# CompreHensive geriAtRician-led MEdication Review (CHARMER)

A programme grant to develop and test a practitioner behaviour change intervention for deprescribing in the hospital setting

University of East Anglia

Sion Scott, David Wright & Debi Bhattacharya on behalf of the CHARMER team

#### The research team The problem The goal

**University of East Anglia** Dr Debi Bhattacharya Prof David Wright

Mr David Turner

Dr Ian Gibson

Dr Sion Scott Dr Allan Clark

**Norfolk and Norwich University Hospital** Dr Martyn Patel

**University of Leeds** Professor David Alldred Dr Ian Kellar

**University of York** Dr Jo Taylor

> **Newcastle University** Prof Miles Witham

Cambridge **University Hospital** Dr Victoria Keevil

Patient and public involvement Mrs Kathryn Murphy Half of patients are prescribed at least one medicine where the harms outweigh the benefits, however, only 6% of these patients have an inappropriate medicine proactively deprescribed in hospital before harm occurs. The research team have previously established the barriers and enablers | The objectives are to: (determinants) to geriatricians and hospital pharmacists increasing the number of older patients in hospital for they proactively deprescribe. We have also identified six Behaviour Change Techniques (BCTs) that are suitable for addressing these determinants.

To refine and test a practitioner-focussed behavioural intervention to increase proactive deprescribing in hospital.

Develop a new core outcome set for hospital deprescribing trials

Identify the most appropriate secondary outcomes for safety, efficacy and cost-effectiveness

Characterise the practitioner behaviour change intervention in terms of mode of delivery of BCTs Determine feasibility of trial and intervention delivery

Estimate effectiveness and cost-effectiveness of the intervention



Selecting patient outcomes and exploring trial design features for collecting outcomes

We will use modified Delphi (n=120-150) to develop a core outcome set for hospital deprescribing trials and to identify a suitable primary outcome measure for this



Months 1-10

## Developing the intervention package

We will characterise the six BCTs and operationalise them into an intervention package using two rounds of co-design workshops with stakeholders (n=8-10). We will also develop a questionnaire investigating the mechanism of action of the intervention BCTs.



Months 11-24

### Feasibility testing

We will test intervention and trial procedures over three months in four hospitals and use the arising data to undertake pre-trial modelling of the intervention and refine trial procedures.



Months 22-49

#### Internal pilot and definitive cluster randomised control trial

We will phase recruitment of 44 hospitals (each recruiting 110 patients) over 14 months and randomise each to intervention or control. This will provide 90% power at 5% significance for detecting a 20% difference in proactive deprescribing between intervention and control hospitals.













#### Dissemination

We will undertake dissemination activities and refine the strategy throughout the programme and convene a strategy workshop with key stakeholders (n=8-10), to prepare a detailed plan for the intervention to be more widely implemented and adopted.

FUNDED BY

