Lung Cancer Rehabilitation

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Lung Cancer Rehabilitation Literature Review
Cancer Rehabilitation

• The rationale behind cancer rehabilitation is to improve the patient’s quality of life by maximising their ability to function, to promote their independence and to help them to adapt to their condition. (Rankin J et al 2008)
Allied Health Professionals (AHPs)

- Help cancer patients not only recover from the physical changes of their illness and the impact of treatment but to help them function in every day activities and adapt to their new needs (National Cancer and Palliative Care Rehabilitation Workforce Project 2010)
Allied Health Professionals
(Nice 2004)

- Key professionals providing cancer rehabilitation (NCAT peer review measures)
  - Dieticians
  - Occupational therapists
  - Physiotherapists
  - Speech and language therapists
  - Lymphoedema Therapists

- Professionals that may contribute to the rehabilitation process
  - Podiatrists
  - Psychosexual counsellors
  - Stoma therapist
  - Therapy Radiographers
  - Appliance officers
  - Oral health specialists
## Range of AHP Competencies

<table>
<thead>
<tr>
<th>Level</th>
<th>Provider</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Involves all those providing day-to-day care for a patient: patient and carers, general nursing staff, therapy radiographers, assistant practitioners/support workers</td>
<td>Basic interventions including self-management, and care strategies initiated by generalist health care professionals</td>
</tr>
<tr>
<td>2</td>
<td>Involves all generalist AHPs</td>
<td>Interventions for commonly presenting rehabilitation needs: post-operative input and management of common side effects of treatment or functional impairment</td>
</tr>
<tr>
<td>3</td>
<td>Involves experienced AHPs with basic level of training in cancer rehabilitation working at senior level</td>
<td>Interventions that require professionals with knowledge and experience of effects of cancer treatment and aetiology. Interventions requiring knowledge of the impact of disease</td>
</tr>
<tr>
<td>4</td>
<td>Involves advanced practitioner AHPs who work predominantly or exclusively with patients with cancer. These AHPs will have received higher-level training in the rehabilitation needs of patients with cancer</td>
<td>Highly specialist interventions for patients: having radical surgery, advanced disease, severe functional impairment, undergoing combination of therapies and/or with complex end of life issues</td>
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Based on NICE (2004c) and Rankin (2008)
### Total WTE AHPs by Profession and Level of Expertise in MCCN against National Average per million population

<table>
<thead>
<tr>
<th>Profession</th>
<th>MCCN</th>
<th>National Average</th>
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</thead>
<tbody>
<tr>
<td>Dietetics Level 3</td>
<td>1.74</td>
<td>1.5</td>
</tr>
<tr>
<td>Dietetics Level 4</td>
<td>1.96</td>
<td>2.76</td>
</tr>
<tr>
<td>Lymphoedema Level 3</td>
<td>0.22</td>
<td>1.08</td>
</tr>
<tr>
<td>Lymphoedema Level 4</td>
<td>1.5</td>
<td>2.00</td>
</tr>
<tr>
<td>Occupational Therapists Level 3</td>
<td>0.17</td>
<td>2.20</td>
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<tr>
<td>Occupational Therapists Level 4</td>
<td>6.01</td>
<td>3.29</td>
</tr>
<tr>
<td>Physiotherapists Level 3</td>
<td>0.32</td>
<td>2.19</td>
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<tr>
<td>Physiotherapists Level 4</td>
<td>4.71</td>
<td>3.49</td>
</tr>
<tr>
<td>Speech and Language Therapists Level 3</td>
<td>0.22</td>
<td>0.88</td>
</tr>
<tr>
<td>Speech and Language Therapists Level 4</td>
<td>1.5</td>
<td>1.75</td>
</tr>
</tbody>
</table>
Research Priorities of Patients

• Corner and Wright et al (2007)
  – Fifteen areas identified by patients attending UK Cancer Treatment Centres
  – Top areas included ‘impact cancer has on life’, ‘how to live with cancer’ and the ‘management of practical, social and emotional issues’.
Functional Problems

• Cheville, Beck, Petersen, Marks & Gamble (2008)
  – American Study looking at identification of cancer related functional problems by Oncology Clinicians (not specific to lung cancer)
  – 202 patients. 65.8% of patients self identified a functional problem however clinicians notes identified 6% of functional problems and none of these were formally addressed with onward referrals.
The Diagnosis and Treatment of Lung Cancer (NICE 2005)

• Discusses need for MDT however does not specify membership
• AHP input is not suggested until palliative stage of disease.
Supportive and Palliative Care (NICE 2004)

• ‘although rehabilitative interventions are often considered primarily in terms of their physical impact for patients, they can also have major psychological, social and spiritual benefits.’

• ‘while patients needs will differ, all patients are likely to need rehabilitation at some stage in the patient pathway.’
Supportive and Palliative Care NICE Guidance Key Objectives

• NICE Guidance (2004)
  – Patients’ need for rehabilitation services assessed
  – Active and planned approach to rehabilitation
  – Access to services without undue delay
  – Education and training available for staff providing rehabilitation services to cancer and palliative care patients
National Cancer Action Team (2007)

- A national cancer and palliative care rehabilitation workforce project.
- Initiated to describe, clarify and quantify the role of rehabilitation to support people with cancer and cancer related palliative care needs.
Outputs of the Project

- Review of evidence for rehabilitation interventions
- Development of evidence based care pathways
- Workforce Modelling
- Commissioning Guidance
National Cancer Rehabilitation Pathways

- Nine Site-Specific Pathways
  - Breast
  - Head and Neck
  - Upper GI – oesophagus/gastric
  - Upper GI – hepatobiliary
  - Colorectal
  - Gynaecology
  - Urology
  - Lung
  - Brain (CNS)
Patients are at risk of developing or experiencing the following clinical indicators and should be assessed for referral to rehabilitation pathway interventions at all stages in the cancer care pathway as described below:

**Consider level of intervention required:**
- Information support
- General rehabilitation services
- Specialist oncology/palliative rehabilitation.
- Ensure patient has contact details for timely future access to rehabilitation services (see local cancer services directory-rehabilitation services).

**Difficulties with function, movement and symptom control:**
- Difficulty walking and getting around
- Breathing difficulties/cough
- Fatigue/tiredness
- Weakness and loss of muscle strength (focal or generalized)
- Pain/sensory changes/body image
- Impaired Balance

**Difficulties with functional activities of daily living, leisure and work resulting from:**
- Difficulty walking and getting around
- Breathing difficulties
- Fatigue/Tiredness
- Impaired balance/weakness
- Anxiety/role and function change/body image
- Cognitive impairment
- Equipment/environmental/information needs

**Impaired or risk of impaired communication, eating and drinking:**
- Coughing on eating or drinking
- Weak voice or cough
- Difficulty with speech and/or understanding

**Nutrition and diet:**
- Reduced appetite (anorexia)
- Malnutrition
- Weight loss/Weight management (cachexia)
- Fatigue/tiredness
- Nausea and vomiting
- Difficulties swallowing
- Information needs
Symptom clusters

  – Difficulty Breathing
  – Weakness
  – Pain
  – Fatigue

• Fox & Lyon et al (2006) also identified the above 4 main symptoms along with
  – Depression
  – Finding that depression and fatigue were significantly related to each other
  – Found that ‘symptoms that occur together may have a synergistic affect on each other and on key patient outcomes such as quality of life’
Anorexia/Cachexia

• Fearon (2008)
  – Cancer cachexia is multifactorial including poor nutritional intake and systemic inflammation leading to altered metabolism
  – Generally increasing nutritional intake alone is not shown to have an impact on survival
  – Initial evidence is emerging around multi-modal rehabilitation for cancer cachexia in selected groups of patients
Pain

• Acupuncture
  – Sellick and Zaza (1998) found no effect on pain
  – NICE (2004) concluded evidence for nausea and vomiting but not currently for pain

• Relaxation Therapy
  – Robust evidence including several RCTs and one Systematic Review, Luebbert et al (2001)
  – Positive effect on psychosocial symptoms as well as somatic symptoms e.g. Pain
Pain

- **Massage**
  - Some evidence of effectiveness of massage interventions on pain and psychological well-being
  - Not consistently demonstrated and not sustained
Fatigue

• Kangas, Bovbjerg and Montgomery (2008)
  – Meta-analytic review of non-pharmacological therapies for cancer related fatigue (CRF).
  – Exercise and psychological interventions provided reductions in CRF – specifically exercise and walking programmes, restorative approaches, supportive-expressive and cognitive-behavioural interventions.
Fatigue

- Hanna (2008) concluded that exercise can improve physical function, fatigue and mood
- Dimeo (2008) found benefits of exercise on physical fatigue but not depression, anxiety or cognitive fatigue.
- Barsevick et al (2004) found evidence for the use of energy conservation for the improvement of fatigue
Breathlessness

  - Nurse led randomised controlled pilot study/Multi-centred randomised control trial
  - Indicated that interventions based on a rehabilitative approach combining breathing retraining, psychosocial support, and adaptive strategies lowered levels of perceived breathlessness and distress caused, enabling patient to increase functional level and activities of daily living.

  - Pilot outpatient breathlessness clinic. Physio led.
  - Based on techniques and strategies used in above studies.
  - Demonstrated significant improvements in QOL and concluded that this intervention should be recognised as useful in the lung cancer care pathway.
Breathlessness

  - Cochrane review
  - Review of non-pharmacological interventions for breathlessness in advanced disease concluded that there was evidence to show that breathing retraining and the use of walking aids are effective interventions to benefit the relief of breathlessness
  - Only 2 studies looked specifically at lung cancer patients.
Exercise Rehabilitation

• Nici (2009)
  – Review of Literature
  – Concluded that Pulmonary Rehabilitation (PR) shown to improve exercise capacity, functional performance and quality of life and may benefit lung cancer patients in a variety of clinical situations.

• Temel et al (2009)
  – Small American pilot study
  – Findings from this study suggests that structured, supervised exercise programme may improve symptom burden and functional capacity in patients with advanced NSCLC.
Exercise Rehabilitation

• Jones et al (2007)
  – Small Pilot Study
  – Demonstrated “proof of principle” that relatively short high intensity pre-surgical exercise training program induced significant improvements in exercise capacity in patients undergoing thoracic surgery for malignant lung lesions. May have important implications for surgical outcome and post surgical recovery.

• Jones et al (2010)
  – Lung Cancer Exercise Training Study (Rationale and design for randomised trial)
  – Aims to investigate the optimal form of exercise training for post-op NSCLC patients, the effects of this physiologically and on patient reported outcomes.
  – Hopes to contribute to establishment of clinical exercise therapy guidelines for patients across the entire NSCLC continuum.
**Summary**

- Patient’s perceive rehabilitation interventions as of paramount importance in ongoing cancer research.
- Functional problems are poorly identified and acted upon in the oncology clinic setting.
- Still limited robust research in cancer rehab interventions.
- Growing evidence for the effectiveness of rehabilitation interventions for the management of cancer-related symptoms.
References

References

- Nici L 2009 The role of pulmonary rehabilitation in the lung cancer patient. Semin respir crit care med (30): 670-674
Lung Cancer Rehabilitation Audit Results
59 proformas returned:

- Palliative community 25
- Palliative inpatient 19
- Lung MDT 15
## Disciplines

- **Wide range of disciplines:**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Number</th>
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<tbody>
<tr>
<td>Doctors</td>
<td>20 (33.9%)</td>
</tr>
<tr>
<td>CNS</td>
<td>18 (30.5%)</td>
</tr>
<tr>
<td>Discharge planner</td>
<td>4 (6.8%)</td>
</tr>
<tr>
<td>Physio</td>
<td>4 (6.8%)</td>
</tr>
<tr>
<td>Staff nurse</td>
<td>4 (6.8%)</td>
</tr>
<tr>
<td>Social worker</td>
<td>3 (5.1%)</td>
</tr>
<tr>
<td>Occupational therapist</td>
<td>2 (3.4%)</td>
</tr>
<tr>
<td>Pastoral care</td>
<td>2 (3.4%)</td>
</tr>
<tr>
<td>MDT coordinator</td>
<td>1 (1.7%)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (1.7%)</td>
</tr>
</tbody>
</table>
Perception of rehab needs

- Yes - occasionally: 7%
- Yes - sometimes: 31%
- No - never: 3%
- Don’t know: 3%
- Missing: 3%
- Yes - often: 54%
What are rehab needs?
When do you refer?

- At diagnosis: 27.1%
- Pre-treatment: 33.9%
- Post-treatment: 61.0%
- Palliative: 76.3%
- End of life: 32.2%
- Monitoring & survivorship: 18.6%
- Other: 8.5%
• **Individual Needs**
  – “Depending on individual patient may depend on their treatment & prognosis.”
  – “Some patients at diagnosis pre and post treatment will be referred, it is dependant on assessed need.”

• **Time of referral**
  – “When symptoms suggest the need irrespective of stage once referred to SPCS.”
  – “Most patients are not referred until they are under "palliative care" however I feel they should be referred much earlier ie. Diagnosis.”
Are rehab needs discussed at MDT?

- Yes - often: 61.1%
- Yes - sometimes: 37.5%
- Yes - occasionally: 14.3%
- No - never: 14.3%

By setting:
- Community: 33.3%
- Inpatient: 33.3%
- Lung: 28.6%
- Total: 29.2%

- Community: 21.4%
- Inpatient: 19.6%
- Lung: 19.6%
- Total: 21.4%
Role of MDT

- “The MDT's function is for treatment and diagnostic decisions.”

- “The MDT is for advising clinicians on specific treatment for their patients with cancer i.e. curative or palliative, surgery or non-surgery. There isn't time to go into details of other aspects of palliative care.”

Palliative & Rehab input to MDT

- “MDT is diagnosis heavy. As palliative medicine representative have only small input into MDT meeting.”

- “I suspect a degree of "not considered" also applies with most patients”

- “We have palliative care team input at our MDT and they pick up cases where we have particular concerns but we do try and treat some of these things ourselves too - e.g. prednisolone for appetite etc and analgesia”
Do you initiate referral to rehab services?
• **Nominated responsibility of rehab referral**
  - “Usually picked up by speciality nurses and Macmillan team.”
  - “Palliative care pick up many cases for us via MDT or ward referrals but also our specialist respiratory nurses pick many issues up and refer on to relevant services as part of their roles.”
  - “Some patients are identified as requiring specialist palliative care referral at MDT. These often go on to be referred to palliative care rehab services. No direct referral from MDT to rehab services.”

• **Responsibility of individual**
  - “If I had brought patient to meeting to discuss at MDT I would assume responsibility in ensuring the reference to rehab services. “
  - “If needed would refer to OT/Physio for assessment.”
Most responsible for referral?

- CNS Lung: 23.7%
- Other: 23.7%
- Missing: 22.0%
- Palliative MDT: 11.9%
- Palliative medical team: 6.8%
- GP: 3.4%
- Lung MDT: 3.4%
- Respiratory medical team: 1.7%
- AHP: 1.7%
- District nurse: 1.7%
**Comments**

- **Shared responsibility**
  - “All members of palliative care team.”
  - “Any nurse or doctor caring for the patient.”
  - “Referrals should be able to come from a variety of sources, depending upon who has input into the patients' care. I think all members of the lung MDT who have direct patient contact, as well as primary care.”

- **Whoever is looking after the patient at the time**
  - “Depends upon whether patient is initially seen and by whom - so everyone has responsibility.”
  - “Whichever team is looking after the patient when rehab needs are present, so may be any of the above.”
Who provides rehab?

- Physios: 93.2%
- Dieticians: 91.5%
- Lymphoedema specialists: 54.2%
- Speech and language: 37.3%
- Orthotists: 33.9%
- Podiatrists: 18.6%
- Stoma therapists: 13.6%
- Psychosocial care: 11.9%
- Radiographers: 10.2%
- Oral health specialists: 8.5%
- Others: 5.1%
### Barriers to referral

<table>
<thead>
<tr>
<th>Barriers to referral</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waiting lists</td>
<td>17 (28.8%)</td>
</tr>
<tr>
<td>Lack of knowledge of services</td>
<td>17 (28.8%)</td>
</tr>
<tr>
<td>“Patient’s don’t want rehab”</td>
<td>13 (22%)</td>
</tr>
<tr>
<td>Do not know how to refer</td>
<td>10 (16.9%)</td>
</tr>
<tr>
<td>Lack of time to fill forms</td>
<td>7 (11.9%)</td>
</tr>
<tr>
<td>Lack of service</td>
<td>7 (11.9%)</td>
</tr>
<tr>
<td>Patient’s unlikely to benefit</td>
<td>3 (5.1%)</td>
</tr>
<tr>
<td>Patients can manage rehab needs themselves</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>
• **Limited resources**
  – “Limited local services.”
  – “Limited resources at hospice. Very few services available at hospital and in community.”
  – “For some rehabilitation services (but not all) there can be long waits.”

• **Organisational/Structural**
  – “Following diagnosis, lung CNS often not involved on regular basis, so needs of patients need to be identified by other HCP involved in hosp and community; therefore no clear responsibilities.”
  – “Getting the right referral to the right person in an efficient way can be challenge.”
  – “Not all patients, appropriately, known to specialist services in the community and may not benefit when referred to us. Some DN teams fell empowered to refer for SPC rehab services whereas other may just access equipment through the PCT.”
• **Patient attitudes**
  
  – Some patients are very reluctant at the beginning of illness and usually accept when impacting greatly on QOL.”

  – “Patient expectations of the process effects access to services i.e. opinions of rehabilitation.”

• **Lack of understanding of role of rehab**
  
  – “Lack understanding from HCP (e.g. lung MDT, primary care teams) regarding 1) the benefits of rehabilitation in this group and 2) the services available. I think there is widespread misconception that rehabilitation is about getting somewhere back to normal, whereas in this patient group, rehabilitation is about adapting to changing functional level.”

• **Good Service**
  
  – “I feel that those patients requiring rehab are seen appropriately in this setting.”

  – “I do not feel we have any barriers in our area.”
Is rehab beneficial?

- Yes: 85%
- No: 0%
- Don't know: 12%
- Missing: 3%
Is rehab service adequate?

- Yes: 39%
- No: 26%
- Don't know: 33%
- Missing: 2%
• **Limited resources (esp. dietician, SALT)**
  
  – “We have designated OT for cancer but all other services i.e. dietician, physio, speech and language have limited availability. With regard to pulmonary rehab, which I've accessed for surgical patients post op - waiting times are significant.”

  – “Frequent delays in physio/OT assessment.”

  – “Dietician service not adequate.”

  – “Only have an OT who provides excellent care, more staff including physio would improve service.”

• **Good service**

  – “Excellent response.”

  – “Rehab at hospice is great support. In comparison, service at hospital trust limited due to volume of patients they cover.”
Final Comments

- **Evidence/Cost effectiveness**
  - “This should be a community based service for all patients. Cost effectiveness studies are needed.”
  - “The benefits of rehabilitation following surgery for lung cancer are unproven. Length of benefit is uncertain...if only short term benefit seen... may not be financially worthwhile. A randomised trial would be worth doing to establish the benefits post surgery.”

- **Earlier input**
  - “I believe we could significantly improve the service we provide at out patients if we moved beyond the palliative & terminal phase of lung cancer and provided input at a much earlier stage including individuals who may be receiving curative therapy.”

- **Access**
  - “Variation in availability of services across the locality. Waiting lists can be a problem for community based services. SLT’s in Liverpool PCT do not accept referral for any patients. Access to out-patient physiotherapy for ambulatory patients limited, long waiting list, 16-17 weeks. No non hospice based breathlessness and fatigue management services available in this locality for patients in the pre-palliative phases of their illness.”

- **General fabness**
  - “Rehab is fab!”
Summary

- 92% of respondents perceived palliative patients have rehab needs.

- Communication difficulty and dysphagia were the least considered rehab needs.
  - Oral health specialists and SALT generally considered unable to provide rehab
  - Several comments highlighted lack of SALT and dietician rehab service.

- Most patients referred at post treatment and palliative stage of disease.

- Rehab need most likely discussed at inpatient MDT and least discussed at lung MDT

- Generally respondents felt all members of MDT responsible for referring patients for rehab.

- 85% felt rehab was beneficial

- 39% felt rehab service adequate at their trust

- Problems consisted of limited resources, organisational/structural barriers, lack of understanding, concerns over evidence and cost-effectiveness and lack of awareness.
Lung Cancer Rehabilitation Guidelines and Standards
1.1 General Principles

- The rationale behind cancer rehabilitation has been described as aiming ‘to improve the patient’s quality of life by maximising their ability to function, to promote their independence & to help them to adapt to their condition’.

- Allied health professionals (AHP) not only help cancer patients recover from the physical changes of their illness but also help them function in every day activities and adapt to their new needs.
Patients with lung cancer may have rehabilitation needs at different phases of their disease trajectory. Generally, four cancer rehabilitation stages have been identified: ³

- **Preventative**: reducing the impact of expected disabilities and learning to cope with any disabilities that do occur
- **Restorative**: returning the patient to their pre-illness level of functioning
- **Supportive**: in the context of continual disease, aim to limit functional loss and provide support
- **Palliative**: further loss of function, put in place measures that eliminate or reduce complications and provide support
Rehabilitation is not solely the responsibility of AHPs, and all health and social care professionals may play a part.  

However, when identifying those who are AHPs, the following criteria have been proposed:

Key professionals providing cancer rehabilitation:
- Physiotherapists
- Occupational therapists
- Dieticians
- Speech and language therapists
- Lymphoedema Therapists (can be provided by nurses as well as AHP’s)
Other professionals who may contribute to the rehabilitation process include: ⁴

– Podiatrists
– Psychosexual counsellors
– Stoma therapist
– Therapy Radiographers
– Appliance officers
– Oral health specialists
There is evidence to provide support for the role of rehabilitation for lung cancer patients in the following areas:

- **Cancer-related fatigue**
  - Benefits of an exercise intervention have been shown to have some benefit in the management of cancer-related fatigue during and post cancer therapy.\(^6\)
  - No studies, however, have specifically been conducted with lung cancer patients and the longer-term follow-up measures are more limited.\(^6,7,8\)
- Non-pharmacological therapies combining exercise and psychosocial interventions e.g. cognitive-behavioural interventions also show promising potential.\(^9\)
  - Initial studies looking into the role of a pre-surgical exercise program for lung cancer patients show promising results and further RCTs are warranted\(^{10}\)
Breathlessness

The benefits of non-pharmacological interventions and pulmonary rehabilitation have been shown to improve patients’ management of their breathlessness and their functional ability although some of the trials have been conducted with COPD patients. ¹¹, ¹², ¹³, ¹⁴, ¹⁵

There is moderate evidence to support the use of walking aids and breathing training. ¹⁵
Anorexia / cachexia

The role of multimodal strategies to tackle both food intake and metabolic change remains controversial. Although there have been some studies demonstrating an improvement in function and QOL, more work is required in this area.\textsuperscript{16}
Pain

• There is evidence to support the use of acupuncture in the management of nausea and vomiting and breathlessness but not currently for pain. ⁴, ¹⁵

• Relaxation therapy has been shown not just to have a positive effect on psychosocial symptoms, but also somatic ones such as pain. ¹⁷

• There is some evidence of effectiveness of massage interventions on pain and psychological well-being but this is not consistently demonstrated and not sustained. ¹⁸

• Successful pain management can be achieved through coordinated efforts of team members e.g. OT can help modify pain perceptions & individuals lifestyles ¹⁹
1.2. Guidelines

- For lung cancer patients, rehabilitation needs may include the following symptoms or issues: ⁵ (Level 4) (link to clinical indicators)
  - Pain
  - Dyspnoea
  - Fatigue
  - Dysphagia
  - Anorexia and cachexia
  - Anxiety / stress
  - Impaired mobility
  - Reduction in independence for activities of daily living
  - Need for specific equipment
  - Communication difficulties
  - Difficulties with work and leisure activities
Ideally, for all lung cancer patients, their rehabilitation needs should be reviewed at the following different stages of their illness\textsuperscript{5} (Level 4):

- Diagnosis
- Treatment
- Post treatment
- Monitoring and survivorship
- Palliative care
- End of life
Simple measures like the use of walking aids and breathing re-training should be considered to help lung cancer patients manage their breathlessness \(^{15}\) (Level 2+)

A referral for more intensive non-pharmacological and psychological intervention should be considered for lung cancer patients to help improve both their dyspnoea and functioning level. \(^{11}\) (Level 1+)

Exercise is a simple low-risk intervention and should be considered to help patients suffering from cancer-related fatigue both during and after treatment \(^{6}\) (Level 1+)
Relaxation therapy should be considered as an intervention not only to help lung cancer patients with psychological symptoms but to also help with somatic symptoms such as pain. \(^{17}\) (Level 1)

Although the evidence for acupuncture and massage is more limited, these can still be beneficial interventions for some lung cancer patients. \(^{4, 15, 18}\) (Level 4)
1.3 Standards

- All lung cancer patients at the palliative or end-of-life care stage of their illness should have their need for rehabilitation services assessed, ideally through the use of a holistic assessment tool. (Grade D)
- Lung cancer patients with palliative and end-of-life care needs should be able to access the rehabilitation services they need in a timely manner. (Grade D)
- In particular, they should have access to the five Allied Health Professionals highlighted within the NCAT Rehabilitation Care Pathway – physiotherapist, occupational therapist, speech and language therapist, dietetics, and lymphoedema (Grade D)
There should be clear contact points for referral to rehabilitation services for all healthcare professionals\(^2\) (Grade D)
References

4. NICE guidelines for palliative and supportive care (need full reference)
• Thanks very much
• Questions and comments?