

Changing the script: medicine optimisation recommendations made during proactive multidisciplinary meetings with older adults

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Medical science continues to reshape healthcare with an ever-increasing number of medications available to transform people's lives for the better, improving mortality, morbidity and, frequently, quality of life. Yet this increased longevity often comes with comorbidity, dependency and frailty. Polypharmacy is associated with increased comorbidities; in many cases a reflection of appropriate prescribing based on available evidence. However, polypharmacy and inappropriate prescribing, combined with the age-related changes in pharmacokinetics and pharmacodynamics, is associated with increased harm for older adults, including adverse drug reactions, falls, decreased quality of life and increased health system costs, among other adverse effects.¹ Due to these potential concerns, prescribing recommendations such as the STOPP/START guidelines are available to help facilitate appropriate prescribing in older adults.²

We recently performed a randomised controlled trial (RCT) of a proactive multidisciplinary (MD) intervention versus usual care in otherwise well retirement village residents in the Waitematā and Auckland areas, with the primary aim to reduce hospitalisations.^{3,4} In this report we describe the medicine optimisation recommendations made during the MD meeting undertaken as part of the active arm of the RCT to highlight the significant number of potential medication changes present in otherwise well older people.

Details of the RCT methodology and outcomes are described elsewhere,^{3,4} but in brief, relevant to this report, 173 residents participated in the active RCT arm, which included a meeting with individual participants in their own home and an older adult specialist research team (clinical pharmacist, geriatrician or nurse practitioner and gerontology nurse specialist [GNS])

to develop healthcare recommendations. Prior to the MD meeting, detailed health, functional and psychosocial information and clinical observations were recorded by research GNSs. Clinical pharmacists liaised with participants and performed a medicines reconciliation. At these contact points with participants, individual healthcare and medication-specific goals/issues of importance were recorded and brought to the MD meeting for wider discussion in context of overall health and wellbeing.

Recommendations made at meetings included those regarding medications/prescribing, investigations, specific advice to participants (e.g., exercise recommendations), referrals to other specialists/community teams and advice on on-going primary care monitoring. Recommendations were agreed with participants, formally written-up and provided to general practitioners and participants. Collaborative medicine-related recommendations were retrospectively reviewed to describe the number and type of (start/increase, stop/reduce) medication recommendations made at MD meetings and alignment with STOPP/START guidelines published at the time of intervention. The STOPP/START guidelines are one of several guidelines designed to assist clinicians in appropriate prescribing for older adults. They include criteria for stopping medications that are significantly associated with adverse drug reactions but also give advice on starting medications to ensure that older adults do not miss out on evidence-based treatment. Research shows that following such guidelines has practical clinical value by reducing adverse drug reactions and hospitalisations.²

The mean age of participants in MD meetings was 81 years, and 128 (74.0%) were female. In three (2%) MD meetings no specific recommendations were suggested. The most common

recommendations made were around prescribing, with 310 suggestions made for 135 (78%) of the participants, averaging 1.8 per participant. The most common medicines recommended to be stopped or reduced included statins (n=31), proton-pump inhibitors (PPI, n=20), diuretics (n=16), antiplatelet agents (n=10), tricyclics and diabetic medications (n=9 for both). The most common medicines recommended to be started or increased included paracetamol (n=29), vitamin D (n=14), topical analgesics (n=11), vaccinations (n=7) and bisphosphonates (n=6). Additionally, 11 recommendations were made around changing medications within a class or formulation; for example, changing oral bisphosphonates to intravenous. Of the recommendations made, 89 (28.7%) aligned with STOPP guidelines, 33 (10.6%) aligned with START guidelines and 188 (60.6%) were independent of STOPP/START guidance. Previous literature has shown STOPP/START alone may not be clinically appropriate in around 60% of cases.⁵

While there were a wide variety of prescribing recommendations made overall, those working clinically with older adults are probably not surprised that certain cardiac medications and PPIs were the commonest medicines recommended to be reduced or stopped. In particular, in the very old age group (>80 years) there is not strong evidence of benefit with antiplatelet treatment or statins for primary prevention, and many older adults were keen to reduce medication load. Recommendations regarding starting or increasing medications were predominantly around simple analgesic and bone protection, reflecting common issues of pain and osteoporosis in this age group; our previous work demonstrated 47% of this study population experience daily pain.⁶

This study sample was predominantly European (>96%) and therefore we are unable to comment on differences between ethnicities. However,

previous literature demonstrates inequities in both access to medications and adverse outcomes associated with inappropriate prescribing for Māori.⁷ This suggests that within the wider Aotearoa New Zealand population, addressing appropriate prescribing has even greater importance than demonstrated within this study.

Our work demonstrates that appropriate prescribing in otherwise well older adults who were not actively seeking health service input is a common area that can be improved. While formal clinical guidelines such as the STOPP/START guidance can help identify low-hanging fruit, an individualised, holistic approach to appropriate prescribing based on understanding patient needs and goals, and one supported by specialist knowledge, can lead to a multitude of further recommendations. A strength of this work was the participant-centred approach, which was one that was found to be acceptable to the participants.⁸

With this in mind, we strongly argue for increased presence of clinical pharmacists in primary care and greater collaboration and integration between primary care and specialist older adult services. Pharmacists have a critical but often invisible role to play in safe prescribing in older adults.⁹ A recent study found that over 70% of general practices surveyed wished for more pharmacist support than currently available and that clinical pharmacists within primary care are well received by medical colleagues.¹⁰ Additionally, there is wider supportive evidence for individualised and collaborative proactive care of older adults living with frailty.¹¹ A community model of care addressing appropriate prescribing within the context of patient-centred goals and holistic care, presence of scientific evidence and expert clinical judgement would have the potential to improve prescribing-related outcomes and inequities in quality medicines use.

COMPETING INTERESTS

Nil.

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