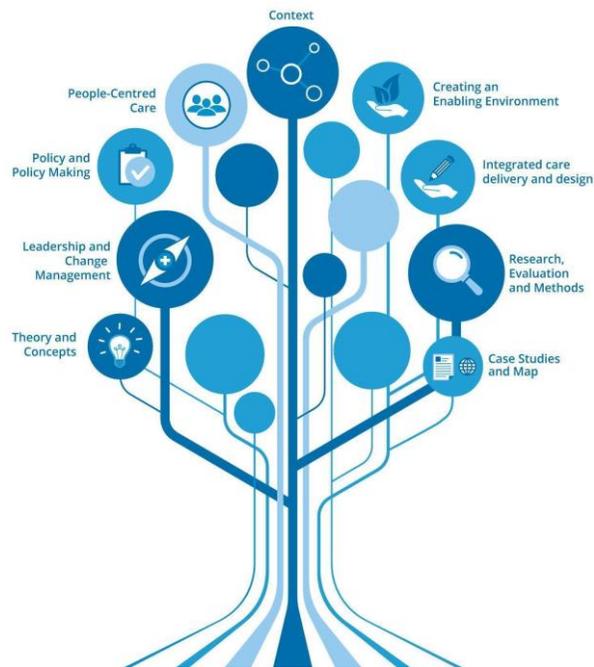


Integrated Care Matters

Addressing the Global Challenge: Reducing Medicines Related Harm

Knowledge Resource



About the information

The information provided in this document is intended to support the Integrated Care Matters webinar series.

Where possible, we select evidence that is published open access, and provided links to the materials referenced. Some are identified as author repository copies, manuscripts, or other copies, which means the author has made a version of the otherwise paywalled publication available to the public. Other referenced sources are pdfs and websites that are available publicly.

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Developed in partnership



American Geriatrics Society (2019) Updated AGS Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. J Am Geriatr Soc, 67: 674-694

<https://agsjournals.onlinelibrary.wiley.com/doi/abs/10.1111/jgs.15767>

An interdisciplinary expert panel reviewed the evidence published since the last update (2015) to determine if new criteria should be added or if existing criteria should be removed or undergo changes to their recommendation, rationale, level of evidence, or strength of recommendation.

Bernacki R, Hutchings M, Vick J, et al (2015) Development of the Serious Illness Care Program: a randomised controlled trial of a palliative care communication intervention, BMJ Open; 5:e009032. doi: 10.1136/bmjopen-2015-009032

<https://bmjopen.bmj.com/content/5/10/e009032>

Ensuring that patients receive care that is consistent with their goals and values is a critical component of high-quality care. This article describes the protocol for a cluster randomised controlled trial of a multicomponent, structured communication intervention.

Cushing A and Metcalfe R (2007) Optimizing medicines management: From compliance to concordance. Therapeutics and Clinical. Risk Management, Dec;3(6):1047-58. PMID: 18516274; PMCID: PMC2387303

<https://pubmed.ncbi.nlm.nih.gov/18516274/>

This article examines the extent to which doctor and patient behaviors are compatible with the increasing focus on prescribing medication which is more likely to be adhered to by the patient. The article also looks at available consultation models which might be useful to the reflective practitioner and consider what actions on the part of the doctor and the healthcare system could promote medicine prescription and utilization in line with this new approach based on partnership.

Deprescribing guidelines and algorithms (2019)

<https://deprescribing.org/resources/deprescribing-guidelines-algorithms/>

The evidence-based guidelines and their algorithms, developed by the Bruyère Research Institute Deprescribing Guidelines Research Team and its collaborators, are products of quality research and real-world application.

American Geriatrics Society (2019) Updated AGS Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. J Am Geriatr Soc, 67: 674-694
<https://agsjournals.onlinelibrary.wiley.com/doi/abs/10.1111/jgs.15767>

An interdisciplinary expert panel reviewed the evidence published since the last update (2015) to determine if new criteria should be added or if existing criteria should be removed or undergo changes to their recommendation, rationale, level of evidence, or strength of recommendation.

Fried T R, Tinetti M, Agostini J, Iannone L, Towle V (2011) Health outcome prioritization to elicit preferences of older persons with multiple health conditions. Patient Educ Couns, 83, 2, 278-282 <https://pubmed.ncbi.nlm.nih.gov/20570078/>

This article develops and tests a simple tool to elicit the preferences of older persons based on prioritization of universal health outcomes.

Garfinkel D, Mangin D (2010) Feasibility study of a systematic approach for discontinuation of multiple medications in older adults: addressing polypharmacy, Arch Intern Med, Oct 11;170(18):1648-54. doi: 10.1001/archinternmed.2010.355. PMID: 20937924 <https://pubmed.ncbi.nlm.nih.gov/20937924/>

This study reports on the feasibility of the Good Palliative-Geriatric Practice algorithm for drug discontinuation which has been shown to be effective in reducing polypharmacy and improving mortality and morbidity in nursing home inpatients.

iSympathy Project: making medication personal

iSIMPATY, (implementing Stimulating Innovation in the Management of Polypharmacy and Adherence Through the Years), a three-year EU funded project in Northern Ireland, Scotland, and the Republic of Ireland. The project aims to ensure the best and most sustainable use of medicines for patients by training pharmacists and other medical professionals to deliver medicine reviews and embedding a shared approach to managing multiple medicines.

<https://www.isimpathy.eu/>

Jansen J, Naganathan V, Carter SM, McLachlan AJ, Nickel B, Irwig L, Bonner C, Doust J, Colvin J, Heaney A, Turner R, McCaffery K (2016) Too much medicine in older people? Deprescribing through shared decision making, BMJ Jun 3;353:i2893. doi: 10.1136/bmj.i2893. PMID: 27260319 <https://pubmed.ncbi.nlm.nih.gov/27260319/>

Jansen and colleagues explore the role of shared decision making in tackling inappropriate polypharmacy in older adults. For each step of the shared decision making process we describe the unique tasks required for deprescribing decisions; identify challenges for older adults, their companions, and clinicians (figure); give practical advice on how challenges may be overcome; highlight where more work is needed; and identify priorities for future research (table).

Lake J, Steenhof N, Kellar J, Austin Z (2019) Letter to the Editor: "Development and validation of key performance indicators for medication management services provided for outpatients." Res Social Adm Pharm Sep 28. pii: S1551-7411(19)30949-0. doi: 10.1016/j.sapharm.2019.09.061 <https://pubmed.ncbi.nlm.nih.gov/31585785/>

Maher RL, Hanlon JT, Hajjar ER (2014) Clinical consequences of polypharmacy in elderly. Expert Opin Drug Saf. 2014;13(1):57-65 <https://pubmed.ncbi.nlm.nih.gov/24073682/>

This article presents information about: i) prevalence of polypharmacy and unnecessary medication use; ii) negative consequences of polypharmacy; and iii) interventions to improve polypharmacy.

Page AT, Clifford RM, Potter K, Schwartz D, Etherton-Ber CD. The feasibility and effect of deprescribing in older adults on mortality and health: a systematic review and meta-analysis. Br J Clin Pharmacol. 2016 Sep;82(3):583-623. doi: 10.1111/bcp.12975. Epub 2016 Jun 13. PMID: 27077231; PMCID: PMC5338123.

The review aims to determine whether or not deprescribing is a safe, effective and feasible intervention to modify mortality and health outcomes in older adults.

Presley B, Groot W, Pavlova M. Pharmacy-led interventions to improve medication adherence among adults with diabetes: A systematic review and meta-analysis. Res Social Adm Pharm. 2019 Sep;15(9):1057-1067. doi: 10.1016/j.sapharm.2018.09.021. Epub 2018 Oct 3. PMID: 30685443.

This article reviews pharmacist-led interventions to improve medication adherence in patients with diabetes and to assess the effectiveness of these interventions on medication adherence.

Reeve, E, Gnjjidic D, Long J, & Hilmer S (2015) A systematic review of the emerging definition of 'deprescribing' with network analysis: implications for future research and clinical practice. British journal of clinical pharmacology, 80(6), 1254–1268. <https://doi.org/10.1111/bcp.12732>

This study identifies what definitions have been published for the term 'deprescribing', and determines whether a unifying

definition could be reached. A secondary aim is to uncover patterns between the published definitions which could explain any variation.

Reeve E, Shakib S, Hendrix I, Roberts MS, Wiese MD (2014) Review of deprescribing processes and development of an evidence-based, patient-centred deprescribing process. Br J Clin Pharmacol, Oct;78(4):738-47. doi: 10.1111/bcp.12386. PMID: 24661192; PMCID: PMC4239968 <https://pubmed.ncbi.nlm.nih.gov/24661192/>

This study contains a review of previously proposed deprescribing processes and relevant literature which was used to develop the patient-centred deprescribing process, which is a five-step cycle that encompasses gaining a comprehensive medication history, identifying potentially inappropriate medications, determining whether the potentially inappropriate medication can be ceased, planning the withdrawal regimen (e.g. tapering where necessary) and provision of monitoring, support and documentation.

Reeve E, Wiese MD, Hendrix I, Roberts MS, Shakib S (2013) People's attitudes, beliefs, and experiences regarding polypharmacy and willingness to Deprescribe. J Am Geriatr Soc. Sep;61(9):1508-14. doi: 10.1111/jgs.12418. Epub 2013 Aug 26. PMID: 24028356.

<https://pubmed.ncbi.nlm.nih.gov/24028356/>

This study captures people's attitudes, beliefs, and experiences regarding the number of medications they are taking and their feelings about stopping medications.

Scott I A, Hilmer S N, Reeve E, Potter K, Le Couteur D, Rigby D, Gnjidic D, Del Mar C B, Roughead E E, Page A, Jansen J, Martin JH. Reducing inappropriate polypharmacy: the process of deprescribing. JAMA Intern Med. 2015 May;175(5):827-34. doi: 10.1001/jamainternmed.2015.0324. PMID: 25798731.

<https://pubmed.ncbi.nlm.nih.gov/25798731/>

A deprescribing protocol is proposed comprising 5 steps: (1) ascertain all drugs the patient is currently taking and the reasons for each one; (2) consider overall risk of drug-induced harm in individual patients in determining the required intensity of deprescribing intervention; (3) assess each drug in regard to its current or future benefit potential compared with current or

future harm or burden potential; (4) prioritize drugs for discontinuation that have the lowest benefit-harm ratio and lowest likelihood of adverse withdrawal reactions or disease rebound syndromes; and (5) implement a discontinuation regimen and monitor patients closely for improvement in outcomes or onset of adverse effects.

Stiggelbout A M, Van der Weijden T, De Wit MP, Frosch D, Légaré F, Montori VM, Trevena L, Elwyn G (2012) Shared decision making: really putting patients at the centre of healthcare. BMJ. Jan 27;344:e256. doi: 10.1136/bmj.e256. PMID: 22286508. <https://pubmed.ncbi.nlm.nih.gov/22286508/>

Although many clinicians feel they already use shared decision making, research shows a perception-reality gap. A M Stiggelbout and colleagues discuss why it is important and highlight some best practices.

Weir K et al (2018) Medicine conversation guide, The University of Sydney
<https://ses.library.usyd.edu.au/handle/2123/18330>

A Medicines Conversation Guide was developed for pharmacists to use in the context of a Home Medicines Review. The Guide aims to increase patient involvement and support discussions about:

general health understanding, decision-making and information preferences, health priorities related to medicines, patient goals and fears, views on important activities and trade-offs.

Weir K, Nickel B, Naganathan V, Bonner C, McCaffery K, Carter SM, McLachlan A, Jansen J (2018) Decision-Making Preferences and Deprescribing: Perspectives of Older Adults and Companions About Their Medicines. J Gerontol B Psychol Sci Soc Sci. 2018 Sep 20;73(7):e98-e107
<https://pubmed.ncbi.nlm.nih.gov/29190369/>

This study explores decision-making about polypharmacy with older adults and their companions.

Weir K et al (2021) Consumer attitudes towards deprescribing: A systematic review and meta-analysis. J Gerontol A Bio Sci Med Sci. <https://pubmed.ncbi.nlm.nih.gov/34390339/>

This study aimed to synthesise the results of the Patients' Attitudes Towards Deprescribing (PATD) questionnaire (and revised versions).

Weir K et al (2021) The role of older patients' goals in GP decision-making about medicines: a qualitative study. BMC Fam Prac

<https://bmcfampract.biomedcentral.com/articles/10.1186/s12875-020-01347-y>

In this qualitative study, the authors explored GPs' perspectives on the importance of discussing patients' goals and preferences, and the role patient preferences play in medicines management and prioritisation.

Weir K et al (2019) Pharmacists and patients sharing decisions about medicines: Development and feasibility of a conversation guide. Res Social Adm Pharm
<https://pubmed.ncbi.nlm.nih.gov/30172642/>

This study describes the development and feasibility testing of a Medicines Conversation Guide in HMRs with pharmacists and older patients.

WHO (2019) Medication safety in polypharmacy report

<https://www.who.int/publications-detail-redirect/medication-safety-in-polypharmacy-technical-report>

This report introduces polypharmacy as a concept, and examine some approaches for the appropriate management of polypharmacy, which are crucial for ensuring greater medication safety.

WHO (2019) Medication safety in high-risk situations

<https://apps.who.int/iris/bitstream/handle/10665/325131/WHO-UHC-SDS-2019.10-eng.pdf?sequence=1&isAllowed=y>

This report – Medication safety in high-risk situations – outlines the problem, current situation, and key strategies to reduce medication-related harm in high-risk situations.

WHO Medication Safety in Transition of Care

This report – Medication safety in transitions of care – outlines the problem, current situation, and key strategies to reduce medication-related harm in transitions of care.

<https://www.who.int/patientsafety/medication-safety/TransitionOfCare.pdf?ua=1>