



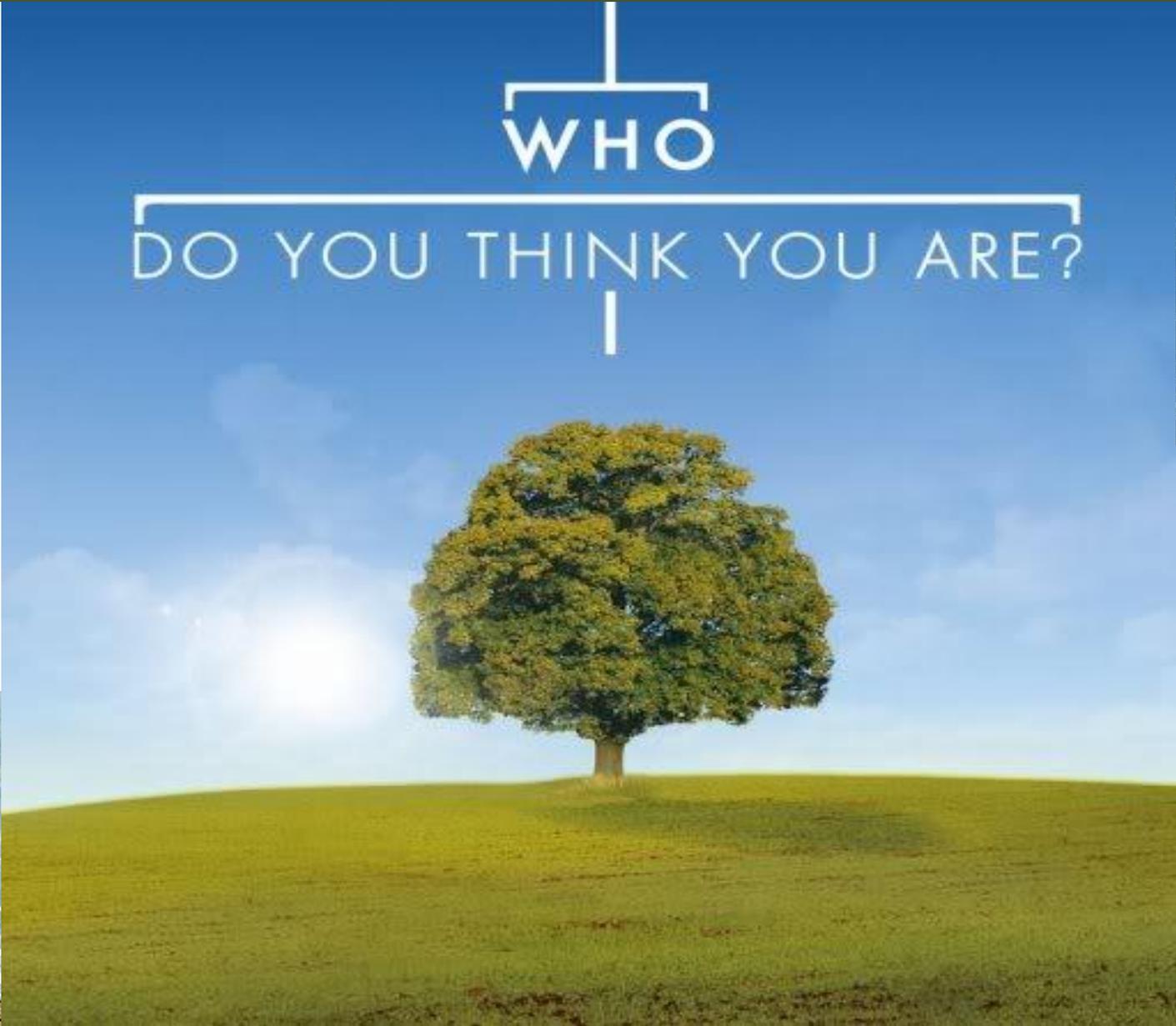
# Evolving Treatments, Evolving Needs: Advancing Rehabilitation in Head and Neck Cancer

Professor Jo Patterson, University of Liverpool

[Joanne.patterson@liverpool.ac.uk](mailto:Joanne.patterson@liverpool.ac.uk)

[Living Well After Head and Neck Cancer Research Group | Liverpool Head & Neck  
Centre](#)







**INDEPENDENT**

News > UK

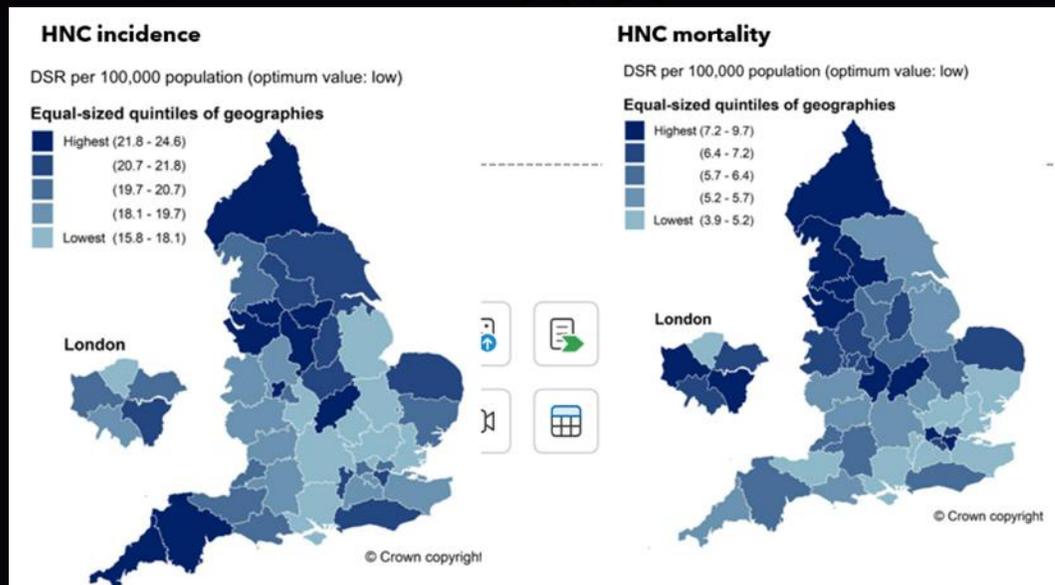
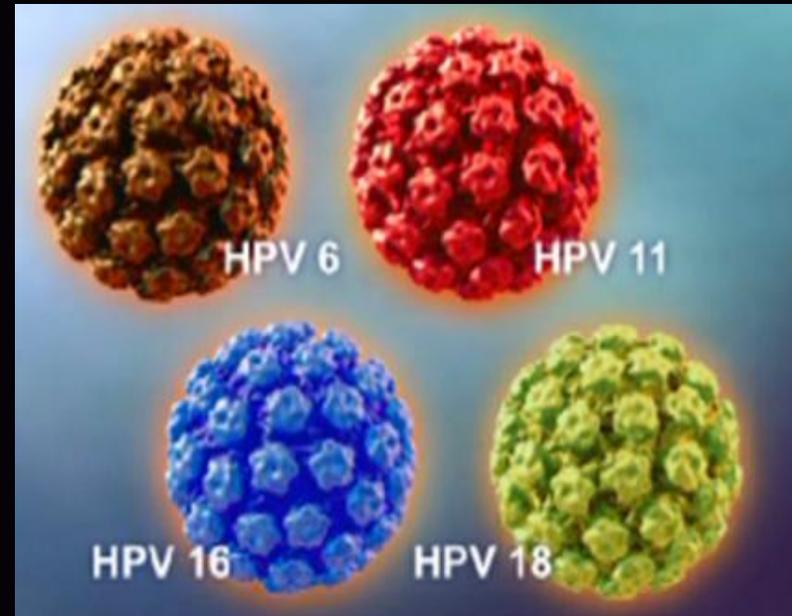
## Head and neck cancer cases rising in England, report warns

**Storm Newton**

Tuesday 22 October 2024 13:25 BST

**UK's 8th most common cancer  
Per year  
>13,000 new cases  
>4,000 deaths**

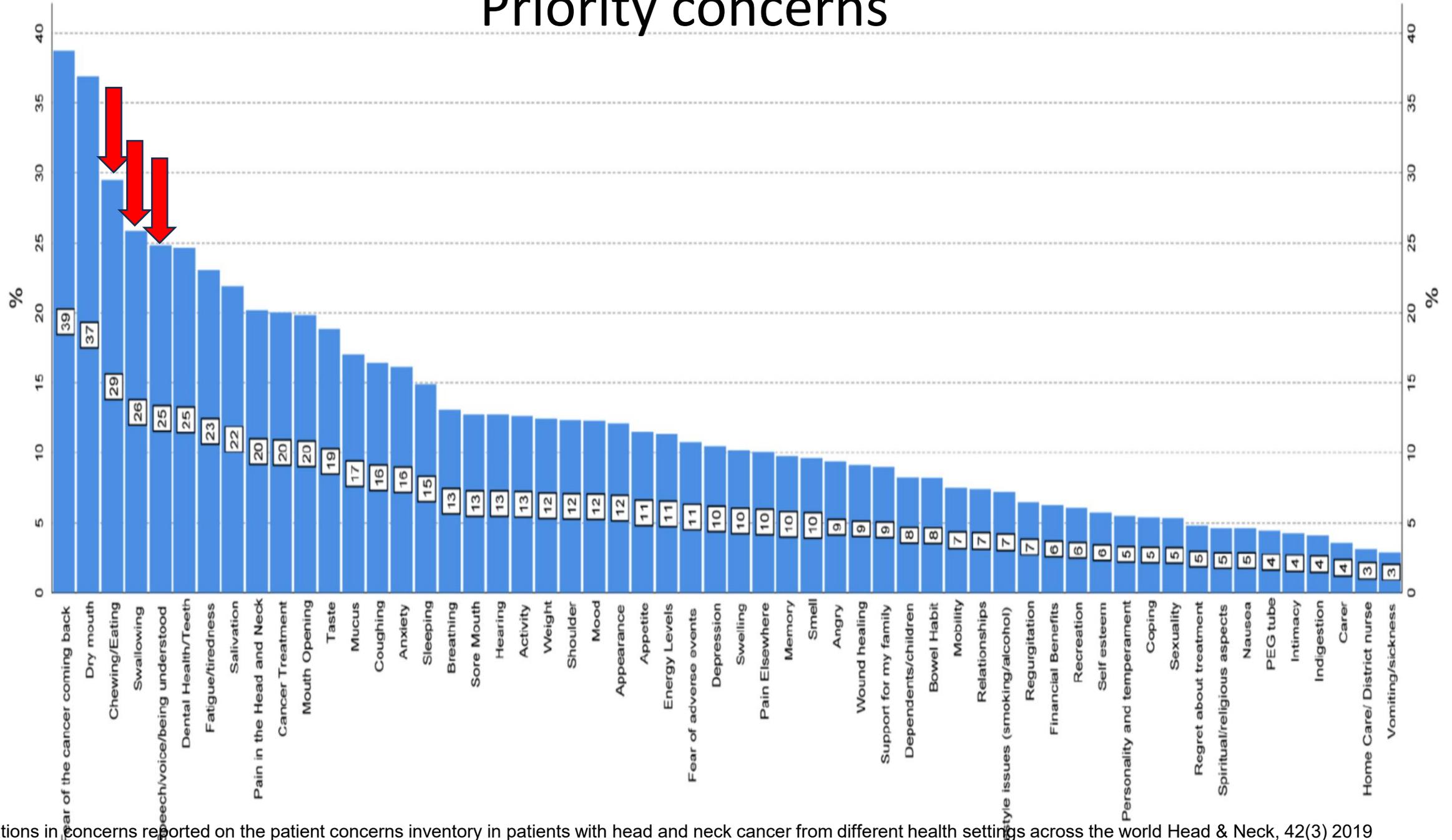




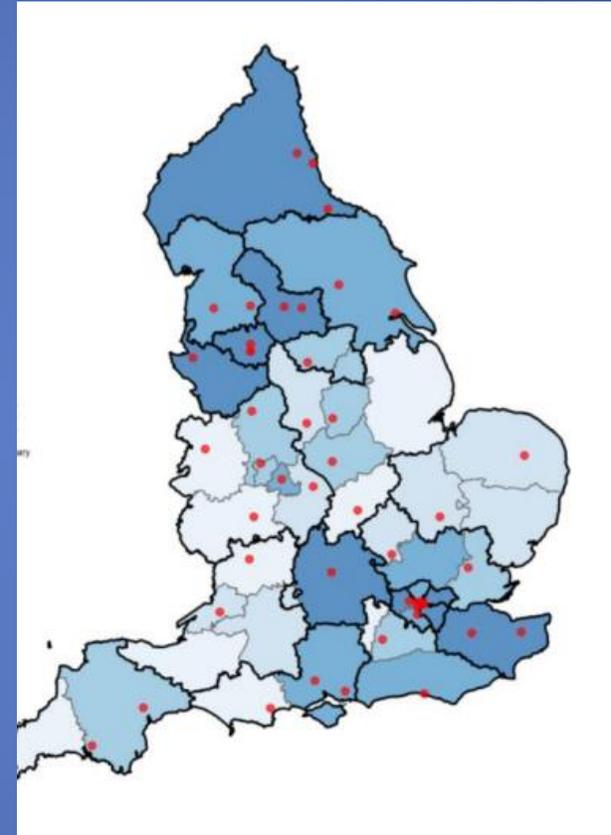
Smith, C.D.L., McMahon, A.D., Purkayastha, M. et al. Head and neck cancer incidence is rising but the sociodemographic profile is unchanging: a population epidemiological study (2001–2020). *BJC Rep* 2, 71 (2024).



# Priority concerns



# Rehabilitation challenges

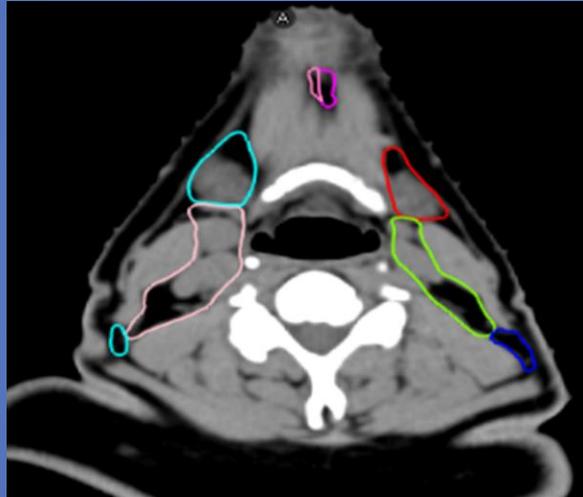


GIRFT Programme National Specialty Report: Head and Neck Cancer 2025

Hanna JR, et al . Suicide and Head and Neck Cancer: A Systematic Review With Meta-Analysis and Narrative Synthesis. Psychooncology. 2025

Jimé. Et al Prevalence of depressive and anxiety symptoms in patients with HNC undergoing radiotherapy: A systematic review and meta-analysis of longitudinal studies. Radiother Oncol. 2025

# Evolution of treatment and its impact



# Minimally invasive surgery

Received: 15 March 2021 | Revised: 2 November 2021 | Accepted: 8 November 2021

DOI: 10.1002/hed.26938

## CLINICAL REVIEW

WILEY

### **Early postoperative functional outcomes following transoral surgery for oropharyngeal cancer: A systematic review**

Sarah E. Stephen MSc<sup>1</sup>  | Jennifer M. Murphy MSc<sup>1</sup> | Fiona R. Beyer PGDip<sup>2</sup> | Diane Sellstrom MClinRes<sup>1</sup> | Vinidh Paleri MS<sup>3</sup>  | Joanne M. Patterson PhD<sup>4</sup>

75% no dysphagia at baseline

Post-op 33% aspiration

Re-admission up to 8%

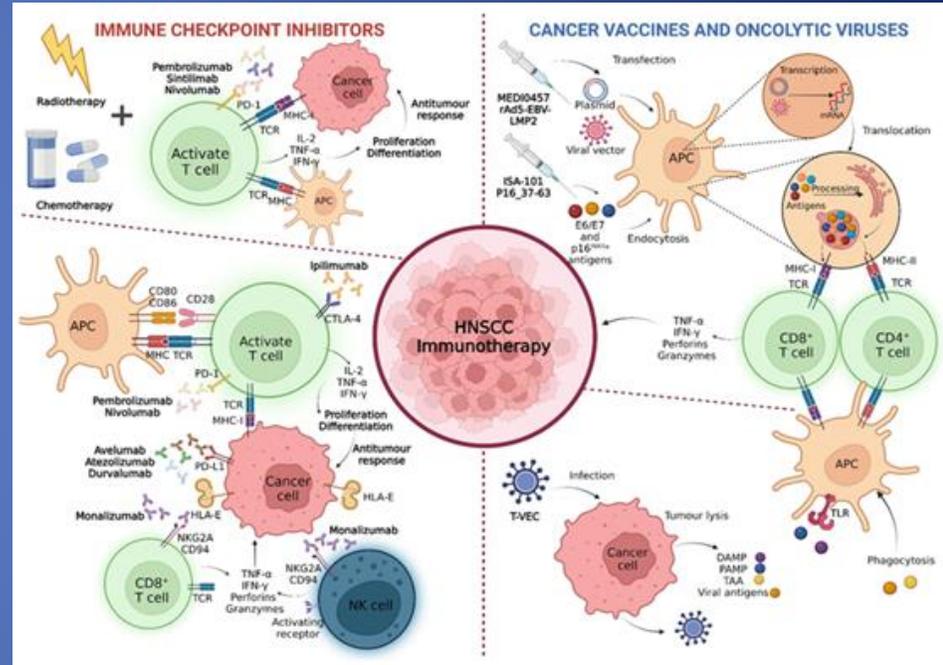
Tonsil tumour site, tumour volume and stage predictive

Improvement ~ 6 weeks

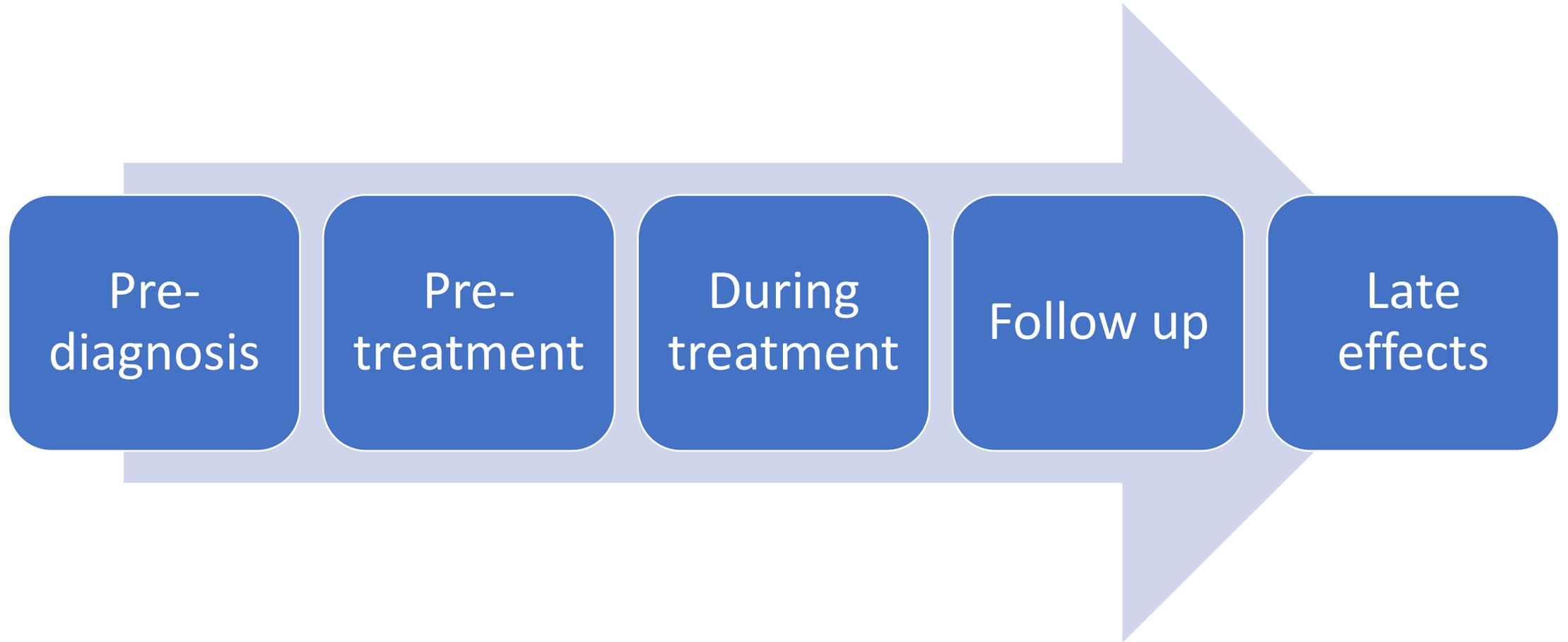
1 month, ~20% moderate-severe dysphagia

# Smart jab can shrink head and neck cancer tumours within six weeks, trial finds

Triple-action therapy drug amivantamab could be given as an injection to help treat recurrent or metastatic cancers



# SLTs in HNC care; challenges and future direction



# Pre-diagnosis

- >200,000 referrals to suspected HNC pathway
- 2 week target; 10% unmet; 97% do not have cancer
- Risk calculator
- Low-risk SLT- led clinics; extended role



# Attitudes to the Implementation of Speech and Language Therapist Led Low Risk Two Week Wait Clinic in the UK: A Survey Exploration Using Normalization Process Theory

\*Paula T Bradley, and †Joanne Patterson, \*Sunderland, and †Liverpool, England

RESEARCH REPORT | [Open Access](#) | 

Speech and language therapist-led clinics for low-risk suspected head and neck cancer referrals: A qualitative study of ear, nose and throat surgeons' views

Louise C. O'connor-Kent  John C. Hardman, Justin W. G. Roe, Paula Bradley, Paul N. Carding, Joanne M. Patterson

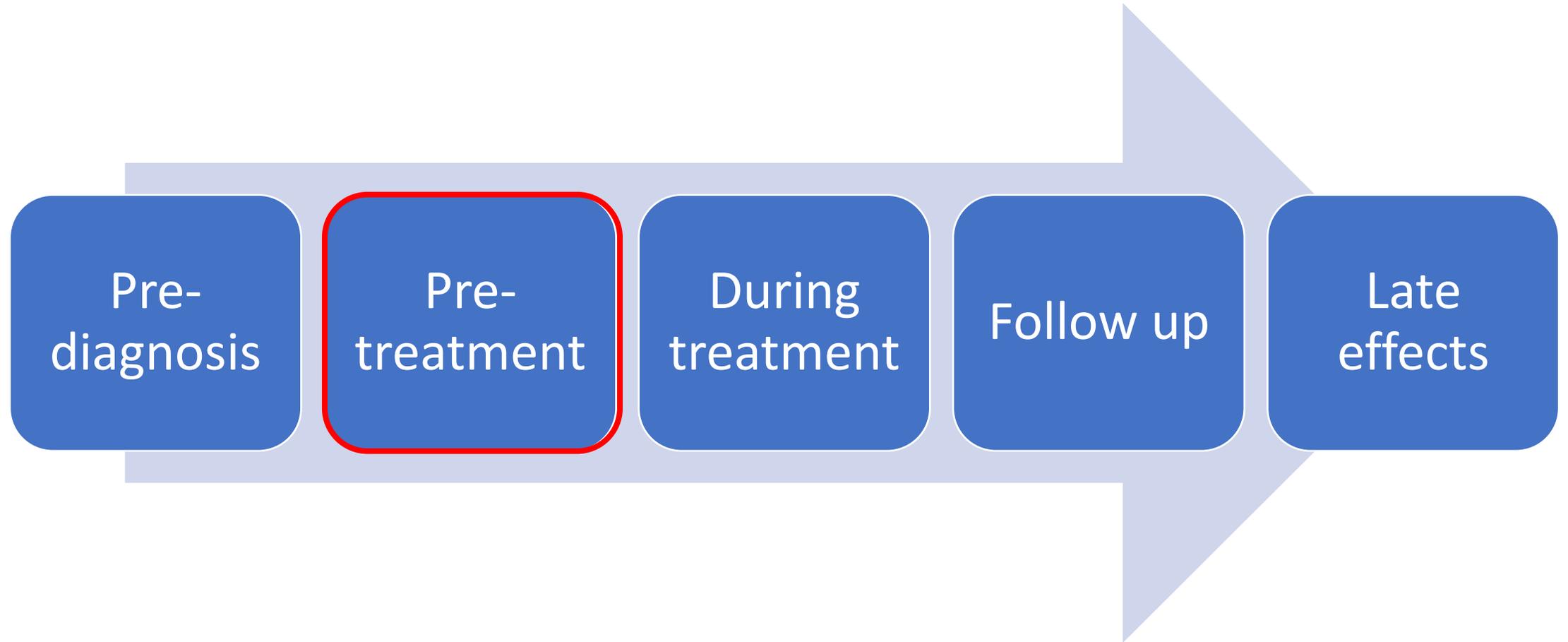
## SLT Interviews

- Currently there is **little recognition** of our profession taking on this type of role - ENT departments can be hierarchical - we have to work hard to **establish our credibility** with all concerned
- I'm apprehensive about how it is managed in terms of **accountability**
- Can only work if consultant willing to work in a true **parallel clinic**

## ENT Interviews

- extremely **meticulous** in their assessment of images. And they pick up things that even consultants sometimes don't always recognise
- the initial work we got back said it was **highly cost-effective** compared to running a consultant clinic
- you may be lucky and never come across a bad case, but when it happens, then you will very quickly find the **protections are non-existent**

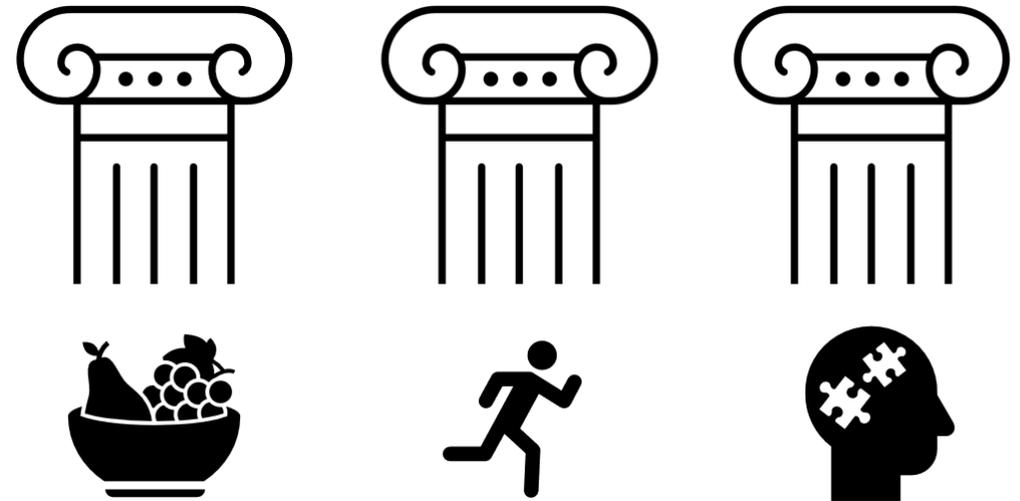
# SLTs in head and neck cancer care; challenges and future direction



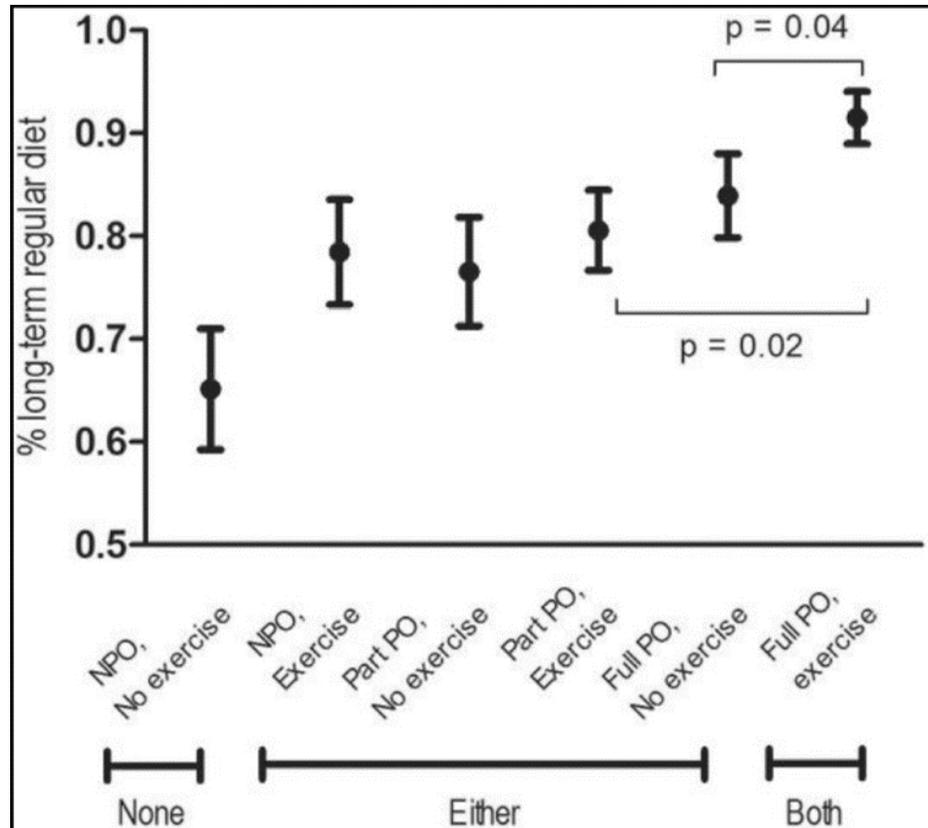
# Pre-treatment



## Prehabilitation



# Eating as treatment



I was in agony – I could've given up 2 weeks in ... eating was like putting acid on a fire

See this image and copyright information in PMC

**Figure 1** Long-term Diet by Swallowing Groups Greater proportions of patients who performed swallowing exercise and/or maintained PO intake throughout treatment ate a regular diet after RT or CRT ( $p=0.012$ ). Abbreviations: NPO, nothing per oral, PO, per oral

# Prophylactic swallowing exercises



Cochrane  
Library  
Cochrane

International Journal of  
**Radiation Oncology**  
biology •  
Official Journal of

Loewen et al. *Journal of Otolaryngology - Head and Neck Surgery* (2021) 50:2  
<https://doi.org/10.1186/s40463-020-00486-7>

Journal of Otolaryngology -  
Head & Neck Surgery

REVIEW

Open Access

Prehabilitation in head and neck cancer  
patients: A systematic review

Received: 24 May 2021 | Revised: 30 September 2021 | Accepted: 2 December 2021

DOI: 10.1111/ecc.13549



European Journal of Cancer Care WILEY

Dysphagia  
Cancer  
Review

Irene Loewe

REVIEW

The impact of dysphagia prehabilitation on swallowing  
outcomes post-chemoradiation therapy in head and neck  
cancer: A systematic review

Elissa Greco, MSLP, Tijana S  
PhD, Rosemary Martino, PhD

PlumX Metrics

DOI: <https://doi.org/10.1016/j.jrobp.2021.11.001> Rhona Brady<sup>1</sup> | Laura McSharry<sup>1</sup> | Susan Lawson<sup>2</sup> | Julie Regan<sup>1</sup>

Therapeutic  
swallowing in  
neck cancers

Perry A, Lee SH, Cotton S, Kennedy C

Prophylaxis

Open access

Original research

# BMJ Open Swallowing prehabilitation for people with head and neck cancer: a pilot cluster-randomised feasibility trial of the SIP SMART intervention

Roganie Govender ,<sup>1,2</sup> Jiunn Wang ,<sup>3</sup> Louise Marston ,<sup>4,5</sup> Elena Pizzo ,<sup>3</sup> Stuart Taylor ,<sup>6</sup> Irwin Nazareth ,<sup>3,5</sup>

Journal of Otolaryngology - Head & Neck Surgery



Cochrane Library

Cochrane

< Previous Article

REVIEW

Open Access

**Adherence**

**Outcome measures**

Therapeutic swallowing prehabilitation for head and neck cancers

Dysphagia in Head and Neck Cancer: A Review



# The PRO-ACTIVE trial protocol: a randomized study comparing the effectiveness of PROphylACTic swallow InterVEntion for patients receiving radiotherapy for head and neck cancer



R. Martino<sup>1,2,3,4\*</sup>, M. I. Fitch<sup>5</sup>, C. D. Fuller<sup>6</sup>, A. Hope<sup>7,8</sup>, G. Krisciunas<sup>9</sup>, S. E. Langmore<sup>9</sup>, C. Lazarus<sup>10</sup>, C. L. Macdonald<sup>11</sup>, T. McCulloch<sup>12</sup>, G. Mills<sup>13</sup>, D. A. Palma<sup>14</sup>, K. Pytynia<sup>15</sup>, J. Ringash<sup>4,7,8</sup>, K. Sultanem<sup>13</sup>, J. Theurer<sup>16</sup>, K. E. Thorpe<sup>17,18</sup> and K. Hutcheson<sup>6,15\*</sup>

1. Reactive (if dysphagic, high intensity)
  2. Prophylactic low intensity (diet & goal setting)
  3. Prophylactic high-intensity (diet, goal setting, swallow exercises)
- Primary OM feeding tube (FT)
  - Secondary PROM & clinical OM

LBA12000

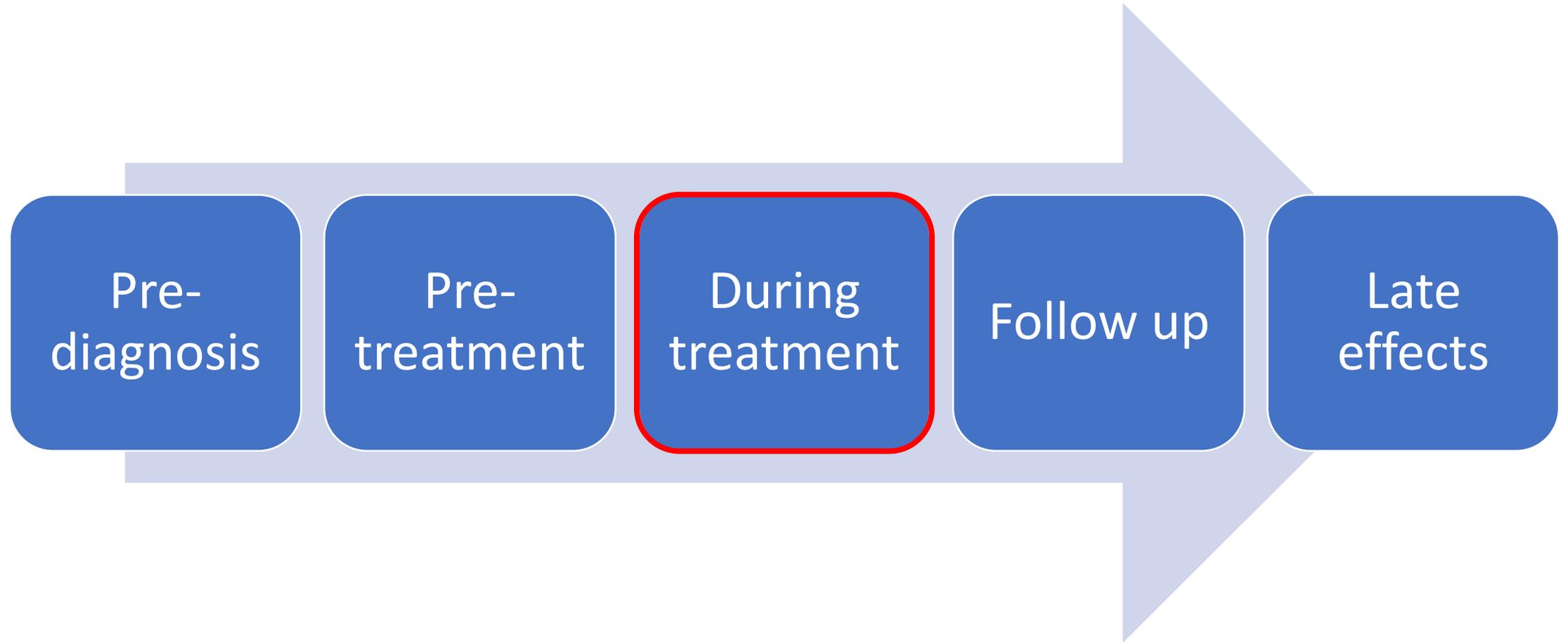
Oral Abstract Session

## PRO-ACTIVE: Results of a pragmatic phase IV randomized trial comparing the effectiveness of prophylactic swallow intervention for patients receiving radiotherapy for head and neck cancer.

Katherine A. Hutcheson, Clifton Dave Fuller, Kristen B. Pytynia, Andrew J. Hope, Jolie Ringash, Kevin Thorpe, David A. Palma, Julie Theurer, Gina Mills, Jennifer R. Cracchiolo, Mario Alberto Landera, Timothy M. McCulloch, Rafael Ricardo Manon, Annette May, Jamie Ku, Neil McIver Woody, Steven S. Chang, Susan Langmore, Brittany N. Krekeler, Rosemary Martino, PRO-ACTIVE Trial Working Group; The University of Texas MD Anderson Cancer Center, Houston, TX; Department of Radiation Oncology - Princess Margaret Cancer Centre - University Health Network, Toronto, ON, Canada; Princess Margaret Cancer Centre, Toronto, ON, Canada; University of Toronto, Toronto, ON, Canada; London Regional Cancer Program, London, ON, Canada; Western University, London, ON, Canada; Jewish General Hospital, Montreal, QC, Canada; Memorial Sloan Kettering Cancer Center, New York, NY; University of Miami Health System, Miami, FL; University of Wisconsin, Madison, WI; UF Health Cancer Center Orlando, Orlando, FL; Orlando Health, Orlando, FL; Department of Otolaryngology, Head and Neck Institute, Cleveland Clinic, Cleveland, OH; Department of Radiation Oncology Taussig Cancer Institute, Cleveland Clinic, Cleveland, OH; Henry Ford Health System, Detroit, MI; Retired, Sausalito, CA; University of Cincinnati, Cincinnati, OH

- N=952 Sites=13
- Baseline ~50% Dysphagia grade 0
- FT 34.4 (SD 75.9) mean days
- NS difference FT, PROMs, Diet, weight
- Next steps sub-analysis & VF OMs
- ✓ Baseline SLT assessment + VF
- ✓ SLT monitoring during and after RT
- ✓ Rapid EAT/EX delivery w/in 3d of dysphagia during RT

# SLTs in head and neck cancer care; challenges and future direction



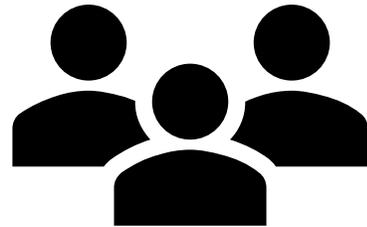


**Eating Assessment Tool (EAT-10)**  
 Circle the appropriate response

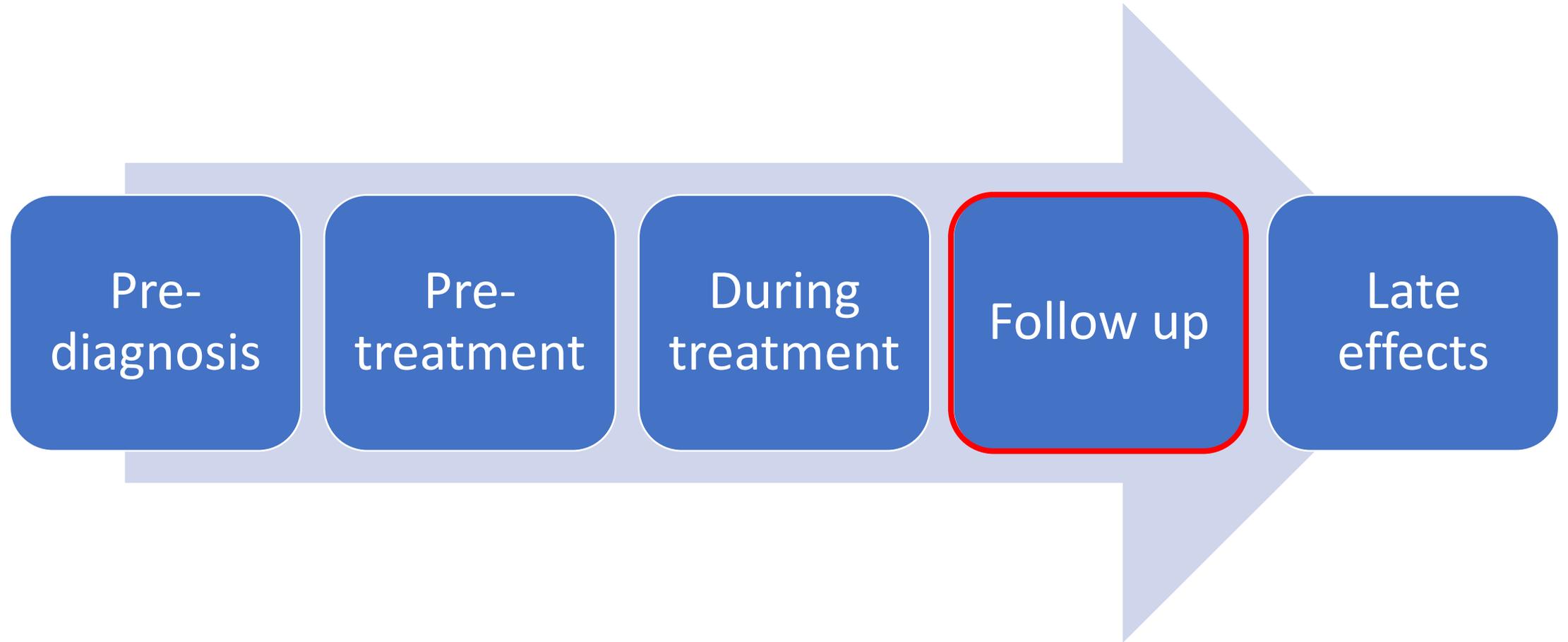
To what extent are the following scenarios problematic for you?

	0 = No problem	1	2	3	4 = Severe problem
1. My swallowing problem has caused me to lose weight.	0	1	2	3	4
2. My swallowing problem interferes with my ability to go out for meals.	0	1	2	3	4
3. Swallowing liquids takes extra effort.	0	1	2	3	4
4. Swallowing solids takes extra effort.	0	1	2	3	4
5. Swallowing pills takes extra effort.	0	1	2	3	4
6. Swallowing is painful.	0	1	2	3	4
7. The pleasure of eating is affected by my swallowing.	0	1	2	3	4
8. When I swallow food sticks in my throat.	0	1	2	3	4
9. I cough when I eat.	0	1	2	3	4
10. Swallowing is stressful.	0	1	2	3	4
Total EAT-10					

- Level 1 Nothing by mouth
- Level 2 Tube-dependent with minimal attempts of food or liquids
- Level 3 Tube-dependent with consistent oral intake of food or liquids
- Level 4 Total oral diet of a single consistency
- Level 5 Total oral diet with multiple consistencies but requiring special preparations or compensations
- Level 6 Total oral diet with multiple consistencies without special preparations but with specific food limitations
- Level 7 Total oral diet with no restrictions

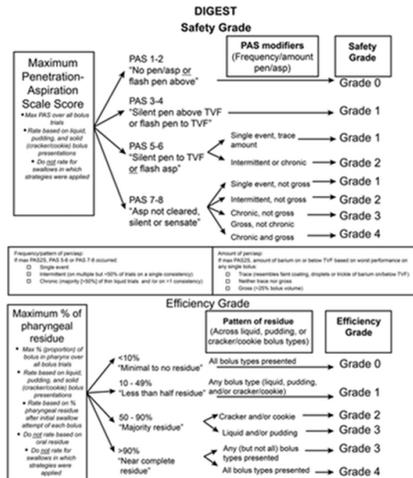
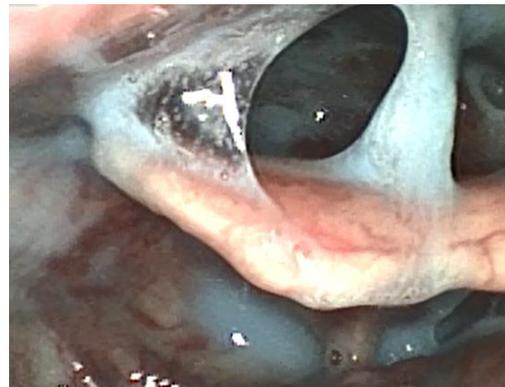


# SLTs in HNC care; challenges and future direction



# Core outcome set

## Instrumental



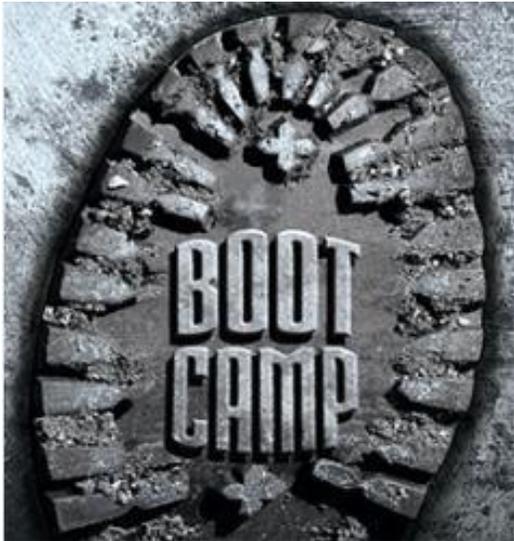
## Clinical

- Level 1 Nothing by mouth
- Level 2 Tube-dependent with minimal attempts of food or liquids
- Level 3 Tube-dependent with consistent oral intake of food or liquids
- Level 4 Total oral diet of a single consistency
- Level 5 Total oral diet with multiple consistencies but requiring special preparations or compensations
- Level 6 Total oral diet with multiple consistencies without special prepa but with specific food limitations
- Level 7 Total oral diet with no restrictions

## Patient-reported

E4. I am upset by my swallowing problem.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
P6. Swallowing takes great effort.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
E5. I do not go out because of my swallowing problem.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
F5. My swallowing difficulty has caused me to lose income.					
P7. It takes me longer to eat because of my swallowing problem.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
P3. People ask me, "Why can't you eat that?"	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
E3. Other people are irritated by my eating problem.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
P8. I cough when I try to drink liquids.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
F3. My swallowing problems limit my social and personal life.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
F2. I feel free to go out to eat with my friends, neighbors, and relatives.	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree

# Dysphagia therapy



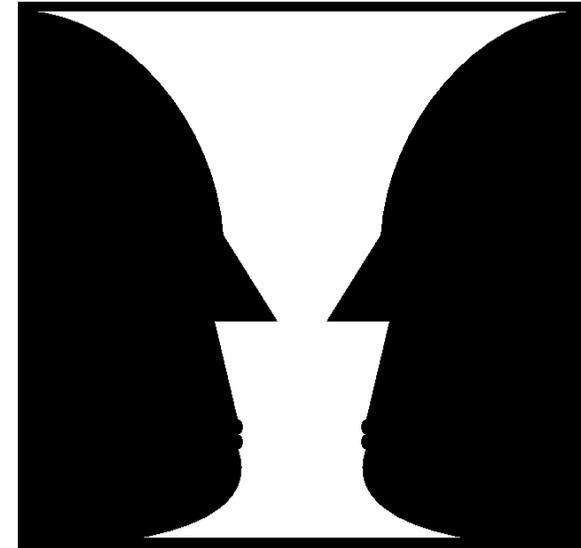
Charters E, . Intensive dysphagia rehabilitation program for patients with head and neck cancer. *ANZ J Surg*. 2022



EMST150™ Expiratory Muscle Strength Trainer – Main Med  
Hutcheson KA, et al. Expiratory muscle strength training for radiation-associated aspiration after HNCr: A case series. *Laryngoscope*. 2018  
Palmer AD, et al The Safety and Efficacy of Expiratory Muscle Strength Training for Rehabilitation After Supracricoid Partial Laryngectomy: A Pilot Investigation. *Ann ORL*. 2018



Martin-Harris, B., et al . (2015). Respiratory-swallow training in patients with head and neck cancer. *Archiv phys / medicine and rehabilitation*, 96(5),



Patterson JM, et al. Feasibility and acceptability of combining cognitive behavioural therapy techniques with swallowing therapy in head and neck cancer dysphagia. *BMC Cancer*. 2018

# Oncokompas



PROMS

LEARN

ACT

Physical 	Psychological 	Social 	Lifestyle 	Existential questions 
<ul style="list-style-type: none"> <li>• Pain</li> <li>• Sexuality</li> <li>• Sleep</li> <li>• Fatigue</li> <li>• Body image</li> <li>• Diarrhea</li> <li>• Constipation</li> <li>• Lack of appetite</li> <li>• Nausea</li> <li>• Lymphedema</li> <li>• Daily functioning</li> <li>• Hearing</li> <li>• Child wish</li> <li>• Nutritional drinks</li> <li>• Probe feeding</li> <li>• Dyspneu</li> <li>• Tinnitus</li> <li>• Choice support</li> </ul>	<ul style="list-style-type: none"> <li>• Anxiety</li> <li>• Fear of recurrence</li> <li>• Depression</li> <li>• Memory &amp; concentration</li> </ul>	<ul style="list-style-type: none"> <li>• Social life</li> <li>• Relationship</li> <li>• New relationship</li> <li>• Children</li> <li>• Finance</li> <li>• Insurance and mortgage</li> <li>• Work</li> <li>• Physician-patient interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Smoking</li> <li>• Alcohol</li> <li>• Exercise</li> <li>• Nutrition</li> <li>• Weight</li> <li>• Stress</li> </ul>	<ul style="list-style-type: none"> <li>• Existential questions</li> </ul>
Cancer survivors: tumour specific				
Head and neck cancer 	Colorectal cancer 	Lymphoma 	Breast cancer 	Melanoma 
<ul style="list-style-type: none"> <li>• Swallowing</li> <li>• Speech</li> <li>• Shoulder problems</li> <li>• Loss of taste and smell</li> <li>• Lymphedema</li> <li>• Oral problems</li> </ul>	<ul style="list-style-type: none"> <li>• Bladder and urinary symptoms</li> <li>• Bloating</li> <li>• Scar symptoms</li> <li>• Hereditary</li> <li>• Stool symptoms</li> <li>• Diarrhea</li> <li>• Constipation</li> <li>• Stoma related problems</li> <li>• Sexuality</li> </ul>	<ul style="list-style-type: none"> <li>• Wait and see regimen</li> <li>• Fear of recurrence</li> <li>• Neuropathy</li> <li>• Pain</li> <li>• Muscle and joint pain</li> <li>• Stem cell transplantation</li> <li>• Infections</li> <li>• Fertility</li> </ul>	<ul style="list-style-type: none"> <li>• Endocrine therapy</li> <li>• Menopausal symptoms</li> <li>• Body image</li> <li>• Sexuality</li> <li>• Fertility</li> <li>• Hereditary</li> <li>• Lymphedema</li> <li>• Fibrosis</li> <li>• Arm-shoulder movement</li> <li>• Breast reconstruction</li> <li>• Breast prosthesis</li> </ul>	<ul style="list-style-type: none"> <li>• Lymphedema</li> <li>• Scar symptoms and care</li> <li>• Hereditary</li> <li>• Self-examination</li> <li>• Dealing with sunlight</li> <li>• Working oversight</li> <li>• Freelancer</li> <li>• Fear of recurrence</li> <li>• Changing future perspective</li> <li>• Reaction people on melanoma</li> </ul>



# eAltra Conversational Patient Concerns Inventory

**[PCI]** Aintree University Hospital **NHS**  
NHS Foundation Trust  
*Where quality matters*

## Head and Neck - After Diagnosis Patient Concerns Inventory [PCI]

The amount of information patients and their family would like after the time of diagnosis of their cancer varies considerably. This Patient Concerns Inventory (diagnosis) is a checklist to help patients and their family raise issues that they want to talk about with the doctors, nurses and allied health professionals. Tick as many or as few as you wish to help you remember what you want to discuss with our head and neck team.

**Cause of cancer:**

- Lifestyle issues (smoking/alcohol)
- HPV
- Other

**Treatment related:**

- Investigations needed (MRI/CT)
- Investigation results
- Cancer treatment: what choices of treatment are available
- Treatment intent: cure or palliation
- Clinical trials - contributing to research
- Nutrition/feeding tube/PEG
- What are the side effects/toxicity/complications of treatments
- Surgery: length of stay in hospital, neck dissection, laser, free flap
- Radiotherapy: mould room, number of treatments, sore mouth and skin
- Chemotherapy: number of treatments, deafness, nausea
- What is the chance of cure
- When will I know I am all clear - when will I know treatment has been successful
- What treatments are available if the cancer comes back

**How long am I likely to live:**

- Waiting time for commencement of treatment
- Duration of treatment
- Dental check up

**What will I be like:**

- What are the main issues that patients find important e.g. speech, swallowing
- What sort of 'quality of life' do patients report

**Follow-up:**

- What sort of follow up do I need/how often/ scans/tests
- Patient and Carer Support Group/meet other patients

**Social care and Social well being:**

- Carer
- Dependants/children
- Finance/money
- Benefits/what's free and what's not
- Time off work
- Home care/District nurse
- Recreation
- Relationships
- Speech/voice/being understood
- Support for my family

SHEET 1/2

Study Number:

Date:

**EPRC**

The assessment will take around 15 minutes. Are you ok to do it now, or would you prefer to come back later?

**I'm ready now**

PCI means Patient Concerns Inventory. I'm going to show you topics you might have questions about, and store the ones you choose in a file for your next appointment. We can share these topics with your clinical team, to help them prepare for the appointment.

**Go on**

If you want to take a break at any time, press 'Exit' and I will save your answers. When you're ready to continue, just go back to the website, log in, and you can resume your assessment from where you left off. Press OK to continue.

**OK**

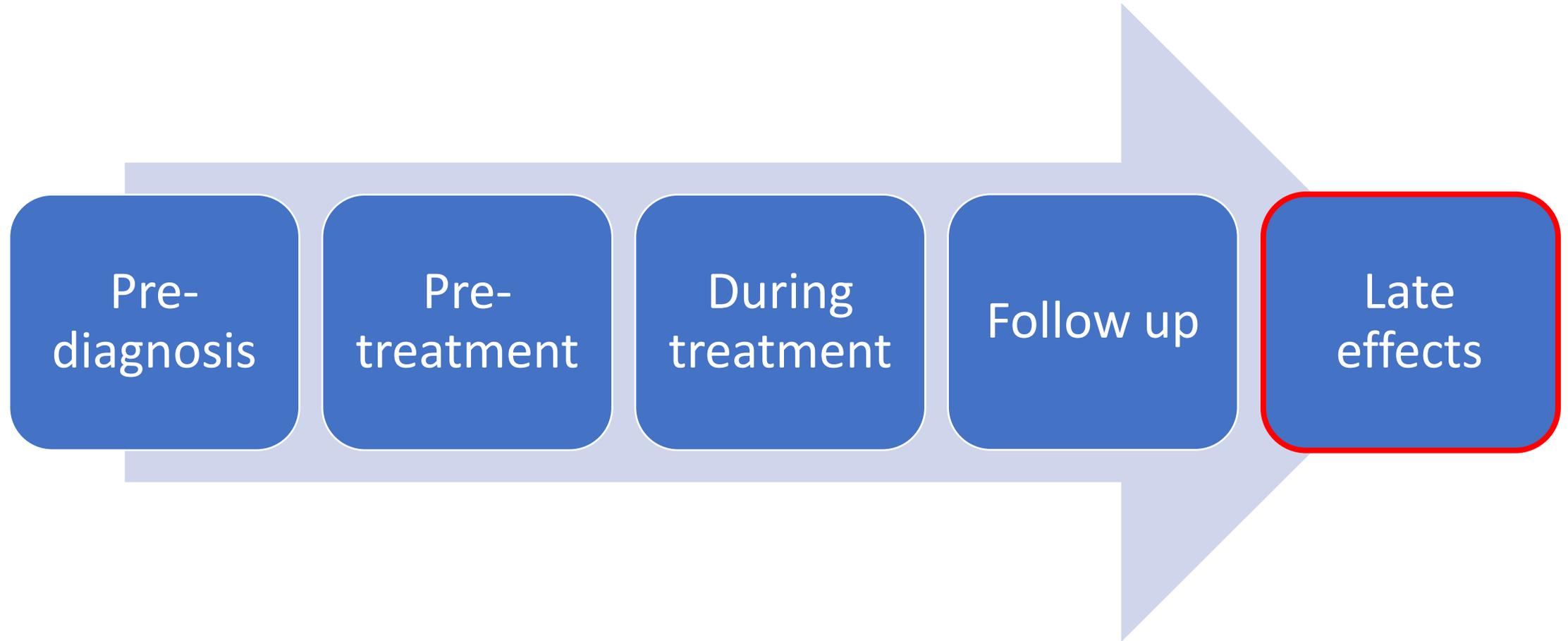
OK, Here are a list of areas you might have concerns in. Please choose which area you'd like to look at first.

- My Physical Wellbeing
- My Treatment
- My Social Care and Wellbeing
- My Psychological, Emotional and Spiritual well-being

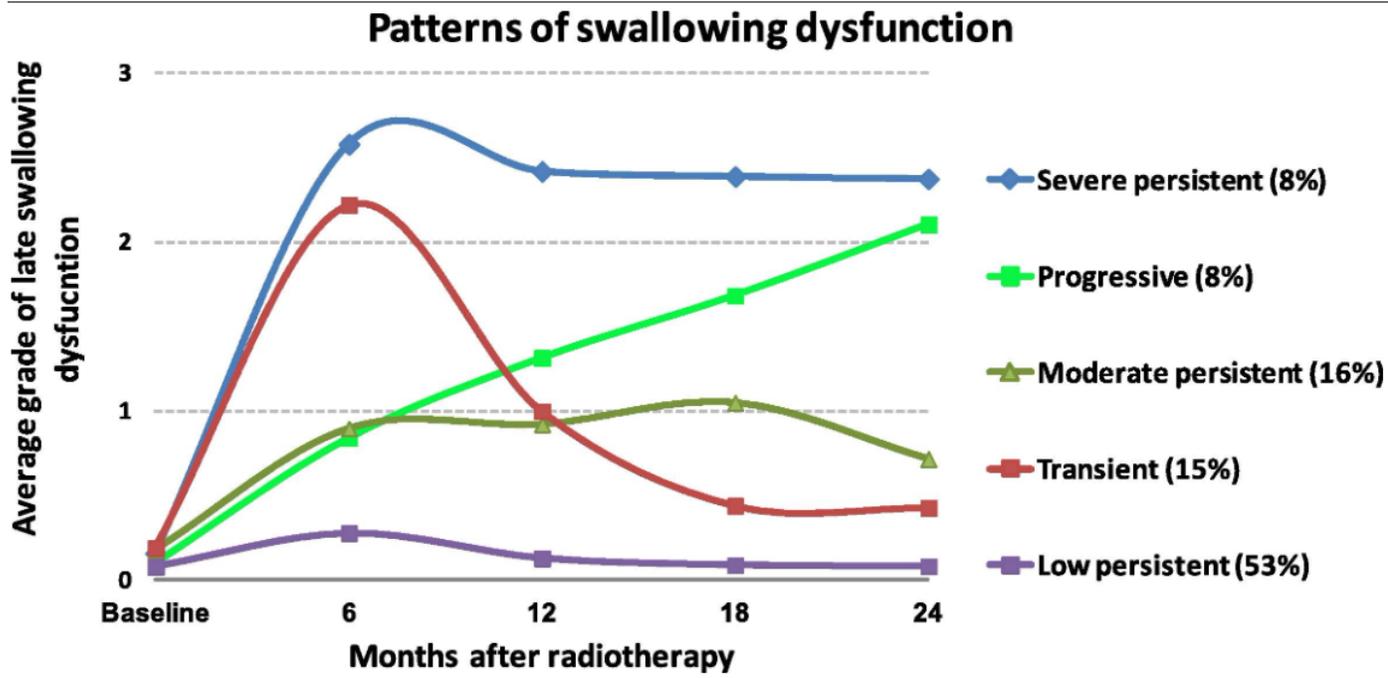
**BACK** **EXIT**

- Integrated with Electronic Health Record
- Any web-enabled device
- Fully interactive and 'live'
- Feasible for peri-RT

# SLTs in head and neck cancer care; challenges and future direction



# What are 'late effects'



## Swallowing beyond six years post (chemo)radiotherapy for head and neck cancer; a cohort study

J.M. Patterson<sup>a,b</sup>, E. McColl<sup>a</sup>, P.N. Carding<sup>c</sup>, J.A. Wilson<sup>a</sup>

Supportive Care in Cancer (2025) 33:493  
<https://doi.org/10.1007/s00520-025-09540-4>

### REVIEW

## Late radiation-associated dysphagia following treatment for head and neck cancer: a scoping review

Diane Sellstrom<sup>1,5</sup>, Joanne M. Patterson<sup>2</sup>, Tracy Finch<sup>3</sup>, James O'Hara<sup>1,4</sup>, Catherine Haighton<sup>3</sup>

Develops **many years** post-treatment after a **latency** period

Onset 5.8-12 years  
Candidate predictors

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

**Radiotherapy and Oncology**

journal homepage: [www.thegreenjournal.com](http://www.thegreenjournal.com)

Swallowing dysfunction  
Patterns of long-term swallowing dysfunction after definitive radiotherapy or chemoradiation



Miranda E.M.C. Christianen<sup>a</sup>, Irma M. Verdonck-de Leeuw<sup>b</sup>, Patricia Doornaert<sup>c</sup>, Olga Chouvalova<sup>a</sup>, Roel J.H.M. Steenbakkers<sup>a</sup>, Phil W. Koken<sup>c</sup>, C. René Leemans<sup>b</sup>, Sjoukje F. Oosting<sup>d</sup>, Jan L.N. Roodenburg<sup>e</sup>, Bernard F.A.M. van der Laan<sup>f</sup>, Ben J. Slotman<sup>c</sup>, Hendrik P. Bijl<sup>a</sup>, Johannes A. Langendijk<sup>a,\*</sup>

CLINICAL EXPERIENCE

## **Clinical Profile and Referral Pathways in Late Radiation-Associated Dysphagia (Late-RAD): A Consecutive Case Series**

Diane Sellstrom , James O'Hara, Catherine Haighton, Tracy Finch, Joanne M. Patterson

- Symptoms
- 57% hospital admission rate
- System re-entry: GP (55%) acute admission (24%)

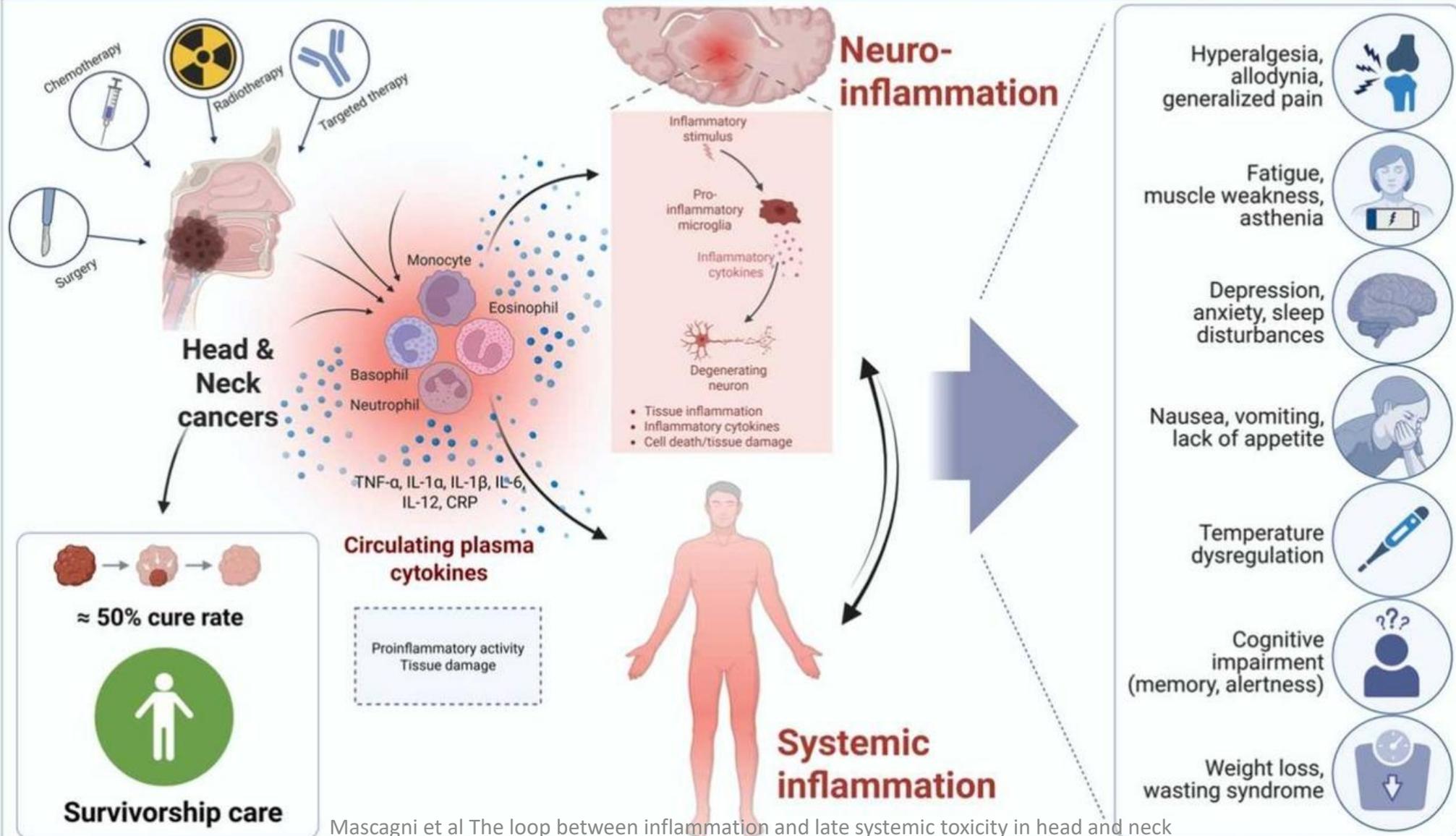
## Sellstrom et al “Everything I Had, I Lost”: Survivors’ Lived Experiences of Late Radiotherapy Side Effects Following Head and Neck Cancer Treatment

- “it is **gradual** a very gradual thing, it almost sort of creeps up on you a bit”
- “I was fine until about 12 months ago, when I notice then I was having difficulty swallowing and it's definitely got quite worse.. **Rapidly** really”
- “probably about five years ago...it probably started long before that but I was probably **in denial**”
- “you were out playing golf ...one of the guys went ‘Andrew was poorly he was really sick’. He came home and laid on the couch. He went to work and they said you need to go home you’re not well. **He couldn’t breathe.**”



headandneck **5000**

# The Loop Between Inflammation and Late Systemic Toxicity in Head and Neck Cancer Survivors



# Future

**Preventative approach**

**Core outcomes**

**Effective interventions**

**Harness digital revolution**

**Early identification**

**Integrated care**



**LIVING WELL AFTER HEAD AND NECK CANCER**

# Clinical academic career pathways for nurses, midwives and allied health professionals



# NIHR INSIGHT Programme

- Who?** Students / recent graduates registered Health and Care Professions
- Where?** 12 regional INSIGHT Programmes in England HEIs
- What?** Research Masters Studentships (course fees + stipend)  
30 places per year within each region

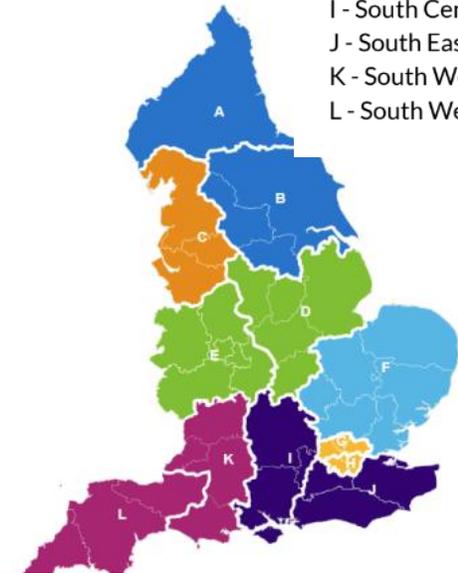
# NIHR Health & Care Professional Internship Programme

**Who?** Qualified Health and Care Professionals

**What?** Research knowledge and skills to enhance practice, build research delivery expertise or begin a clinical academic career

**Where?** Organisations across 12 regions in England  
23 internships available per a year with each region

A - North East & North Cumbria  
B - Yorkshire & Humber  
C - North West  
D - East Midlands  
E - West Midlands  
F - East of England  
G - North London  
H - South London  
I - South Central  
J - South East  
K - South West Central  
L - South West Peninsula



# NIHR Academy Research Training Awards



Award Programme	Research Training	Clinical and practitioner academic training		
	Fellowships	Develop as a health or social care researcher with flexibility for clinical and practice time	Integrated Clinical and Practitioner Academic Programme	Integrated Academic Training Programme
Eligibility	All professions	Health and social care professionals, excl. doctors and dentists	Doctors and dentists	Professionals in local authority settings
Pre-doctoral	Pre-doctoral Fellowship*	Pre-doctoral Clinical and Practitioner Academic Fellowship	Academic Clinical Fellowship	Pre-doctoral Local Authority Fellowship
Doctoral	Doctoral Fellowship	Doctoral Clinical and Practitioner Academic Fellowship	In-Practice Fellowship	Doctoral Local Authority Fellowship
Post-doctoral	Development and Skills Enhancement Award	Advanced Clinical and Practitioner Academic Fellowship	Clinical Lectureship	Advanced Local Authority Fellowship
	Advanced Fellowship			
Chair	Research Professorship			

\*eligible for those aiming for a career in health and social care research methodology





# Evolving Treatments, Evolving Needs: Advancing Rehabilitation in Head and Neck Cancer

Professor Jo Patterson, University of Liverpool

[Joanne.patterson@liverpool.ac.uk](mailto:Joanne.patterson@liverpool.ac.uk)

[Living Well After Head and Neck Cancer Research Group | Liverpool Head & Neck  
Centre](#)

