

QUALITY USE OF MEDICINES IN CHRONIC AIRWAYS DISEASE PROGRAM

Program Design Synopsis | April 2024

Prepared by Asthma Australia on behalf of The Lung Learning Partnership







The Quality Use of Medicines in Chronic Airways Disease Program is funded by the Australian Government Department of Health and Aged Care



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Asthma Australia acknowledges the Traditional Custodians of the lands on which we work and pay respect to Elders past and present, and the Aboriginal and Torres Strait Islander Peoples within the community.

We recognise and respect the holistic concept of health for First Nations Peoples which embraces physical, social, emotional, cultural, and spiritual wellbeing, for both the individual and the community, and which encompasses the importance of connection to land, water, culture, spirituality and ancestry.

We acknowledge and uphold the intrinsic connections and continuing relationships Aboriginal and Torres Strait Islander Peoples have to Country and value their cultural knowledge, strength and resilience in our work to improve the lives of people experiencing chronic airways disease.



Chronic airways disease has a significant impact on the quality of life of Australians.

The **QUM in CAD Program** will leverage the Lung Learning Program components
(Lung Learning Framework and Lung Learning Hub) to deliver a national program of education for HCPs that aims to improve the quality use of medicines and medical tests in the diagnosis and management of chronic airways disease, focusing on breathlessness, asthma and COPD.

The QUM in CAD Program is the execution of a Health Professional Education Grant to the Lung Learning Partnership from the Australian Government Department of Health and Aging, as part of the Quality Use of Diagnostics, Therapeutics and Pathology Program.

Program Design approach

This report summarises the variety of inputs into the design process and demonstrates how these connect to define the challenges and to design the collaborative delivery of the QUM in CAD Program outcomes by the Lung Learning Partnership.

A human-centred design approach has been used in Program Design. The Program Design strategic process has taken us through discovery, definition to design and sets out the framework to develop the next steps.



Figure 1: Adapted six stages of human-centred design approach to QUM in CAD Program

DISCOVER: listen, learn, understand, and empathise

Creating meaningful solutions begins with gaining a deep understanding of the needs of the people and organisations the problem affects

In this first phase of the Program Design process both internal and external sources were reviewed to consider relevance to the design of the QUM in CAD HCP Education Program. With a number of initiatives in place to support HCPs in the delivery of the quality of medicines, it is important that our program supports and amplifies these rather than adding another activity to the already crowded space. Analyses from the Lung Learning Framework were considered as well as findings from the Environment Scan, in addition to considerations of the current CPD requirements, HCP preferences and current indicators of best practice in QUM.



Multiple stakeholder organisations, clinical experts and consumers are being engaged to inform the development of the Program and its priorities as they relate to QUM and the target audiences it seeks to influence. In addition to the Project Consortium, a Stakeholder Reference Group and multidisciplinary Expert Working Group have been established. People with lived experience of CAD are a critically important stakeholder group, and additional clinical expert and/or end-user working groups will be assembled for specific program activities.

Design Thinking Workshop

The Design Thinking Workshop was the major activity of the Program Design process. Held on 26th February 2024 in Brisbane and hosted and facilitated by Prof Sharyn Rundle-Thiele and her team from Social Marketing @ Griffith, 54 HCPs and people with lived experience of CAD gathered for a five-stage participatory design thinking process: empathise, define, ideate, prototype and test.

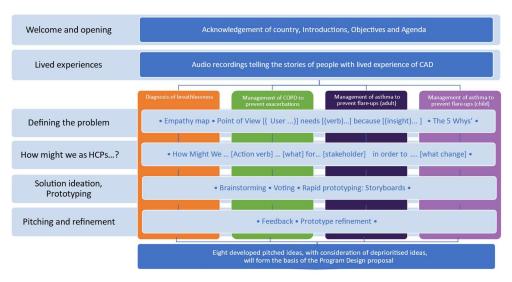


Figure 2: Design Thinking Workshop - agenda flow

1. Empathise

We began the workshop listening to recordings of Lived Experience Narratives from a selection of five people with CAD. The narratives were created from interviews with people with different CAD conditions, adapted to create stories of suitable length and recorded by actors.

2. Define the problem

A series of exercises were run with participants working individually and in groups in order to better understand and define the problem we would be designing the Education Packages to solve.



Table 1: Summary of outputs from the Design Thinking Workshop exercises to define the problem

	1. Young adult with recently-diagnosed COPD	2. Adult who has struggled with breathlessness for years	3. Adult with long-term poorly-controlled asthma and comorbidities	4. Older adult with life-long silent asthma	5. Adult and children with asthma
POV statement	They need comprehensive patient care and education because they are frustrated with inadequate healthcare for COPD and feel isolated.	They need support to navigate the clinical journey because their life is limited by breathlessness.	They need to be empowered to self-manage their asthma, because they are overwhelmed.	They need greater support from others because they live life in fear.	They need support to organize the family asthma management because they don't want family life to be limited.
Problem	The patient needs to be holistically assessed and managed	HCPs are not able to diagnose breathlessness	Consumer feels like they are not being heard throughout the asthma journey		Good quality, person-centred care is compromised when multiple family members have asthma
Why is that?	HCP stigma	HCP doesn't recognise breathlessness	Lack of patient confidence		HCP takes a an individual view
Why is that?	HCP lack of knowledge	Long-standing problem	Patient-HCP power dynamic		HCPs are not supported to look at family
Why is that?	New information not disseminated	Out-dated HCP attitude	HCP doesn't recognise lived experience		PHC episoidic business model
Why is that?	HCP competing priorities	Lack of HCP experience	HCP is reactive / solutionising		Lack of family- centred model of care in PPHC

Ultimately "How might we...?" questions were developed to frame the challenges in a way that inspires creative problem-solving and innovation. Overall, you could summarise our overarching challenge as follows.

How might we design Education Packages to inform and equip healthcare professionals with the knowledge, attitude and skills in order to deliver patient-centred care and empowerment?

3. Ideation

A series of brainstorming activities amongst participants both individually and in groups generated 427 unique responses to the different questions. The ideas could be categorized into the potential deliverable solutions for healthcare professional education, factors that would facilitate the delivery of these solutions, ideas targeting health services or system-level solutions, as well as more consumer-focused activities.



4. Prototype and test

The conclusion of the Workshop were eight pitches presented by the participants as the culmination of the Design Thinking process at the end of the day. Each group developed their ideas and presented and took feedback from other groups, refining their idea in an iterative fashion.

Table 2: Eight concepts pitched at the Design Thinking Workshop

Concept name	Description
(Group focus) Podcast series based around the AAH and connected to patient experience (Asthma in children)	A 12 episode-podcast based on sections of the AAH supported by patient experience. Extension activities include guided reflections, online learning, supplementary resources and behaviour change reflections.
Asthma certification program plus community of practice (Asthma in adults)	Asthma certification after completion of in-person training, online training and an assessment. Extension activities include an immersive experience at a respiratory clinic and community of practice.
Asthma Compass: checklist to create integrated care plan for all patients (Asthma in adults)	With the goal of supporting primary healthcare professionals to create and use an integrated plan of care, a checklist to build a plan pulling together existing resources. Considerations include tapping into existing MBS-funded items, CPD accreditation for reflective practice.
Breathlessness pie: a model to organise diagnosis and interventions in breathlessness (Breathlessness)	A biopsychosocial cultural model for organising thinking about how to manage the patient experience of breathlessness. Each slice of the pie represents a different aspect that is potentially treatable to impact a person's experience of breathlessness.
Resources for HCPs to support better lung health in Aboriginal people (COPD)	With the goal of empowering HCPs to understand the questions they need to ask so they're culturally appropriate for that community, how that needs to be framed, how they need to talk to their patient about their condition, this proposal sets out to engage and partner with community in APY Lands to co-design and develop a toolkit for HCPs
A digital destination on breathlessness for HCPs (Breathlessness)	A centralised digital space where information is available at a click as a quick resource for doctors within their consultation. The goal is to make information available at a click as a quick resource for doctors within their consultation. To help GPs how to assess, diagnose, investigate and manage. Supplemented by a learning module on how to use, and key principles.
Choose your own asthma adventure (Asthma in children)	An Al assisted platform to direct the user though a learning pathway based on a family with children or adolescents with asthma. Scenario-based learning combining real-life stories and messages around the quality use of medications, inhaler technique, prescription and deciding if an inhaler is correct for that person.
COPD checklist for GPs (COPD)	A tool to facilitate standardised, patient-centred COPD care and training resources on how to use it. the checklist is at the GP fingertips to prompt appropriate diagnosis and managements steps. Integrate existing assets. Supported by training on how to use.



Each of the pitched education concepts aim to empower HCPs with the knowledge, skills, and

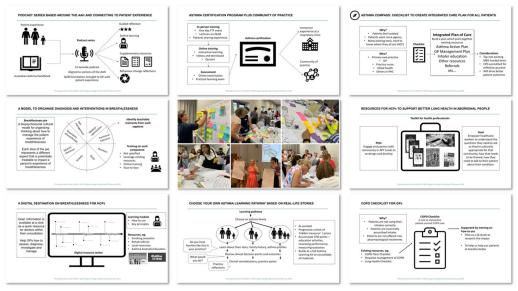


Figure 3: Summary of the eight pitches present at the conclusion of the Design Thinking Workshop

resources needed to deliver high-quality, patient-centred care. Themes from the pitches can be summarised as principles to guide the Education Package design.

- · Understand patient experiences and integrate them into healthcare practice
- Use innovative educational methods
- Emphasise the importance of adhering to evidence-based practice guidelines.
- Provide opportunities for reflection and self-assessment.
- Community engagement, collaboration, and partnership are important in healthcare delivery.
- Provide practical tools, checklists, and resources that can be easily implemented into clinical practice
- Work in a way that is **culturally sensitive**, considering diversity, and inclusion.

Elements of each pitch will be used in the Education Package and Activity Design.



DEFINE: consolidate insights to inform effective solutions

Prioritised findings and rich insights around challenges are translated into opportunity areas for innovation

The DEFINE phase of human-centred design allows an opportunity to bring together the volume of findings and insights from the DISCOVER phase and organise them. Keeping the people we are delivering the Education Packages to, and the ultimate beneficiaries of the people living with chronic airways disease as our focus, in this section we have organised the findings in a way to point to optimal solution design.

Reflect priority QUM issues for people with CAD and promote patient empowerment as key to optimal management

- We heard that priority issues for people with CAD are as follows:
 - **Breathlessness** Patients suffer from lack of personal, community, and provider awareness, discontinuity of care, and too few clinical and self-management options.
 - **COPD** Fragmented care coordination of COPD and comorbidities causes additional stress from navigating the health system.
 - **Asthma** Lack of understanding of the disease, undervaluing of medications and easy access to relivers contribute to cyclic lack of control.
 - **People with CAD** need to feel empowered through engagement from HCPs in shared decision-making because their disease is poorly-controlled and they feel overwhelmed.
- The pitches emphasise the importance of understanding patient experiences and integrating them into the educational content through patient stories, scenarios, and real-life experiences.

Facilitate HCPs to self-appraise their knowledge and skills against the capabilities of the Lung Learning Framework

- Activities created within Education packages should be built around the identified gaps in current Lung Learning Framework and the training needs identifies HCP self-appraisal analysis.
- The design and build of the Education Packages must include planning of Journeys to connect the user with the self-appraisal, and re-appraisal of capabilities within the Framework.
- The pitches emphasised the importance of adherence to evidence-based practice guidelines and called out the need to provide opportunities for reflection and self-assessment.

Include multi-modal education and behaviour change activities that support HCPs to deliver evidence-based care

- It is important to include activities that provide Reviewing Performance and Measuring Outcomes time for the doctors who consume the content.
- Design of contemporary CPD requires consideration of suitable format and HCP preferences.
- Mapping issues relating to QUM to the relevant points in the patient journey and thinking about intervention design to tackle these concerns will drive a needs-based approach.
- Work with existing and planned activities which may overlap with the QUM in CAD Program
- The pitches incorporated a range of ideas, with a focus on utilising innovative educational
 methods and digital platforms to deliver education and training to HCPs. These methods aim to
 make learning accessible, engaging, and convenient for busy professionals.



DESIGN: a strategic process to synthesise and set direction

The more energy, creativity, and hard work that goes into program design, the greater the chances that a program will succeed

Taking a human-centered design approach to the development of the QUM in CAD Program Design builds on four principles: focus on people and their context, seek to understand and solve the right problems, think about the system of interconnected parts, and build small, simple interventions that truly meet the needs of the people in focus. In the DESIGN phase we have integrated the findings and insights and made decisions about the build of an interlinked set of Education Packages to deliver the QUM in CAD Program objectives and outcomes.

We set out the schema for the QUM in CAD Program "home" and its constituent Education Packages, separate from, but related to, the Lung Learning Program and its components. Also we outline high-level plans for the Education Package design by topic, mapping the lived experience needs, target audience, priority gaps in the Lung Learning Framework and identified QUDTP issues alongside a suite of activities to deliver to educational need of healthcare professionals.

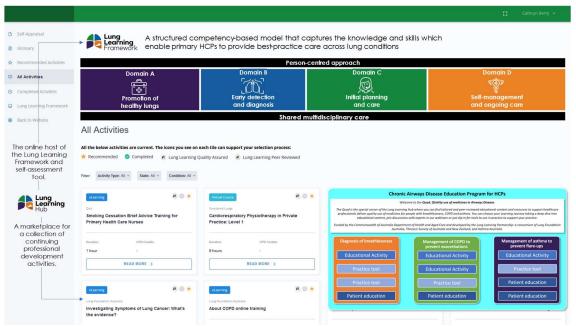


Figure 4: QUM in CAD Program Schema illustrated within the context of the Lung Learning Hub



Table 3: Summary of the key design components of the three Education Packages

	EDUCATION PACKAGES		
	Diagnosis of breathlessness	Management of COPD to prevent exacerbations	Management of asthma to prevent flare-ups
Priority QUM issue: person with CAD	Patients suffer from lack of personal, community, and provider awareness, discontinuity of care, and too few clinical and self-management options	Fragmented care coordination of COPD and comorbidities causes additional stress from navigating the health system.	Lack of understanding of the disease, undervaluing of medications and easy access to relivers contribute to cyclic lack of control
Priority QUM issue: HCP	Lack of proper diagnosis for respiratory symptoms can mean over- or under-diagnosis	Lack of adherence to guidelines by prescribers leads to suboptimal treatment approaches	Lack of adherence to guidelines by prescribers leads to suboptimal treatment approaches Over-reliance solely on short- term symptom relief rather than chronic disease thinking
Primary HCP target	GP	GP	GP
Lung Learning Framework capability gap(s)	9: Radiological lung tests and findings 10: Lung function tests 11: Diagnosis	15: Empowering self- management and providing ongoing care	15: Empowering self- management and providing ongoing care
Learning objectives	 On completion of the Education Package, participants will: be aware of breathlessness as an important presenting symptom for CAD and other conditions feel able to identify where breathlessness is a symptom of CAD activate clinically appropriate diagnostic and referral pathways, eg spirometry, imaging, sputum examination, blood tests. 	On completion of the Education Package, participants will: • be familiar with the key evidence-based recommendations from The COPD-X Plan • recognise the impact of fragmented care coordination and empathise with patients in this situation • develop a plan of care for their patients with COPD which supports optimal management towards minimisation of exacerbations.	On completion of the Education Package, participants will: • be up-to-date with the current guidelines for managing asthma in children • feel driven to ensure parents can independently manage their child's asthma • ensure that all children with asthma in their practice have an up-to-date Asthma Action Plan, have been educated on the plan including inhaler technique and they understand the need for preventative medication to avoid flare ups.
Multi-modal education and behaviour change activities	Educational activities - Online learning module - Mix of short-form content formats Practice tools - Checklist Patient education - Materials for patient education Other - Reflective practice audit	Educational activities - Webinar series - Mix of short-form content formats Practice tools - Checklist Patient education - Materials for patient education Other - Reflective practice audit - Community of practice	Educational activities - Webinar series - Mix of short-form content formats Practice tools - Checklist Patient education - Materials for patient education Other - Reflective practice audit Community of practice



DEVELOP: a plan of action, the solution blueprint

A living document, the Solution Blueprint is a detailed plan that outlines the steps required to implement a specific solution or project

Following the Program Design the workflow now separates, with a Solution Blueprint to be created for each of the Education Packages. Additional clinical expert and/or end-user working groups will be assembled to advise us on the development and implementation of these plans.

In parallel with the Program Design, the Marketing and Communications Strategy and accompanying Implementation Plan have been in development, to support the reach of the Education Packages to reach the target number of healthcare professionals.

Meanwhile, updates are being made to the functionality of the Lung Learning Hub to facilitate the development of the QUM in CAD Program "home" and connect users more effectively on Learning Journeys.



DEFINITIONS AND ACRONYMS

Definitions and acronyms are provided enhance clarity and understanding of the document. If anything remains unclear, please contact us for further explanation.

Definitions

Table 4: Definitions of key concepts referred to within this document

Term	Description
Person-centred care	Australian Commission on Safety and Quality in Healthcare stated that "person-centred care is widely recognised as a foundation to safe, high-quality health care. It is care that respects and responds to the preferences, needs and values of patients and consumers."
Quality use of medicines	Quality use of medicines (QUM) is used somewhat interchangeably with Quality use of diagnostics, therapeutics and pathology (QUDTP).
Quality use of diagnostics, therapeutics and pathology	 The Quality Use of Diagnostics, Therapeutics and Pathology program defines the quality use of medicines and medical test as:² selecting the appropriate management option when treating illness and maintaining health using medicines safely and effectively by monitoring outcomes minimising misuse, overuse and underuse improving people's ability to solve problems with their medication, such as negative side effects or managing multiple medications choosing the most suitable medicines by considering the individual the clinical condition the risks and benefits the dosage and length of treatment any coexisting conditions other therapies monitoring considerations costs for the individual, the community and the health system as a whole Recognising that non-medicinal approaches to manage many disorders may result in better health outcomes.
Human-centred design	Human-centered design (HCD) is an approach to problem-solving and innovation that prioritises understanding the needs, behaviours, and preferences of the people who will ultimately use the product, service, or system being designed. It involves empathising with users, defining their needs, ideating solutions, prototyping ideas, and testing them

¹ Australian Commission on Safety and Quality in Healthcare. *Person-centred care.*

² Australian Commission on Safety and Quality in Healthcare. *Quality Use of Medicines*.



Term	Description
	iteratively to create solutions that are user-friendly, effective, and meaningful. ³
Lung Learning	The Lung Learning Partnership is a consortium of Lung Foundation of Australia (LFA), the Thoracic Society of Australia and New Zealand (TSANZ) and Asthma Australia (AA).
	The Lung Learning Program represents the culmination of the work from the Lung Learning Partnership to set standards for lung health education and training. The program is delivered through the key components of the Lung Learning Framework and Lung Learning Hub.
	The Lung Learning Framework is a structured competency-based model that captures the knowledge and skills which enable primary HCPs to provide best-practice care across lung conditions.
	The Lung Learning Hub acts as the online host of the Lung Learning Framework through a self-assessment tool. The Lung Learning Hub also acts a marketplace for a collection of continuing professional development CPD activities.
QUM in CAD Program	The QUM in CAD Program is the response of the Lung Learning Partnership to the Health Professional (HCP) Education grant opportunity from the Quality Use of Diagnostics, Therapeutics and Pathology (QUDTP) Program. The goal is to deliver a national program of education for HCPs that aims to improve the quality use of medicines and medical tests in the diagnosis and management of chronic airways disease, including asthma and COPD.
	QUM in CAD program will leverage the Lung Learning Program components (Lung Learning Framework and Lung Learning Hub) in addition to creating three Education Packages, focusing on three topics.
	 Diagnosis of breathlessness and treatment initiation in CAD A step-wise approach to the management of COPD to prevent exacerbations Personalised management of asthma to prevent flare-ups

 $^{^{\}rm 3}$ IDEO.org. 2015. The Field Guide to Human-Centered Design.



Acronyms

Table 5: List of frequently used acronyms in this document and their meanings

Acronyms	Meaning
AA	Asthma Australia
ААН	Australian Asthma Handbook
ACRRM	Australian College of Rural and Remote Medicine
ACSQHC	Australian Commission on Safety and Quality in Health Care, The Commission
AMC	Australian Medical Council
ATSI	Aboriginal and Torres Strait Islander
CAD	Chronic airways disease
COPD	Chronic obstructive pulmonary disease
CPD	Continuing professional development
EAG	Expert Advisory Group
GP	General Practitioner
HCD	Human-centred design
НСР	Healthcare professional
LFA	Lung Foundation of Australia
NMP	National Medicines Policy
NPS	National Prescribing Service
NSQUM	National Strategy for Quality Use of Medicines
PHC	Primary Healthcare
QI	Quality improvement
QUDTP	Quality Use of Diagnostics, Therapeutics and Pathology
QUM	Quality use of medicines
RACGP	Royal Australian College of General Practitioners
SRG	Stakeholder Reference Group
TSANZ	The Thoracic Society of Australia and New Zealand



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