



ELDAC Home Care App – How co-design processes and a user-centred approach can shape resources for the home care workforce

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Acknowledgement of country

I acknowledge the Traditional Custodians of the many lands and waters throughout Australia, and I pay my respects to Elders past, present and future. I would also like to recognise Aboriginal and Torres Strait Islander Peoples continuing connections to land, sea and community.



This presentation

1. Introduction – Why home care and why an app
2. Complementary approach to design – Co-designing within a user centred design process
3. How ELDAC is working with the home care workforce to design the Home Care App
4. Our experience – Identifying advantages and difficulties of co-designing within an user centred design process





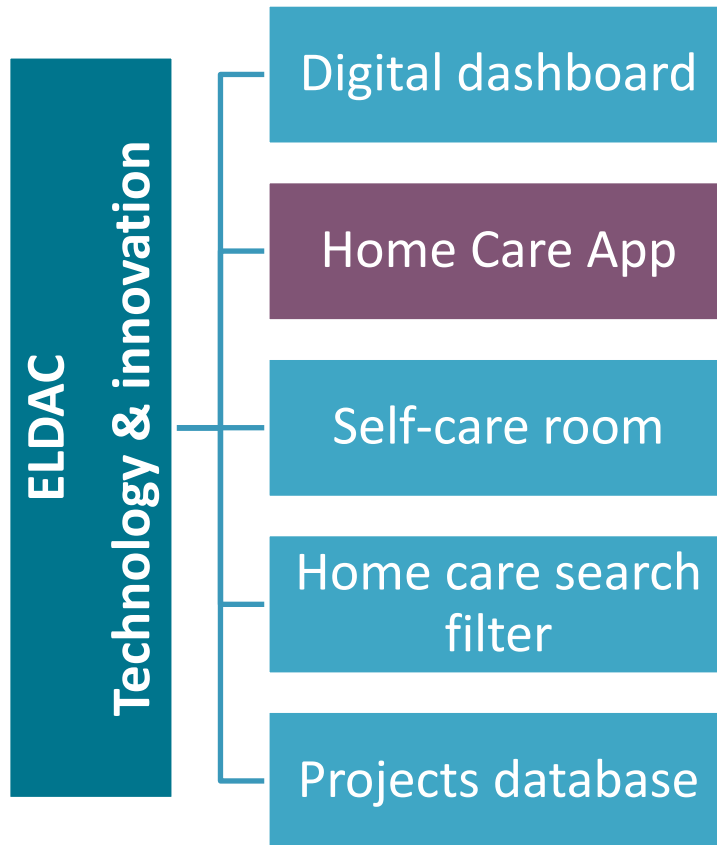
About ELDAC

ELDAC provides information, guidance, and resources to healthcare professionals and aged care workers who are providing end of life (EOL) care to older Australians in aged care settings.

www.eldac.com.au

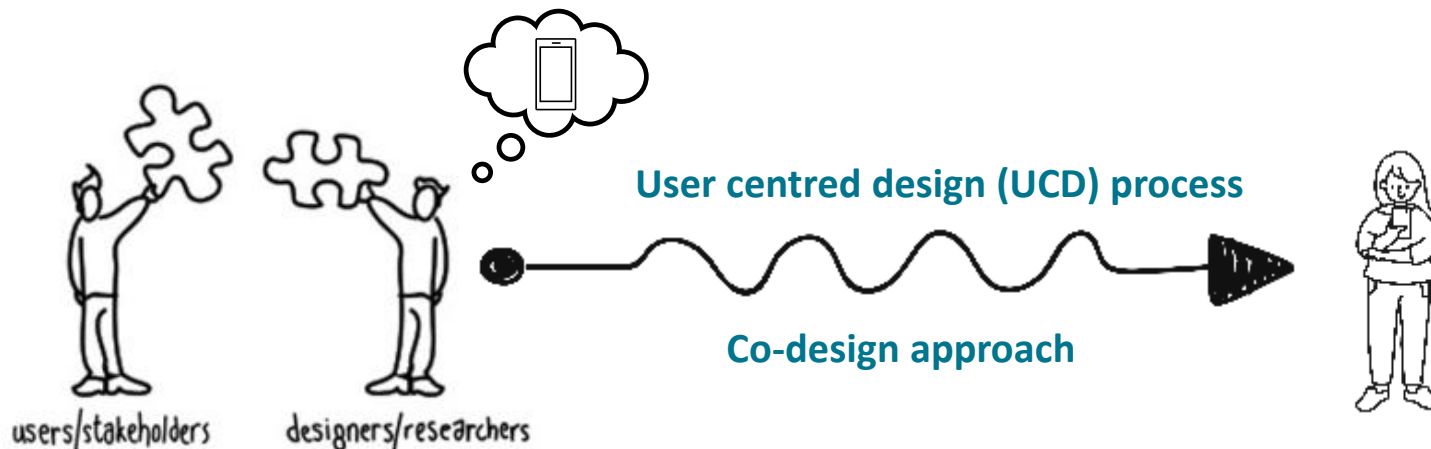


Why home care and why a palliative care app

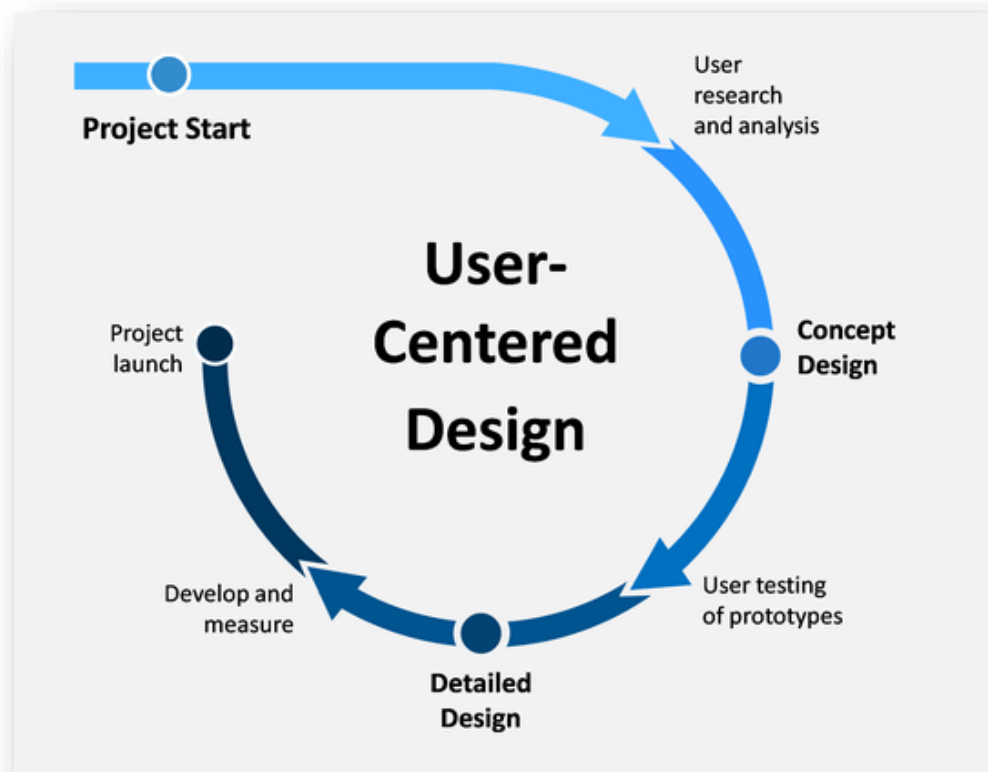


- Australian home care workforce provides direct care to many older people in the last year of life.
- Only 30% HCW (7% care workers) have any formal training in providing palliative and end of life care to their clients. [1]
- Identified as both a need and a gap for HCW given end of life care is core business of the aged care sector.
- We can only **assume** how, when, why, what and if this cohort of workers will engage with digital resource supporting their end of life care practice.

How do you move from a concept to a digital resource designed specifically for Australian home care workers to support palliative care provision?

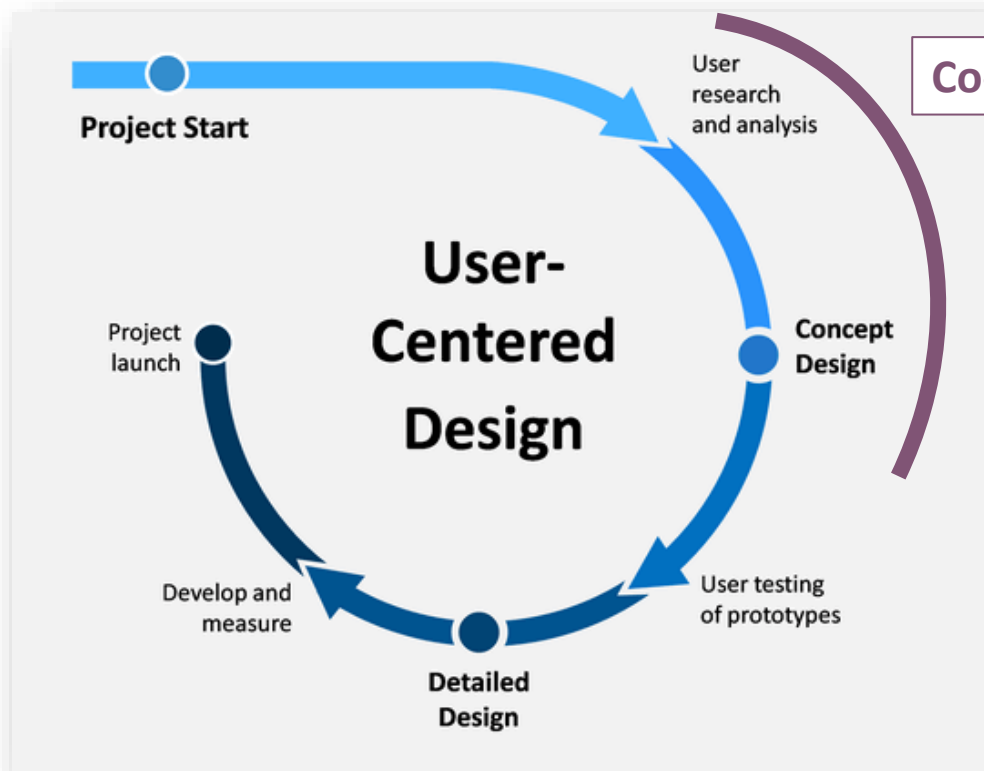


User-centred design (UCD) process



- Has a focus on product development – end-user is the centre of design across development process
- **End-users as subjects of research**
- End-user feedback generated through evaluation of prototypes informing reiterative refinement of designs
- Continuous cycle of improvement across development into the post-release period

Co-designing within an UCD process



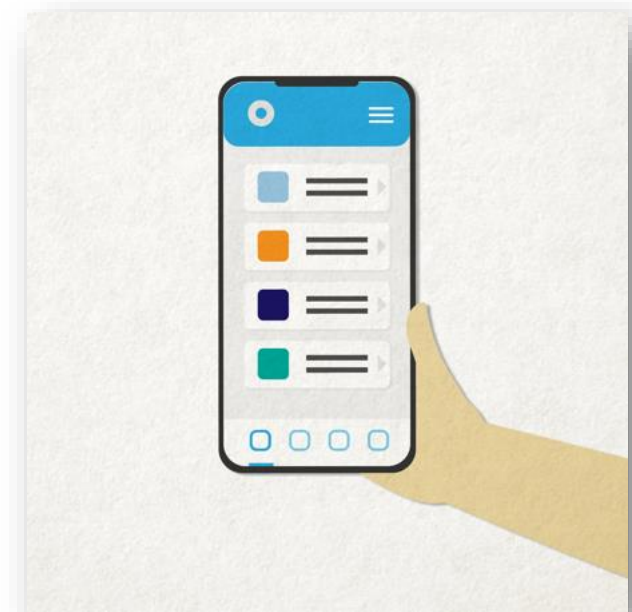
Co-design – undertaken early within UCD

- Collaborative approach involving stakeholders, partners and end-users who are not trained in product design. [2]
- **End-users are collaborators in design**

- Generation of ideas
- Identifying needs and requirements
- Context and environment of use

<https://www.sketchbubble.com/en/presentation-user-centered-design.html>

Our experience:
Co-designing the ELDAC
Home Care App within an
user centred design process



Groups involved in app design and development

- More than just the research team and end-users involved.



Expert Review Group (Stakeholders)

- ELDAC partners
- Service providers
- Academics

Governance



Researchers

- ELDAC Project Team

Research, translation
and conduit between
groups



End-users

- HCW
 - HCW Managers
- Perspectives and
feedback as real life
users of the app



App developer

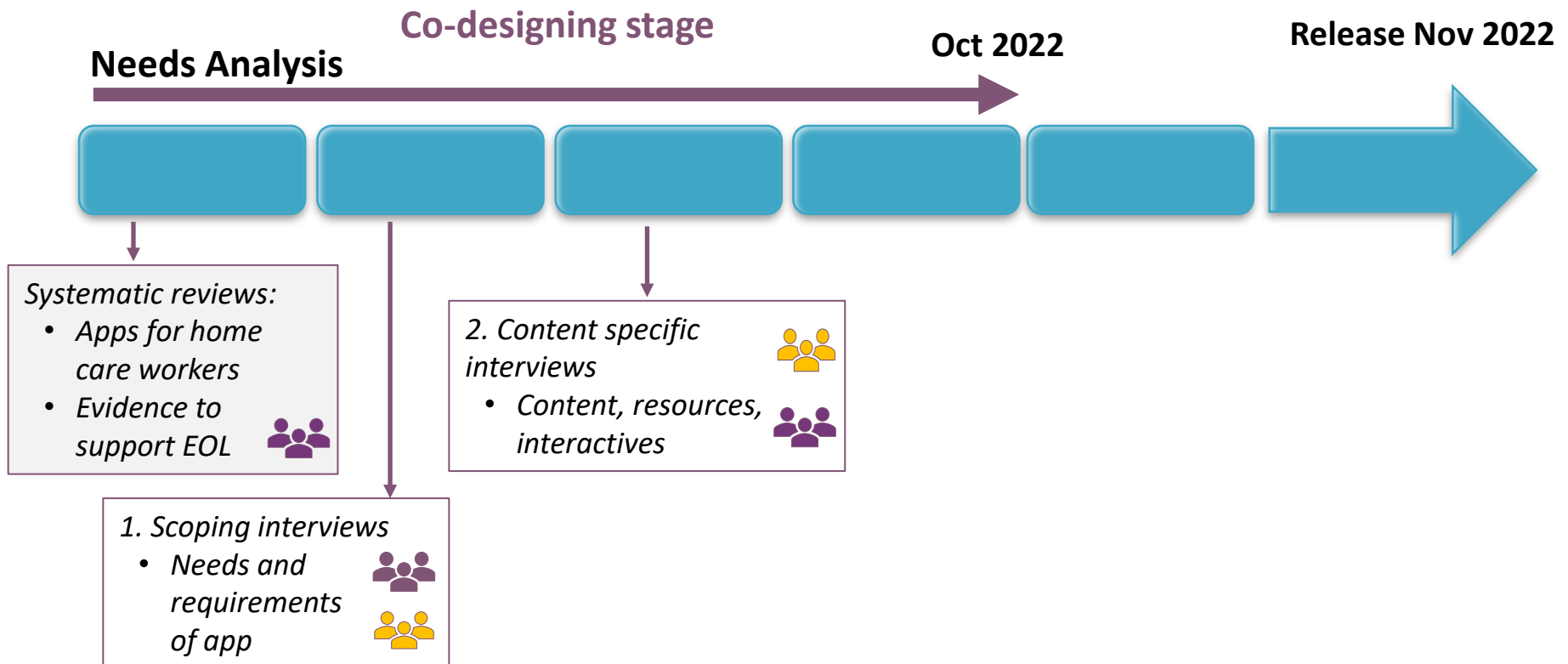
- Kiratech

Technical:
Prototypes and
production

- Each group brings different expertise to the design, development and evaluation process.

ELDAC Home Care App – Co-designing stages

Six activities involving care workers, stakeholders, researchers and our developer





Activity 1 and 2 – Co-design interviews

2 rounds of interviews with two different groups of end-users:

Activity 1: HCW and HCW Managers (n=8)

- ‘On the ground’ need and requirements for the app at an informational, functional and behavioural level from the perspective of HCW



- **Practical information is required to support and build confidence of HCW when providing EOL care ‘within their scope of practice’**

Activity 2: HCW and HCW Managers plus ‘others’ (n=10)

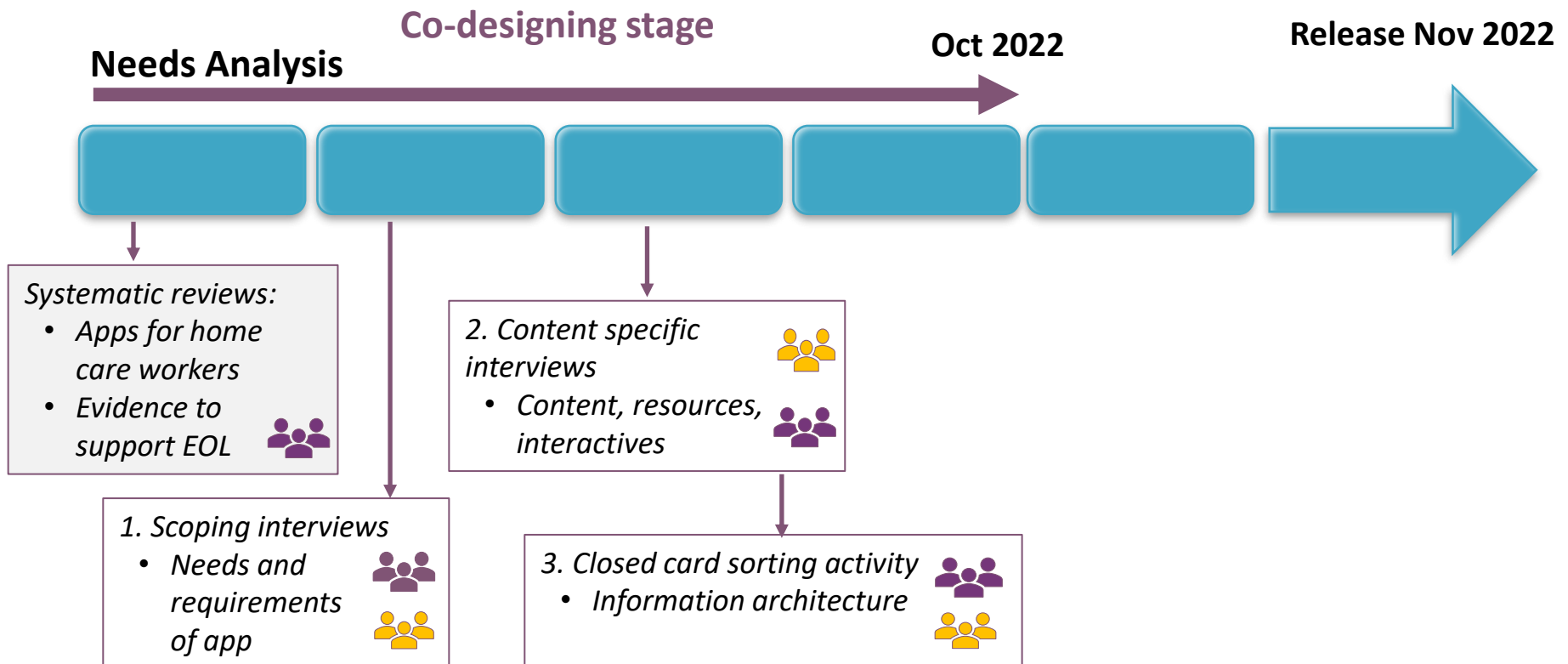
- Requirements – Content, practical tips and interactive activities relating to the practicalities of HCW providing EOL care

Key information:

- Self-care
- Difficult conversations and communication
- Show and share resources
- Care of the carer and families

ELDAC Home Care App – Co-designing stages

Six activities involving care workers, stakeholders, researchers and our developer



ELDAC Home Care App – Activity 3

Closed card sorting with care workers and care worker managers (n=10)

- Sorting content concepts into categories reflects participant’s knowledge, life experiences, and their background – explores how information fits together.
- Identify an information architecture supporting knowledge, navigation, function, and information flow across/between screens.

**16 content
concepts from
co-design
interviews**

End of life care concept card list for card sorting from interviews

- How to work with others to care for someone at the end of life
- Tips for recognising change and deterioration
- When to tell someone that things are changing
- Feeling confident about caring for someone at the end of life
- Communication Tips
- Conversation starters
- Responding to people asking about advance care planning
- Feeling confident about signs of change and symptoms
- What you can do in your role to care for someone in the last weeks of life
- Understanding how to care for yourself and seek support
- Taking part in planning and delivering care
- How to talk about death and dying
- What to say and do when people are distressed
- Understanding the SPICT-4-ALL
- Sharing observations with the team
- End of life tips for careworkers

ELDAC Home Care App – Activity 3

Sort 1

ELDAC Care Model Category Names

- **Formal**
- **Clinical terms**
- Advance care planning
- Recognising end of life
- Assessing and providing palliative care
- Work together
- Responding to deterioration
- Managing dying
- Bereavement
- Self-care*

16 content concepts
from co-design
interviews



OptimalSort

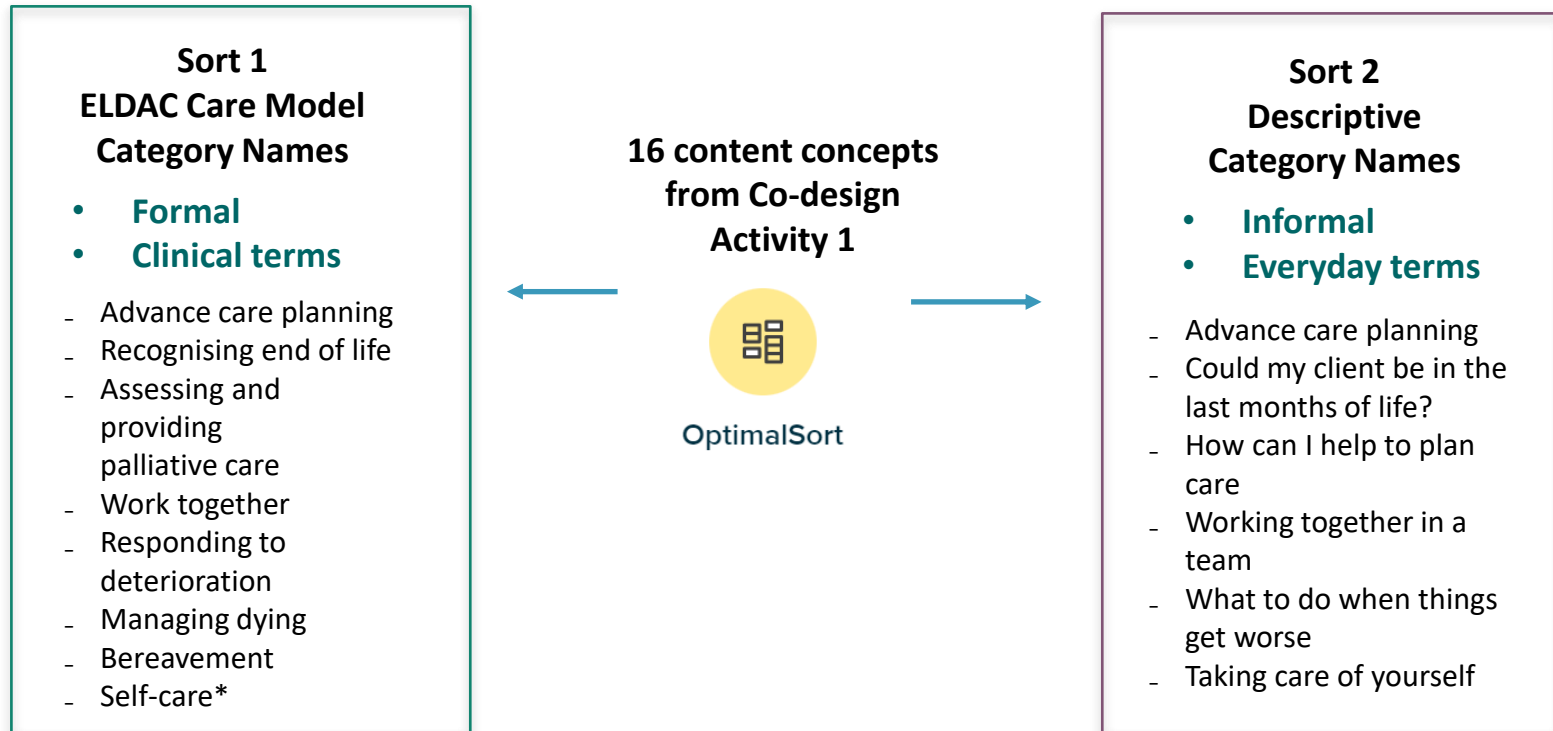


ELDAC Care Model

- Guiding framework to support healthcare professionals and aged care staff to meet the end of life needs of older Australians
- Based on current national policies, standards and practices in palliative care
- Data from co-designing interviews covered all eight sections of the model



ELDAC Home Care App – Activity 3





Activity 3 – Card sorting placement matrix

Placement matrix from sort with descriptive category labels

	Advance Care Pl...	Could my client ...	How can I help t...	Working togethe...	What to do when...	Taking care of yo...	Unsure
Responding to people asking abo...	90%		10%				
Feeling confident about caring for...	40%	20%	20%		20%		
How to talk about death and dying	30%	30%	20%		20%		
Feeling confident about signs of c...	10%	50%			40%		
Tips for recognising change and ...		50%			50%		
End of life tips for careworkers	20%	30%	10%	20%	10%	10%	
What you can do in your role to c...	10%	30%	20%	30%	10%		
Taking part in planning and delive...	30%		60%	10%			
Conversation starters	10%	20%	30%		20%		20%
Sharing observations with the team				100%			
How to work with others to care f...	10%		10%	80%			
Communication Tips	20%		20%	40%			20%
What to say and do when people ...				10%	90%		
When to tell someone that things ...				20%	70%		10%
Understanding how to care for yo...						100%	
Understanding the SPICT-4-ALL	10%	10%	20%		10%		50%

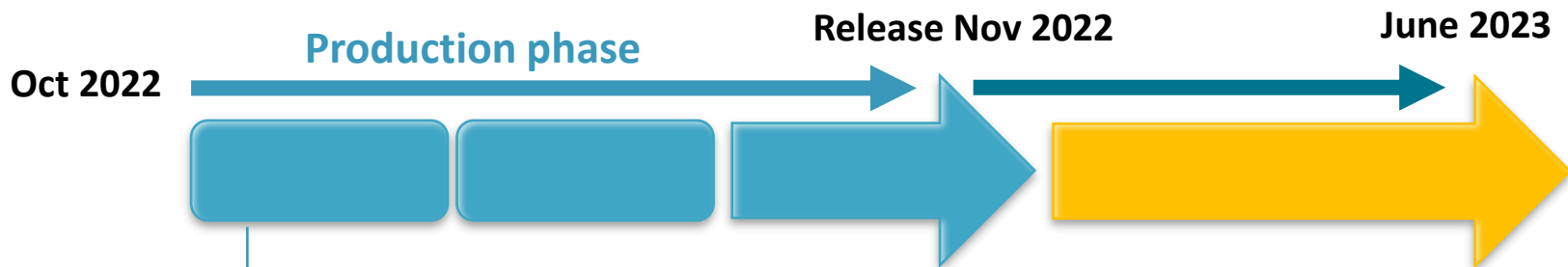
Key Findings:

- Understand how concepts fit together to build an architecture for app information
- Type of language is key for HCW

Descriptive category labels created *less diffuse* sorting **patterns** – participants were confident in their groupings and were precise in when categorising their sorts.

ELDAC Home Care App – Wireframes

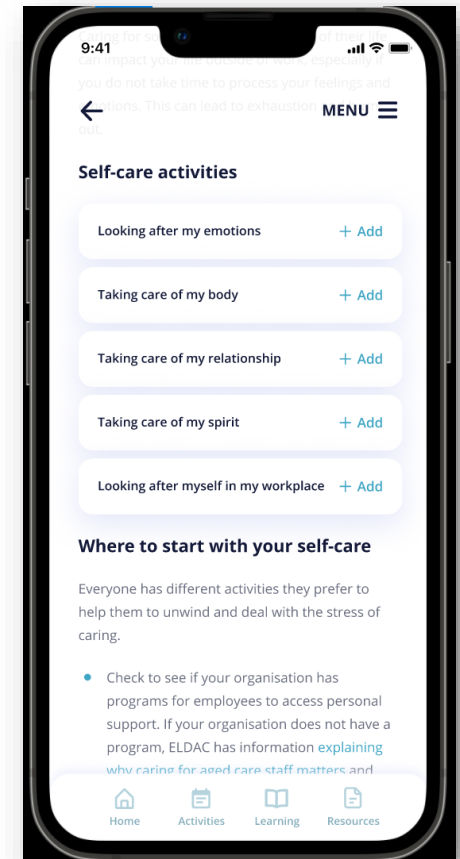
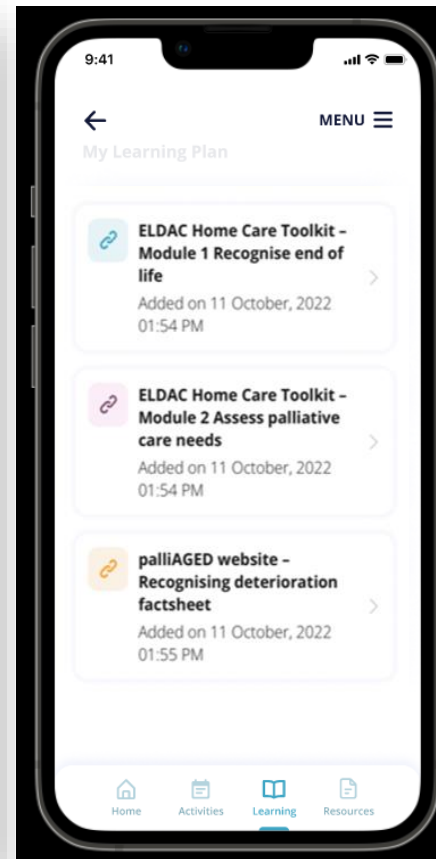
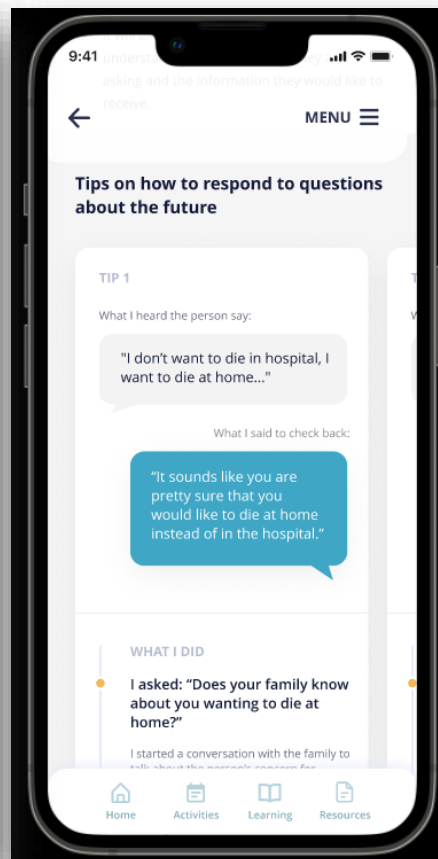
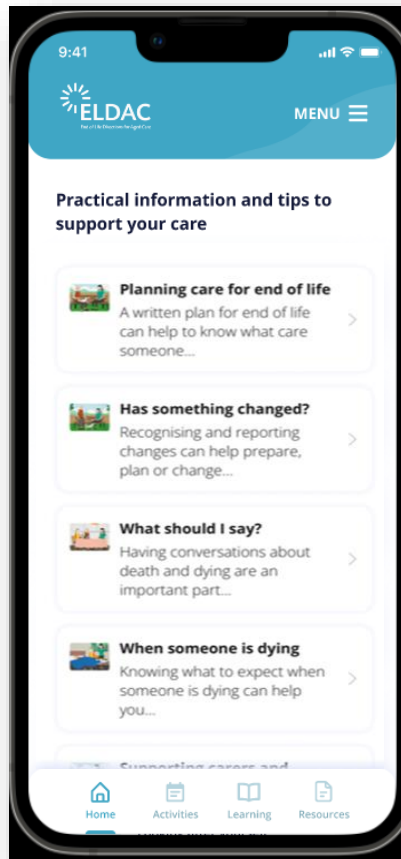
Final wireframe designed and signed off on, building the app prototype to be evaluated.



Wireframe design 

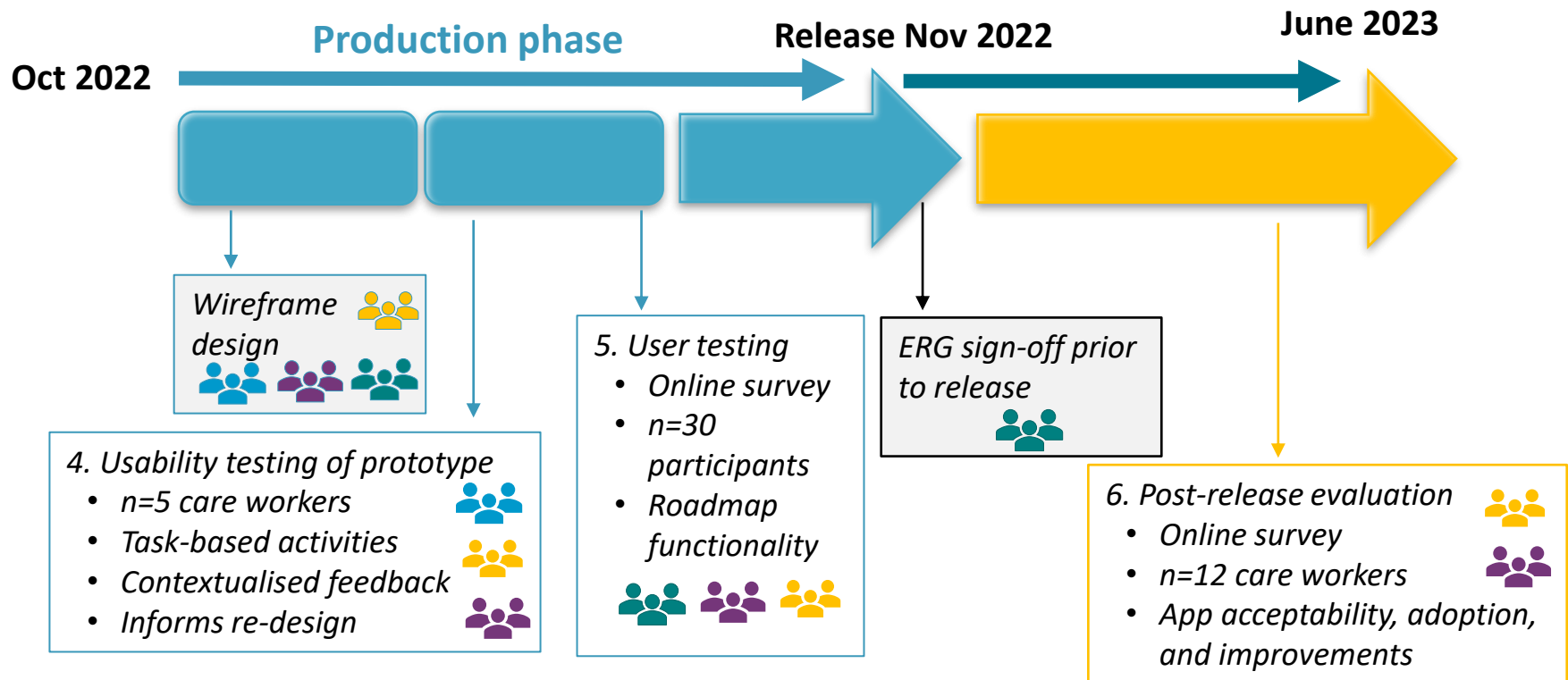

Findings from *all three* activities and feedback from *all four* groups informed cost-effective wireframe designs as the basis for production of the app prototype.

ELDAC Home Care App – Figma wireframe examples



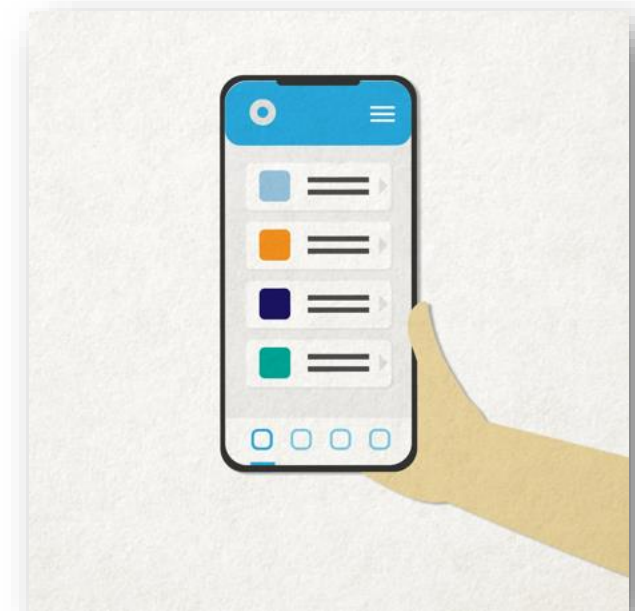
ELDAC Home Care App – User centred activities

Three UCD evaluation activities before release and into the post-release period.



Reflecting on our experience

Advantages and difficulties of co-designing within an UCD process when creating digital technologies for the home care sector



Advantages - Co-designing within an UCD process

- Places the needs and requirements of the **end-user** at the **centre** of design across the whole of development process
- Ability to account for **diversity of interactive behaviours**
- **Removes assumptions** of what 'we' as developers think end-users will use and how they will use it by providing opportunities to '**listen**' to different perspectives
- Increase the chance your product design will be **fit for purpose** offering the home care workforce a **relevant** and **meaningful** user experience.
 - Importantly, the home care workforce **will be able to use it !**



Difficulties

- Both co-designing and UCD process as approaches **requires time, money and resources** to be allocated within the development schedule.
- Due to provider fragmentation, over-burdened and time-poor care workers, **inviting participation is difficult** but not impossible.
 - Can contribute to time delays in development schedule.
- Knowledge, experience and practice in **facilitating, translating and evaluating** is required to turn feedback into purposeful interface designs.
 - Choice of technology partner becomes important factor in designing for the end-user.



Here's the plug - ELDAC Home Care App

- Release into both Apple App and Google Play Stores in November 2022
- Free to download!
- For more information, visit **Home Care App webpage**
 - **Sign up** to be notified when the app is available from the stores.
 - **Register your interest** to help us evaluate the app post-release.



<https://www.eldac.com.au/tabid/6037/Default.aspx>





Thanks and get in touch!

Please come and visit us at the ELDAC booth

Contact us:

- Website: www.eldac.com.au
- Twitter: @ELDAC_agedcare
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