Special Interest Group
Appropriate Polypharmacy & Adherence in Integrated care

Purpose

This SIG is for practitioners, pharmacists, managers, researchers, students, policy makers and health economists engaged in planning, designing and delivering appropriate polypharmacy reviews as a key component of the pathway for people centred integrated care.

Due to advances in pharmacotherapy, those with multiple morbidities are increasingly likely to be prescribed multiple medications. Prescribing is largely based on single disease evidence-based guidance which does not generally take account of multi-morbidity, now the norm in those over 65 years[2]. Consequently, patients are prescribed several medicines recommended by a disease specific guideline which is potentially harmful and challenging for them to manage. Inappropriate polypharmacy and medication non-adherence are two key, inter-related problems in elderly multimorbid patients, with negative effects on health outcomes. It is recognised that lifestyle can not only contribute to multimorbidities that require management with medication, but that addressing this might be appropriate when considering alternatives to medication.

Medication is the single most common intervention for those with multiple morbidities and is known to contribute to between 7-14% of all hospital admissions with these patients twice as likely to be admitted again due to their medication. Despite this evidence, there is not usually a focus on medication appropriateness as part of the patient pathway.

The group would facilitate work across disciplines about developing guidelines, tools for accelerating implementations of programmes as part of the patient pathway so that outcomes from medications are optimised whilst reducing harm, including economic modelling tools that can demonstrating that models can be designed to demonstrate sustainability in different healthcare systems. Collaboration will allow the group to build a repository of these relevant tools, best practice and outcomes from members, undertake twining activities and carry out joint evaluation of implementation so that scale up of programmes can be accelerated.

Get Involved

If you have an interest in Appropriate Polypharmacy and Adherence, practical experience or resources to share, a question or challenge for SIG members, or suggestions for future SIG activities please contact Marie Curran, SIG facilitator IFICscotland@integratedcarefoundation.org

Activities

The SIG provides a platform for members to share implementation experience, highlight good practice, signpost practical resources, and agree and collaborate on research, education and evaluation priorities for polypharmacy as a key component of people centred integrated care. Members will shape the scope of SIG activities and outputs. These may include:

- Webinars and online peer support
- Good practice case studies
- Practical resources – guidance and tools
- Study / Twinning visits
- Blogs
- Evidence reviews
- Consensus documents
- Collaborative action research
- Benchmarking
- Presence in IFIC conferences and involvement in the development of workshops.

Topics for 2023-2025

- Guidelines
- Tools for Implementation
- Evaluation and Economic Modelling
- Knowledge exchange / twinning
- Blogs
- Literature reviews / surveys

SIG Lead Alpana Mair

Head of Effective Prescribing and Therapeutics, Scottish Government & previously Deputy Chief Pharmacist for Scotland. EU project coordinator for SIMPATHY, EIP AHA A1 action group coordinator for polypharmacy and prescription, and WHO lead for Polypharmacy for the Third Patient Safety Challenge, National Scottish lead for polypharmacy and Patient Safety Quality and Scottish Quality and Improvement Fellow

Moderators

Alpana will be supported by practitioners and researchers who are implementing or evaluating appropriate polypharmacy and adherence. These volunteer moderators, drawn from the membership of the SIG, will change to enrich the knowledge base, facilitate sharing of experience, mobilise participation and extend the reach of the global community of practice.

Moderators are knowledgeable and passionate about their subject and will be expected to:

- Support the SIG lead to update the SIG workplan each year
- Identify specific topic areas to lead on
- Mobilise their networks and colleagues to source and share resources, updates, and learning opportunities that can be uploaded to the SIG
- Encourage members to use the SIG as a discussion forum
- Contribute a blog about their work / developments
- Participate in SIG virtual meetings and ICIC workshops
  Host / contribute to Integrated Care Matters Webinars

The group will incorporate a diversity of profiles that will bring in the different perspectives of polypharmacy in the context of people centred integrated care, to enable sharing of best practice and wider engagement. The area leads below are anticipated:

- Geriatrician
- Primary care Physician
- Pharmacist
- Health Economist
- Nurse practitioner
- Group administrator
- Adherence expert

Dr Martin Wilson, Consultant Geriatrician,
Highland, Scotland

Dr Albert Alonso, senior researcher, FRCB-IDIBAPS, Barcelona; and senior associate, International Foundation for Integrated Care (IFIC)

Frank Federico, R.Ph. is Vice President and Senior Safety Expert, Institute for Healthcare Improvement in Cambridge, MA. Faculty for the Patient Safety Executive Development Program. Chair of the National Coordinating Council for Medication Error reporting and Prevention (NNC MERP), and Vice-Chair of the Joint Commission Patient Safety Advisory Group.

Ian Scott, Director of Internal Medicine and Clinical Epidemiology, Princess Alexandra Hospital, Brisbane and Associate Professor of Medicine, University of Queensland, Australia. Chair of the Australian Deprescribing Network.

Prof. Doron Garfinkel, Geriatric-Palliative consultant, Wolfson Medical Center, Holon, Israel;

Deputy Head, Homecare hospice, Israel Cancer Association;

Founder - IGRIMUP - international group for reducing inappropriate medication use and polypharmacy.

Specializations: internal medicine, palliative medicine and Geriatrics.

Additional information

The term polypharmacy itself just means "many medications" and has often been defined to be present when a patient takes five or more medications. However, it is important to note that polypharmacy is not necessarily a bad thing. For example, secondary prevention of myocardial infarction often already requires the use of four different classes of drugs (antiplatelets, statins, ACE inhibitor, beta blocker). Polypharmacy can be both rational and required. It is therefore crucial to distinguish appropriate from inappropriate polypharmacy[1].

Inappropriate polypharmacy is present, when one or more drugs are prescribed that are not or no longer needed, either because: (a) there is no evidence based indication, the indication has expired or the dose is unnecessarily high; (b) one or more medicines fail to achieve the therapeutic objectives they are intended to achieve; (c) one, or the combination of several drugs cause inacceptable adverse drug reactions (ADRs), or put the patient at an unacceptably high risk of such ADRs, or because (d) the patient is not willing or able to take one or more medicines as intended.

Appropriate polypharmacy is present, when: (a) all drugs are prescribed for the purpose of achieving specific therapeutic objectives that have been agreed with the patient; (b) therapeutic objectives are actually being achieved or there is a reasonable chance they will be achieved in the future; (c) drug therapy has been optimised to minimise the risk of ADRs and (d) the patient is motivated and able to take all medicines as intended.

'Polypharmacy', the prescribing multiple medications, has been described as one of the most pressing prescribing challenges [2] . Polypharmacy increases the likelihood of adverse effects, impacting significantly on health outcomes and healthcare resources[3]. While traditionally polypharmacy has been described as 4-5 medicines, it has been recently suggested that, given the emphasis on evidence based practice, there should be a change in focus from inappropriate polypharmacy (inappropriate prescribing of too many medicines) to optimal polypharmacy (appropriate prescribing of many medicines)[,4].

[1] Scottish Polypharmacy Guidance. 2018. Scottish Government. Scottish Polypharmacy Guidance-2018.pdf

[2] Payne RA, et al. Polypharmacy: one of the greatest prescribing challenges in general practice. Brit J Gen Prac 2011;61:83-84.

[3] Gurwitz JH, et al. Incidence and preventability of adverse drug events among older persons in the ambulatory setting. JAMA 2003;289(9):1107-1116.

[4] The Kings Fund: Polypharmacy and medicines optimisation. London. 2013.