Extended Data File 4: Inclusion and Exclusion Criteria Guidelines for Reviewers

Revisions based on feedback from team 02092021

Rapid Realist Review of General practice interventions to reduce ADE in community dwelling older adults

The aim of this Rapid Realist Review is to identify the contexts and mechanisms that influence any outcomes relevant to the reduction of ADE in community dwelling older adults in general practice. The exact outcomes will be dependent on the evidence that exists in the literature. Some examples of the questions that we hope will be answered are:

- What are the contextual factors that have most impact (positive or negative) on interventions to reduce ADEs in community dwelling older adults in general practice, and for whom?
- What mechanisms (positive or negative) are triggered in interventions targeting GP practices to reduce ADEs?
- What are the important contexts that determine whether different mechanisms produce their intended outcome?
- What are the intended and unintended outcomes?
- In what circumstances are interventions in GP practices to reduce ADEs most likely to be effective?

Definition of Terms used in this review:

Adverse drug events (ADEs): Harmful unintended consequences of medication usage including medical errors, side effects, adverse drug reactions and overdoses.
Polypharmacy: the concurrent use of ≥5 drugs
Older adults: aged ≥ 65 years
Community dwelling: living at home, with or without carer support.
Primary Care GPs: Doctors caring for patients in the community

For Title and Abstract Screening

The article must **broadly** relate to adverse drug events in community dwelling older adults in general practice.

Inclusion Criteria:

Participants: GPs, their nurses, patients, their informal carers, community pharmacists and public health nurses.
Setting: GP practices and any linked setting i.e. community pharmacy or patients home. Include studies beyond the GP setting that may have CMOs of interest.
Focus on those countries where GPs have gate-keeping functions similar to Ireland: UK, Australia, New Zealand and The Netherlands particularly if the context, mechanism or outcomes are not transferable to an Irish setting. For Canada and USA, include if the focus is on family practice only (not ambulatory care in general, including outpatients etc). Studies from other countries can be included if the topics relate to human behaviour, support systems, beliefs, attitudes, opinion and perspectives that might be comparable to an Irish population.
Articles to include:
Any interventions (irrespective of study design), opinion pieces, policy or protocol documents considering any issue thought to impact on levels of ADE in community dwelling older adults where the GP has a role to play, they may not be the main role player.
Include articles that involve community pharmacists and public health nurses as long as the GP has a role to play.
Include articles about transitions between GP practices and specialist care.

Relevant Systematic, Scoping or Literature Reviews will be assessed for studies of interest and should be included at T&A screening stage and tagged as Review Article. Their inclusion will be dependent of the numbers other articles identified.

Outcomes of interest: hospital presentations/ admissions, emergency department visits, mortality, burden on GP and/or patient/ carer, continuity of care, symptom/condition/event change, change to health-related quality of life, patient-oriented or patient-mediated outcomes, falls, level of adherence to drug regimen, financial impacts.

Realist outcomes of interest: may include but are not limited to the follow: Inertia / failure to act, therapeutic relationship, credibility, impact on initial and ongoing workload, potential for litigation, conflict with other prescribers/health professionals, patient withdrawal syndrome, help-seeking behaviour, diverse outcomes associated with medication management that mattered/ potentially motivating to the patient or GP, satisfaction with outcome, clinician and patient awareness, older people's and informal carers' coping experiences, achieving appropriate or inappropriate treatment, following adherent or non-adherent behaviours, quality of life, relationships and resource use.

Contexts of interest: including but not limited to; resource availability, healthcare systems, technology, work practices, continuity of care, medical and societal health beliefs and culture, regulations, monitoring, level of follow up, level of support/ carer, opportunities to review medication regimens, GP knowledge, communication skills, experience. Patient characteristics related contexts: individual characteristics and capacities, diagnoses, medications, interpersonal relationships with health and care practitioners, access to services or information.

Mechanisms of interest: including but not limited to; awareness, self-efficacy, empowerment, coping, control, credibility, motivated, informed, satisfaction, trust, confidence, continuity, consistency, threat, fear of unknown/negative consequences of change, conflict.

Exclusion criteria:

Exclude transitions from hospital
Exclude in-patient hospital settings
Exclude articles reporting prevalence only
Exclude studies about pharmacists or public health nurses that do not also include a role for GPs.
Exclude studies that use GP data only
Exclude studies focused on patients < 65 years old
Exclude those articles not immediately accessible via our own library (RCSI) or on open access.

Filters:

Articles published in the last 10 years (2011), with a flexibility to included relevant articles close to this timeline. Flag relevant articles beyond this timeframe which may be included if few relevant articles are found.
Articles in English.
Title only (No abstract available)

For Full Text Screening

Any article that assesses the facilitators or barriers in relation to reducing ADE in community dwelling older adults in the primary care setting.
Able to shed light on any aspect of Context, Mechanism or Outcome for any element of the research questions/candidate theories
Focus on elements of any studies that relate to how they worked or not, as well as the outcome
The article may not necessarily be about the whole research question, but relevant to a sub-section of it (i.e. the patients' perspective)

Assessment of Quality:

Relevance – Does the article provide information of value to the review in relation to interventions to reduce ADEs in community dwelling older adults in primary care or the GPs or patients' responses/reactions to the resources and opportunities provided by in the intervention?

Rigour – Are the sources or methods used to generate the relevant data credible and trustworthy?
Richness - Relates to the level of theoretical and conceptual development detail provided in the articles. It is used as a means to identify articles of most value in a realist review. To score highly an article should provide sufficient details in relation to how the approach used was expected to work; documenting the process and explaining contextual factors that influenced implementation and/or outcomes.

Relevance and Rigour will be scored using the following ratings: 0 = very poor, 1= poor, 2 = good, 3 = very good. Richness will be scored as follows: 0 = nothing of interest, not focused on the topic of interest, 1 = limited data of interest, likely to appear in other articles, 2 = limited data of interest, but quick to extract it and could add weight to findings, 3 = some good quality data, 4 = Much valuable data. The ratings will be assessed at full text review and may be reassessed at the data extraction stage.