



# CareFit app - aiming to improve physical activity awareness and accessibility for informal carers

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**NIHR** | National Institute for Health and Care Research

In collaboration with:

**Patient and Public Involvement (PPI) Event**

12 March 2024



Informal (unpaid) care:  
800,000 stories in  
Scotland

Introduction to the  
work through an  
individual story of  
caring

## Strathclyde carers group

<https://www.strath.ac.uk/professionalservices/staff/policies/wellbeing/carers/>



Study with us ▾ Work with us ▾ Why Strathclyde? ▾



Staff ▸ Policies, Procedures & Guidelines ▸ Wellbeing ▸ Carers

Support for staff members with caring responsibilities at Strathclyde

### Who are we?

We are a support group for staff members who have caring responsibilities.

The group encompasses staff members who care for someone who is ill, old and/or frail, disabled or requiring significant assistance; care may be substantial or ad-hoc.

The Carers group meet every once a month, providing the opportunity to network with other carers and share concerns and experiences. As well as allowing the opportunity for carers to come together to discuss issues and support each other, we encourage the group to suggest topics for discussion and suggest guest speakers or sessions that they would find beneficial.



**When and Where does the group meet?**

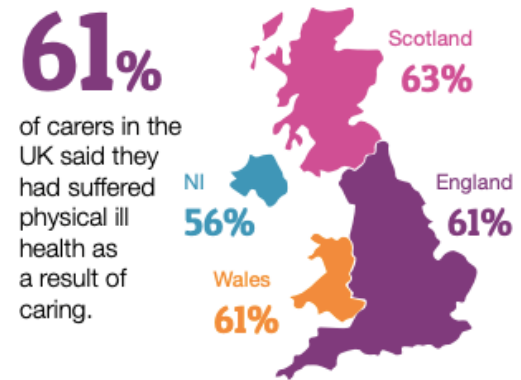
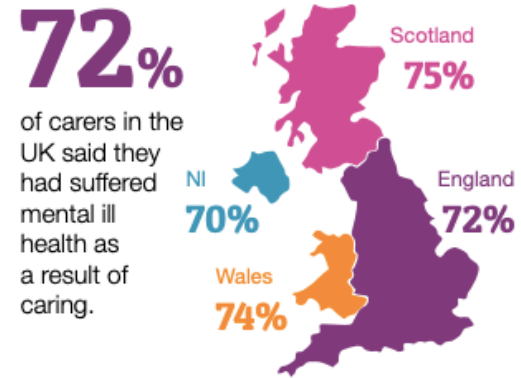
# Background: informal carers



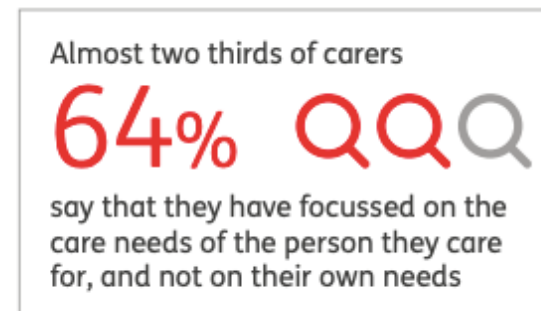
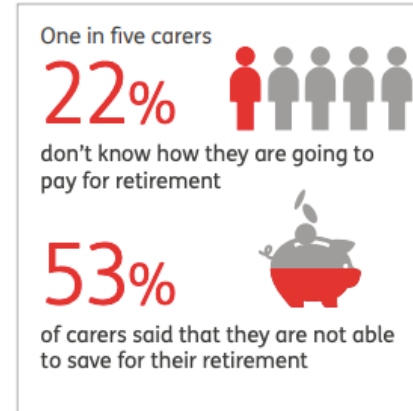
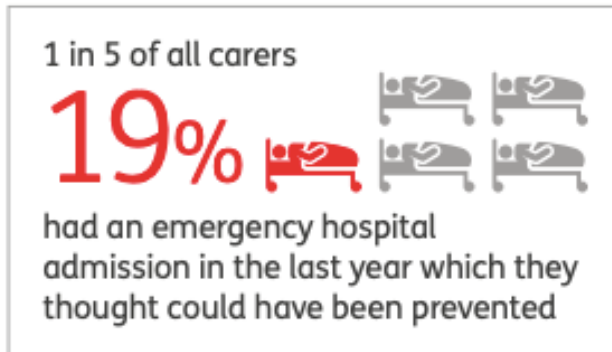
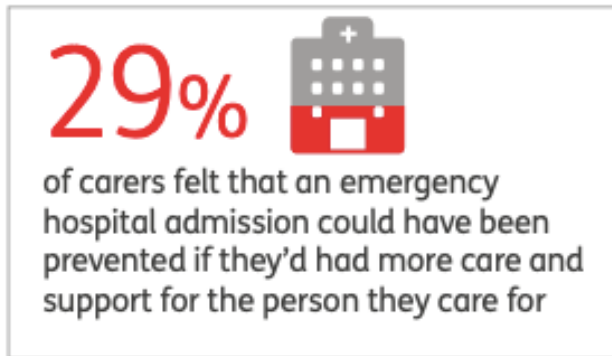
carersuk.org/stateofcaring

## State of Caring

A snapshot of unpaid care in the UK



# Background: informal carers



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4 in 5 unpaid carers (81%) were providing more care than before lockdown.

More than three quarters (78%) of carers reported that the needs of the person they care for have increased recently.



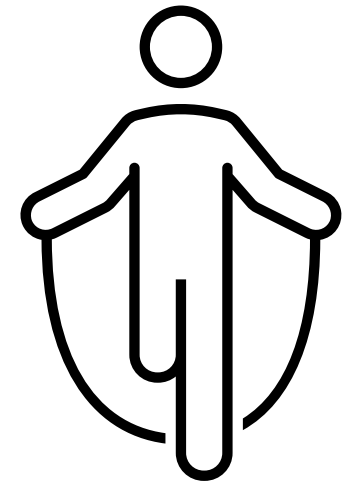
Isolation  
Pressure on individuals and healthcare service  
Becoming the “face” of rules and measures



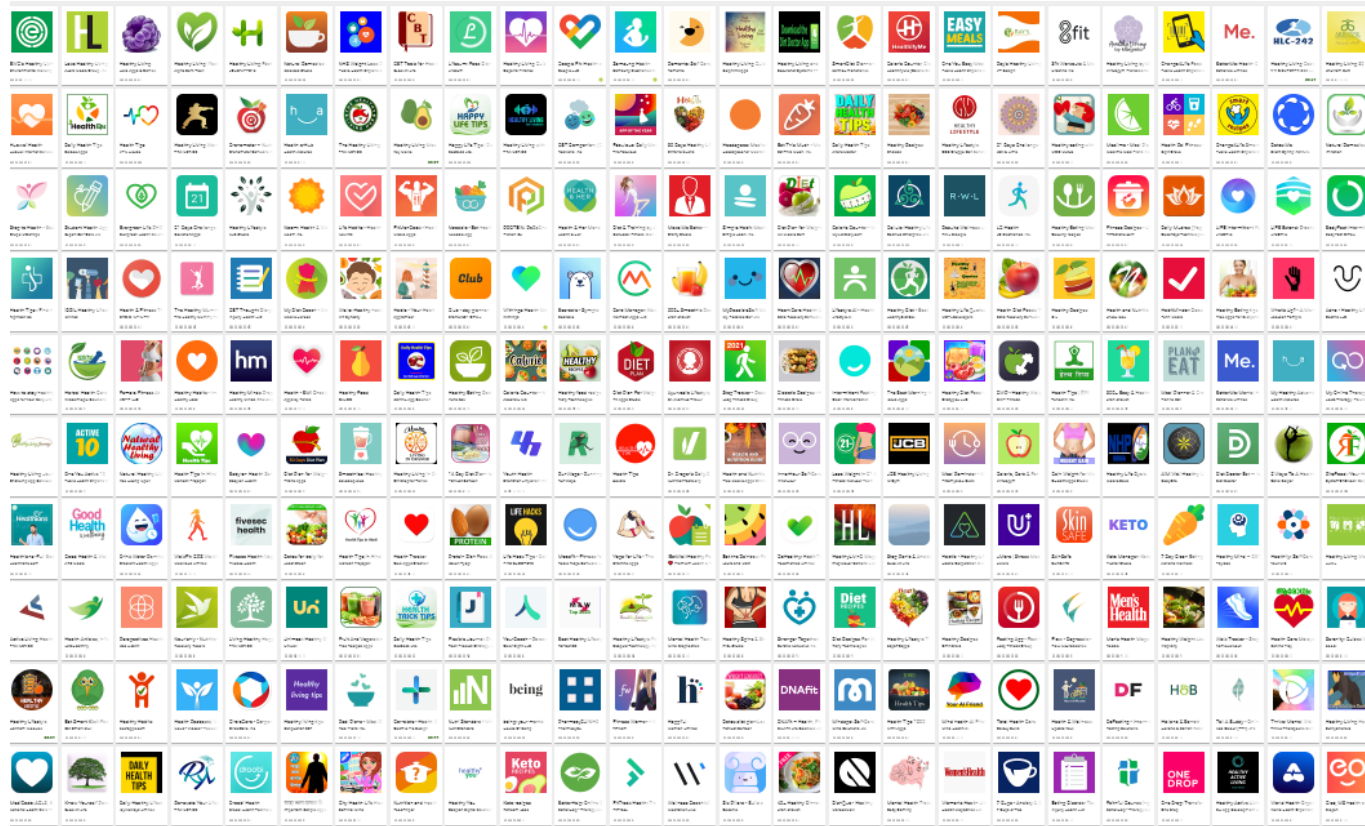
Empowering tools  
support self-management  
Increase carer health and wellbeing

# Background: informal carers

- The 2019 State of Caring survey (Carers UK) found that 81% of carers of all ages are not able to do as much physical activity as they would like.
- Systematic review work in this area identified only 14 studies to date with interventions mainly delivered face to face and/or by telephone-based approaches. Across these studies, improvements were observed in physical activity levels, distress, well-being, quality of life, and sleep quality. Such targeted solutions are yet to make the “leap” into the digital spectrum and mass impact potential of smartphone apps.
- U.K. National statistics report that four in five carers use digital technologies.



# Background: informal carers



# We need an approach that....



can be personalised to an individual caregivers needs that carers would want to use



does not require specialist equipment



is evidence based and safe to use



recognises that caregivers are likely to relapse and stop making progress due to the care that they are delivering



# Research aims....

1. To co-design and develop a novel (evidence based) mobile app to educate and support carers in the undertaking of regular physical activity (for a period of 3 weeks) at home during and beyond COVID-19 restrictions?
2. To evaluate whether the approach developed is: feasible, acceptable and usable to our user group?

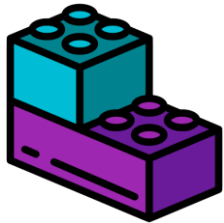
*CSO rapid response call to COVID-19 pandemic*

# First phase of the work....



## 1. Collate knowledge and identify needs

- Examine relevant behavioural change literature and activity guidelines
- Establish an expert group (including carers) to establish how to deliver current scientific knowledge around physical activity to carers (e.g. using U.K. physical activity guidelines). Key themes were identified through exploring follow up questionnaire feedback.



## 2. Build it

An “android” smartphone-based application, ‘CareFit’, instructed by the needs of carers and carer professionals, that could support caregiver physical wellbeing on a regular basis both during and beyond the COVID-19 pandemic.



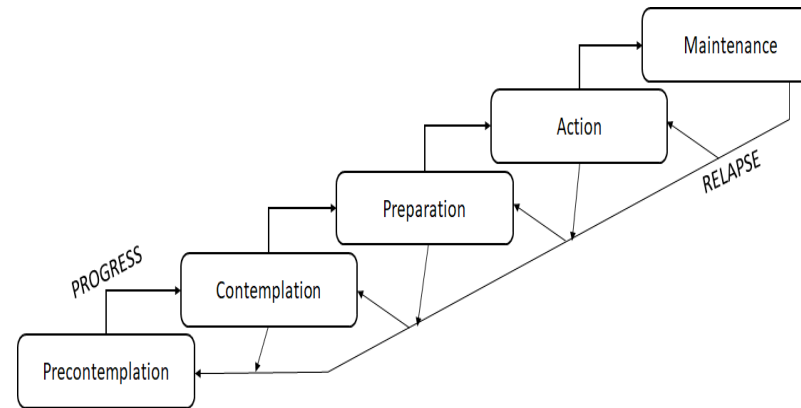
## 3. Test it

The codesigned developed smartphone app for a period of 3 weeks across Scotland to understand whether the concept could work in practice, and examine to whether caregivers could accept and see value in the overall approach.

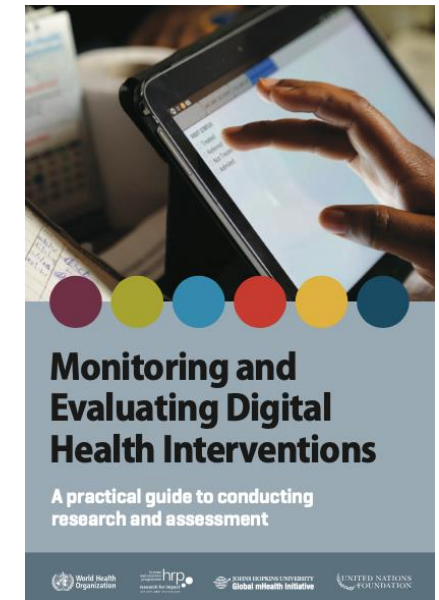
# Collating knowledge



Physical activity guidelines

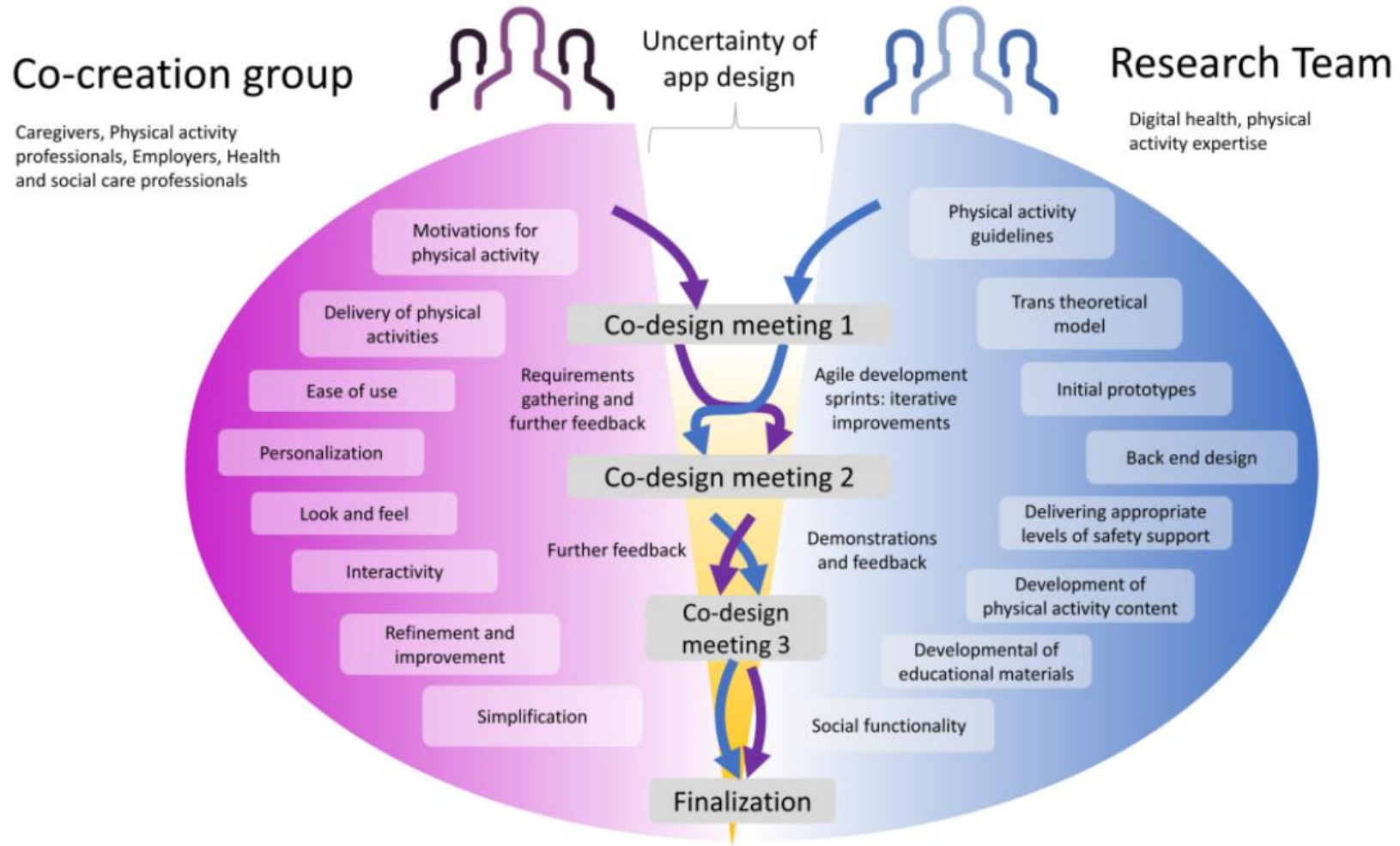


Transtheoretical Model



Frameworks for the development of Digital Health Interventions

# Strong focus on codesign



# First academic prototype

7 Carers & Care professionals involved in the design of the app



8 Carer focused Educational sections developed



9 Carer focused Physical activity sections



Our final prototype was therefore designed for use across 3 weeks including:

- A main menu screen with 4 different navigation options: planner, education, reminders, share progress and user guide.
- 8 educational “stages”: (1) Welcome and Introduction (2) Physical activity: Beginners Guide” (3) “Relationships and” Physical Activity”, (4) “Managing time”, (5)“Goals and Rewards”, (6) “Physical activity and consequences” , (7) “The Mind and body” and (8) “Knowledge Quiz”
  - Cardiovascular activities
  - Muscle and balance activities
  - Sedentary breaker activities

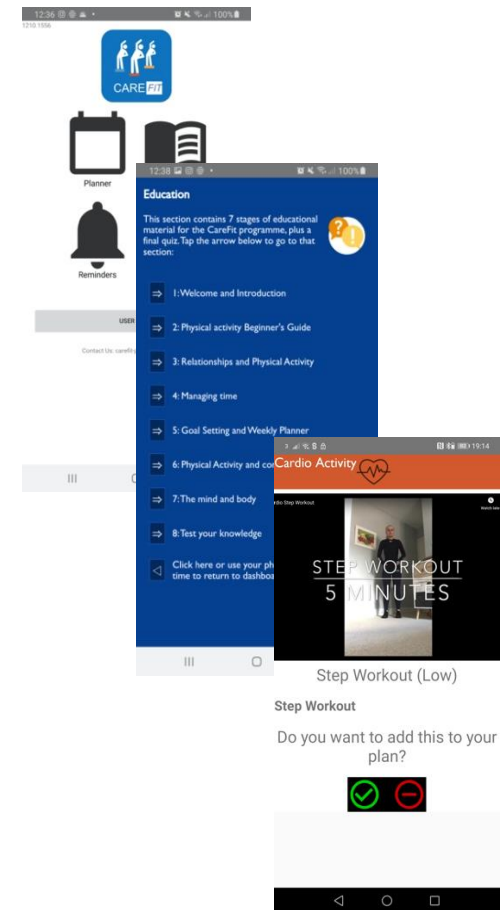
# Evaluation

*“The app was gently telling me to look after myself. I loved the instructor she just cared.”*

*“The education part lifted me to feeling I needed this and deserved this. Love the Schedule and the programming”*

*“I have been trying to lose weight and this app has got me thinking about not only exercise but my diet”*

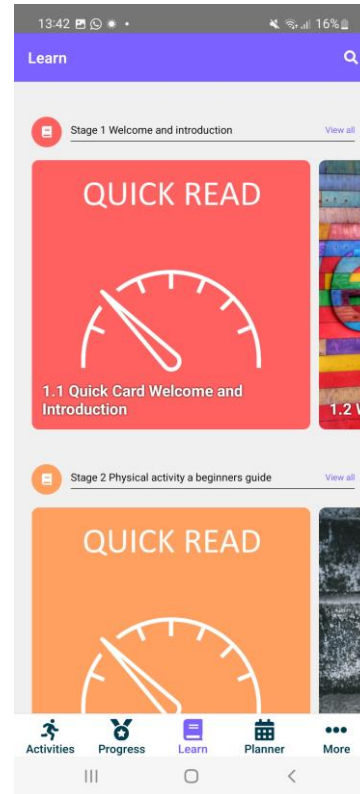
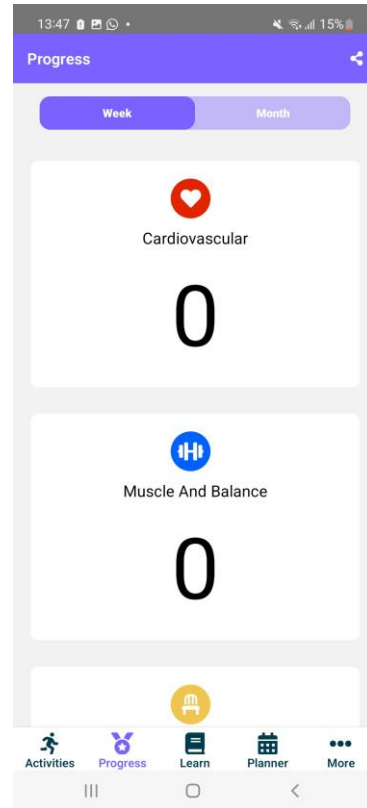
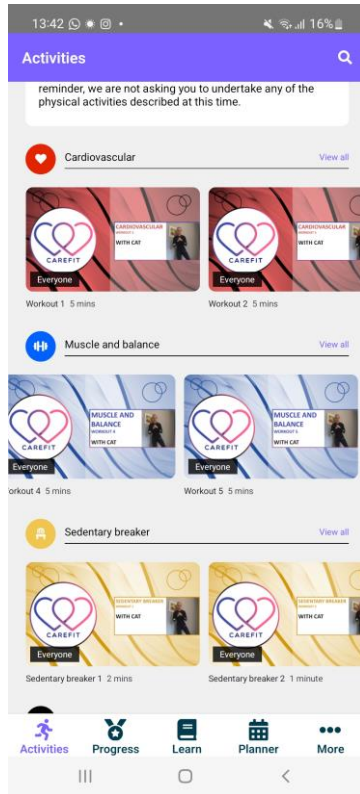
Example quotes from participants



# Second wave of work

1. To extend “Carefit” from a 3 week intervention to an 8 week intervention with an NHSx compliant high quality app, and to support longer behavioural change around physical activity in caregivers of people with dementia
2. To map the social care pathway to explore the feasibility of recruitment across different sites? Who would be willing to recommend an app such as “CareFit” to caregivers? What added value could it bring for their working role? How could it link best to existing infrastructure and services?
3. Build evidence and impact to improve our understanding of:
  - Acceptability, usability and feasibility of the new version of the app
  - Understand how to regularly measure physical activity within caregivers (e.g. self report)
  - Link to an existing dementia resource developed by the World Health Organization (iSupport)
  - Explore unexpected benefits
  - Explore key recruitment uncertainties (i.e. how do we find caregivers who are in need of using the app?)

# App development examples



## 4 Carer stories: Meet Fatima

- Fatima, 72, is from Leith in Edinburgh
- She is caring for her partner who has late stage dementia
- She listing barriers and enablers to physical activity.



*"The app was gently telling me to look after myself. I loved the instructor she just cared."*

Fatima, Edinburgh



# Wider networks and engagement

NEWS

## Researchers seek stories to give a voice to Scotland's 800,000 unpaid carers

By Marie Montondo | 1 December 2023 11:15

University researchers are seeking to gather stories from Scotland's 800,000-strong community of unpaid carers to help give them a voice and inform government policy on the development of a National Care Service.

The aim is to promote the visibility of carers, give them a voice around the critical role of caring, and to develop a diverse audience for these voices and stories allowing them to be amplified and impactful. This initiative comes at a time when the Scottish Government continues to develop and consult on the [proposed 'National Care Service'](#).

The [Scotland Cares](#) project is being supported by YAS to address our three [Grand Challenges](#).

The project brings together four universities – Strathclyde, Glasgow, Edinburgh Napier and West of Scotland – with Carers Scotland and the Health and Social Care Alliance.

[Dr Kieren Egan](#), Senior Research Fellow at the University of Strathclyde, said: "As our population ages and our health and social care models evolve, the carer voice has never been more important. There are approximately 800,000 unpaid carers in Scotland – that is family, friends and neighbours – looking after an individual living with a mental or physical illness, disability or frailty.

"While caring represents some of the most remarkable elements of the human spirit, the innate compulsion to look after others, it is synonymous for many with a wide array of challenges such as stress, uncertainty, loneliness, declining personal health, and a loss of identity.



→ [Visit survey](#)

→ [Learn more about this project](#)

**Scotland Cares**

ARE YOU AN UNPAID CARER IN SCOTLAND?

WE WANT TO CELEBRATE THE UNTOLD STORIES OF UNPAID CARERS

THERE ARE OVER 700,000 INFORMAL CARERS IN SCOTLAND

OUR TEAM AT THE YOUNG ACADEMY OF SCOTLAND ARE SEEKING STORIES OF CARING TO HIGHLIGHT YOUR IMPORTANCE

PLEASE COMPLETE OUR ONLINE SURVEY TO HELP US SHARE YOUR STORY

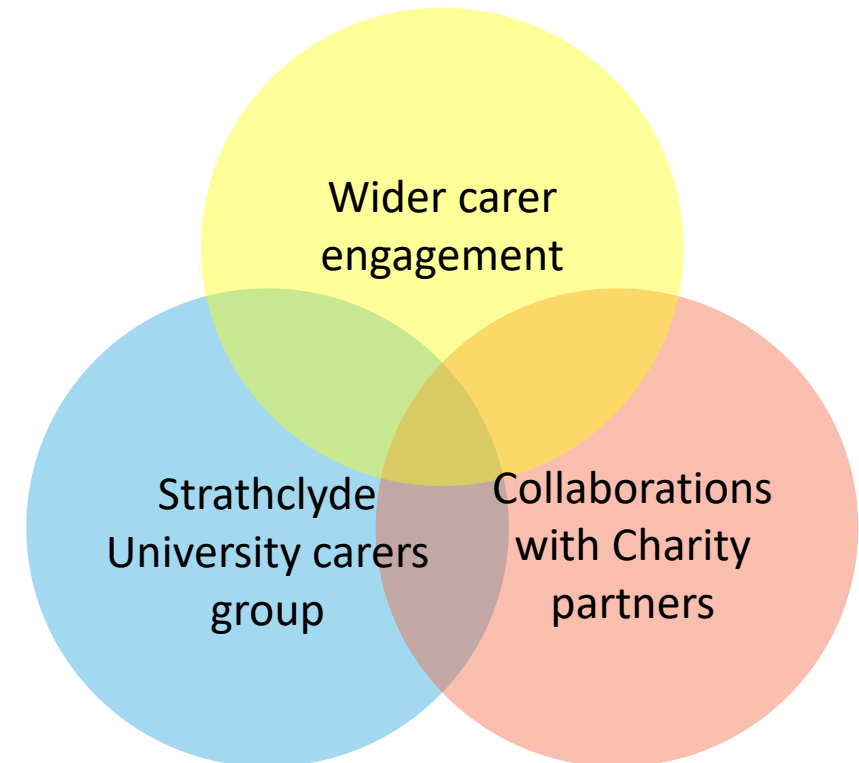
CELEBRATING THE ACHIEVEMENTS OF UNPAID CARERS

RSE YOUNG ACADEMY OF SCOTLAND

[carers-research-project@strath.ac.uk](mailto:carers-research-project@strath.ac.uk)

# Conclusions and Next steps

- Vital that we continue to engage directly with those who have lived experience of delivering care as a family member/friend- diverse and growing population with wide ranging needs.
- Our work has clear impacts of carer involvement: study design, outcomes, feedback, all critical for long term implementation.
- We will continue to work directly with carer communities and are moving towards a greater depth and breadth of PPI approaches.
- We will be publishing our findings of the latest CareFit work in the months ahead.



# Acknowledgements and funding

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  - The National Institute for Health Research (NIHR) Public Health Research programme (project reference NIHR130914). The views expressed are those of the authors and not necessarily those of the NIHR or the Department of Health and Social Care.
  - The Chief Scientist Office, Scottish Government (COV/SCL/20/06) research grant.

**Thank you for listening**

## **Get in touch**

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