GP Delivery Improvement Framework

Name of Area: Structured Medication Review

April 2024 to March 2025

Lancashire and South Cumbria ICB

V5 15.05.24

Rationale

Structured Medicine Reviews (SMRs) are an evidence-based and comprehensive review of a patient's medication, taking into consideration all aspects of their health. In a structured medication review clinicians and patients work as equal partners to understand the balance between the benefits and risks of and alternatives of taking medicines. The shared decision-making conversation being led by the patient's individual needs, preferences, and circumstances.

NICE Guideline Definition[1]

"A structured medication review is a critical examination of a person's medicines with the objective of reaching an agreement with the person about treatment, optimising the impact of medicines, minimising the number of medication-related problems and reducing waste."

Problematic polypharmacy is where, for an individual taking multiple medicines, the potential for harm outweighs any benefits from the medicines and/or they do not fully understand the implications of the medication regime they are taking. This includes:

- medicines that are no longer clinically indicated or appropriate or optimised for that person
- combination of multiple medicines has the potential to, or is actually causing harm to the person
- practicalities of using the medicines become unmanageable or are causing harm or distress.

Preventable medicines harms

A recent study by Pirmohammed et al conducted in Liverpool Foundation Trust in 2022 looked at the prevalence of admissions due to an adverse drug reaction (ADR) and associated mortality, prevalence and association of multimorbidity and polypharmacy with ADRs, and estimated local financial cost of admissions where an ADR was a contributing or main reason for admission with projected costs for NHS in England.

The study showed that ADRs thus accounted for 16.5% of total admissions. Those with an ADR were on average taking more medicines (10.5 vs 7.8, $p<0.01$) and had more comorbidities than those without an ADR (6.1 vs 5.2, $p<0.01$).

Drugs most commonly implicated were diuretics, steroid inhalers, anticoagulants and antiplatelets, proton pump inhibitors, chemotherapeutic agents and antihypertensives.

- 40.4% of ADRs were classified avoidable or possibly avoidable.
- The mortality rate due to an ADR was 0.34%.
- The average length of stay for those with an ADR was 6 days.

Key components of a SMR[2]

- **Shared decision-making principles** should underpin the conversation
- **Personalised approach** – tailored to the patient
- **Safety** – consider the balance of benefit and risk of current treatment and starting new medicines
- **Effectiveness** – all prescribed medication must be effective for the patient

SMRs have benefits to people taking multiple medicines:

- improved experience and quality of care through being involved in the decision-making process and having a better understanding of the medicines they take
- less risk of harm from medicines (e.g. adverse drug events, side effects, hospitalisation or addiction)
- better value for local health systems (e.g. reduced medicine waste).

1. Role for primary care networks

Across England, general practices are working together with community, mental health, social care, pharmacy, hospital and voluntary services in their local areas in primary care networks (PCNs). Professionals are working together to support patients with structured medication reviews as one of the PCN service requirements which commenced during 2020/21.

SMRs as part of the DES

From October 2020, all PCNs were required to identify patients who would benefit from a SMR. The 2023-24 Network Contract DES Specification[3] includes the following section:

a. use appropriate tools to identify and prioritise the PCN's Patients who would benefit from a structured medication review (referred to in this Network Contract DES Specification as a "SMR"), which must include patients:
    i. in care homes;
    ii. with complex and problematic polypharmacy, specifically those on 10 or more medications;
    iii. on medicines commonly associated with medication errors;
    iv. with severe frailty, who are particularly isolated or housebound patients, or who have had recent hospital admissions and/or falls; and
    v. using one or more potentially addictive medications from the following groups: opioids, gabapentinoids, benzodiazepines and z-drugs;
b. offer and deliver a volume of SMRs determined and limited by the PCN's clinical pharmacist capacity, and the PCN must demonstrate reasonable ongoing efforts to maximise that capacity;
c. ensure invitations for SMRs provided to patients explain the benefits of, and what to expect from SMRs;
d. ensure that only appropriately trained clinicians working within their sphere of competence undertake SMRs. The PCN must also ensure that these professionals undertaking SMRs 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;
e. clearly record all SMRs within GP IT systems;
f. actively work with place-based teams to optimise the quality of local prescribing of:
    i. antimicrobial medicines;
    ii. medicines which can cause dependency;
    iii. metered dose inhalers, where a lower carbon device may be appropriate; and
    iv. nationally identified medicines of low priority;
g. work with community pharmacies to connect patients appropriately to the New Medicines Service which supports adherence to newly prescribed medicines; and
h. in complying with this section, have due regard to NHS England guidance on Structured Medication Reviews and Medicines Optimisation."

The quality of the conversation with the patient and documentation of this interaction in the clinical record is crucial to be able to obtain the best clinical outcomes for patients.

Practices and PCNs should ensure that:

- only appropriately trained clinicians working within their sphere of competence undertake SMRs.
- these professionals undertaking SMRs 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;
- If SMRs are undertaken by another primary care healthcare professional, i.e. GP then they must also follow these same standards when undertaking SMRs. In L&SC it is expected that this work will be taken on by pharmacists and GPs.

- Staff undertaking SMRs must be allocated protected time by the practice. Practices must allow for flexibility in appointment length for SMRs, depending on the complexity of individual cases. The actual length of time taken to undertake the SMR will vary in line with the needs of the individual patient.
- The SMR invite to the patient must include an explanation to the patient of the benefits of, and what to expect from the SMR.
- Patients are given the choice of their preferred method of meeting for their SMR, either:
    - face to face in person
    - face to face virtually or
    - verbal only via telephone discussion (exceptional circumstances only).
- The patient must be provided with sufficient time to reflect and prepare for the SMR, i.e. time between invite and appointment. They should be invited to prepare questions in advance, if they have any, to aid discussion during the review. SMR Patient Information Resources are available to support including SMR invitation letter, 'Stopping Medicines Safely' leaflet, patient film and questions patients may want to ask their health professional. The resources are available in a range of languages[4].
- The SMR must take into account ALL of the patient's medicines.
- The SMR must involve the patient in a conversation to understand what their priorities are, i.e. be an all-round holistic review with shared decision making.
- The SMR conversation should provide the patient with an explanation of the "purpose" of each medicine.
- The pharmacist/healthcare professional undertaking the SMR should be familiar with the recommendations of NICE NG5[1], in particular sections 1.5 and 1.6 relating self-management plans and patient decision aids.

Undertaking structured medication reviews

NICE guideline NG5[1] states the following should be taken into account during SMRs:

- the person's, and their family members or carers where appropriate, views and understanding about their medicines
- the person's, and their family members' or carers' where appropriate, concerns, questions or problems with the medicines
- all prescribed, over-the-counter and complementary medicines that the person is taking or using, and what these are for
- how safe the medicines are, how well they work for the person, how appropriate they are, and whether their use is in line with national guidance
- whether the person has had or has any risk factors for developing adverse drug reactions (report adverse drug reactions in line with the yellow card scheme)
- any monitoring that is needed.

It may be appropriate to change, reduce or add medications in an SMR based on the needs and preferences of the individual using the **NO TEARS**[5] approach.

Need and indication

Open questions

Tests and monitoring

Evidence and guidelines

Adverse events

Risk reduction or prevention

Simplification and switches

Key details of the SMR must be recorded in the patient's clinical record. These include, but are not limited to:

- Any patient outcomes relating to changes made at the previous SMR (for repeat SMRs)
- Any express wishes/preferences communicated by the patient regarding their medicine treatment.
- For each current medicine – whether the option to stop or change was discussed with the patient.
- Whether any new medicines were discussed with the patient.
- Actual changes made to the patient's medicine therapy, the clinical rationale for the changes & confirmation that the patient has agreed to these.
- Details of any follow up required to assess the impact of any changes made.
- Indication of when the next SMR should be undertaken
- Any point of non-agreement between patient & healthcare professional regarding their medicines

Practices can use the EMIS template to complete the SMR which follows the NO TEARS format. The template is appended to this specification (Appendix 1) and can be found by searching within EMIS templates.

Any other template used would need to be approved by the Medicines Optimisation Team.

2. Service Specification

Aims

The aim of this scheme is to promote a consistent approach in primary care to enhancing the number and effectiveness of structured medication reviews carried out in patients with the greatest potential risk of harm from medicines across Lancashire and South Cumbria (L&SC). The scheme should have a positive impact on patient care and reduce medicines related harms.

This scheme will target SMRs to those patients that would most benefit using a comprehensive risk scoring tool from a GP quality and population health management tool called Eclipse. It is recognised that these groups of patients can be complex and require several patient reviews especially when deprescribing in patients with problematic polypharmacy, high anticholinergic burden or prescribed dependence forming medicines. As such these patients should be managed as a case load by the clinical team involved in their care.

This scheme will support the ICB's statutory duty to improve outcomes in population health and tackle inequalities in outcomes**,** experience, and access through designing a new quality specification which focuses on the important role of primary care as the first point of contact for patients.

Inclusion Criteria

The scheme will pay for additional Structured Medication Reviews in patients at highest risk of medicines harm. **The claimable number of SMR's will be limited to the individual practice cap as previous circulated.** Standard SMRs for lower risk patients that fall outside of the targeted cohorts should continue as Business As Usual (BAU) as this should form part of normal care.

SMRs can be delivered at practice or PCN level, however monitoring and outcomes will be at practice level.

Eclipse SMR Live automatically identifies patients meeting one or more SMR criteria. An individual patient risk score is generated based on multiple risk factors (see Appendix 2 for Eclipse risk score components). This enables prioritisation of patients in order of SMR score.

Practices will view the SMR Live module in Eclipse to identify those patients with the highest SMR score. A user guide explaining how to do so, is available in Appendix 3.

It is recognised that the SMR score is dynamic as patients will change risks on a daily/ weekly basis so should be run at various times throughout the year to identify additional patients.

Throughout the year the practice should systematically review patients from the SMR list. SMRs must be prioritised and patients invited to an SMR in the following Eclipse SMR score order:

1. Patients with an SMR score >10, starting with the highest scores first
2. Then patients with an SMR scores >9
3. Then patients with an SMR scores >8
4. Then patients with an SMR scores>7

High risk patients as detailed in this specification are eligible for **a maximum of 4 SMRs** during 2024/25 to allow for multiple interventions and follow-up.

Within each of the above cohorts **early consideration of patients taking dependence-forming medications** (opioids and/or gabapentinoids) for chronic pain provides the greatest opportunity for patients to attend further appointments as part of a reduction schedule

Eclipse Priority Groups have been created under SMR caseload to enable easy identification of patients in cohorts identified above. See the user guide and FAQs for more details on how to access these priority groups.

GP Practice level access will allow users to view patient identifiable data. The patient code referred to in SMR Live patient lists and Structured Medicines Use Review & Follow Up (SMURF) pages is the same as the patient reference as found in the clinical system i.e. EMIS Number. Using the secure N3 network portal (https://secure.nhspathways.org) will also display NHS numbers. The NHS numbers for the caseload can be exported and used to build a patient list in EMIS population manager to support routine practice processes such as bulk invitations. See FAQs for more details.

As part of each SMR it is expected that there is a review of the patient's Eclipse Structured Medicines Use Review & Follow Up (SMURF) page, as per example shown in Appendix 5, which contains insights and alerts, enabling easy identification of risks. Where appropriate, these should be addressed as part of the SMR.

Exclusion Criteria

An opportunistic or routine medication review, for example, an annual reauthorisation of repeat medicines is NOT an SMR and cannot be claimed for under this scheme.

A review on a low-risk patient e.g., 40-year-old on 2 medicines as part of standard annual review. This would add little or no value to addressing problematic polypharmacy or unplanned admissions and should be considered usual care.

Addressing adverse drug reactions or monitoring for individual drugs not reviewing a full regimen is not an SMR.

Where there is no contact with the patient or carer, either:

- face to face in person
- face to face virtually or
- verbal only via telephone discussion (exceptional circumstances only).

SMRs must not be treated as a "tick box" approach of completing a template. The ICB reserves the right to validate practice claims and may audit the quality of SMRs and the use of codes to ensure patients excluded from the scheme are not claimed for.

Clinical Coding

The practice should invite patients for a full structured medication review following the national standards detailed in the NHSE 2023/24 Network Contract DES Specification[3] and as detailed above. Patients should be coded when invited for a SMR using the code in the table below.

Given the cohorts identified are expected to be high-risk and/or complex, it is necessary to differentiate between these patients and those that do not meet the criteria identified above to enable payment to be made for reviews in the targeted cohorts.

For this reason, a second code has been added to the SNOTEARS template called "**All medication checked".** (NB. This code is simply there to differentiate between the two types of review for payment purposes). This code should be ticked in addition to the standard SMR code if patients reviewed fall into the targeted cohorts detailed above.

Practices should use the following SNOMED codes:

Code	Description	SNOMED Code	Code to be used
1	Structured medication review (procedure)	1239511000000100	ALL SMRs i.e. for standard SMRs as BAU as part of normal, routine care AND SMRs undertaken in the target cohorts as part of the GP Quality Contract
2	**All Medication Checked (finding)**	**788129008**	For SMRs undertaken in the target cohorts - to enable identification of **patients receiving an SMR as part of the GP Quality Contract** for payment purposes.
3	Invitation for structured medication review (procedure)	1363201000000103	Code for patients invited to a SMR.
4	Invitation for structured medication review declined (situation)	1363191000000100	Code for patients offered but declined SMR.

The ICB will audit the use of these codes and associated SMRs from a quality and assurance perspective and share monthly updates on progress during 2024/25.

Practice data requirements

To support practices to keep track of progress, the ML Data Quality Team (DQT) will provide monthly reports of the number of SMRs completed using central data extractions based on patients with Code 1 only (routine SMRs) and with Code 1 & 2 (SMRs in identified GP Quality Contract cohorts). This report will also include details of those patients with multiple SMRs (up to 4 SMRs per person).

No additional baseline or monthly reporting is required from practices.

Practice must complete a review of SMR processes and outcomes by March 2025 using the data provided by the Data Quality Team and the template provided (Appendix 4) to report on the:

- Impact of reviews on multidisciplinary learning and teamworking
- Impact of reviews on key Medicines Optimisation indicators (detailed below)
- Changes to practice operations because of the SMR work
- Significant interventions made for shared learning (see example in Appendix 6).

Practice payment

- Routine standard SMRs should continue as BAU and routine, normal care.
- Payments will only be made where the SMRs are undertaken in the target groups detailed in this GP Quality Contract service specification.
- A payment of £28.60 will be made for **each SMR undertaken in patients within the targeted cohorts**.
- High risk patients may require more than one review and a maximum of 4 SMRs per patient will be reimbursed.
- Overall practice payment is subject to a maximum payment within the 12-month period.
- The scheme will pay for additional Structured Medication reviews in patients at highest risk of medicines harm. **The claimable number of SMR's will be limited to the individual practice cap as previous circulated.** Standard SMRs for lower risk patients that fall outside of the targeted cohorts should continue as BAU as this should form part of normal care.
- Practices can go above cap where clinically appropriate, however, there will no payment for these SMRs.

Key Medicines Optimisation Indicators and Outcomes

As part of the evaluation of this service specification the Medicines Optimisation Team will provide monthly reports on the following prescribing outcome measures. The reports will also be available on Aristotle[8].

Practices are required to review their performance against these indicators and include an analysis of the impact of their SMRs on the following key Medicines Optimisation indicators as detailed in the Practice Data Requirements section:

- Percentage of patients 65 and over with an anticholinergic burden score (ACB) of 6 or greater – SMRs delivered as part of this specification should lead to reduction of medicines that cause confusion, adverse events, and hospital admissions especially in frail, elderly patients.

- Opioid burden (as oral morphine equivalence) per 1,000 Total Analgesics (BNF 4.7.1 & 4.7.2) STAR PU - SMRs delivered as part of this specification should lead to reduction in opioid burden due to deprescribing of opioids.
- Gabapentin and pregabalin ADQ per 1,000 Total Analgesics (BNF 4.7.1 & 4.7.2) STAR PU - SMRs delivered as part of this specification should lead a reduction in prescribing of gabapentinoids in chronic pain due to deprescribing.

Practices should note that ICB, PCN and Practice level performance on these indicators will inform future commissioning of this service.

Contact details for queries

For queries contact your designated Medicines Optimisation Team staff member or email:

Morecambe Bay: necsu.medicinesmb@nhs.net

Fylde Coast: lscicb-bl.medicinesoptimisation@nhs.net

Blackburn with Darwen and East Lancashire: lscicb-el.adminmmt@nhs.net

Central Lancashire and West Lancashire: philip.haydock@nhs.net

Resources & References

1. NICE Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes [NG5] 2015. https://www.nice.org.uk/guidance/ng5
2. NHS England Structured medication reviews and medicines optimisation webpage – May 2023 https://www.england.nhs.uk/primary-care/pharmacy/smr/
3. Network Contract Directed Enhanced Service Contract specification 2023/24 https://www.england.nhs.uk/wp-content/uploads/2023/03/PRN00157-ncdes-updated-contract-specification-23-24-pcn-requirements-and-entitlements-updated.pdf
4. Health Innovation Network Patient Information Resources https://thehealthinnovationnetwork.co.uk/programmes/medicines/polypharmacy/patient-information/patient-information-resources/
5. Lewis T. Using the NO TEARS tool for medication review. BMJ 2004; 329:434 http://www.bmj.com/content/329/7463/434
6. PCN DES 2022/23 NHS England » Network Contract Directed Enhanced Service (DES) 2022/23
7. Network Contract Directed Enhanced Service 2020/21. Structured medication reviews and medicines optimisation: guidance Structured medication reviews specification guidance 2020-21
8. SMR and Medicines Optimisation Indicators data - Aristotle scorecard https://aristotle.midlandsandlancashirecsu.nhs.uk/portal/report/id/653
9. Osanlou R, Walker L, Hughes DA, et al Adverse drug reactions, multimorbidity and polypharmacy: a prospective analysis of 1 month of medical admissions BMJ Open 2022;12:e055551.https://bmjopen.bmj.com/content/12/7/e055551
10. Medicines Optimisation Polypharmacy Prescribing Comparators guide NHS BSA ACB Information Services landscape Word document template V1 (nhsbsa.nhs.uk)

Appendix 1 – EMIS Structured medication review template

The following structure medication review template can be accessed via EMIS resource publisher. If there are any queries or issues accessing the template please contact your Data Quality Specialist.

SMR EMIS Template

Appendix 2 – Eclipse risk score components

SMR Risk Score

Red Alerts:	10 points per alert
Amber Alerts:	5 points per alert
Polypharmacy:	
>= 15 : 10 points	
between 12 and 14 :	7 points
between 10 and 11 :	5 points
ACB Score: 1 point for each ACB score	
High Risk Drugs:	
On a DOAC	2 points
On NSAIDs	2 points
On Warfarin	2 points
On Antiplatelets	2 points
Deprescribing: 1 Point each (to Deprescribe as Not Cost-effective)	
Dependency:	
Pregabalin or Gabapentin	2 points
Opiates	2 points
Current Smoker	2 points
High Alcohol Intake	2 points
Z-drug or Benzodiazepine	2 points

Severe Frailty:	5 points
Moderate Frailty:	2 points
Learning Disability:	10 points
Priority Groups: Medication Related Indicators	
GIB01	2 points
GIB02	2 points
GIB03 or GIB04	2 points
GIBCI	2 points
PAIN01	2 points
PAIN02	2 points
PAIN03	2 points
FRAC01b	2 points
FRAC02b	2 points
FRAC03b	2 points
Emergency Admissions:**	
APC Emergency Admission	5 points per admission
A&E Admission	5 points per admission

The SMR Risk Score has been developed to prioritise SMR activity based on given clinical and outcome markers.

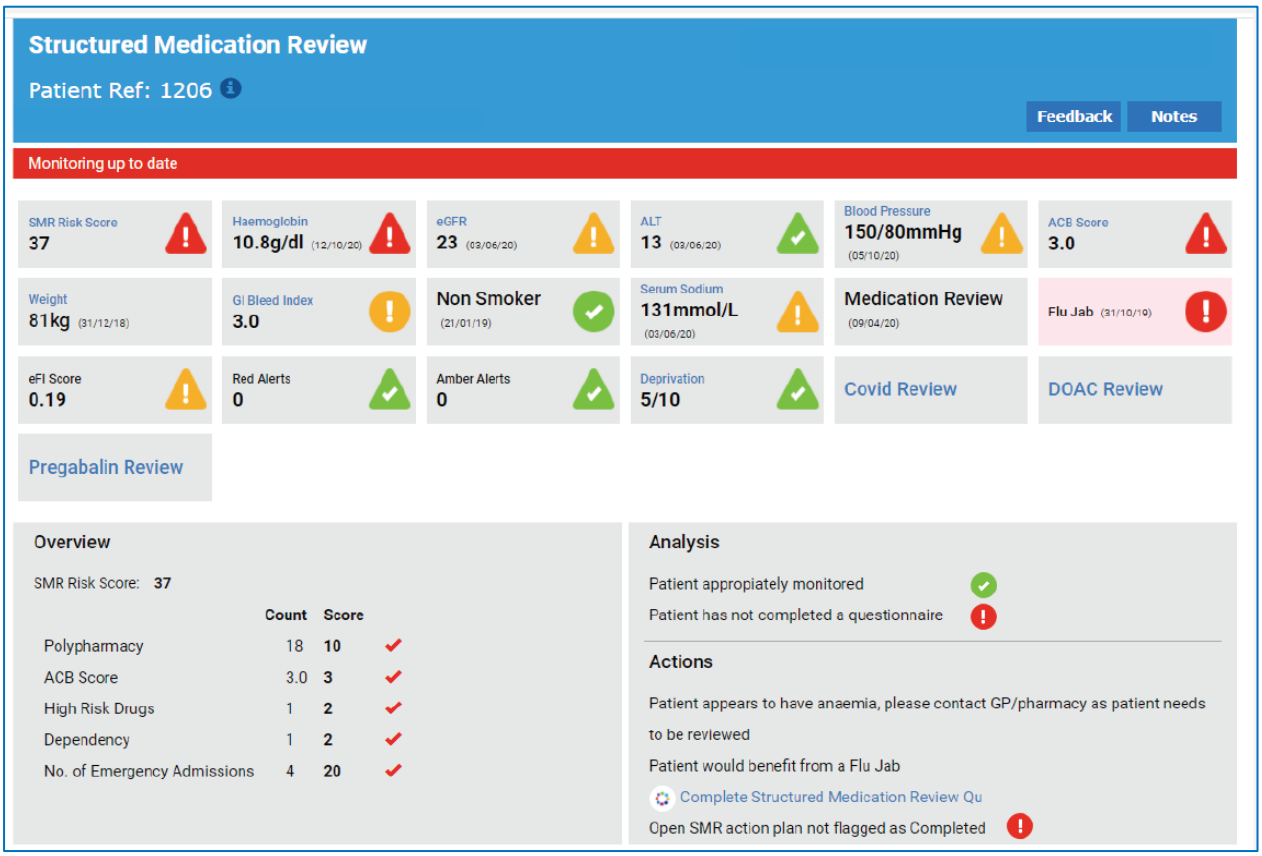
Appendix 3 – SMR User Guide

User Guide - SMR Live.pdf

Appendix 4 – Practice End of Year template for completing by March 2025

SMR END OF YEAR TEMPLATE

Appendix 5 –SMURF Page Screenshot



Appendix 6: Worked example of an SMR to reduce ACB Score