NCAT

National Cancer Action Team

Part of the National Cancer Programme

NHS

Cancer Rehabilitation

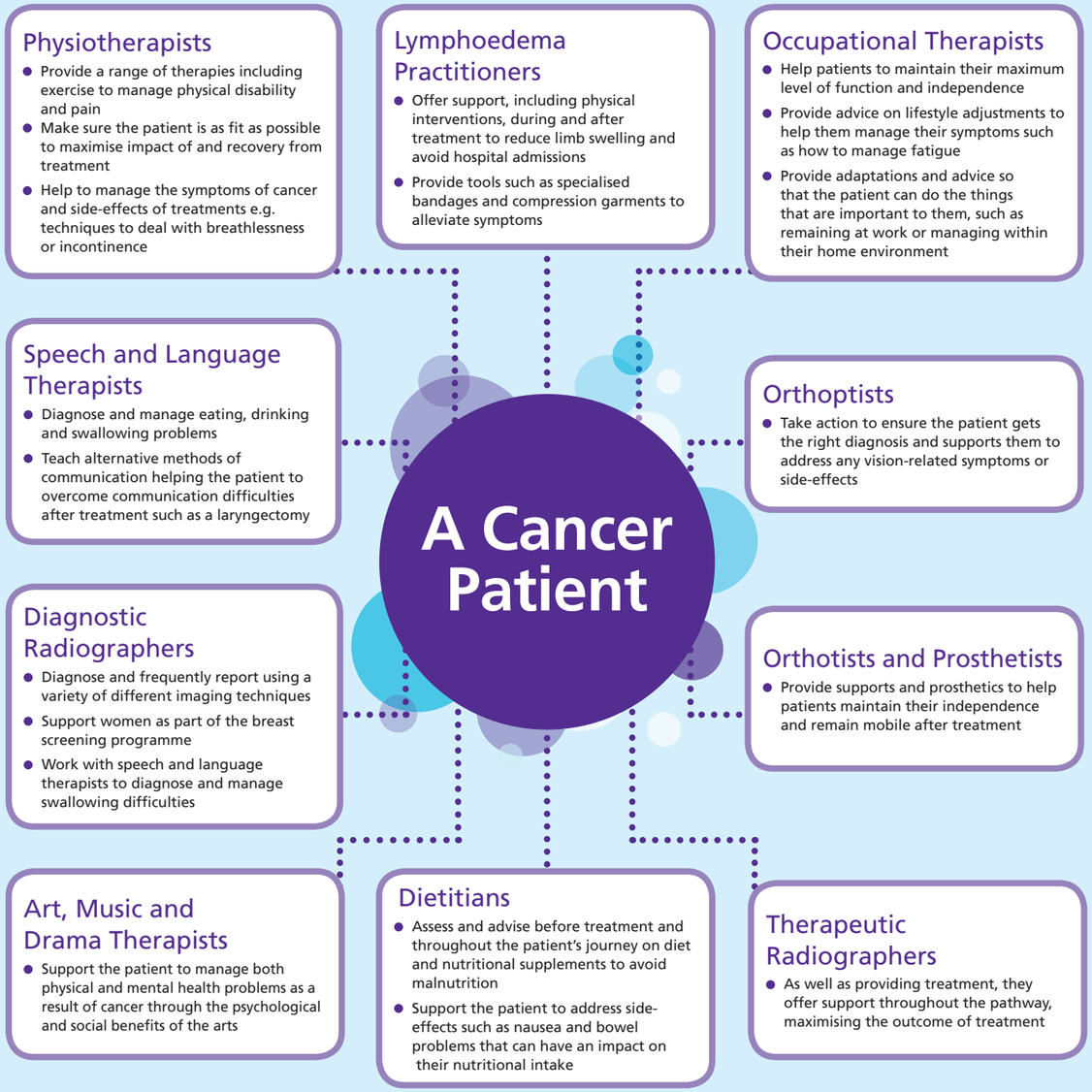
Making excellent cancer care possible

March 2013

WE ARE MACMILLAN. CANCER SUPPORT

The **many 'faces'** of cancer rehabilitation

Cancer rehabilitation involves a wide range of AHPs carrying out different roles throughout the pathway. They deliver specialist interventions that complement the skills of other team members. Different patients will have different rehabilitation needs, depending on the type, location and stage of their cancer.



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Foreword

In order to achieve the best cancer outcomes for patients in the UK, it is critical that NHS resources are deployed to best effect. While treatment techniques have radically improved life expectancy for people diagnosed with cancer, it is time to build on this improvement. Rehabilitation and reablement are fundamental to ensuring that we maximise the effect of treatment for people with cancer. Focusing on rehabilitation will enable us to make sure each person can make choices that maximise their potential to live life the way they want to and improve health outcomes. It is not an optional 'add on' but integral to high quality, cost effective care.

Well thought out and commissioned rehabilitation services will play a large part in getting people home quicker, keeping them out of hospital and improving health outcomes. These services are vital at all stages of the patient journey; from prehabilitation ensuring an individual is as well as possible before surgery through to end of life care and helping them stay in their home as long as possible. This is a key part of the National Cancer Survivorship Initiative which outlines the role rehabilitation has to play in supporting people to manage as their needs change.

It is clear that more needs to be done to integrate services across health and social care. Allied Health Professionals delivering rehabilitation with others are already ensuring this happens by focusing on each individual's holistic needs, however complex. However their skills could be used more effectively and consistently to deliver the outcomes all of us would wish to see.

This short publication identifies and provides illustrations of the potential impact of well commissioned rehabilitation services. It outlines key recommendations, which providers and commissioners will wish to consider to ensure that all people living with and beyond cancer can access high quality, cost effective rehabilitation services that meet their needs.

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Executive summary

This publication aims to raise understanding and awareness amongst commissioners and providers of the role of rehabilitation for the individual diagnosed and living with and beyond cancer.

The need for rehabilitation is increasingly well documented and understood in long term conditions and supports the National Cancer Survivorship Initiative. As more and more people survive and now live with cancer, early intervention and continuing access to rehabilitation can minimise the often predictable effects of lengthy treatment and the level of disability resulting from the disease itself. Closer integration between health and social care is also required to deliver excellent care and rehabilitation to people living with complex health needs.

It is clear that without effective rehabilitation, the benefit of treatment will be limited and the health outcomes delivered by cancer services will be diminished. Through relatively modest planning and investment in rehabilitation services, it is possible to achieve significant outcome benefits, reduce avoidable ill health and improve quality of provision, unlocking savings in other parts of the pathway, and thereby delivering on important NHS priorities.

Building the case for change is essential if commissioners are to comply with NICE Supportive and Palliative Care guidance which states that people with cancer should be 'offered a comprehensive care and rehabilitation package at the time of diagnosis. This includes information on prognosis and treatment, rehabilitation and nutrition'.[1]

Commissioners will wish to:

- Understand the rehabilitation needs of the local population – almost all cancer patients will need rehabilitation at some point in their cancer journey
- Maximise resources – rehabilitation makes savings for the NHS by promoting self-management, reducing readmission rates and lowering the cost of care in the home
- Consider developing a survivorship strategy – rehabilitation is a crucial element that will promote and sustain recovery following primary treatments for cancer and enable people to manage the consequences of treatment through the survivorship recovery package
- Commission care across a care pathway - It is essential that care is coordinated between hospital and community settings including hospice care

Providers will wish to:

- Focus on outcomes – rehabilitation makes significant improvements to patient outcomes at all stages
- Maximise resources – rehabilitation makes savings across the health economy by ensuring that patients are as independent as possible to reduce the burden of care in the home
- Make the most of AHPs – they are trained to assess, anticipate needs and plan care with patients, helping them to agree achievable outcomes and the best solutions to keep them independent by educating and supporting them to self-manage where they are able
- Learn from examples of good and innovative practice - examples are given throughout this document and resources are identified

This document summarises the current evidence for appropriately resourced cancer rehabilitation and how resulting health outcomes meet and exceed the indicators within the Outcomes Frameworks. It also sets out the key recommendations which commissioners and providers should consider as they assess the quality of their local services and plan improvements.

The Case for **Rehabilitation** and its **Characteristics**

Rehabilitation aims to restore, as far as possible, a person's roles and functions whether affected by physical or mental ill health and help them adjust to limitations where required. These roles and functions may be relevant to any context including the family, society or work.

There are now 1.8 million people in England living with or beyond cancer[2] and this is predicted to rise to 3 million by 2030. All will experience the shock of a cancer diagnosis and most will undergo often lengthy and intensive cancer treatment. However, diagnosis is just the start of people's experience and many patients will need help in adapting to their new life and fulfilling their potential. Rehabilitation is integral to high quality care and can no longer be viewed as a 'bolt on' to treatments such as surgery. It is a central element of cancer care, enabling patients to make the most of their lives by maximising the outcomes of their treatment and minimising side effects and symptoms such as fatigue, breathlessness and lymphoedema. It also has a role to play in public health agendas such as nutrition, obesity and physical activity.

Cancer Rehabilitation in numbers

40% of all cancers in the UK are linked to alcohol, diet, obesity, and inactivity[3]

8.7% of breast cancer cases are attributable to excess weight and obesity

24% of oesophageal cancers are attributable to excess weight and obesity

20% of patients who undergo surgery for breast cancer will go on to develop lympho-edema in their arm[4]

40% of cancer patients have been found to have malnutrition

60% of prescriptions for oral nutritional supplements do not meet Advisory Committee on Borderline Substances (ACBS) prescribing criteria

50% of people with cancer have breath-lessness

70 - 100% of patients receiving anti-cancer treatments are affected by fatigue that may persist for years[5]

30% of cancer patients have unmet needs after treatment for cancer, which could be addressed by rehab-ilitation[6]

22% of cancer patients report moderate or severe problems with their mobility and carrying out usual activities[7]

What is rehabilitation?

Rehabilitation is an essential component of the cancer journey and aims to optimise the patient's physical, psychological and economic functioning while ensuring their dignity.

Rehabilitation should start at the point of diagnosis, helping patients prepare for treatment ('prehabilitation') and transfer home, as well as recover from its effects. It can help patients get well and stay well, help people return to or adjust to work, reducing the chances of recurrence, complications or adverse consequences of treatment, some of which can be avoided or their impact limited.

Rehabilitation maximises outcomes for patients by anticipating the problems they might face during their treatment and helping to make changes to manage these before they happen. This means helping patients to live their lives, to maintain their independence and to address the practical problems caused by their disease and treatment. By helping patients become as independent as possible, rehabilitation can also minimise the impact on carers.

There are four stages of cancer rehabilitation:[8]

1. Preventative – aiming to reduce the impact of expected disabilities and provide assistance in learning to cope with any disabilities
2. Restorative – aiming to return the patient to pre-illness level of function without disability
3. Supportive – aiming to limit functional loss and provide support in the presence of persistent diseases and the continual need for treatment
4. Palliative – aiming to put in place measures to eliminate or reduce complications and provide support such as symptom management

High quality rehabilitation services all have the following characteristics[9]. They:

- Are patient focused, problem solving and based on prevention of long term effects
- Contribute to better patient experience with an emphasis on the key parts of the pathway that patients and family carers find challenging
- Provide timely access to appropriate elements of rehabilitation based on an accurate holistic needs assessment, and shared goal setting with the patient
- Ensure co-ordination of ongoing assessment and interventions through a multi-disciplinary approach
- Provide the patient with the tools they need to regain independence as far as possible while adjusting to any residual limitations and therefore being able to self manage their condition
- Assist delivery of a seamless service in the most appropriate setting that ensures that individuals do not 'fall between services' and maximises an individual's quality of life and social inclusion
- Are based on sound evidence, are compliant with Improving Outcomes Guidance (IOG) and contribute to achieving the priorities in both the NHS[10] and Adult Social Care[11] Outcomes Frameworks
- Make full use of outcome measures to understand their impact on delivering high quality services across organisational/health and social care boundaries
- Make effective use of skill mix and recognise the role of the oncology specialist and generalist allied health professionals and the supporting role of the health care assistant
- Provide training to other healthcare professionals to ensure rehabilitation is supported across the whole pathway

Allied Health Professionals (AHPs) are the only healthcare professionals whose primary qualification is in rehabilitation.

They:

- Take a holistic approach, considering the interactions of biological, psychological and social factors when working with patients
- Anticipate potential problems when assessing patients and their family's needs
- Work with the patient to identify what is important to them and provide tools and techniques to overcome symptoms and ensure they can achieve the outcomes that matter most to them
- Take an informed approach to risk taking with the individual to ensure they maximise their potential for rehabilitation
- Enable the patient to be the expert by educating rather than doing unto them by educating and supporting them to self-manage
- Focus on the things people take for granted, because having cancer can affect every part of a patient's life, including living their life in their own home, being able to eat, speak or work
- Use extended roles, such as supplementary prescribing to enhance pain management and diagnostic testing including, for example, videofluoroscopy
- Work across health and social care

A patient's perspective of rehabilitation

'to me the speech and language element of my treatment was of equal importance to the surgical and other elements of treatment I received. Given the nature of the cancer and destructive nature of the surgery, how I would be able to communicate and eat post surgery were as of much concern to me as the basic survival element. How could I be expected to continue a fulfilling life without being able to communicate and eat; two pretty fundamental elements of any normal life?'

Patient recovering from mouth cancer

AHPs that may be involved in cancer management:

- Art, Music and Drama Therapists
- Dietitians
- Diagnostic Radiographers
- Occupational Therapists
- Orthoptists
- Physiotherapists
- Podiatrists
- Prosthetists and Orthotists
- Speech and Language Therapists
- Therapeutic Radiographers

*Lymphoedema practitioners have a primary qualification in physiotherapy, occupational therapy or nursing

Why commission or provide **rehabilitation**?

Rehabilitation improves patients' outcomes and experience and helps the NHS achieve value for money.

As well as delivering important benefits in itself, rehabilitation can help patients self-manage, which is an essential component of risk stratification outlined by the National Cancer Survivorship Initiative document.[12] Focusing treatment interventions on patients according to their needs and their risk of consequent ill health will help focus resources on what will make the biggest difference to patients.

Rehabilitation can deliver important improvements for the NHS by achieving key outcomes, as well as leading to more efficient services.

Outcomes benefits for the patient

- Reduced risk of recurrence of cancer, leading to improved survival
- Enhanced quality of life, wellbeing and experience, measured through PROMs, Patient Experience surveys and other measures
- Timely and appropriate follow up and onward referral to appropriate specialists.
- Increased likelihood of returning to work[13]
- Accelerated recovery from treatment through prehabilitation and early access to rehabilitation
- Prevention of secondary complications
- Fewer and less severe adverse consequences of treatment
- Fitter and more able therefore increasing independence
- Assist identification of preferences and appropriate goals in palliative and end of life care
- Swift and timely access to equipment/resources
- Development of patient centred goals which aim to optimise engagement and independence
- Reduce impact on families and carers

Efficiency benefits for the system

- Improved management of co-morbidities
- Anticipatory/proactive approach
- Reduced length of stay
- Fewer readmissions
- Identification of self-management strategies reducing need for support
- Reduced emergency admissions
- Reduced use of HDU beds
- Effective use of the whole workforce
- Reduced burden of care
- Seamless interfaces across patient journey to promote continuity
- Early identification of consequences of treatment and disease progression
- Return to work - benefits to economic system

Improving **Patient Outcomes**

From prevention through diagnosis, treatment and palliative care to the end of life, rehabilitation improves patient outcomes, not only preventing premature deaths but also enhancing the quality of life for people with long-term conditions and supporting swift recovery. The following section outlines how making better use of cancer rehabilitation will enhance the outcomes identified in the 5 Domains of the NHS Outcomes Framework 2013/14. At the same time rehabilitation will contribute to the priorities identified in the Adult Social Care Outcomes Framework in particular domains 1 and 2, namely enhancing quality of life for people with care and support needs and delaying and reducing the need for care and support.

Domain 1. Preventing people dying prematurely

Rehabilitation anticipates potentially serious effects of cancer and cancer treatments.

- Videofluoroscopy is a modification of the standard barium swallow examination used in the assessment and management of oropharyngeal swallowing disorders. It can be used for assessment, treatment and management of swallowing in a range of client populations, where the suspected condition or disease process impacts on swallow function and may result in a risk of death, pneumonia, dehydration, malnutrition and psychosocial issues related to discomfort and difficulty eating and drinking[14]. At Glasgow Royal Infirmary, delivering the videofluoroscopy clinics with radiographers and speech and language therapists rather than consultant radiologists and speech and language therapists, saved £33,800 a year. This could equate to a national saving of £4.2 million annually[15] with no reduction in the quality of care for patients

- The costs of early nutritional care are low especially in frail, malnourished patients[16]. Studies have found that screening with the short nutritional assessment questionnaire and early standardised nutritional care improves the recognition of malnourished patients provides the opportunity to start treatment at an early stage of hospitalisation

Domain 2. Enhancing quality of life for people with long-term conditions

Early rehabilitation provided at or before diagnosis can prevent complications, reduce length of stay and readmissions and improve patient experience

- Heart of England NHS Foundation Trust has introduced an evidence-based rehabilitation service for patients requiring surgery for lung cancer to reduce post-operative pulmonary complication rates. The programme offers a nutritional status assessment and advice, patient education, including smoking cessation, and an exercise programme to improve respiratory capacity. A team of pulmonary physiotherapists, nurses and dietitians delivers the programme

  A review of the service found that it:

  - Reduced post-operative complication rates from 18.7% to 11.4%
  - Cut average length of stay from 7.2 days to 5.7 days
  - Reduced intensive care admissions from 3.2% to 2.9%
  - Led to fewer readmissions, from 16.1% to 5.7%
  - Achieved per patient savings of £1257.42[18]

  "taking part in the physiotherapy classes to improve my fitness before surgery would aid a quicker recovery and it did as I was only four days in hospital after surgery"

  Dietitians assess and recommend appropriate oral nutritional supplements for patients at risk of weight loss prior to surgery. Patients who take these supplements have been shown to have fewer wound site infections[19]

Improving independence

- A meta-analysis of physiotherapy in approximately 1,000 cancer patients showed clear improvements on standardised measurements in activities such as transfers from wheelchair to bed, managing stairs and bladder control[20]

Rehabilitation ahead of surgery reduces risk of life threatening complications

Cardio-pulmonary exercise testing indicated that an ex-smoker with pancreatic cancer was unfit for surgery. His lifestyle was sedentary and, although previously an avid golfer, was unable to play. The physiotherapist prescribed twice weekly supervised exercise aimed at increasing his cardiovascular fitness. He was also provided with a pedometer and walking programme to carry out at home. Following the eight week programme, re-testing showed significant improvement. This ensured that surgery could proceed with a greatly reduced risk of postoperative complications and he was able to return to playing golf.[17].

- Physical, psychological and vocational support can help more cancer patients to return to work[21], potentially saving the government £30 million a year, through reduced cost of benefits and increased income tax receipts.[22] An evaluation has demonstrated the benefit of embedding work support into the whole patient pathway with specialist vocational rehabilitation such as that delivered at the National Hospital for Neurology and Neurosurgery for those who have complex needs[23]

Making the best use of specialists

- The Greater Manchester and Cheshire Cancer Network employs two specialist AHPs to work with brain and central nervous system tumour patients in a new and innovative way. Patients with brain tumours have complex needs, including poor co-ordination, speech difficulties, motor and tonal changes, or loss of sensation, which all affect the individual's ability to walk, manage their personal care or work. By providing specialist assessment the AHPs act as advocate/navigator for patients ensuring they receive appropriate rehabilitation. They educate and train the wider rehabilitation workforce in community services closer to the patient's home to manage these patients' needs appropriately and act as a resource on an ongoing basis. This ensures their specialist skills are effectively used to support a much larger number of patients and provides better continuity of care along the care pathway[24]

Rehabilitation can be appropriate at any stage in the patient journey

After eight weeks unable to walk or care for himself and considered terminally ill, a patient with lung cancer was transferred to a hospice and a multidisciplinary rehab team. The occupational therapists assessed his requirements and worked with him to solve his immediate need to manage his own personal care. In doing so, the therapists built a rapport with the patient and they encouraged him to agree to a number of rehabilitation goals. The physiotherapist helped him with graded exercises to increase his strength, enabling him to stand independently for the first time in 10 weeks and then walk with the aid of two people. His severe lymphoedema was managed with bandaging and exercise. The rehabilitation interventions motivated him to recognise that going home was a possibility. In four weeks, with skilled input from the therapists, he was able to progress to walking with an aid and managing stairs. By liaising with his family, social services and housing, the occupational therapists resolved complex housing problems and adaptations were made to enable the patient to return home.[25]

Domain 3. Helping people to recover from episodes of ill health or injury

Rehabilitation can impact on a person's speed of recovery and the quality of the outcomes.

Improved recovery

- Dietitians assess and recommend nutritional support for patients undergoing treatment for cancer. Nutritional support of undernourished patients reduces the risk of secondary infections e.g. wound abscesses and chest infections, improves recovery rates, and reduces length of stay in hospital. Implementing NICE guidelines would provide substantial savings[26]. It is conservatively estimated that even a 1% saving of the annual cost of care for malnutrition would amount to £130 million[27]

Reducing length of stay

- By introducing a dedicated occupational therapy service to the admissions unit, a foundation trust was able to identify patients requiring rehabilitation to manage fatigue, psychological effects and difficulties with activities ranging from personal care through to seating and wheelchair assessments. This enabled them to identify and put in place early appropriate therapeutic interventions that reduced length of stay by an average 3 days. In addition the percentage discharged before assessment fell from 13 to 3%, potentially preventing a number of avoidable readmissions[28]

Effectiveness of rehabilitation

- Implementing active treatment for lymphoedema using specialised hosiery and short stretch bandages costs £1162 compared to £3160 for standard management[15,] whilst achieving the same or better outcomes for patients.
- For every £1 spent on lymphoedema services, by limiting swelling and preventing damage and infection, the NHS saves £100 in reduced hospital admissions[29]

Domain 4. Ensuring that people have a positive experience of care

Improving patient experience

- Cancer patients undergoing painful treatments and procedures reported lower levels of distress and anxiety following individual art therapy sessions[30]. Women with breast cancer also reported significantly lower levels of depression, anxiety and somatic symptoms after art therapy[31]

- Preventative (swallowing) exercise programmes prescribed by speech & language therapists for patients undergoing chemo-radiotherapy for advanced head and neck cancer have been found to improve patients' quality of life and reduce the use of feeding tubes and stays in hospital.

  Patients who undertook the programme had:

  - Fewer days spent in hospital – 3.2 days compared to 4.5 days
  - Lower use of feeding tubes – 3% compared to 25%[32]

- Continuity of care becomes increasingly important to patients when they have complex problems. Patients value being able to consult the healthcare professional with whom they have formed a therapeutic relationship during treatment[33]. Evidence suggests that this can lead to greater patient satisfaction and lower needs for care[34]. One trust has introduced radiographer-led telecare follow-up, which aims to address cancer patients' unmet needs in the early post-radiotherapy treatment phase, when patients' acute radiotherapy side effects and psychosocial needs are often greatest. The scheduled call provides convenient, timely, personalised information and holistic support, including early detection of problems and prompt referral to medical specialties if necessary[35]

Innovative partnerships improve quality of care

A unique partnership between the Christie NHS Foundation Trust and Manchester United Football Club (MUFC) supported specialist physiotherapists and occupational therapists to work with young adults with cancer. These pioneering roles assist young people to adjust to living as normal a life as possible with cancer. The service is provided at hours to suit young patients. Interventions tailored to the individual include anxiety and anger management, finding solutions to encourage independence, exercise programmes (including hydrotherapy at the MUFC training ground), fatigue management and ensuring that equipment and wheelchairs are provided that meet each young person's specific needs. As a result, patients are better able to deal with their illness physically and psychologically[36].

Domain 5. Treating and caring for people in a safe environment and protecting them from avoidable harm

- Orthotists are specially trained to identify and develop interventions such as trunk braces for people with spinal cord metastases. These will provide stability and improve recovery as well as avoiding potential side effects such as prolapsed spine and paralysis, with the associated costly morbidities[15] For every £1 spent on orthotic services the NHS saves £4. This could represent a national saving of £400 million[37]

- Metastatic spinal cord compression can cause irreversible neurological damage that can lead to paralysis. Rapid recognition of the symptoms and referral for urgent treatment such as radiotherapy, steroids or surgery is crucial. Physiotherapists have raised awareness of the potential symptoms (Red Flags which indicate serious spinal pathology) amongst other healthcare professionals using credit card sized information cards. A study in Manchester showed that it cost just £800 to circulate 9,000 cards (8 pence each). Early recognition of MSCC would deliver substantial savings by preventing spinal cord compression. This would reduce the need for hospital admissions and intensive rehabilitation to manage an individual's loss of ability to walk and function without a wheelchair[15]

Physios using the red flag card to prevent irreversible cord compression

A lady was referred to physiotherapy with a history of 3 months thoracic pain being managed by morphine and recent referred leg pain. She had no history of cancer and a normal chest X-ray. As a result of a study day raising awareness of the red flag cards, the physiotherapist arranged an urgent MRI of the thoracic and lumbar spine. This showed large metastatic deposits at 4 thoracic vertebrae and imminent cord compression at one vertebral segment.

- Speech and language therapists with competencies in valve changing run a drop in valve replacement clinic for patients who have had a laryngectomy. This allows for problem solving issues as they arise as well as access to a greater range of valves for improved personalised care[38]. This can also prevent emergency hospital admissions, for example pneumonia, reduce the number of valve changes a patient needs, prevent the need for insertion of a nasogastric tube for feeding and replacement of the speaking valve in theatre. Approximately 2,300 people are diagnosed with laryngeal cancer each year and may require a speaking valve[39]. These are replaced at a minimum every 6 months. It is estimated that by avoiding these hospital admissions up to £1.6 million could be saved nationally, while offering a much better patient experience

- Physiotherapists provide advice about mobility and exercise. Advice about restricting shoulder movement in the first 7 days following a mastectomy for breast cancer can reduce the incidence of lymphoedema by 19%[40]

Key **Recommendations**

Commissioners, Health and Wellbeing Boards and providers should consider the following key recommendations:

Recommendations for Commissioners

- Understand the rehabilitation needs of the local population – almost all cancer patients will need rehabilitation at some point in their cancer journey
    - Map accurately the number of cancer patients in a local area in each tumour site specific pathway
    - Assess the different rehabilitation needs of patients at different stages of cancer, including the survivorship stage and palliative care
    - Cancer treatments take a major toll on patients and their bodies become deconditioned. They will need help to be able to maximise their ability, to manage aspects of their life previously taken for granted and improve their confidence to socialise and take part in physical activity
    - Work with patients and carers to identify the services which will help them most
    - Provide access to a Health and Well-being Clinic which includes advice on diet, mobility, speech, physical activity and vocational rehabilitation[41]
    - Consider aligning commissioning of cancer rehabilitation to that of other long term conditions

- Maximise resources – rehabilitation makes savings for the NHS by reducing admissions and promoting self-management and reducing the cost of care in the home
    - Make sure there is flexibility in how the care you commission can be delivered – different professionals or different locations can help to make savings
    - Ensuring that patients remain as independent as possible and recover quickly from their cancer treatments not only improves their experience but can mean services are delivered more efficiently and reduces the burden of care
    - Rehabilitation is cost-effective. Many problems patients face can be anticipated and early intervention can help to solve them quickly

- Focus on outcomes – rehabilitation makes significant improvements to patient outcomes at all stages
    - Rehabilitation is relevant to all five domains of the NHS Outcomes Framework and the Adult Social Care Outcomes Framework; commission services to deliver these
    - Use rehabilitation to minimise adverse outcomes – patient safety is improved by rehabilitation
    - Commission AHPs to deliver their extended roles, such as supplementary prescribing to improve outcomes

- Understand your rehabilitation services - high performing rehabilitation services have a clear and detailed understanding of their service (including from the patient and their family's perspective) and use metrics to analyse service quality and workforce required to deliver the service

  Key performance indicators (KPIs) that could be used by providers and commissioners include:
    - Clinical outcome measures e.g. quality of life questionnaires, brief fatigue inventory[42]
    - National patient experience surveys
    - Patient reported outcome measures e.g. MYMOP[43] which measure the impact of the intervention on the patient's main symptoms[44]
    - Waiting times for services and measures of whether services are available when patients need them
    - Proxy measures e.g. reduction in hospital readmission rates, length of stay in hospital, reduced complication rates

Recommendations for Providers

- Understand the rehabilitation needs of the local population – almost all cancer patients will need rehabilitation at some point in their cancer journey
    - Provide a workforce with skills and knowledge in cancer treatments
    - Consider how skill mix can be matched to rehabilitation needs making use of specialist AHPS where highly specialist skills are required to deliver services or advise wider teams and generalists where services are aligned with other rehabilitation services for long term conditions
    - Make sure the service uses a multi-disciplinary team approach
    - Consider access into prehabilitation programmes where appropriate
    - Ensure cancer rehabilitation advice and support e.g. for diet, mobility and speech is available as part of a Health and Well-being Clinic and access is available to vocational rehabilitation[44]

- Collect the data to understand your services and inform your commissioners
    - Patient reported outcome measures as well as relevant clinical outcome measures for rehabilitation should be collected routinely
    - Contribute to national audit projects such as DAHNO (Dataset for Head and Neck Oncology) to monitor equal access to services nationally

- Make the most of AHPs – they are trained to undertake assessments, to anticipate and meet patients' needs and can find the best solutions to keep patients independent
    - Make sure health and social care providers in acute trusts, community services and hospices are including AHPs as part of the multi-disciplinary teams delivering cancer care
    - Ensure the links between those services are in place
    - Use their expertise to plan and develop effective evidence based local pathways

In conclusion, rehabilitation can improve clinical outcomes, patient experience and make better use of health and social care resources. It will contribute to achieving important NHS priorities. However, to deliver on this potential, rehabilitation services need to be commissioned and provided effectively as illustrated throughout this document.

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Appendix 1 - Resources

There are a number of resources available that can help you to plan and manage cancer rehabilitation services:

- **The National Cancer Action Team has a range of information on its website, including rehabilitation pathways:**
  www.ncat.nhs.uk/our-work/living-beyond-cancer/cancer-rehabilitation#

The following resources may also be of interest:

- **A review of the evidence on cancer rehabilitation and palliative care services:**
  www.ncat.nhs.uk/sites/default/files/work-docs/NCAT_Rehab_EvidenceReview__2012FINAL24_1_12.pdf

- **A toolkit on how AHPs can save money and improve outcomes, produced by NHS London:**
  www.networks.nhs.uk/nhs-networks/ahp-networks/ahp-qipp-toolkits/AHP_Cancer_Pathway_final%20-3.pdf

- **An evidence review of specialist lymphoedema services, (2011) produced by Macmillan Cancer Support:**
  www.macmillan.org.uk/Documents/AboutUs/Commissioners/LymphoedemaServicesAnEvidenceReview.pdf

- **Back to Health, Back to Life, an overview of AHPs from the North East Allied Health Professions Collaborative:**
  www.networks.nhs.uk/nhs-networks/ahp-national-commissioning-network/messageboard/ahp-representation-on-gp-commissioning/612678166/228743211/back-to-health-back-to-life-feb-2012-pdf

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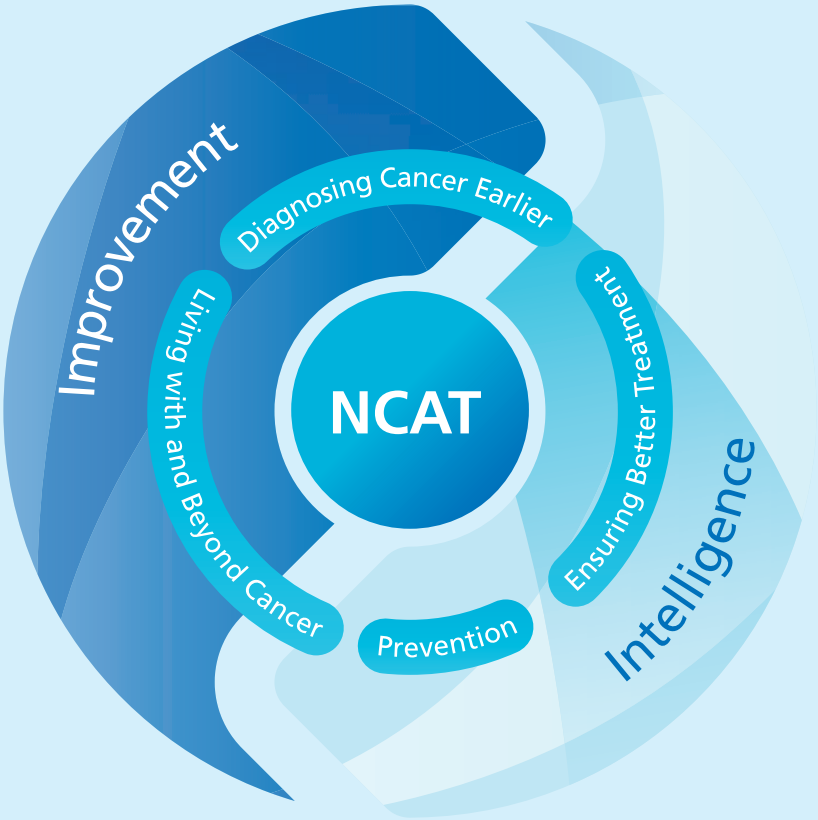

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