

CHARMER Work Package 1: Developing a Core Outcome Set for research into stopping medicines that are no longer needed for older people, in a hospital setting

Why we did this research

As we get older, our bodies are less able to handle some medicines. Medicines that were once effective and safe may not have as much benefit and may have an increased chance of causing harm. In our previous research, we asked older people and their carers about their thoughts on stopping these medicines. They told us that they would like these medicines reviewed by doctors in hospital during their stay and for those no longer needed or that could cause harm to be stopped. This is called 'proactive deprescribing' and is different from stopping a medicine after harm has occurred.

Currently, medicines that are no longer needed or may cause more harm than good are not routinely reviewed or stopped during hospital admissions. The CHARMER (CompreHensive geriAtRician led MEducation Review) study will develop and test a way to support geriatricians (consultants working on older people's medicine wards) and hospital pharmacists to proactively deprescribe for older people whilst they are in hospital. The research team has already explored the reasons why geriatricians and hospital pharmacists do not proactively deprescribe for older people. They used what they learned to develop methods to support and encourage proactive deprescribing.

In order for us to test whether these methods work, we first needed to find out what we should look at in our research trial. We wanted to develop a list of the most important things that might be affected by proactive deprescribing for older people in hospitals. These outcomes could then be used in our trial and any other research trials that want to test methods for hospital proactive deprescribing for older people. In this way, the results of our trial and others can be compared. This set of outcomes is called a Core Outcome Set and is usually between 5-12 outcomes.

What we did

We first reviewed published research to identify outcomes previously used by researchers to measure their results in similar trials (such as undertaking reviews of medicines) and identified other outcomes we felt could be relevant to hospital proactive deprescribing. This gave us 109 outcomes. We removed overlapping outcomes and those outcomes only related to specific medicines because the CHARMER intervention is designed to increase proactive deprescribing of any medicine that is inappropriate. This left us with 49 potentially relevant outcomes.

To reach an agreement about the most important outcomes to measure in hospital proactive deprescribing trials we used a recognised method to find out what the people most likely to be affected by a proactive deprescribing trial thought of these outcomes. We identified and contacted four groups of people:

- older people (who were taking at least 5 medicines) and their carers
- clinicians involved in the care of older people in hospital (including geriatricians, pharmacists, occupational therapists, physiotherapists, nurses)
- hospital managers and,
- researchers with an interest in older people's medicine or deprescribing

In total 200 people contributed to this study.

This involved two rounds of surveys followed by two online workshops, with fewer people involved at each stage. Contributors were asked to rate the importance of each outcome and we used their ratings at each stage to determine the outcomes that went forward to the next stage. This process reduced the number of outcomes to just six outcomes that were considered the most important to include in the Core Outcome Set and were able to be measured satisfactorily in hospitals.

What we found

The six outcomes in the Core Outcome Set that should be measured in all research trials looking at proactive deprescribing for older people in hospital under the care of a geriatrician are:

- Quality of life (a person's thoughts and feelings about how their current health impacts their daily life)
- Number of prescribed medicines that are stopped
- Number of prescribed medicines with dosage reduced
- Number of hospital stays
- Adverse drug events (an event when a medicine someone is taking causes harm, including effects when someone is stopping a medicine)
- Death

Next steps

We will publish this work in a research journal and present our findings at a conference so that other people working in this research area know about the Core Outcome Set.