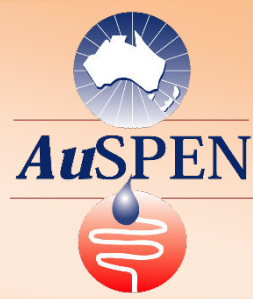


Managing malnutrition in respiratory disease from hospital-to-home: *Patients don't have time to waste*

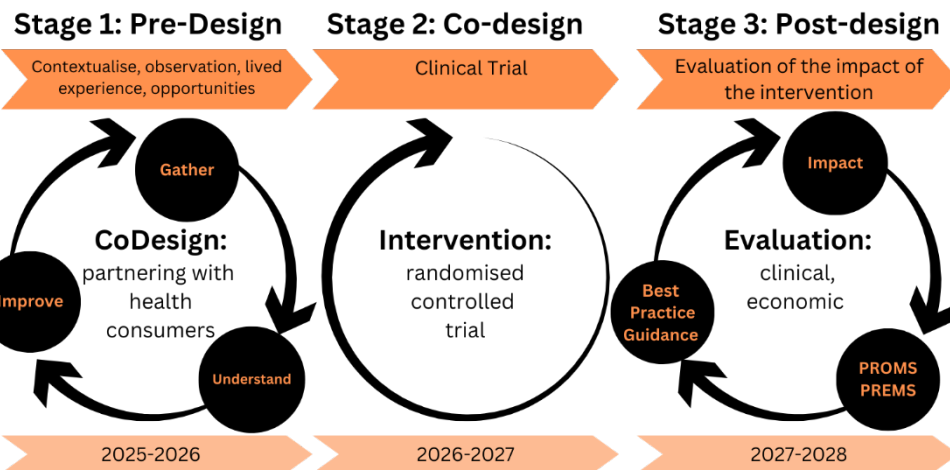


Project team: Dr Peter Collins (Dietitian), Assoc Prof Michelle Cunich (Health Economist), Dr Stephen Milne, Dr Elizabeth Veitch, & Assoc Prof Lauren Troy (Respiratory Physicians). **Contact:** Dr Peter Collins, Nutrition & Dietetics, Charles Perkins Centre, Sydney Nursing School, Faculty of Medicine and Health, The University of Sydney, NSW, Australia. Email: peter.collins@sydney.edu.au

Description of the initiative

- **Background / context:** Malnutrition is a common and costly problem in respiratory diseases, affecting up to 60% of patients with diagnoses of chronic obstructive pulmonary disease (COPD). Although the aetiology is complex and multi-factorial, key contributors are an inability to consistently meet nutrition requirements in the setting of chronic inflammation and frequent exacerbations.
- **Rationale for the initiative:** Using a generative codesign framework, develop an innovative multi-modal malnutrition model of care (MMOC) supporting patients as they transition from hospital-to-home. **Objectives and scope:** 1) Develop a codesigned MMOC; 2) Randomised controlled trial: establish the impact of a transitional MMOC on clinical and health economic outcomes including malnutrition diagnosis resolution, patient-reported outcome measures (PROMS) such as quality of life, patient-reported experience measures (PREMS), healthcare use and associated costs, and efficiency (e.g., cost per quality adjusted life year, QALY); 3) Inform future evidence-based nutrition support guidelines.

Planned activities & deliverables



Resources & enablers

- **Personnel, financial needs:** Funding of €40,000 is required to support a full-time researcher to lead the design, implementation and evaluation of the project under the guidance of the multidisciplinary research team. A supply of oral nutrition supplements will be sought from a MNI partner for the intervention phase.

- **Specify how the grant will be spent:** Funds will be matched with \$75,000 AUD of University of Sydney, Faculty of Medicine & Health research funding to support the project. **What factors will make it successful?** The vision for Sydney Local Health District is to be a world leader in allied health research, the Charles Perkins Centre at The University of Sydney is focused on tackling global chronic disease collaboratively, and the dietetics and respiratory medicine departments are research active and would facilitate the project. The project team have experience in design and implementation of interventional studies and disseminating and translating findings into clinical practice.

Results, outcomes & expected impact

- **How will the findings be implemented?** The MMOC will be tested against routine care across 4 Sydney Local Health District tertiary hospitals to inform future service delivery, research, and guidelines.
- **How will this project advance patient care / contribute to optimal nutritional care?** The MMOC will be published and available for researchers and clinicians to implement in other patient groups.
- **What makes the project innovative?** No codesigned MMOC specifically targeting malnourished respiratory patients has been previously developed and formally evaluated.
- **Will the project be likely to influence national nutrition policy?** The project is expected to inform policy via national and international practice guidelines (e.g., European Respiratory Society). The project team are influential and include the current lead for the ESPEN guideline on nutrition support in COPD, panel member of COPD malnutrition pathway, support from the AuSPEN president, respiratory physicians, and the co-director of Institute for Academic Medicine, Royal Prince Alfred Hospital.
- **Is the project transferable to other settings / countries?** By 2050, COPD is expected to affect 49.5 million Europeans and is predicted to cost the Chinese and US economies more than \$1 Trillion USD annually. The findings will have a global impact and inform interventions in other diseases.



Please tick to confirm the PEN letter of endorsement is attached. Incomplete submissions will not be considered.

