

Guidance on Structured Medication Reviews (SMRs)

This document aims to provide guidance on the performance of Structured Medication Reviews in all contexts.

Guidance specific to medication reviews for the Frail and Care Home population during COVID are also included in **GREEN**.

Why do we need guidance on Structured Medication Reviews (SMRs)?

The purpose of this guidance is to set out a standard (drawing from published guidance) by which patients' medications are reviewed, and the roles and responsibilities for this.

SMRs now form part of the Primary Care Network Direct Enhanced Service Specification (PCN DES) and the new directive from NHS E&I around primary care support to patients in care homes during the COVID-19 pandemic.

What is a Structured Medication Review?

NICE Medicines Optimisation – NG5 2015¹ defines a SMR as:

“A critical review of a persons' medicines with the objective of:

1. Reaching an agreement with the person about the treatment
2. Optimising the impact of medicines
3. Minimising the number of medication related problems
4. Reducing waste.” (and environmental impact – NHS long term plan).

The following do not count as a full clinical medication review, but may be useful as part of the medication review process:

- technical check of the medication list or tidying up medication records e.g. removing unrequested items from repeats or dose optimisation
- switching to a formulary item
- “linking” medication to a “problem”
- re-authorising the repeat list or reviewing an individual medication/ disease without reviewing all medication as above
- asking the patient “is everything else alright?” at the end of a consultation
- an MUR, a Medicines Use Review by community pharmacists

There have previously been 3 levels of medication review defined²:

Level 1: Prescription review – a technical review of the list of a patient's medicines

Level 2: Treatment review – A review of medicines with the patient's full notes

Level 3: Clinical medication review – a face to face review of medicines and condition.”

SMRs should always be a Level 3 review by the definitions above – but may be with the carer or relative if the patient is not able to indicate their wishes. The review should be patient centred.

Who can complete a SMR?

The PCN DES³ states:

“Ensure that only appropriately trained clinicians working within their sphere of competence undertake SMRs. These professionals will need to have a prescribing qualification and advanced assessment and history taking skills or be enrolled in a current training pathway to develop this qualification and skills.”

The practitioner should have full access to the patient’s notes, test and investigation results, medication administration records and the ability to contact the patient or carer for consultation. [During COVID-19 restrictions this might occur remotely via tele or video-link](#)

Organisations should determine locally the most appropriate healthcare professional based on their knowledge and skills, plus:

- their technical knowledge of the process for managing medicines
- therapeutic knowledge on medicines use
- effective communication skills
- SMR may be led by a pharmacist or by an appropriate healthcare professional who is part of an MDT.

Which patients?

[During the COVID-19 pandemic the focus is on the care home population, including those new patients and those recently discharged from acute care. This could also be extended to the frail, elderly and those with learning disabilities if there is capacity.](#)

The most recent guidance on SMRs from NHS England⁴ states that the following cohorts of patients should be considered when prioritising PCN SMRs:

- those in care homes
- with complex and problematic polypharmacy – specifically 10 or more medicines
- on medicines commonly associated with medication errors (see reference)⁵
- with severe frailty, who are particularly isolated or housebound or who have had recent hospital admissions and/or falls.
- those using potentially addictive pain management medication.

Where pharmacist capacity allows PCNs should consider offering SMRs to those patients not covered in the list above, including any patient who they think may benefit including those on multiple but less than 10 medications, and potentially addictive medicines. [During the COVID-19 pandemic also consider the needs of those who are clinically vulnerable to COVID-19 and communities at particular risk of COVID-19 \(eg BAME\), including considering rationalisation of medicine regimes to improve safety.](#)

Patients should be **proactively** prioritised using an appropriate tool. Examples of tools that might be used are the PINCER/PRIMIS searches (as are in the Prescribing Incentive Scheme) and the [Polypharmacy Risk Identifier Tool](#)⁶.

There should also be a process for identifying patients who **reactively** need to be referred for an SMR. Reactive triggers could include:

- Crisis or incident – for example admission to hospital where medicines were a factor.
- Personal concerns – when the patient is worried about the number of medicines.
- Professional referral – where another professional is concerned about patients managing their medicines, could be a care or social worker.

- Requests for monitored dosage systems (MDS) as an aid to managing multiple medicines – should always trigger a review of the regime before MDS is initiated.

How often should SMRs be conducted?

There is no documented timeframe for the interval between reviews but it is generally accepted that for frail elderly patients the interval for SMR should be six months (or less if changes made and sooner review appropriate), similarly for those on complex regimes including more than ten medicines. If the patient not frail, is stable and monitoring is up to date this could be extended to 12 months where clinically appropriate.

How long should an SMR appointment be?

The national guidance on SMRs⁴ does not specify, but acknowledges that the process would take considerably longer than an average GP appointment; the precise length will vary depending on the needs of the patient and to some extent the experience of the practitioner completing the SMR. The guidance suggests that flexibility should be allowed in the length of the appointment so that it can be varied based on the complexity of the case⁴. Time should also be allowed for follow up(s) and subsequent review if any changes are made.

Conducting a review – Practical information

1. Prepare for the consultation
 - a. Arrange a time and date when it is convenient for the patient/carer/relatives to discuss the medicine regime with you. The PCN DES states that the invite should explain the benefits and what to expect from the review. This is ideally done face to face but can be by telephone or video call if appropriate.
 - b. Check the patient details, any public health indicators
 - c. Check the list of conditions
 - d. Ensure list of acute and repeat medicines available – both current and past medications.
 - e. Have a look at the most recent consultations, by other practitioners, check if you have consulted with the patient before.
 - f. Review the latest pathology – are there any trends?
 - g. Have a look at recent clinical letters or discharges
 - h. Any personal or family history that may be relevant
 - i. Any investigations
 - j. Any additional useful information: social care, learning disabilities, dementia, dexterity, housebound, and/or anything that you might want to be aware of that would affect how you communicate (e.g. Interpreter required? Consider pre-booking).
2. Conducting the consultation (The process should be centred on a shared decision-making conversation)
 - a. Introduce yourself, check you have the right patient (2 identifiers) ensure the patient, carer or relative understands the purpose of the consultation and ask if there is anything that they wish to discuss
 - b. Ask open questions – allow them to talk freely for the first minute if possible.
 - c. Find out what is important to the patient – with respect to their medicines and care
 - d. Make decisions about the medicine in conjunction with the patient, match this with their wishes and beliefs where possible.
 - e. Go through each medicine – check the patient (or other) knowledge and understanding of why things are prescribed, whether they are adherent to the regime as it is now, if they perceive the medicines to be causing any adverse effects, if they have any issues or concerns.
 - f. Check if there are any non-prescribed medicines taken.
 - g. Conduct any monitoring which is required and within your scope, otherwise arrange for an appropriate practitioner to do this on your behalf.

- h. While going through the medicines the practitioner should note any points where changes might need to be made and return to those in summary at the closing of the consult.
 - i. Discuss options for any alterations to the regime and monitoring, agree with the patient.
 - j. Summarise what you have agreed.
 - k. Close with a plan, or if not a prescriber relay how you will move forward with the information gathered. Arrange any follow up required and inform patient that they can contact you if they have any concerns about what has been discussed or agreed.
3. Follow up
- a. Record the consultation, care plan and follow up notes in the patient' EMIS record.
 - b. Liaise with GP, agree changes with them if not prescriber or out of scope.
 - c. Once changes agreed advise patient/carer/relative
 - d. Inform carers if not involved in discussion, include what to look out for if you have changed the regime.
 - e. Communicate changes to the community pharmacy, consider if patient appropriate for New Medicine Service review (new medicine for asthma, COPD, anticoagulation, type II diabetes or hypertension) and highlight to pharmacy as appropriate.
 - f. Follow through with the review at the agreed interval or sooner as needed.

Conducting a review – Technical information

For **each drug** check that:

- The medication prescribed is **appropriate for the patient's needs**.
- Following hospital discharge there may be unintentional changes to regular medication or conversely medication may have been introduced that was appropriate in the hospital setting, but is not needed at home e.g. hypnotics, enteral nutrition or nebulas.
- National and local evidence-based guidelines should be considered, consider if it is appropriate to change to formulary items if patient is out of area and this is an initial review.
- A medication may be time-limited e.g. clopidogrel and aspirin in combination for one year.
- Drugs of "limited clinical value" are flagged up in the BNF, and the STOPP / START Toolkit suggests medication that might be inappropriate for older people in certain situations.
- The dose prescribed should be reconsidered with advancing age or changing physiology e.g. renal clearance.
- It is unlawful for service providers to discriminate on grounds of age however for medication that has clinical benefit only after use for a number of years or is intended to prevent events in the distant future it is appropriate to consider the patient's life expectancy when weighing up the benefits versus risks of a treatment. The review process should aim to provide the patient with medication that enables them to "live well until they die". Particular care should be taken with drugs that are poorly tolerated in the frail elderly. These drugs are listed in the STOPP START Toolkit (see links). Consideration should also be given to what might happen if the drug were stopped.
- The medication is **effective** for the patient – this may involve objective evidence e.g. change in HbA1c or discussion with the patient. In frail patients' precedence may be given to drugs that provide symptomatic benefit or those that prevent rapid worsening of symptoms.

- The medication is a **cost-effective choice** - prescribing within NICE guidance and the Oxfordshire Clinical Commissioning Group Formulary (see links) ensures that drug choices are evidence based and cost effective. The medication should be prescribed generically wherever appropriate. Specials (unlicensed products, imports and special formulations) are rarely cost effective. In preference a licensed alternative should be sought, if necessary and used outside the licence. The clinical pharmacist can provide advice and a guide to alternatives.
- Any required **monitoring** has been done or arrangements are in place e.g. blood tests specific to a medication or to monitoring a disease.
- If the drug is under **shared care** the relevant monitoring and reviews have been conducted, in line with the shared care protocol.
- Whether there is a more **environmentally friendly** option that would be equally as effective for the patient.

Looking at the medication list, with the information you have gathered about over the counter medicines (and past medicines to check if any have 'expired'), check:

- a) **Drug interactions** – also consider the impact of withdrawing an interacting drug e.g. simvastatin and warfarin.
- b) **Contraindications** to the drug – this status may have changed since the drug was originally prescribed (either a change in licensing/evidence or a change in patient factors such as kidney function or co-morbidities) so that the benefit to risk ratio is no longer favourable.
- c) **Side effects** – adverse reactions are implicated in many hospital admissions; they can also lead to non-compliance and therefore ineffectual treatment. Some drugs may be appropriately prescribed to mitigate side-effects, but in many cases the original need for the original drug can be reconsidered e.g. should a PPI be co-prescribed with an NSAID, or could the NSAID be replaced with a less toxic option?
- d) **Compliance** – it is estimated that 50% of medicines are not taken as prescribed. The history of prescription “issues” can indicate non-compliance but cannot be relied upon due to possible hoarding. The patient may have practical issues such as swallowing difficulties or remembering to take medication in a complex regimen. For patients that struggle to manage ordering repeat medication in time, repeat dispensing and/or the electronic transfer of prescriptions might help. The patient could also be encouraged to see the community pharmacist for an MUR or for provision of large labels, easy-open containers etc.
- e) **Concordance** – if the patient understands the rationale behind their treatment, they are more likely to take the medication as prescribed and adopt other non-medical measures. This may be particularly important in the very elderly who may no longer be interested in medication that prolongs life, but may be more willing to take medication that allows them to live without pain or discomfort.
- f) **Over-the-counter and complementary medicines** – many potent medicines can now be purchased by the patient; these may have side effects, antagonise or augment prescribed medication or affect the course of the disease. e.g. St John's Wort reducing contraceptive effect or decongestants in cough and cold remedies elevating blood pressure. Therefore, these should be enquired about and recorded on the record when a review is conducted.
- g) **Lifestyle and non-medicinal interventions** – the patient may be more willing to adopt a lifestyle change than take medication – or have made a lifestyle change that negates the need for treatment e.g. weight loss to

control hypertension. Lifestyle interventions that complement pharmacological therapy should also be promoted as appropriate.

- h) **Unmet need** - this is an opportunity to identify and treat new conditions, particularly those that increase in prevalence with age e.g. atrial fibrillation, heart failure and dementia. Some conditions are frequently under-treated e.g. warfarin could be more widely used to prevent stroke in atrial fibrillation. The STOPP / START Toolkit is a detailed aid to medication that might be either inappropriate or worth starting in the elderly.
- i) **Hydration and nutrition** – some medicines rely on the patient taking them with food, to increase bioavailability or reduce risk of side effects, and hydration is important to avoid acute kidney injury with certain medicines. Consider checking what fluid and food the patient usually consumes, and if there have been any recent weight changes. Further guidance is in the ‘Resources’ section.

Practical application and special considerations for the SMRs conducted for care home residents or frail patients during COVID-19 pandemic

Be both patient focussed, and care home focussed

- Focus on reducing spread of COVID-19 – consider how can minimise patient contacts with those external to the care home setting (B12 delayed or switched to oral cyanocobalamin – see FAQ link below, considering if blood tests are essential etc).
- Personalised care – consider patients wishes, for example if their main concern is not taking lots of tablets, consider which of their medicines are most important and consider stopping those that aren't, change formulations to once a day if possible. Or if patient is very worried about not having a stroke, ensure anticoagulation if in atrial fibrillation is continued or started as clinically appropriate, and blood pressure and pulse checks arranged as safely as possible, if clinically required.
- Reducing hospital admissions - base review around this (for example adding in gastro protection, acute kidney injury guidance, checking DOAC dosing correct for most recent blood test, warfarin time in therapeutic range is above 65%, and PINCER type interventions).
- Think about carer workload – for example – patient has only simvastatin at night – change to atorvastatin so can have with other meds in the morning. Streamline dosing to once daily administration where possible/safe.
- When conducting telephone/video consults – be aware of what clues you may not be getting – seeing the surroundings of the patient, building rapport.
- If monitoring indicated, consider whether this is absolutely necessary, or is it ideal?
 - o For example, stable creatinine no changes to meds – could these be delayed? Look for other signs of kidney problems in interim.
 - o For example, blood pressure, what is the history, any signs of postural hypotension, headaches. Helps decide if absolutely needs checking or if could be delayed.
- Deprescribing during COVID-19 is a lower priority unless it supports one of the above concepts
- Reduce the risk of delirium by causes other than COVID-19 by ensuring that patients are not constipated, in pain, suffering from undiagnosed infections or urinary retention.
- Consider hydration and nutrition.

Local resources to support medication reviews during COVID-19 (including Frequently Asked Questions and Drug Monitoring Guidance) are populated here: <https://clinox.info/clinical-support/Medicines/medicines-management/>

Resources to support medication review

Oxfordshire Clinical Commissioning Group Formulary: <http://www.oxfordshireformulary.nhs.uk/> (also available on an app for mobile) – includes links to shared care protocols.

The STOPP/START toolkit: <https://www.networks.nhs.uk/nhs-networks/nhs-cumbria-ccg/medicines-management/guidelines-and-other-publications/Stop%20start%20pdf%20final%20Feb%202013%20version.pdf> (please keep in mind some of the national guidance has been updated since this toolkit was released)

Oxfordshire Prescribing Rationalisation Tool: <https://www.oxfordshireccg.nhs.uk/professional-resources/documents/clinical-guidelines/Prescribing-Rationalisation-Clinical-Tool.pdf>

NHS Scotland Polypharmacy Guide: <https://www.therapeutics.scot.nhs.uk/wp-content/uploads/2018/09/Polypharmacy-Guidance-2018.pdf>

[OCCG Nutrition and Hydration Pack for Care Homes to use during the Covid 19 Pandemic](#)

References:

1. National Institute for Health and Clinical Excellence (2015). NG5 – Medicines Optimisation: the safe and effective use of medicines to enable the best possible outcomes. [Accessed at: <https://www.nice.org.uk/guidance/ng5> on 14/5/2020]
2. Room for Review: A guide to medication review: the agenda for patients, practitioners and managers (2002). Task Force on Medicines Partnership and The National Collaborative Medicines Management Services Programme.
3. BMA and NHS E&I: Update to the GP contract agreement 2020/21-2023/24. 6/2/2020. [Accessed at: <https://www.england.nhs.uk/wp-content/uploads/2020/03/update-to-the-gp-contract-agreement-v2-updated.pdf> on 14/5/2020]
4. NHS England (2020) Network contract directed enhanced service: Structured medication reviews and medicines optimisation guidance. [Accessed at: <https://www.england.nhs.uk/wp-content/uploads/2020/09/SMR-Spec-Guidance-2020-21-FINAL-.pdf> on 5/11/2020].
5. NHSBSA and NHS Digital (2019). Medication Safety Indicators Specification. [Accessed at: <https://www.nhsbsa.nhs.uk/sites/default/files/2019-08/Medication%20Safety%20-%20Indicators%20Specification%20%28Aug19%29.pdf> on 5/11/2020]
6. West Hampshire CCG (2018). [Polypharmacy Risk Identifier Tool](#). [Accessed at: <https://www.prescqipp.info/community-resources/innovation-and-best-practice/polypharmacy-risk-identifier-tool-2018/> and [Polypharmacy Risk Identifier Tool](#) on 1/6/2020].