MY COMRADE PLUS: A pilot cluster Randomised Controlled Trial for patients with multimorbidity

Led by Professor Andrew Murphy

Why did we conduct this research?

Every day, General Practitioners (GPs) are seeing patients, who are living with multiple chronic health conditions, known as multimorbidity and prescribed multiple medications, known as polypharmacy. Internationally, approximately 25% of adults (& 50% of older adults) are living with multimorbidity. Multimorbidity is strongly linked to increased risks of adverse drug reactions, unplanned additional health problems, hospital admissions and death. This is in addition to the increased burden of managing multiple healthcare appointments and the associated costs.

While international health guidelines recommend medication reviews as part of the management of multimorbidity, evidence on how to implement reviews in practice in primary care is lacking. This study addresses this gap by exploring the feasibility of a novel intervention to support the conduct of medication reviews in primary care, by GPs and practice-based pharmacists, for patients living with multimorbidity and polypharmacy, across two healthcare settings – Northern Ireland (NI) and Republic Of Ireland (ROI).

What did we do?

A pilot cluster-randomised controlled trial (cRCT) was conducted (clustered at general practice), looking at the feasibility of proceeding to a definitive trial, between Jan 2019 and September 2021. The intervention, the My Comrade intervention, involved pairs of GPs in ROI and a GP and Practice Based Pharmacist in NI conducting joint medication reviews guided by an agreed checklist called NO TEARS. Control practices practiced usual care.

Data was collected between August 2019 and March 2020. It included a once off data collection on practice and patient recruitment and retention, demographics, information on the conduct of the medication reviews, economic cost analysis. Further data was collected on patient quality of life and burden of treatment, potentially inappropriate prescribing (PIPs), number and changes in number of medications and healthcare service utilisation at baseline, four months and eight months.

In addition, a purposeful sample of consenting practice staff and patients, in both the control and intervention groups, participated in semi-structured interviews exploring their experience and perception of taking part in the study and in medication reviews and considerations for the future. Patient and Public Involvement informed participant interview documentation, interview schedule and qualitative data analysis and reporting.

What answers did we get?

The recruitment of practices (n=15) and patients (n=121), 94% and 38% of proposed target respectively, was more complex and took longer than anticipated. The COVID-19 pandemic critically impacted on the recruitment of patients. 100% of practices and 85% of patients remained to the study end. Both practice staff and patients found the intervention acceptable and relevant. Practices implemented the intervention successfully, without undue burden. Some practice staff highlighted concerns such as: poor communication of the reviews to patients, dissatisfaction regarding incentivisation and in ROI, the sustainability of two GPs collaboratively conducting the medication reviews.

What should be done now?

The study demonstrated the potential to proceed to a definitive trial with some modifications. Predominately, these modifications relate to practice and patient recruitment, practice incentivisation and patient follow-up. Recruitment of participants requires significant time and effort given the nature of this population and the pairing of GP and pharmacist may be more sustainable to implement in routine practice. Furthermore, it found that the My Comrade intervention was feasible to conduct in two different healthcare systems.