#### Leicester Kidney Exercise Team Loughborough UNIVERSITY OF LEICESTER University Hospitals of Leicester **NHS Trust**

# The "person-based approach" to developing a structured group education programme to increase physical activity in CKD: The PACT-Project.

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## Introduction

- Physical activity (PA) is beneficial for patients with chronic kidney disease (CKD). However, PA is not routinely prescribed and the majority (~80%) of patients lead very sedentary lifestyles, and would benefit from a behaviour change intervention to increase levels of PA.
- Assessing patients' needs and perspectives is an essential first step in optimising acceptability and engagement with a behaviour change intervention.

# Findings

Phase 1: Intervention planning

Qualitative study: N=36 patients CKD stages 1-5 not on dialysis. Patients described the following preferences for intervention delivery:

Patient preferences for intervention delivery

 The "person-based approach" uses iterative qualitative research to understand the users perspectives to ensure they can be incorporated during intervention planning, design and development.

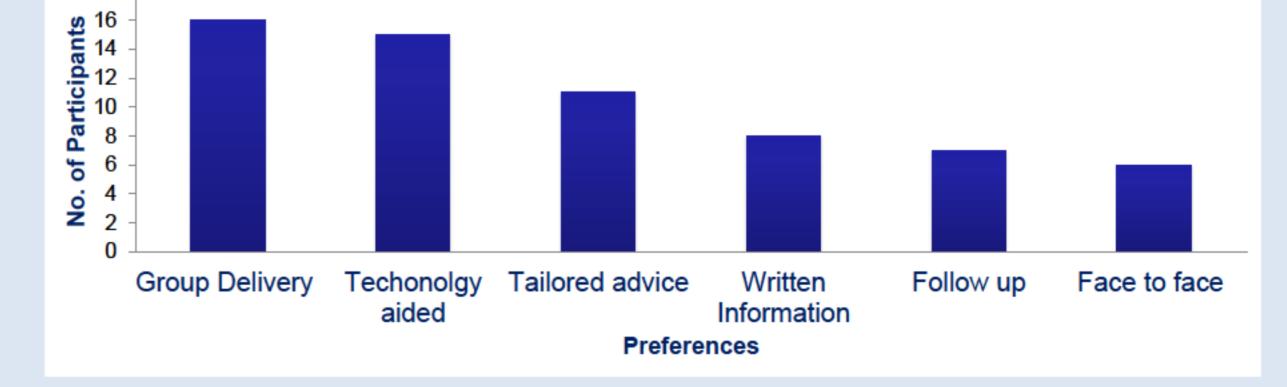
# **Objective**

 The objective of this study was to apply the "person-based approach" to the development of a self-directed, theory driven and evidence based structured group education programme "PACT" (Physical Activity Changing Together), designed to increase levels of PA in non-dialysis CKD patients.

## **Methods:** This work was conducted in three phases:



- Literature Review;
- Qualitative Study : "Identification of patient" preferences for intervention delivery";
- Consultations with experts in the field: Nephrologists,

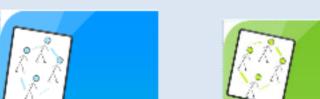


- Expert consultations and programmes observations confirmed that a structured group based education programme would be appropriate to target levels of PA in CKD patients.
- Suitable behaviour change theories identified included: Social Cognitive Theory, Common Sense Model and Gollwitzer's Implementation Intentions.

### Phase 2: Intervention design

The PPI group (N=9) helped to establish key guiding principles including:

Written Materials on CKD and PA experiences





Self-monitor PA behaviour



Opportunity to share



Phase 1 Intervention Planning (Conceptualise the intervention)

Renal Nurse, Health Psychologists, Dietician, Physical activity experts and director of national DESMOND Programme;

- Observations of current education and physical activity behaviour change interventions;
- Consideration of behaviour change theory.



Draft intervention: 3 <sup>1</sup>/<sub>2</sub> hour structured group based education programme including 6 modules, 2 written education booklets, PA diary, pedometer and individual telephone counselling.

#### Phase 3: Intervention development

Preliminary findings from 4 of the pre-testing patient focus groups (n=14):

<b>Major themes</b>	Participant Quotations	Actions taken
Timing of education	"I wish this was here when I was newly diagnosed" Female FG1.	Recruitment will target newly diagnosed patients.
Group delivery	"you can't beat the face to face sat round a table talking like this". Male FG4	No changes group session was positively received. Consider the potential for a follow up session.
Perceptions of activities	"I thought it was really comprehensive, and I think this sort of thing helps peoplewe are obviously three quite confident people but if you get people who aren't, this sort of thing will bring people in, a visual activity." Female FG3	Activities positively received. Ensure space is sufficient and activity picture cards are big enough.

Phase 2 Intervention design (Create guiding) principles)

- Public Patient Involvement (PPI) group was convened to establish guiding principles and co-design intervention content and written materials.
- Mapping of behaviour change techniques.

Phase 3 Intervention Development (Pre-test intervention and pilot)

 Draft intervention was pre-tested using patient focus groups. Modifications were made after each group session based on researcher observations and patient recommendations to optimise acceptability and engagement.

 Focus groups were audio recorded, transcribed verbatim and thematically analysed.

"... I must say it was a bit of a garbled 45 Developed new simple but Perceptions of seconds I think it could have spent twice comprehensive video describing the videos as long..."Male FG1 roles of the kidneys. Risk "This might sound daft but would you be Cardiovascular risk introduced at at risk of say having a stroke or getting communication population level with an activity depressed if your kidneys were promoting modifiable risk factors to A1?"FG1 Male reduce likelihood of developing other

## Conclusion

 The "person-based approach" provides a systematic framework to aid the development of a behaviour change intervention. The qualitative research and consultations with patient partners was invaluable to the development of the PACT Project. The next phase will be to pilot the intervention, with assessment of user experience via semi-structured interviews upon completion.

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health conditions or making existing

ones worse.