

## Medication reviews in patients with multi-morbidity

This guidance aims to provide support for healthcare professionals reviewing medication for adults with multimorbidity (i.e. adults with two or more long-term physical health conditions or adults with one or more mental health condition and at least one physical health condition).

Careful review of the risks and benefits of the individual treatments recommended for single health conditions are required for people with multimorbidity. The evidence for single health conditions is often drawn from people without multimorbidity, who are taking fewer prescribed medicines.<sup>1</sup>

### Recommendations

- Ensure patients with multimorbidity have had a frailty assessment undertaken and documented, where appropriate.
- For patients with multimorbidity who are prescribed 10 or more medicines, consider carrying out collaborative medication reviews (in pairs—GP/GP or GP/practice-based pharmacist) to agree and make note of any items to discuss with the patient prior to the consultation.
- Consider using an automated text and email booking system to reduce the administrative burden associated with inviting patients to attend for a medication review and increase efficiency.
- Use “[GP evidence](#)” or, if not available for the condition being reviewed, the NICE “[database of treatment effects](#)” to find information regarding the effectiveness of treatments, the duration of treatment trials and the populations included in treatment trials to inform medication review discussions and decisions.
- Consider using a suitable screening tool to support individual medication reviews (e.g. [PrescQIPP IMPACT](#)) in order to identify medicines-related safety concerns and optimise treatment.
- When optimising treatment, consider medicines or non-pharmacological treatments that the person might benefit from but is not currently taking/using, as well as those that might be stopped.
- Ask the person if treatments intended to relieve symptoms are providing benefits or causing harm. If the person is unsure of benefit or is experiencing harms from a treatment, discuss reducing or stopping the treatment and plan a review to monitor the effects of any changes made and decide whether any further changes to treatments are needed (including restarting a treatment).
- Discuss any changes to treatments with the person, taking into account their views on the likely benefits and harms from individual treatments and what is important to them in terms of personal goals, values and priorities
- If stopping, starting or changing treatments, don’t try and change everything all at once, but instead prioritise the changes to be made according to the risk/benefit.
- Formulate an action plan with the patient to outline the changes agreed upon and how they will be managed, including managing their expectations, ensuring that they know when to restart treatment if symptoms persist or worsen during a trial discontinuation. Provide detailed dose tapering information if needed, and outline the timescales for planned review of the changes and next steps.

## Recommendations

- Consider the possibility of a lower overall benefit of continuing treatments that aim to offer prognostic benefit, particularly in people with limited life expectancy or frailty, and discuss with people whether they wish to continue treatment, taking into account their views on the likely benefits and harms from individual treatments and what is important to them in terms of personal goals, values and priorities.
- Ensure all reviews and outcomes are fully documented and coded on the GP practice clinical system.

## Background

In 2016, the National Institute for Health and Care Excellence (NICE) published the guideline “Multimorbidity: clinical assessment and management. NICE guideline [NG56]”.<sup>1</sup>

Multimorbidity refers to adults with two or more long-term physical health conditions or adults with one or more mental health condition and at least one physical health condition.<sup>1</sup> These include:<sup>1</sup>

- Defined physical and mental health conditions such as diabetes or schizophrenia.
- Ongoing conditions such as a learning disability.
- Symptom complexes such as frailty or chronic pain.
- Sensory impairment such as sight or hearing loss.
- Alcohol and substance misuse.

This guideline covers optimising care for adults by reducing treatment burden (polypharmacy and multiple appointments) and unplanned care.<sup>1</sup>

In Wales, the All Wales Medicines Strategy Group has published the *Welsh National Standards for Medication Review* to provide a structured approach to medication review, whilst being flexible enough to allow the review to be tailored to the patient.<sup>2</sup> They have also published guidance entitled *Polypharmacy in older people: A guide for healthcare professionals*.<sup>3</sup>

In Scotland, NHS Scotland and the Scottish Government have published *Polypharmacy Guidance, Realistic Prescribing*, which aims to provide guidance on preventing inappropriate polypharmacy at every stage of the patient journey.<sup>4</sup>

In Northern Ireland, Pharmacy Forum NI have produced *A Guide to Support Medication Review in Older People*, which is aimed at supporting healthcare professionals when carrying out comprehensive reviews of the appropriateness of medicines prescribed for older people.<sup>5</sup>

However, evidence on how to implement reviews in practice in primary care is lacking.<sup>6</sup> Consequently, a 2022 study evaluated the feasibility of the MyComrade (Multimorbidity Collaborative Medication Review And Decision Making) intervention in the Republic of Ireland and Northern Ireland and found that it was feasible to conduct.<sup>6</sup>

The MyComrade intervention is an evidence-based, theoretically informed, novel intervention that aims to support the conduct of medication reviews for patients with multimorbidity in primary care.<sup>6</sup>

The study was carried out as follows:<sup>6</sup>

GPs were asked to schedule protected time for themselves and one of their GP or practice-based pharmacist colleagues to conduct a collaborative medication review. The GPs chose multimorbid patients prescribed ten or more medicines from their caseload and in the scheduled review time, collaboratively reviewed the patient’s prescribed medications. The medication review was prompted by a medication review checklist to guide the discussion, which lasted between 10 and 30 minutes.

The medication checklist was based on the NO TEARS tool:<sup>7</sup>

- Need and indication
- Open questions
- Tests and monitoring
- Evidence and guidelines
- Adverse events
- Risk reduction or prevention
- Simplification and switches

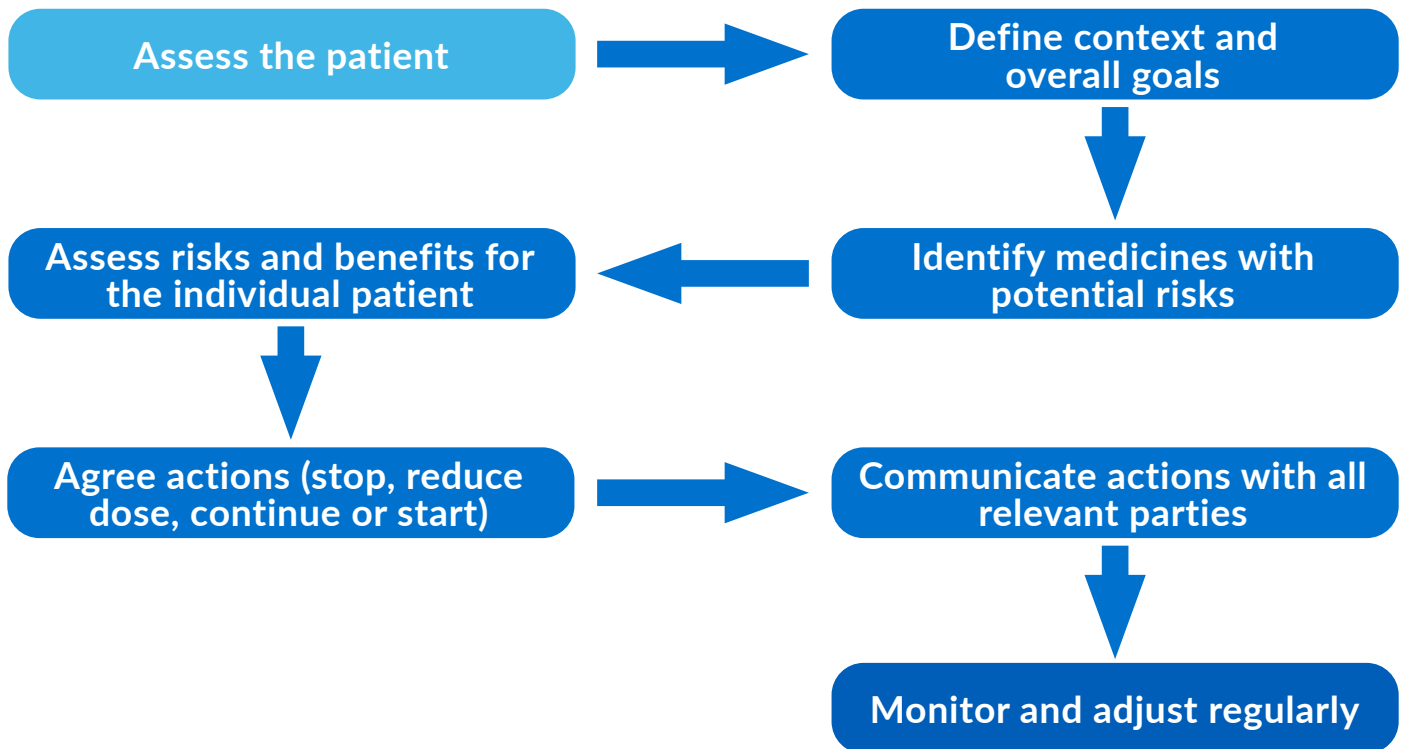
GPs were asked to record recommendations for any medication changes arising from the review in the patient's notes to allow them to discuss these with the patient during their next consultation, prior to implementing the change.<sup>6</sup> After completing the review, GPs awarded themselves one continuing professional development point for each cumulative hour of reviews completed.<sup>6</sup>

## Medication review for people with multimorbidity

When reviewing medicines and other treatments for patients with multimorbidity, the following recommendations are made:

1. Use the [NICE database of treatment effects](#)<sup>8</sup> to find information regarding the effectiveness of treatments, the duration of treatment trials and the populations included in treatment trials.<sup>1</sup> A new tool, [GP evidence](#), could also be used. This tool summarises the evidence of benefits and harms of treatments for long term conditions in a format that is easy to access and understand for GPs, specialist nurses, primary care pharmacists and other healthcare professionals.<sup>9</sup>
2. Consider using a screening tool to identify medicines-related safety concerns and optimise treatment.<sup>1</sup> For example, the STOPP/START tool in older people<sup>1</sup> and [PrescQIPP IMPACT](#)<sup>10</sup>
3. When optimising treatment, think about any medicines or non-pharmacological treatments that might be started as well as those that might be stopped.<sup>1</sup>
4. Ask the person if treatments intended to relieve symptoms are providing benefits or causing harms. If the person is unsure of benefit or is experiencing harms from a treatment, discuss reducing or stopping the treatment and plan a review to monitor the effects of any changes made and decide whether any further changes to treatments are needed (including restarting a treatment).<sup>1</sup>
5. Take into account the possibility of a lower overall benefit of continuing treatments that aim to offer prognostic benefit, particularly in people with limited life expectancy or frailty.<sup>1</sup>
6. Discuss with people who have multimorbidity and limited life expectancy or frailty whether they wish to continue treatments recommended in guidance on single health conditions which may offer them limited overall benefit.<sup>1</sup>
7. Discuss any changes to treatments with the person, taking into account their views on the likely benefits and harms from individual treatments and what is important to them in terms of personal goals, values and priorities.<sup>1</sup>
8. Ensure patients with multimorbidity have had a frailty assessment undertaken and documented, where appropriate.<sup>1</sup>
9. Ensure that the medication review and any resulting changes are appropriately documented and coded on the GP practice clinical system, e.g. Structured medication review (procedure) [SNOMED code](#) 1239511000000100. GP clinical system auto-consultation templates can be used to document the medication review which automatically apply the GP clinical system code.

## Practical steps to support medication review (adapted from<sup>11</sup>)



### Important things to remember:

- Talk to the patient about their medicines in order to ascertain their expectations and whether they are experiencing any issues with them.
- Take the patient's views and wishes into account when reviewing their treatment goals.
- Formulate an action plan with the patient to outline the changes agreed upon and how they will be managed.
- If stopping, starting or changing treatments, don't try and change everything all at once.
- Prioritise the changes to be made according to risks/benefits.
- Ensure that the patient is aware of any follow up, and what action they should take if symptoms recur or adverse events occur.
- Provide reassurance that any medicine stopped during a trial discontinuation can be restarted if needed.
- Provide advice on how to manage any dose tapering that may be required, and any withdrawal effects that the patient may experience.
- Document the full action plan on the patient's electronic patient record.
- Adopt a flexible approach that is suited to the needs of the individual patient.

## Using IMPACT to support multi-morbidity medication reviews

IMPACT (improving medicines and polypharmacy appropriateness clinical tool) is a PrescQIPP tool that helps healthcare professionals optimise medicines use, and provides practical advice (where it is available) about how to safely stop/discontinue/withdraw a medicine and issues to consider. It gives recommendations and considerations for appropriately continuing or stopping medicines, and brings together information from a number of other resources e.g. STOPP/START, Beers criteria, NICE, Scottish Polypharmacy Guidance. It can be used to identify clinical and deprescribing priorities for many of the medicines used in the UK.<sup>10</sup>

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By translating the list of medicines an individual is prescribed into the IMPACT data tool, a shortened and individualised version of the tool to be created to support medication review. This can be done by using the filters in the IMPACT visual data pack.

Deselect “all” from the drugs drop-down menu and select the classes of medication that a person is prescribed. Then press “apply” to view the medicines information relevant to only that individual.

This individualised list can then be sorted by clinical risk or deprescribing priority (high or medium) to assist with prioritising interventions. Click on the drop down menu for ‘Select Sort’ to choose the order the medicines are displayed - alphabetically by drug name, by clinical risk (high to low) or deprescribing priority (high to low). The total cost data can also be excluded by selecting ‘no’ in the ‘Show Data’ drop down menu.

The IMPACT report details the criteria to consider for medicines optimisation, any withdrawal or tapering advice, links to other supporting guidance including deprescribing algorithms for specific drugs or classes of drugs as well as the clinical risk and deprescribing priority.

The IMPACT bulletin and visual data pack are available at:

<https://www.prescgipp.info/our-resources/bulletins/bulletin-268-impact/>

## Using an automated booking system

To reduce the administrative burden associated with inviting patients to attend for a medication review and increase efficiency, an existing automated booking system can be adapted to utilise bulk text and email invitations.

The text or email invitation can be used to provide a link to an online booking system. After verifying their identity (for example, by entering their date of birth to access the website), people can choose the type of appointment they would prefer (telephone or face-to-face) and select a convenient date/time slot.

Letters can still be used alongside this system as an option for those patients with no mobile phone number or email address listed. The letters can contain the same information as the text/email and link to the same website for online bookings. However, for those people who are unable to use a digital method of booking or experience any difficulty, all communication methods (text/email/letter) should also include a phone number to call as an alternative.

In order to avoid overburdening the online booking system, and depending on the availability of appointments, the messages can be sent out in batches, allowing appropriate follow-up for non-responders.

Template text and email messages are available as supporting resources for this bulletin to assist practices/PCNs who would like to utilise this approach.

## Medication review patient resources

Researchers in the NIHR Yorkshire and Humber Patient Safety Translational Research Centre have developed tools to support pharmacists undertaking medication reviews. These tools were co-designed with patients (older people living with frailty), informal carers and healthcare professionals to help pharmacists take a person-centred approach to medication reviews. If you would like to discuss the tools further, please contact Prof David Alldred, University of Leeds, (d.p.allred@leeds.ac.uk).<sup>12</sup>

The following patient resources are available and are included as attachments with this resource:

- **Attachment 7. Invite letter for medication reviews** - this explains what the patient can expect from a medication review and, importantly, provides them with some suggested questions they may wish to think about and ask.

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- **Attachment 8. “Safely stopping your medicine” guide for patients** - this is for the pharmacist to complete and to give to the patient to take home with them.
- **Attachment 9. Brief patient satisfaction questionnaire** - to gain patient feedback on the medication review.

These resources can be added to NHS websites or adapted locally, but be aware of the following copyright information:

*These resources were developed by patients, healthcare professionals and researchers in the NIHR Yorkshire and Humber Patient Safety Translational Research Centre (<https://yhpsrc.org/>). Bradford Teaching Hospitals Foundation Trust (BTHFT), the University of Bradford (UoB) and the University of Leeds (UoL) are the owners of the following resources that are protected by Copyright: SMR invite letter; Safely stopping your medicine (a patient guide); Patient satisfaction questionnaire.*

*BTHFT hereby grants permission to use these resources only for conducting SMRs within the NHS. You may not make any changes to the resources without permission from BTHFT/UoB/UoL (contact Prof David Alldred [d.p.allred@leeds.ac.uk](mailto:d.p.allred@leeds.ac.uk)) other than personalising the SMR invite letter and Patient satisfaction questionnaire to the GP practice/PCN and the patient. You may not make commercial use of the resources.*

## Cost-effectiveness evaluation

To determine the cost-effectiveness of medication reviews, a simple and easy-to-use tool has been developed and is available at <https://www.prescqipp.info/our-resources/bulletins/bulletin-331-medication-reviews-in-patients-with-multi-morbidity/>. This tool can be used to assign a monetary value to interventions resulting from any type of medication review where the intervention potentially prevented a hospital admission.

### Summary

People with multimorbidity (i.e. adults with two or more long-term conditions or adults with one or more mental health condition and at least one physical health condition) may be prescribed a higher number of regular medicines, putting them at greater risk of adverse events and drug interactions.<sup>1</sup>

It is important that people with multimorbidity are identified and have a regular medication review. This should take into account their multimorbidity and include personalised assessment, in order to improve their quality of life by reducing treatment burden, adverse events, and unplanned or uncoordinated care.<sup>1</sup>

There are numerous tools available that can be used to support the medication review process that aim to make the process easier and more effective, including PrescQIPP IMPACT, which brings together information from various tools and can be individualised based on the types of medicines that are prescribed for an individual patient.<sup>10</sup>

## Additional resources

PrescQIPP. Polypharmacy and deprescribing webkit. <https://www.prescqipp.info/our-resources/webkits/polypharmacy-and-deprescribing/>

[PrescQIPP e-learning courses](#) on:

- Polypharmacy and deprescribing e-learning.
- Anticholinergic burden e-learning.
- Asthma e-learning.
- Chronic heart failure in adults e-learning.
- Optimising medicines for adults with type 2 diabetes e-learning.

Royal College of General Practitioners (RCGP). Multimorbidity and polypharmacy learning course. September 2022. <https://elearning.rcgp.org.uk/course/info.php?id=604>

Royal Pharmaceutical Society (RPS). Polypharmacy: Getting our medicines right. 2019. <https://www.rpharms.com/recognition/setting-professional-standards/polypharmacy-getting-our-medicines-right>

## References

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12. Personal communication. Prof David Alldred, University of Leeds, (d.p.allred@leeds.ac.uk) 13/07/23.

## Additional PrescQIPP resources

Briefing	<a href="https://www.prescqipp.info/our-resources/bulletins/bulletin-331-medication-reviews-in-patients-with-multi-morbidity/">https://www.prescqipp.info/our-resources/bulletins/bulletin-331-medication-reviews-in-patients-with-multi-morbidity/</a>
Implementation tools	

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