Safer Prescribing And Care for the Elderly (SPACE): a cluster randomised controlled trial in general practice
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Context: High-risk prescribing, adverse drug events, and avoidable adverse drug event (ADE) hospitalisations are increasingly common as more people are taking more medicines for multiple long-term conditions. The most effective, cost-effective, and practical approach to safer prescribing in routine practice is not yet known.

Objective: To test the effect of the Safer Prescribing And Care for the Elderly (SPACE) intervention on the rate of high-risk prescribing of non-steroidal anti-inflammatory (NSAID) and antiplatelet medicines, and related ADE hospitalisations.

Intervention: SPACE comprises a practice prescribing audit to identify and generate for each general practitioner (GP) a list of patients with high-risk prescribing, an outreach educational visit from a clinical advisory pharmacist to go through with each GP their list of patients, and GPs to indicate in a tick-box intended action for each patient: no action, change medicines, letter to patient inviting them to discuss medications when next in seeing their doctor.

Methods: Design: Cluster randomised controlled trial. The clusters are general practices; data collection and analysis at the level of patient. Setting: General practices in the Auckland and Northland regions of New Zealand. Participants: Patients at increased risk of ADE from non-steroidal anti-inflammatory and antiplatelet medicines. Outcome measures: Rate of high-risk prescribing of NSAID and/or antiplatelet medications at 6 and 12 months. Ethics: University of Auckland Human Participants Ethics Committee, Ref. 020092, 2017.

Findings: We recruited 39 practices, with 205 GPs and 191,593 registered patients. We identified 21,877 participants (11.4%) (mean age 73.4 years; 52% female; mean number of medicines 5.34), of whom 1479 (6.8%) were receiving high-risk prescribing. Twenty practices were randomised to receive the intervention. Analysis is on-going.

Implications for practice: This study addresses an important translational gap, testing an intervention designed to prompt medication review and support safer prescribing in routine practice.

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