individuals living with and beyond

cancer enabling return to work for a significant number of working age adults. A more detailed enquiry is required to investigate this service model.

## *Cancer in the Long-Term Plan for the NHS*

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Evidence from the Chartered Society of Physiotherapy (CSP) and the Association of Chartered Physiotherapists in Oncology and Palliative Care (ACPOPC) submitted to NHS England during the consultation period in Autumn 2018.

### *About the Chartered Society of Physiotherapy*

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The CSP is the professional, educational and trade union body for the UK's 57,000 chartered physiotherapists, physiotherapy students and support workers. The contribution of the physiotherapy workforce can be seen throughout a cancer care pathway. This may include leadership of multi-disciplinary teams, case management, prehabilitation before and during medical intervention, and rehabilitation within acute, palliative care and community settings. Physiotherapy supports people living with and beyond cancer. Registered physiotherapists are autonomous, independent practitioners. They give expert advice and support to patients before, during and after cancer treatment. They aim to optimise health, regain function and mobility and manage long-term consequences of cancer and cancer treatment. Support workers work with people directly on rehabilitation exercise. They provide care and support for people through individual and group moderate intensity physical activity programmes. They also support carers.

### *About the Association of Chartered Physiotherapists in Oncology and Palliative Care*

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The Association of Chartered Physiotherapists in Oncology and Palliative Care (ACPOPC) is a professional network of the Chartered Society of Physiotherapy. ACPOPC's members are physiotherapists working in cancer and palliative care. We actively develop and promote high standards of physiotherapy practice for patients with cancer and/or palliative care needs. We inform and influence healthcare policy on behalf of members, strive to modernise service model delivery and support and champion education and research.

#### 1.0 What are your top three priorities for improving cancer outcomes and care over the next 5 and 10 years?

With the number of people living with and beyond a cancer diagnosis increasing in the last decade and set to increase over the next 10 years, more importance needs to be placed on provision of, and equity of access to, high quality rehabilitation. This needs to be the next big area for research and development in cancer care.

As cancer services develop, there needs to be an emphasis on rehabilitation interventions that are multimodal and multi-professional, as part of a rehabilitation continuum that spans the cancer care and survivorship pathway. There also needs to be better communication and integration across other long-term condition pathways. Rehabilitation is an essential element of care to achieve the best possible outcomes with patients before, during and after cancer. High quality rehabilitation for anyone living with or recovering from cancer needs to be personalised, holistic and universal. There is now a good evidence-base for prehabilitation. Prehabilitation is a type of specific rehabilitation based intervention, delivered earlier in the pathway to prepare people, mentally and physically, for their cancer treatment. There is growing evidence of the positive impact on treatment outcomes that optimising physical function through moderate intensity physical activity before and during treatment has. The evidence for prehabilitation is evolving, and there is research currently underway to better understand regimes for different tumour groups, all of which should be used to inform the development of services.

The rehabilitation needs of people living with and beyond cancer need to be considered in the long term. People need ongoing support to manage the long term consequences of cancer and its treatment. Because of medical advances in cancer care, it is now a long term condition. Ongoing needs are not currently met which results in greater levels of disabilities and other long term health problems. These impact negatively on the lives of individuals and cause ongoing demands on the health and social care system.

7 out of every 10 people with cancer are living with at least one other long term condition. With better survival rates this is likely to become a growing challenge. There is therefore a need for rehabilitation staff to work across condition boundaries. This requires work to upskill the wider workforce in cancer care.

We suggest that the three top priorities are:

- 1.1 All specialist cancer centres and hospices should include a rehabilitation team with the capacity to provide tailored support for all patients. These teams should provide screening and assessment of rehabilitation needs, stratified according to need. This would have a substantial effect for patients in terms of optimising outcomes and improving quality of life.

The decision to organise cancer services into fewer centres of excellence has improved the quality of medical treatment for patients. However, the rehabilitative care within these centres is inconsistent. Some cancer units having access to physiotherapists and other allied health professionals in both their outpatient and inpatient services. Yet others have very little or no access in some settings, such as outpatients. There is inequity of access to rehabilitation services between cancer types, particularly in the acute sector.

Similarly, provision is unequal within palliative care and hospices. Now that people can routinely expect to live for several years, they require ongoing palliative support to optimise function, quality of life and reduce the need for care in the last months or years of life. However rehabilitation within palliative care services for people with cancer has not always kept pace with the change.

Commissioning of rehabilitation teams need to be standardised across settings

#### In five years

All specialist cancer centres, including acute secondary care and tertiary referral centres, need to have an adequate workforce of specialist cancer physiotherapy and allied health professionals to develop sustainable cancer service delivery models and pathways. Palliative care services should be encouraged and supported to have established rehabilitation workforce provision. This needs increased capacity to provide in-service training, advice and outreach support to community based general rehabilitation services and primary care. This is a key aspect of integrated care, often overlooked but central to supporting more and more people to live well with incurable cancer diagnoses and multimorbidity.

The significance of rehabilitative care within cancer centres and palliative care services will need to be reflected within senior healthcare leadership. Multi-professional management structures needed to truly inform progressive service development and sustainability.

#### In ten years

Rehabilitation services should work across the boundaries of sector and settings. Specialist teams would work in a more integrated way with community services. We would follow patients across the pathway through digital monitoring and follow up. Evidence is growing to support the need to 'front-load' rehabilitation services. These should be provided earlier in the cancer pathway in order to equip people for the increasing intensive cancer treatments required to improve survival. This has become particularly evident in people who receive neoadjuvant chemo prior to major surgical resections.(1-3)

ACPOPC and the CSP are supportive of NHS England Cancer Transformation bid funding initiative to develop and evaluate a 'fit for surgery' prehabilitation programme. This includes fitness testing, exercise intervention, behaviour change support and psychological support. Based on emerging evidence as it develops, in ten years time this needs to have been implemented both for patients pre surgery and patients before other forms of treatment.

#### 1.2 Establish a common set of rehabilitation outcomes to support better commissioning and service improvement

There is a lack of good quality data on rehabilitation services to inform commissioning decisions and allow decision-making about need and unmet need for people living with and beyond cancer. For example, the Transforming Cancer Services Team in London has reported there is no existing database of cancer rehabilitation metrics that can support the needs of commissioners in London and help inform their decision making.

The lack of data is a feature of all areas of rehabilitation services delivery, and most of the outcome data requirements are common across rehabilitation pathways. This urgently needs addressing in the long term plan for cancer care and all rehabilitation services. This requires upfront investment in piloting standardised data collection to test that this can be collected at scale.

#### In five years time

There should be a standardised dataset for cancer rehabilitation, integrated with the new mandatory community data set. A full roll out to all cancer rehabilitation services in England should be informed by a pilot to test what can be collected at scale. This has the potential to be aligned with national cancer registries to contribute to the longitudinal data required to continuing improving outcomes for people living with and beyond cancer.

#### In ten years time

The learning from this should have been used to establish a common rehabilitation data set across all long term conditions, focused on symptoms not diagnosis, integrated with the new mandatory community data set but spanning sectors.

1.3 Community-based rehabilitation services need to be available for all people with rehabilitation needs, relating to a range of conditions, including those living with and beyond cancer.

Cancer symptoms such as fatigue, deconditioning and pain are common to a range of longterm conditions. Many people with cancer have co-morbidities, such as cardiovascular disease, mental health conditions or osteoporosis. This adds to the complexity of their rehabilitation needs, and puts a burden on individuals, society and the health and care system in terms of their health and care needs.

Capacity and capability in general community rehabilitation services needs to be significantly developed to meet rehabilitation needs arising from patients with multiple long term conditions, frailty and complex symptoms. There is also a need to consider the number of people with a history of cancer, living longer and the emerging evidence that more people are living long enough to receive a second diagnosis of cancer later in life. Community rehabilitation services should be organised around GP networks but with strengthened links to specialist rehabilitation teams in cancer centers. Using local leisure and voluntary services where appropriate should be part of an enhanced community rehabilitation model. Consideration should be made towards co-locating services from different sectors in easily accessible community locations.

#### In five years time

Community rehabilitation services should be part of the cancer pathway, with capacity in the system to enable timely and effective transition of care from acute care. Following an assessment of need, as part of the overall management of their survivorship rehabilitation programme, all patients living with and beyond cancer with rehabilitation needs should be referred to their local community rehabilitation team.

Community based rehabilitation services should be readily available for people living with and beyond cancer whose needs emerge later, through self-referral and referral from primary care.

#### In ten years time

Physiotherapy staff should be able to work flexibly across acute, community and primary care sector boundaries. They will be providing outreach and in-reach services to meet patient needs and ensure continuity of care. This may mean community rehabilitation team staff coming into hospitals to working with people in the latter stages of hospital-based rehabilitation and working with them following transition to the community sector. It could equally involve acute sector staff following patients into the community, as part of an integrated service.

2.0 What more can be done to ensure that more cancers are prevented, more cancers are diagnosed early and quickly, people can maintain a good quality of life during and after treatment, and people with cancer have a good experience of care.

2.1 Six month rehabilitation programmes as part of the cancer care have a proven benefit to patients physical fitness levels.(4) This results in better outcomes, secondary prevention, and increases for patients in their confidence, function and mobility.

2.2 Prehabilitation physical activity interventions for people with cancer focus on cardiovascular health and/or muscle strengthening before and during treatment or surgery. For example, for abdominal cancer, improving physical fitness and having pulmonary physiotherapy is effective in reducing pulmonary complications.(5) For patients with bladder cancer, strength and endurance exercises prior to radical cystectomy showed improved mobilisation and ability to perform daily tasks.(6)

2.2 Rehabilitation supports people to; manage health conditions and disabilities caused by cancer and its treatment, reduce disease progression. They increase people's ability to manage health conditions and disabilities caused by cancer and its treatment. This enables them to regain confidence, function and mobility. For example, the progression of prostate cancer was reduced by 57% among men who engaged in three hours a week of moderate intensity exercise.(7) There is similar evidence for breast and colorectal cancers.

2.3 Common impairments and side effects of breast cancer include lymphoedema, shoulder dysfunction, fatigue and pain. People who receive physiotherapy from the day after breast cancer surgery can have improved shoulder mobility and function, lower rates of lymphodema and lower rates of referral for outpatient physiotherapy after 6 months.(8)

2.4 Radiation therapy causes decreased bone density, muscular atrophy and fibrosis, muscle spasms and pain. These have both an immediate impact on recovery and long-term health. Loss of bone density is linked to a high risk of osteoporosis and fragility fractures. Rehabilitation exercise is required during and immediately after treatment, and later on. There is a wealth of evidence to show how physiotherapy supports people to strengthen their bones and reduce their risk of falling through strength and balance exercises.(9)

- 2.5 Half of all people diagnosed with cancer annually are of working age. The current number of people of working age with cancer is 890 000. (10) People living beyond cancer are 1.4 times more likely to be unemployed. Exercise, combined with counselling and patient education nearly doubles the likelihood of a person surviving cancer returning to work.(11)
- 2.6 All cancer patients need to have an expert assessment of rehabilitation needs. This should stratify patients for continuation of rehabilitation within an oncology department, referral to community rehabilitation or to support for self-care from professional trainers, voluntary organisations or leisure services.
- 2.7 Community services need to be in place for oncology departments to effectively handover patients for ongoing rehabilitation. Community rehabilitation services are over-stretched and coverage is uneven. This can often result in acute teams delaying referral of patients to community services or not referring them at all.
- 2.8 In the future services should not be delineated by sector and setting (ie acute and community) but rather operate much more flexibly across pathways, to improve the continuity of care for patients and better share expertise.
- 2.9 Physical inactivity is a major public health concern, directly linked to increased risk of developing many long-term health conditions, including cancer. Cross-sector collaboration is required to provide accessible, structured exercise programmes and behavior-change support to increase levels of physical activity. This is key to improving health outcomes and has a strong role in secondary prevention, regaining the confidence, function and mobility people need to resume active live. Physiotherapists have a particular role to play supporting people with long term conditions or disabilities to become more physically active.
- 3.0 How can we recruit, train and retain the workforce to deliver the changes we need and the priorities you have shared?

- 3.1 Modelling work for the Department of Health by the Centre for Workforce Intelligence demonstrated the need to growth of the rehabilitation workforce, including registered physiotherapists, other AHPS and physiotherapy and AHP support workers.(12)
- 3.2 The registered physiotherapy workforce is going through a period of growth, with over 40% increase in the number of pre-registration training places available in England since 2015/16. Unlike some other clinical professions there is a strong demand to train and a low drop-out rate. There are strong indicators from education providers that further growth can be anticipated. This should be utilised to improve cancer rehabilitation and community rehabilitation services more broadly.
- 3.3 A physiotherapy workforce with skills in cancer care and assessing rehabilitation needs of people with a range of long term conditions needs to be expanded and further utilised. In particular, developing advanced practice roles in both acute and community teams would enhance care pathways, enable stratified assessment of rehabilitation needs.
- 3.4 The physiotherapy support worker workforce could be providing more one to one support with therapeutic exercises and delivering group exercise classes. They could perform delegated duties at a higher level of independence if structured, standardised development opportunities are provided and appropriate clinical governance structures are put in place.
- 3.5 Contracts should build in time for NHS staff to share expertise and new developments in cancer care across disease specific and generalist rehabilitation services, regardless of employer. This should include a call on employers to support physiotherapists to lead and engage in high quality research activity and analysis of rehabilitation datasets, as part of their job plans, to further prove the efficacy and cost-effectiveness of cancer rehabilitation.

- 3.6 Exercise professionals in leisure and voluntary services have an important role to meet low rehabilitation needs, and supporting people to self-manage. Their contribution needs to be part of the rehabilitation pathway for those living with and beyond cancer. Physiotherapists have a particular role in developing activity suitable activity programmes for delivery by non-clinical staff, and advising such staff on the ongoing suitability of programmes.
- 3.7 The role of the clinical nurse specialist (CNS) in cancer is well established and is associated with improved satisfaction of people having cancer treatment. The desire to increase the CNS workforce has been hampered by the shortage of adequately trained nursing staff. This is resulting in unfilled vacancies. Allied health professionals, especially physiotherapists, could be a solution if these roles were developed to focus on the required capabilities, not on a single profession. Many of the needs identified as part of Macmillan cancer support holistic needs assessment (HNA), predominately carried out by CNSs, are specifically related to the expertise that physiotherapists are trained to assess and manage. Wider use of the AHP workforce to provide high quality, person centered, named key worker input, like that of CNSs could allow all people with cancer better access to the holistic care they need during cancer treatment. This role could also develop to include integration of patient care across all parts of the pathway – enabling greater sharing of expertise across sectors.
- 4.0 How can we address the variation and inequality to ensure that everyone has access to the best diagnostic services, treatment and care?
- 4.1 There is significant variation and inequality in rehabilitation for people living with and beyond cancer, but this is impossible to address without a shared rehabilitation data set and agreed outcomes to measure need, impact of services or identify gaps.

- 4.2 Those who do not get the support they need to regain function and mobility are more likely to develop lasting disabilities and debilitation despite an improved life expectancy post cancer treatment. This can lead to socio-economic disadvantage, disability and social exclusion.
- 4.3 Health Equality Assessments should be mandatory for all cancer service planning and delivery. The mandate should include: a minimum dataset for monitoring all cancer services and includes inequalities measures; health equity audit (HEA) as part of routine monitoring for all cancer services and reporting on actions taken to address inequalities identified through HEA.
- 4.4 To address variation the palliative care service delivery model and funding needs specific attention. The current system is out of step with the reality that many people with a terminal cancer diagnosis will live for several years, with an accumulative symptom burden from repeated cancer treatments. The services need to be developed to meet these need. There needs to be less reliance on voluntary donations to fund palliative care.

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**of Physiotherapy 17 September 2018**

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