Prehabilitation: Optimizing Patients to Improve Outcomes - Part 2

July 13, 2021
Disclosures

› **Stephen Wootton, PhD, FAfN, OBE** discloses he is on an advisory board and has an investigator-led institutional collaborative research agreement with Seca GmBH

› None of the other planners, reviewers and staff for this activity reported any relevant financial relationships.
How should we be delivering prehabilitation?

Exercise interventions before and during active cancer treatment. A systematic review

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Cancer Prehabilitation
An Opportunity to Decrease Treatment-Related Morbidity, Increase Cancer Treatment Options, and Improve Physical and Psychological Health Outcomes

ABSTRACT
Types of cancer prehabilitation

› Unimodal
  › Exercise based
  › Preoperatively - Improves cardiopulmonary fitness
  › Postoperatively - Reduces stress, complications, and length of stay, improves quality of life

› Multimodal
  › Exercise, nutrition, psychological interventions, behaviour change and patient education
  › Preoperatively - Improves cardiopulmonary fitness, reduces stress, reduce risk factors related to lifestyle
  › Postoperatively - Reduces stress, complications and length of stay, improves nutritional outcomes, improves aspects of neuro-cognitive function, improves quality of life


Macmillan Cancer Prehabilitation Guidance

› Multimodal intervention

› Optimise physical and mental health - exercise, nutrition and psychological interventions

› Multidisciplinary approach

› Stratified intervention: Universal, targeted and specialist
Nutritional considerations in the management of patients with lung cancer

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Key messages

• Nutrition is an essential part of the management of lung cancer and a key consideration in prehabilitation.

• Malnutrition is common and impacts on morbidity and mortality.

• Need to identify those most at risk and offer nutritional support.

• Interventions can improve experience and outcomes

• Evidence specific to nutritional management of lung cancer is limited
Sarcopenia, cachexia and malnutrition

Inadequate Food Consumption

Disease and treatment

Wasting Reductive Adaptation

Specific nutrient losses, cellular damage, tissue malfunction

Loss of regulation & control
Decreased resilience, response and outcomes
Malnutrition in patients with lung cancer

- Anorexia and weight loss prior to diagnosis: ~40%
- Malnourishment during treatment: 35 to 69%
- Modest weight loss during treatment predicts poor response, QoL and survival

~ 80% experiencing cancer-related fatigue during or after treatment that impedes QoL

Kiss N. Lung Cancer: Targets and Therapy 2016:7 1–9
Weight loss primarily due to decreased food intake

- Poor appetite and early satiety
- Symptoms of illness – breathlessness, pain, fatigue
- Inanition due to depression, anxiety, change in taste and smell
- Treatment side-effects – surgery, chemoradiotherapy, biologics
- Social isolation, significant life change, mental illness
Symptoms affecting intake:

- Fatigue
- Nausea / Vomiting
- Taste alterations
- Smell alterations
- Oral mucositis
- Diarrhea
- Constipation
- Dry mouth
- Anorexia / satiation
- Pain on eating
- Dysphagia
- Strictures / obstruction

Nutrition Impact Symptoms

Associated with the cancer &/or treatment
All impact on intake and nutritional state
More symptoms, more undernourishment

Key signals
- Taste
- Appetite
- Nausea

Weight loss

Normal weight and composition

Loss of lean masked by excess fat

Different muscle mass at any weight

More than just weight, body composition matters.

Prado et al. Lancet Oncol 2008; 9, 629-35
Muscle mass – measuring different things

**MRI**
- All muscles
- Volume
- All tissues

**DXA**
- Visible muscle
- 2D Coronal area
- Derive ALTM

**CT**
- Some muscles L3
- 2D Axial CSA
- Derive FFM

**BIA**
- Derive MRI-SMM
- Whole body
Additive effects of prognostic body composition variables on overall survival

Prognostic variables:
- Lack of muscle
- Low muscle attenuation
- > 8% weight loss

Patients with lack of muscle, poor muscle quality and weight loss, survived 8.4 months regardless of their presenting weight

(cf 28.4 months for those with no features)

Martin et al. JCO 2013;31:1539-1547
Approach to care

Intervene through nutrition [with exercise and psychological support] to improve resilience, response & outcomes

- Cancer cachexia cannot be fully reversed by nutritional support
- Can improve experience, treatment tolerance and outcomes
- Who is at risk? How to triage? How to monitor?
Lots of guidance....

ESPEN guideline: Clinical nutrition in surgery

Arved Weimann a,*, Marco Braga b, Franco Carli c, Takashi Higashiguchi d,
Martin Hübner e, Stanislaw Klek f, Alessandro Laviano g, Olle Ljungqvist h, Dileep N. Lobo i,
Robert Martindale j, Dan L. Waitzberg k, Stephan C. Bischoff l, Pierre Singer m

ESPEN guidelines on nutrition in cancer patients*

Jann Arends a, Patrick Bachmann b, Vickie Baracos c, Nicole Barthelemy d, Hartmut Bertz a,
Federico Bozzetti e, Ken Fearon e, i, Elisabeth Hütterer e, Elizabeth Isenring b, Stein Kaasa f,
Zeljko Krznaric g, Barry Laird h, Maria Larsson i, Alessandro Laviano m, Stefan Mühlebach n,
Maurizio Muscaritoli m, Line Oldervoll k o, Paula Ravasco a, Tora Solheim q, r,
Florian Strasser t, Marian de van der Schueren u, v, Jean-Charles Preiser w, x

ESPEN expert group recommendations for action against cancer-related malnutrition

J. Arends a, b, *, V. Baracos a, H. Bertz a, b, F. Bozzetti d, P.C. Calder e, N.E.P. Deutz u,
N. Erickson b, a, Laviano m, M.P. Lisanti i, D.N. Lobo j, D.C. McMillan b, M. Muscaritoli b,
J. Ockenga b, M. Pirlich m, F. Strasser t, M. de van der Schueren u, v, A. Van Gossum q,
P. Vaupel t, b, W. Weimann a

American Society for Enhanced Recovery and Perioperative Quality Initiative Joint Consensus
Statement on Nutrition Screening and Therapy Within a Surgical Enhanced Recovery Pathway

Paul E. Wischnhayer, MD, EIC. a, Franco Carli, MD, MPH, c, David C. Evans, MD, FACS, c,
Sarah Gillibert, MD, LDN, CNSC, c, Rosemary Kozar, MD, PhD, c, Aurora Pryor, MD, FACS, c,
Robert H. Thielke, MD,*, Sotina Everett, EdD, RD,**, Daniela G. Genovese, MD, PhD, c,
Mike Grocott, BSc, MBBS, MD, FRCR, FRCP, FRCP, FRCP, a, b, Tong J., Gan, MD, MHS, FRCA, r,
Andrew D. Shaw, MB, FRCR, FRCM, FRCP, a, b, c, Julie K. M. Thacker, MD, c,
a and Timothy E. Miller, MB, ChB, FRCA, r, for the Perioperative Quality Initiative (POQI) 2 Workgroup
Cumulative experience

Need to consider how to:

1. Identify risk – screen, assessment, nutritional diagnosis

2. Optimise patient *throughout* their journey
   – nutrition, exercise and psychological support

3. Maintain / improve metabolic, nutritional and physiological fitness
## Identifying patients at nutritional risk

<table>
<thead>
<tr>
<th>Item</th>
<th>MUST</th>
<th>Short form PG-SGA</th>
<th>Scored PG-SGA</th>
<th>GLIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low BMI</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Weight loss</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Poor intake</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Nutrition Impact Symptoms</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muscle loss</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflammation</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>
Patient-generated Subjective Global Assessment (PG-SGA ©)

Patient-generated:
- Weight History
- Food intake
- Symptoms
- Activity & Function

Professional:
- Diagnosis
- Age
- Metabolic stress
- Physical exam

Score:
A: Well nourished
B: Moderate malnutrition
C: Severe malnutrition

PG-SGA score/category linked to:
- Mortality
- Post-op complications
- LOS
- Overall survival
- Hospital costs

Nutritional triage:
- Eating guidance
- Symptom management
- Nutritional support

Making a nutritional diagnosis - dietitian

Nutritional Assessment
- Weight
- Body composition
- Appetite
- Eating history
- Supplements

Nutrition Impact Symptoms
- Dysphagia
- Nausea & vomiting
- Mucositis
- Taste & smell
- Anorexia
- Maldigestion
- Malabsorption

Other considerations
- Anxiety about food
- Beliefs, culture, faith
- ‘Dr Google’
- Co-morbidities
- Education
- Socio-economic
Principles and guidance for prehabilitation in oncology – evidence domains

Screening all for risk

Assessing status - Make a diagnosis

NEEDS-BASED PREHABILITATION

Advice
Supported self management
Community-based care
Facility-based care
+
Manage Co-morbidity

Implementation within health system

Work force development – capability & capacity
Triage to nutritional care

Artificial Nutritional Support
Complex needs & care
Nutrition Support Teams (IF Teams)
[Hospital-based, In Patient]

Dietetic counselling + ONS
Address nutrition impact symptoms
[Community-based, Out-patient]

Supportive, self-care
Advice
[Home-based, remote support]
Dietetic counselling - nutritional care

Addressing Nutrition Impact Symptoms -/+ supplements

Understanding Enabling Confidence
Dietetic counselling - nutritional care

• Start early and continue

• More than simply giving a high-protein supplement

• Workforce constrained, so enable others

• Limited evidence of effectiveness [Baguley, 2019]
  • Improve intake and symptom control
  • No definitive effect on cancer-related fatigue (6 studies SMD 0.18) or QoL (8 studies SMD 0.07)
  • Where nutritional status improved, CRF and QoL improved.

Pre-op nutrition (ONS) improves outcomes

- Lower mortality
- Fewer postop complications
- Shorter LOS
- Earlier return of GI function
- Lower rate of re-operations
- Attenuates gut permeability
- Improved wound healing
- Less PN use
- Reduced hospital costs

Nutritional interventions within multimodal prehabilitation - Length of Stay

2d reduction in LOS

Gillis et al. Gastroenterology (2018), 155; 391-410

Nutritional interventions poorly reported
- Goal
- Delivery
- Change in nutritional state

In summary, nutrition matters!

- Malnutrition common and impacts on morbidity and mortality.
- Cancer cachexia cannot be fully reversed by nutritional support.
- Lessons from all cancers, less evidence in lung cancer.
- Screen, assess and diagnose – from first presentation and monitor
  - weight loss, body composition and dietary impact factors.
- Key role of dietetic counselling and access to Nutrition Support.
- Nutrition interventions (within multimodal care) can impact on
  perioperative morbidity, QoL, fatigue, treatment tolerance, costs.
- Need more evidence of clinical effectiveness.
Special thanks

• NIHR Cancer & Nutrition Collaboration (cancerandnutrition.nihr.ac.uk)

• Macmillan Cancer Care & Royal College of Anaesthetists

• Macmillan Review Nutritional Support working group

• Colleagues at Southampton
  • Clinical Nutrition Group
  • Nutrition Support Team & Intestinal Failure Unit
  • Dietetic colleagues
  • Prehabilitation Medicine Team & Fit4Surgery School Team
Key Resources

› Macmillan Cancer Care, Royal College of Anaesthetists, NIHR Cancer and Nutrition Collaboration (2019). Principles and guidance for prehabilitation within the management and support of people with cancer. Available from cancerandnutrition.nihr.ac.uk.


Objective measure for functional capacity in patients with lung cancer pre diagnosis – The 6-Minute Walk Test as a pre-treatment predictor for adverse events in patients with lung cancer: A feasibility study

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morten.quist@regionh.d
Background

› Five year survival rate = 16-20%
› Patients >70 years, low socioeconomic status, inactive lifestyle
› Higher burden of treatment related side effects in lung cancer
› Tolerability to treatment
Background

Eastern Cooperative Oncology Group (ECOG) Performance Status (PS)\(^1\)

<table>
<thead>
<tr>
<th>ECOG Performance Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Fully active</td>
</tr>
<tr>
<td>1</td>
<td>Restricted in physically strenuous activity but able to carry out housework</td>
</tr>
<tr>
<td>2</td>
<td>Being up and about more than 50% of waking hours</td>
</tr>
<tr>
<td>3</td>
<td>Confined to bed or chair more than 50% of waking hours</td>
</tr>
<tr>
<td>4</td>
<td>Completely disabled and totally confined to bed or chair</td>
</tr>
<tr>
<td>5</td>
<td>Dead</td>
</tr>
</tbody>
</table>

Background

Concerns about PS:

› It is based on work from the 1940’s²
› Low-moderate reliability³
› Basing comprehensive medical decisions on subjective measures

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Background

- Functional capacity (6 minute walk distance < 400 m)\(^2\)
  - Higher disease progression
  - Higher mortality
- Functional capacity (6 minute walk distance < 500 m)\(^3\)
  - Older
  - worse pulmonary function tests
  - higher complication rate
  - Longer postoperative hospital stay

Hypothesis

An objective measure of functional capacity can predict tolerance to first-line treatment in patients with lung cancer

Aim

The aim of this exploratory feasibility study was to investigate the feasibility of a 6-Minute Walk Test to predict complications to first-line treatment in patients with newly diagnosed lung cancer.
Inclusion
- Histologically confirmed lung cancer
- Danish language competencies

Exclusion
- Anti-neoplastic treatment within last 5 years
- Other cancer diagnoses
- Not ambulatory
- Hospitalized
Methods

› 6-Minute Walk Test close to diagnosis
› 6MWT, American Thoracic Society Guidelines⁶
› Endpoints: indicators of the 6MWT as a potential predictor for complications to treatment

## Methods

### Minor complications

<table>
<thead>
<tr>
<th>Grade 1</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subcutaneous emphysema</td>
<td>1</td>
</tr>
<tr>
<td>Prolonged airleak</td>
<td>1</td>
</tr>
<tr>
<td>Small pneumothorax</td>
<td>1</td>
</tr>
<tr>
<td>Hyperthyreose</td>
<td>1</td>
</tr>
<tr>
<td>Constipation</td>
<td>3</td>
</tr>
<tr>
<td>Radiation-induced pneumonitis</td>
<td>1</td>
</tr>
<tr>
<td>Leukopenia</td>
<td>1</td>
</tr>
<tr>
<td>Orthostatic hypotension</td>
<td>1</td>
</tr>
<tr>
<td>Hypokalemia</td>
<td>1</td>
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</table>

<table>
<thead>
<tr>
<th>Grade 2</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tinnitus</td>
<td>1</td>
</tr>
<tr>
<td>Subcutaneous emphysema</td>
<td>1</td>
</tr>
<tr>
<td>Dyspnea</td>
<td>2</td>
</tr>
<tr>
<td>Anemia</td>
<td>1</td>
</tr>
<tr>
<td>Leukopenia</td>
<td>1</td>
</tr>
<tr>
<td>Radiation-induced pneumonitis</td>
<td>2</td>
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</tbody>
</table>

### Major complications

<table>
<thead>
<tr>
<th>Grade 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pneumothorax</td>
</tr>
<tr>
<td>Arrhythmia</td>
</tr>
<tr>
<td>Renal affection</td>
</tr>
<tr>
<td>Pneumonia</td>
</tr>
<tr>
<td>Anemia</td>
</tr>
<tr>
<td>Pleural effusion</td>
</tr>
</tbody>
</table>

### Outcome measures:

Clavien-Dindo Classification of Surgical Complications and NCI’s Common Terminology Criteria for Adverse Events (CTCAE) v. 3.0

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Results

Available patients
N= 45

Excluded:
N = 5
- Tendency to fall (brain metastases) n = 1
- Hospitalized with apoplexia cerebri (aphasia, hemiparesis) n = 1
- Ambulatory only with close assistance n = 1
- Hospitalized with severe dyspnea and pain n = 2

Informed consent and baseline test
N= 21

Declined to participate: N= 19
Reasons for declining:
- Pain n = 1
- Too distressed with diagnosis n = 14
- Dyspnea n = 1
- No time n = 1
- Not interested n = 2

Did not receive treatment: N= 3

Included
N= 18
## Results

<table>
<thead>
<tr>
<th></th>
<th>No complications</th>
<th>Minor complications</th>
<th>Major complications</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/N</td>
<td>4/18</td>
<td>8/18</td>
<td>6/18</td>
<td></td>
</tr>
<tr>
<td><strong>6MWD, m (m ±SD)</strong></td>
<td><strong>530 ± 68</strong></td>
<td><strong>436 ± 62</strong></td>
<td><strong>360 ± 136</strong></td>
<td><strong>0.043</strong></td>
</tr>
<tr>
<td>[95CI]</td>
<td>[422; 639]</td>
<td>[384; 487]</td>
<td>[217; 503]</td>
<td></td>
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</table>

### Performance Status

<table>
<thead>
<tr>
<th>PS</th>
<th>No</th>
<th>Minor</th>
<th>Major</th>
<th><strong>p</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>PS 0</td>
<td>4</td>
<td>7</td>
<td>4</td>
<td>0.562</td>
</tr>
<tr>
<td>PS 1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>PS 2</td>
<td>0</td>
<td>0</td>
<td>1</td>
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</table>

### Type of treatment

<table>
<thead>
<tr>
<th>Treatment</th>
<th>No</th>
<th>Minor</th>
<th>Major</th>
<th><strong>p</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0.537</td>
</tr>
<tr>
<td>Chemotherapy + Radiation</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Chemotherapy only</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Radiation only</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Immunotherapy</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Strengths and limitations

- Small sample size
- Heterogenous population
- Time of testing
- Methodological consistency
Conclusion and Summary

› Trends towards 6MWT being able to predict complications to first-line treatment
› Should be tested in a larger homogenous trial
› The subjective evaluation of performance status needs an update or replacement of an objective evaluation
› More patients with lung cancer will get a treatment option
References

The role of psychology in lung cancer prehabilitation

Christina Prickett
Senior Clinical Psychologist
Peter MacCallum Cancer Centre
Melbourne, Australia

Acknowledgements:
Slide contributions by Dr Maria Ftanou
Peter MacCallum Cancer Centre, Melbourne
Overview

› **Why** is psychology important in lung cancer and prehabilitation?

› **What** is the role of psychology in lung cancer and prehabilitation?

› **How** does a psychologist work in this setting?
Lung cancer and wellbeing

• Lung cancer is associated with more distress than other cancers\(^1,2\)
• Clinically significant distress reported in 51% of lung cancer patients\(^3\)
• Prevalence rates of depression and anxiety range 11% to 40%\(^4,5\)
• Greater symptom burden across the disease trajectory (e.g. fatigue, loss of appetite, shortness of breath, cough, pain)\(^6\)
• Highest rates of suicide within the cancer population\(^7\)
• Spouses exhibit high levels of distress and lower quality of life\(^8\)
• Significantly more unmet supportive care needs than other cancer patients\(^9\)
Why focus on wellbeing?

• Patients experience less hopelessness and distress
• Improved treatment adherence
• Increased satisfaction with treatments
• Improved quality of life
• Improved clinical effectiveness and reduced health care costs
But…

› Despite the challenges, wellbeing and psychosocial care remains relatively understudied in lung cancer
› This is mirrored in the prehabilitation literature
“Prehabilitation enables people with cancer to prepare for treatment through promoting healthy behaviours and through needs based prescribing of exercise, nutrition and psychological interventions” ¹⁰
Psychological factors have an impact on surgical outcomes in both the short and long term.\(^1^1\)

Psychological prehabilitation interventions have an impact on cancer patients' reported outcome measures including psychological outcomes, quality of life, and somatic symptoms.\(^1^2\)

Increasing recognition of the importance of strategies to enhance motivation and maximize compliance in cancer populations.\(^1^3\)

Clear recommendations that multidisciplinary cancer prehabilitation programs incorporate a psychological component.\(^1^4\)

Lung cancer patients arguably a population in great need of access to prehabilitation given medical and psychological vulnerabilities.\(^1^5\)
Peter Mac Prehabilitation model

› Medical, Nursing and Anaesthetics
› Educational component
  › Surgery school
  › Educational materials
› Exercise +/- Nutrition, Psychology (based on screening)
› Weekly surgical MDTs
Tiered model of psychosocial interventions

- Severe distress: Acute & intensive interventions
- Moderate to severe distress: Specialist intervention
- Moderate distress: Supportive counselling, skills training
- Mild to moderate distress: Supportive/self-management, Educational
- Minimal distress: Information, practical supports

Hutchinson et al., 2006

- Importance of information and education for all patients
  - Formal vs informal
  - Surgery school
  - Written resources (including psychoeducational materials)

- Not all will require individual psychological support
  - Role of screening
Screening for prehab psychology

- MacMillan (2020)\textsuperscript{14} recommends (but not limited to):
  - Patient Health Questionnaire (PHQ-9)
  - Generalised Anxiety Disorder Assessment (GAD-7)
  - Hospital Anxiety and Depression Scale (HADS)
Table 1. Four Item Patient Health Questionnaire (PHQ-4)\textsuperscript{19}

Over the last 2 weeks, how often have you been bothered by the following problems?

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at All</th>
<th>Several Days</th>
<th>More Than Half the Days</th>
<th>Nearly Every Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling nervous, anxious, or on edge</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Not being able to stop or control worrying</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Feeling down, depressed, or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
Patients referred to Allied Health Prehab team by medical team

Screened by member of allied health team alongside other prehab screening measures (physio, nutrition)

PHQ-4 >3 = referral to psychology (if consent)

Psychologist phone call confirms eligibility and screens psychological concerns in more detail

Patients may also be referred directly by medical/allied health team if clinically indicated
Common emotional responses

- Shock
- Anger
- Exhaustion
- Overwhelmed
- Fear
- Lack of control
- Isolated

- Sadness
- Anxiety
- Hopelessness
- Grief and sadness
- Guilt
- Self blame
- Uncertainty
Psychosocial interventions

**Universal:** Effective information giving, compassionate communication and general psychological support (*all health professionals*)

**Targeted:** Psychological techniques such as problem solving and solution-focused therapy (*health professionals with additional training*)

**Specialist:** Specialist psychological and psychiatric interventions such as psychotherapy, including CBT (*Psychologists, Psychiatrists*)
Psychological Prehabilitation Assessment

› Individual consultations (50 minutes)
› Reaction to diagnosis, proposed treatment
› Understanding of procedure and expectations of recovery
› Anticipation/worry
› Concerns about pain
› Motivation for prehab tasks and associated barriers
› Plans to keep self occupied before procedure, whilst inpatient and during recovery period
› Social, emotional and practical supports
› Fears relating to procedure and recovery
› History of previous major life/medical events and coping strategies at this time
› Screening of mood, anxiety, psych history
› Identifying primary presenting concerns, barriers to preparation, surgery, recovery
› Identifying patient goals
What are the patient’s goals?

› Key to engaging the patient
› Role of psychology in supporting attainment of patient goals
› Supporting broader team in helping patient attain goals and addressing barriers to doing so
Interventions include

› Psycho-education on how to mentally prepare for surgery
› Stress-management and problem-solving to overcome obstacles that interfere with exercise and nutrition
› Behaviour therapy and motivational therapy to help change behaviors that will interfere with recovery (e.g., smoking, drinking, inactivity) and enhance wellbeing
› Cognitive behavioural approaches to managing worry, depression, fatigue, pain
› Communication skills (e.g., supporting communication with medical team, family)
› Maintaining motivation
› Activating supports for the treatment period
Role of psychology within the team

- Role of MDT
- Understanding the role of each discipline
- Supporting behaviour change processes
- Identifying and highlighting barriers to prehabilitation
- Providing psychological formulation to the team when useful
- Contributing to development of resources and education
Next steps

› Research (psychology in prehab, lung cancer)
› Measuring impact of psychological interventions in prehabilitation
› Quality appraisal of current models of care
› Routine care vs optimal screening
› Bias of those who do/do not engage in these programs
Summary

› Growing evidence for Prehabilitation and role of psychology
› Lung cancer is under-represented in the literature, yet one of the most vulnerable physically and psychologically
› Psychologists have a role to play in addressing individual psychological concerns in prehabilitation while also supporting behaviour change processes more broadly
› This includes development and dissemination of education materials, individual patient work, MDT
› More service appraisal and research is required in this patient population
References


14. Macmillan cancer support (2020). Principles and guidance for prehabilitation within the management and support of people with cancer


