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# **Behavioural Science Applied to Medicines Optimisation Challenges: Implementing Deprescribing EVENT REPORT**

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**29 OCTOBER 2021**

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**Ageing and Multimorbidity Theme**

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## Introduction

Over half of older people are prescribed medicines which have the potential to cause more harm than benefit. This places older people at unnecessary risk of adverse drug events and increased use of health services. Deprescribing is a complex process to identify and discontinue medicines that are no longer appropriate, where harms outweigh benefits or when medicines no longer align with the patient's health goals and treatment preferences. Despite strategies to support practitioners to deprescribe, it has failed to become routine practice. Behavioural science can be used to develop deprescribing interventions to facilitate change in practitioner behaviour to establish an accurate account of all the patient's medicines, identify medicines that are no longer needed, agree a plan to taper or stop medicines and ensure ongoing monitoring.

On 29 October 2021, over 90 academic researchers, healthcare providers and commissioners came together virtually to discuss how behavioural science can be applied to address challenges to implementing deprescribing. Attendees shared experiences and resources from across the globe to support efforts to address challenges to implementing deprescribing in primary and secondary care settings.

The event was convened by members of the Ageing and Multimorbidity Theme of the National Institute for Health Research (NIHR) Applied Research Collaborative (ARC) East of England, with invited speakers from the University of East Anglia and the University of Leicester.

## Event format

The session started with an introduction to the ARC by Prof. Claire Goodman, the Ageing and Multimorbidity theme lead. This was followed by an overview of behavioural science by Professor Debi Bhattacharya from the University of East Anglia. Prof. Bhattacharya then gave a presentation of a study to understand the key components for effectively deprescribing opioids by primary care practitioners, which led to the development of an opioid toolkit. The final presentation was by Dr Sion Scott from the University of Leicester to describe the development of a practitioner

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behaviour change intervention for deprescribing in the hospital setting. Dr Scott described the ongoing programme of research. This was followed by a curated question and answer session. Attendees were invited to post questions and comments in the 'chat' about the studies presented and more general questions related to deprescribing.

After the event, a link to the recording was shared with all who registered/attended the event, along with a compilation of resources shared during the session.

## Attendees

Of the 153 people who registered for the event, a total of 96 people attended the webinar on 29 October 2021. The event attracted registrants from across the globe, shown in Figure 1.



Figure 1: Location of people who registered for the event

We sent out a short survey before the event to facilitate networking and to signpost attendees to appropriate resources. Survey respondents said they were interested in

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hearing about (49%) or using (41%) behavioural science to address medicines optimisation challenges. A total of 10% of the attendees were using/had used behavioral science to address challenges to medicines optimisation.

Attendees represented various settings, including, primary care, secondary care and care homes and academia/research. Attendees had various professional backgrounds, e.g., geriatricians, pharmacists, nurses and allied health such as physiotherapists and worked in a range of specialist areas, e.g., older peoples care, long-term conditions, cancer care, diabetes, respiratory medicine, pain management and dementia.

## **Presentation highlights**

### **1. Organisational requirements for supporting primary care practitioners to tackle opioid prescribing**

Presented by Prof Debi Bhattacharya, University of East Anglia

Prof Bhattacharya described a completed study that applied behavioural theory to a realist enquiry to identify behavioural mechanisms and contexts that facilitate prescribers tapering opioids. The study combined research evidence with experiences of health organisations and practitioners to develop a programme theory to describe how an opioid deprescribing intervention is expected to lead to its effects and under what conditions. This programme theory identified six key features, shown in Box 1, that should be included in all opioid deprescribing interventions. The findings of the study were formulated into a toolkit to enable effective intervention components to be adapted for diverse health systems to achieve feasibility and scalability whilst maintaining efficacy.

The toolkit for tackling chronic opioid use in non-cancer pain is available to download from: [Toolkit for Tackling Chronic Opioid Use in Non-Cancer Pain - Groups and Centres - UEA.](#)

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### ***Box 1: Six features to include in opioid deprescribing interventions***

1. There needs to be a clear expectation that opioid deprescribing is the responsibility of prescribers.
2. Information about how to taper (guidelines).
3. Prescribers with appropriate knowledge and skills to initiate tapering discussions and navigate the patient pathway.
4. A consistent approach by all members of the health care team.
5. Comprehensive education for patients.
6. A pathway for patient management including access to appropriate levels of

## **2. A behaviour change intervention for deprescribing in the hospital setting**

Presented by Dr Sion Scott, University of Leicester

Dr Scott gave an overview of the ongoing CHARMER study to develop an approach in hospital older people's wards to increase discussions about stopping medicines. He described how the application of a behavioural theory, the Theoretical Domains Framework, helped to understand why hospital practitioners struggle to have discussions about stopping medicines with older people and identify some solutions to address them, shown in Box 2.

Further details about the studies underpinning the CHARMER programme can be found here: [About the research - Groups and Centres - UEA](#)

Dr Scott then provided a summary of the five steps within the CHARMER research programme to develop, test, evaluate and disseminate the CHARMER intervention:

**Step 1: Core outcome set** – selecting patient outcomes and exploring trial design feature for collecting outcomes in a modified Delphi study.

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**Step 2: Developing the intervention** – developing the intervention with co-design workshops with target audience and local implementation stakeholders.

**Step 3: Feasibility** – feasibility testing intervention and trial procedures and use the arising data to undertake pre-trial modelling of the intervention and refine trial procedures.

**Step 4: Definitive trial** – internal pilot and definitive trial cluster randomised control trial.

**Step 5: Dissemination** – impact and dissemination throughout the programme and development of an implementation strategy for wider adoption.

***Box 2: Things that help and hinder practitioners from having discussions with older people about stopping medicines in hospital wards***

***What helps hospital practitioners:***

- Drawing attention to prescribers who successfully stop risky medicines

***What hinders hospital practitioners:***

- The wrong belief that patients don't want to stop medicines
- Pharmacists not being available when stopping decisions could be made
- Thinking that doing nothing is safer than stopping medicines
- Medicine stopping is not a hospital priority

## **Curated Q & A session highlights**

Selected attendee questions and comments were put forward to the speakers during the second half of the session. Attendees also highlighted a wide variety of resources relating to deprescribing. This helped with compiling a resource list, which was shared with all registrants after the event. Prof Bhattacharya informed attendees that training material is being developed to support practitioners to apply behavioural science to design and implement new ways of working. Profs Goodman and Bhattacharya ended

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the session by thanking attendees for their active participation and encouraged attendees to take forward collaborations. This was facilitated by circulating contact details of attendees who consented to sharing their details. Attendees were also encouraged to contact the speakers if they had specific questions or if they wished further details about the presented studies.

## Selected attendee comments about the event



*“Great webinar - thank you. Looking forward to the next one.”*

*“Thank you for this really interesting webinar! 😊 Greetings from Austria!”*

*“So exciting to [see] the deprescribing wave in the UK!”*



*“[The] recording will be helpful for some of my colleagues here in Canada.”*



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## Summary

The event outlined opportunities for applying behavioural science to address challenges to implementing deprescribing, using examples from primary and secondary care. Key approaches were discussed, including the application of the Theoretical Domains Framework to identify barriers and enablers to practitioner engagement with deprescribing discussions and developing theory and stakeholder informed interventions. The event provided an opportunity for interactive discussions on how to capitalise on behavioural approaches to support deprescribing efforts. The session also provided attendees with an opportunity to provide feedback, comments and ask questions and share resources from the UK and beyond. Some areas suggested by attendees to apply behavioural science include shared healthcare decision-making, antimicrobial stewardship, and biologics/biosimilar prescribing.