

Prevalence, safety and efficacy of deprescribing cardio-protective medications in older adults

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Cardiovascular disease is the leading cause of morbidity and mortality worldwide. Cardio-protective drugs such as statins, antihypertensives and antithrombotic medications have been shown to be effective at preventing cardiovascular disease in older high-risk patients. However, each drug has both benefits and harms and there is debate on the extent to which such treatment should be administered to frail, multi-morbid patients. As such, clinical guidelines recommend using judgement when prescribing in frail older patients, emphasising a personalised approach to care which might include attempts to improve quality of life through deprescribing.

These guidelines are largely based on expert opinion and are vague on how to execute deprescribing due to a lack of evidence. Indeed, studies of current deprescribing practices are limited to small surveys and qualitative interview studies, and trials examining the impact of deprescribing are typically small with short periods of follow-up. Candidates are invited to join the [Stratified Treatments Research Group](#) to undertake a DPhil aiming to better inform deprescribing practice in routine primary care. This work will examine the extent to which cardio-protective medication deprescribing occurs in routine clinical practice, and develop a better evidence base for deprescribing interventions which can inform future randomised controlled trials and clinical guidelines for the care of older adults.

Potential research questions

1. What is the prevalence of cardio-protective medication deprescribing in UK clinical practice?
2. What evidence exists for the benefits and harms of cardio-protective medication deprescribing?
3. What long term benefits and harms of cardio-protective medication deprescribing can be observed in routine electronic health record data?

Methods will include systematic reviews and causal inference epidemiology using routine electronic health records from large databases such as the CPRD, ORCHID, or QResearch. Previous experience using such large databases is recommended.

Other University of Oxford Wellcome DRF studies

The department of primary care at Oxford has an unrivalled investment and range of research infrastructure to support EMC researchers from an accredited CTU, to hosting 3 of the 4 major UK PC databases (each having particular benefits), to a strong multi-disciplinary environment of world class academics from clinical primary care, public health, epidemiology, statistics, health economics, social sciences, all available in-house. We also have excellent support teams for students, access to renowned masters-level modular training programmes, and superb physical space and access to the greatest provision of library and museum resources in Europe in the world's top university and historic city. Other projects are possible in CVD, diabetes, cancer, infection, behaviour change, disease diagnosis, risk prediction, digital health, and social sciences.