

Network Contract Directed Enhanced
Service

Structured medication reviews and medicines optimisation: guidance

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1. Purpose

- 1.1 The 2020/21 [Network Contract DES Specification](#) includes requirements relating to delivery of a structured medication review (SMR) and medicines optimisation service by primary care networks (PCNs). This document sets out implementation guidance for PCNs, including the principles of undertaking a SMR.
- 1.2 The Network Contract DES Specification requires PCNs to have due regard to this guidance when delivering the SMR and medicines optimisation service. This means that PCNs must proactively consider all aspects of this guidance when planning, implementing and delivering the service. Where a PCN decides to deliver the service in a way that diverges from this guidance, the commissioner may require evidence that the PCN has had regard to this guidance when coming to its decision. In practice, this means the PCN evidencing its consideration of the guidance as part of its decision-making through contemporaneous records.
- 1.3 This document should be read alongside the [2020/21 Network Contract DES Specification](#) and [Network Contract DES Guidance](#).

2. Introduction

- 2.1 SMRs are a National Institute for Health and Care Excellence (NICE) approved clinical intervention that help people who have complex or problematic polypharmacy.¹ SMRs are designed to be a comprehensive and clinical review of a patient's medicines and detailed aspects of their health. They are delivered by facilitating shared decision-making conversations with patients aimed at ensuring that their medication is working well for them.
- 2.2 Evidence shows that people with long-term conditions and using multiple medicines have better clinical and personal outcomes following a SMR.² Timely application of SMRs to individuals most at risk from problematic polypharmacy

¹ Problematic polypharmacy arises when multiple medicines are prescribed inappropriately, or when the intended benefit of the medicines is not realised or appropriately monitored, potentially due to clinical complexity or clinical capacity.

² NICE guideline 5: [Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes](#), 2015.

will support a reduction in hospital admissions arising from medicines-related harm in primary care. It is estimated that £400 million is spent annually in unnecessary medicines-related harm admissions to hospital.³

- 2.3 Undertaking SMRs in primary care will reduce the number of people who are overprescribed medication, reducing the risk of an adverse drug reaction, hospitalisation or addiction to prescription medicines. Further information on the rationale behind SMRs can be found on the [Royal Pharmaceutical Society web page](#).⁴
- 2.4 Most prescribing takes place in primary care. Through the increased collaboration with the establishment of PCNs, there is a significant opportunity to support the meeting of international commitments on antimicrobial prescribing.⁵ Improved medicines use will also improve patient outcomes, ensure better value for money for the NHS (eg by reducing inappropriate prescribing of low priority medicines⁶), and reduce waste and improve its environmental sustainability (eg by supporting patients to choose lower carbon inhalers⁷ where clinically appropriate and following a full medications review and shared decision-making process).

Existing provision and available support for PCNs

- 2.5 Since 2015, NHS England has funded two schemes to support the establishment of clinical pharmacists working in general practice and medicines optimisation in care homes. Significant progress in medicines optimisation has been made across the country by using the skills of these individuals; the service requirements to undertake SMRs build on this work.

³ Parekh N, Ali K, Stevenson J, et al. Incidence and cost of medication harm in older adults following hospital discharge: a multicentre prospective study in the UK. *Br J Clin Pharmacol* 2018. doi: [10.1111/bcp.13613](https://doi.org/10.1111/bcp.13613)

⁴ <https://www.rpharms.com/recognition/setting-professional-standards/polypharmacy>

⁵ AMR action plan: <https://www.gov.uk/government/publications/uk-5-year-action-plan-for-antimicrobial-resistance-2019-to-2024>

⁶ <https://www.england.nhs.uk/wp-content/uploads/2019/08/items-which-should-not-routinely-be-prescribed-in-primary-care-v2.1.pdf>

⁷ Reducing the carbon impact of inhalers is a key commitment in the NHS Long Term Plan, to work toward a greener NHS. Providing informed patient choice on the environmental impact of treatment also forms part the NICE Shared Decision Aid and BTS/SIGN 2019 asthma guidelines: <https://www.brit-thoracic.org.uk/quality-improvement/guidelines/asthma/>. The UK's Environmental Audit Committee recommended the NHS set a target of reducing to 50% low GWP inhalers by 2022 (Creagh M, Labour MP, Clark C, 2018. Conservative MP. *Environmental Audit Committee UK progress on reducing F-gas emissions*).

- 2.6 The Additional Roles Reimbursement Scheme made funding available for clinical pharmacists to be deployed in all PCNs from July 2019, building on the existing base from the earlier schemes. From April 2020, pharmacy technicians joined other professionals as part of this scheme. Both roles are reimbursable at 100% of actual salary plus defined on-costs, up to a maximum reimbursable amount.⁸ This workforce will be key in delivering SMRs and leading on medicines optimisation stewardship.
- 2.7 It is expected that a number of GP appointments may be avoided when individuals have a proactive SMR: supporting the alleviation of workload pressures on GPs and reducing the risk of harm to patients.⁹

3. Guidance to support implementation of the 2020/21 service requirements

Service requirement 1: Identification of patients

- 3.1 From 1 October 2020, each PCN must use appropriate tools to identify and prioritise patients who would benefit from a SMR, which must include those:
- in care homes
 - with complex and problematic polypharmacy, specifically those on 10 or more medications
 - on medicines commonly associated with medication errors¹⁰
 - with severe frailty,¹¹ who are particularly isolated or housebound or who have had recent hospital admissions and/or falls

⁸ See section 7 of the [Network Contract DES Guidance](#).

⁹ Mohanad O, Scullin C, Hogg A, Fleming G, Scott MG, McElanay JC. A novel approach to medicines optimisation post-discharge from hospital: pharmacist-led medicines optimisation clinic. *Int J Clin Pharm* 2020. <https://doi.org/10.1007/s11096-020-01059-4>

¹⁰ See NHS Business Services Authority (2019) *Medication safety – indicators specification*: <https://www.nhsbsa.nhs.uk/sites/default/files/2019-08/Medication%20Safety%20-%20Indicators%20Specification%20%28Aug19%29.pdf>. This experimental analysis links prescribing data to admissions data at a national level, and outlines a number of prescribing situations that have resulted in harm or hospitalisation. A set of 20 indicators has been developed to help reduce medications errors and promote safer use of medicines.

¹¹ Based on the validation of the eFI, on average around 3% of over 65s will be identified as potentially living with severe frailty. However, this percentage may be significantly higher in some practices. Severe frailty is defined as a person having an eFI score of >0.36. <https://www.england.nhs.uk/ourwork/clinical-policy/olderpeople/frailty/efi/>

- e. using potentially addictive pain management medication.
- 3.2 These cohorts are likely to include patients with multiple long-term conditions and/or multiple co-morbidities, in particular respiratory disease and cardiovascular disease, as well as those who have received a comprehensive geriatric assessment. Where PCN clinical pharmacist capacity allows, and where patients are not covered by the criteria above, PCNs should also consider offering a SMR to any other patients they think would benefit from a SMR, including those prescribed multiple but fewer than 10 medications, and other potentially addictive medication. PCNs should also be alert to the needs of communities at particular risk of COVID-19 (eg BAME), including by considering how complex prescribing regimens may be rationalised to improve their safety. Our strong expectation is that those patients identified as clinically vulnerable to COVID-19 will be among the groups to be prioritised for a SMR.
- 3.3 PCNs are free to use appropriate tools that help them to **proactively identify** patients from the cohorts outlined above, including the audit and reporting modules in the core GP IT systems. A variety of other tools have been developed to help clinicians identify patients with complex and problematic polypharmacy related to multi-morbidity, including, but not limited to, those listed in Annex B.
- 3.4 Local clinical commissioning groups (CCGs) and integrated care systems (ICSs) may already be supporting identification and review of their local population. Their medicines optimisation teams may be able to give PCNs extra support.
- 3.5 PINCER is an evidence-based intervention that reduces the risk of harm from clinically significant medication errors.¹² PCNs wishing to receive training and support in the PINCER intervention can contact [PRIMIS](#) or their local [Academic Health Science Network](#).

¹² Avery AJ, Rodgers S, Cantrill JA, et al. A pharmacist-led information technology intervention for medication errors (PINCER): a multicentre, cluster randomised, controlled trial and cost-effectiveness analysis. *Lancet* 2012. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(11\)61817-5/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(11)61817-5/fulltext)

- 3.6 PCNs should also have, or develop, processes for identifying patients who reactively need to be referred for a SMR. The **reactive triggers for a SMR** could include:
- **Crisis or incident** – such as an admission to hospital to which the patient's medicine regimen could have been a contributing factor, or following which their medication regimen might require review.
 - **Personal concerns** – when a patient raises concerns about the growing number of medicines they are being asked to take or requests a review of their medication.
 - **Professional referral** – when a health or care professional/worker raises concerns about the growing number of medicines a patient is trying to manage. This individual does not need to be based in or employed by the PCN; they could, for example, be an acute care-based clinician or social care worker.
 - **Requests for monitored dosage systems as an aid to managing multiple medicines** – when a patient, carer or healthcare professional seeks the addition of a monitored dosage system as a means to manage multiple medicines.

Service requirement 2: Prioritisation and capacity

- 3.7 Once patients have been identified, PCNs should create a process for developing SMR caseloads, so that those patients in greatest need of a SMR are seen in a timely manner.
- 3.8 PCNs should offer a range of appointment slots to cater for new SMRs and follow-up consultations, as well as for those patients identified reactively.
- 3.9 As set out in the [Network Contract DES Specification](#) section 7.2.1.b, the number of SMRs that a PCN is required to offer will be determined and limited by their clinical pharmacist capacity. PCNs and commissioners must discuss and agree a reasonable volume of SMRs on this basis if a PCN has not been able to secure sufficient clinical pharmacist capacity to offer initial, follow-up and reactive SMRs to **all** identified patients in the required cohorts. In estimating available capacity, CCGs and PCNs should acknowledge that clinical pharmacists have a variety of responsibilities and not all of their hours should be spent on SMRs. The commissioner must also be assured that the PCN

continues to demonstrate all reasonable ongoing efforts to reach sufficient capacity: for example, by establishing regular SMR audit meetings to discuss progress, priorities and lessons learnt.

What is a SMR?

- 3.10 A SMR is a structured, holistic and personalised review of an individual who is at risk of harm or medicines-related problems because of their current medicine regimen. It is not the act of re-authorising repeat prescriptions. A review of **some** specific medicines during a long-term condition review also does not constitute a SMR, which must consider **all** the medicines a patient is taking or using.
- 3.11 We expect that a SMR would take considerably longer than an average GP appointment, although the exact length should vary in line with the needs of the individual. PCNs should allow for flexibility in appointment length for SMRs, depending on the complexity of individual cases.
- 3.12 Clinicians should conduct SMRs in line with the principles of shared decision-making: consider the health literacy and holistic needs of the patient, provide advice and signpost, and make onward referrals where appropriate. New responsibilities include signposting to healthy living pharmacies¹³ and giving information about possible 'very brief advice' interventions.
- 3.13 SMRs should be personalised. They may be undertaken face to face in the patient's home or care home where possible and in line with infection prevention and control in light of COVID-19, or remotely where deemed clinically appropriate. SMRs are not required to take place in any particular location and can be undertaken during extended hours appointments. Above all, clinicians should consider the patient when planning the location and mode of delivery for the SMR, including consideration of equitable access for

¹³ From July 2020, [changes have been made to the terms of service](https://psnc.org.uk/services-commissioning/locally-commissioned-services/healthy-living-pharmacies/) for all pharmacies providing NHS pharmaceutical services, by revising the NHS (Pharmaceutical and Local Pharmaceutical Services) Regulations 2013 and the approvals under them. We expect that pharmacies will be required to, among other things, reflect the criteria/requirements for a Level 1 Healthy Living Pharmacy, as agreed in the [five-year deal](https://psnc.org.uk/services-commissioning/locally-commissioned-services/healthy-living-pharmacies/) between PSNC, NHS England and NHS Improvement and the Department of Health and Social Care; this reflects the priority attached to public health and prevention work. <https://psnc.org.uk/services-commissioning/locally-commissioned-services/healthy-living-pharmacies/>

housebound patients. Practitioners should be cognisant of the different skills required to deliver a remote consultation (see paragraph 3.20).

3.14 SMRs should be an ongoing process in which an individual appointment or discussion constitutes an episode of care. Regular review and management should be undertaken and SMRs should not be treated as a one-off exercise.

Conducting a SMR

3.15 SMRs can be conducted in different ways and should always be tailored to the individual patient. A SMR should follow the high-level principles and evidenced best practice below, resulting from a wide ranging review of guidance with the support of an external expert working group, including NICE guideline 5¹⁴ and the Royal Pharmaceutical Society's polypharmacy guidance,¹⁵ which itself encompasses the Scottish¹⁶ and Welsh¹⁷ polypharmacy models.

- **Shared decision-making principles should underpin the conversation.** Shared decision-making is a process where patients are supported to make the best decisions about which medicines they should or should not take. The final decision to prescribe or de-prescribe must be based equally on the clinical evidence, the prescriber's experience and the patient's values, experience and wishes. Has the patient been provided with appropriate information to make an informed decision about the medicines they will take after the SMR appointment, together with a clear record and plan?¹⁸ Can the patient demonstrate how they will use the medicines (formulation, device, regimen)? Address questions, agree how treatment will be monitored after the SMR appointment and set a date for the next review. Low priority prescribing should be discussed and removed from the patient's medication regimen, unless exceptions in the low priority prescribing guidance apply.

¹⁴ NICE guideline 5 *Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes*, 2015. <https://www.nice.org.uk/guidance/ng5>

¹⁵ <https://www.rpharms.com/recognition/setting-professional-standards/polypharmacy>

¹⁶ NHS Scotland guidance: <http://www.polypharmacy.scot.nhs.uk/polypharmacy-guidance-medicines-review/>

¹⁷ NHS Wales guidance:

http://www.wales.nhs.uk/sitesplus/documents/861/GPMedicationReview%20leaflet_BCUeng.pdf

¹⁸ Patients can be better prepared to engage in shared decision-making conversations by using initiatives such as 'It's OK to Ask'; these provide simple techniques to improve patient comfort when asking questions. <https://www.nhsinform.scot/publications/its-okay-to-ask-leaflet>

- **Personalised – tailored to the patient.** How would the patient like their medicines to impact on their quality of life? What would the patient like to get from a SMR? What medicines is the patient taking/not taking and why?
- **Safety – consider the balance of benefit and risk.** Is the patient experiencing any side effects? Are these excessive when weighed against the benefits of the medicines? Is there any other risk of harm due to co-morbidities (high risk medicines, drug interactions, contraindications)?
- **Effectiveness – all medication must be effective, except where explicitly permitted in guidelines on low priority prescribing.**¹⁹ What is each medicine for, and is that recorded in the patient's record? Is it appropriate? Is it still indicated? Is it working? Does the patient still take or want it (patient opinion, objective evidence; see shared decision-making above)? Are long-term condition(s) well controlled? Should anything be added to treatment? Clinicians delivering this specification should also consider antimicrobial resistance (AMR). During a SMR clinicians should investigate where patients have experienced repeated prescribing of antimicrobials. If they have, clinicians should review the cause of this prescribing with the patient and their GP to discern whether alternative treatments may be more effective at treating underlying causes of repeat infections.

3.16 The clinician should always ensure any appropriate follow-up SMR appointments are arranged to ensure the safety and effectiveness of any interventions. The clinician undertaking the SMR will determine the number of follow-ups needed in partnership with the patient; this will depend on complexity. It may be that other professionals could follow up the patient.

Service requirement 3: Invitations and communication

3.17 The patient's invitation to the SMR – whether oral or written – should explain what the SMR will involve, and that they will be coming in for a shared decision-making conversation to review all their medications and make sure they are working well for them. Patients should be advised to bring their medication to the appointment, and encouraged to prepare for the discussion and consider what questions they would like to ask. Patients can be supported by carers or

¹⁹ <https://www.england.nhs.uk/wp-content/uploads/2019/08/items-which-should-not-routinely-be-prescribed-in-primary-care-v2.1.pdf>

family members. Further information around health literacy can be found in Annex A.

Service requirement 4: Qualifications and training

- 3.18 PCNs must 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 these, and should be able to take a holistic view of a patient's medication. Although clinical pharmacists primarily are expected to conduct SMRs, suitably qualified advanced nurse practitioners (ANPs) who meet the above criteria, as well as GPs, can also do so.
- 3.19 Specifically, pharmacists must have completed – or at least be enrolled on – the Primary Care Pharmacy Educational Pathway (PCPEP) or a similar training programme that includes independent prescribing. It is expected/required that any ANPs who undertake SMRs are experienced in working in a generalist setting and able to take a holistic view of a patient's medication. A SMR is not considered complete until qualified consideration has been given to all the patient's medication; clinicians should be encouraged to collaborate with colleagues across the PCN and elsewhere, including acute care, and take a multidisciplinary approach to managing complex situations. Where prescribing is more complex (perhaps for some people with a learning disability or those at the end of their life), PCN clinicians undertaking SMRs should establish professional relationships and engage proactively with specialist pharmacists, consultants and other healthcare professionals working across the local healthcare system.
- 3.20 In the context of remote consultations, clinicians should ensure they have undertaken appropriate training and are competent to carry out a virtual consultation to the same standard as face to face. Recommended support is available from the [BMA](#) as well as the [NHS Good Practice Guidance for Digital Healthcare](#).

Service requirement 5: Recording of SMRs on GP IT systems

3.21 General guidance on the new coding requirements of this year's GP contract can be found at [Section 10.4 of the Network Contract DES Specification](#). The new code for the requirement of recording a SMR was released in August 2020, with the expectation that it is available for use by October 2020. Further information will be published around the new network dashboard and metrics in due course.

Service requirement 6: Collaboration on wider medicines optimisation

3.22 [The NHS Long Term Plan](#) sets out the aims for medicines optimisation to reduce inappropriate prescribing of (a) antimicrobials, (b) medicines that can cause dependency, (c) higher-carbon inhalers and (d) nationally identified medicines of low priority. To help achieve these outcomes longer-term, PCNs must actively work with their CCG and at ICS/STP level, to share expertise and lessons learned: for example, to integrate national-level programmes, such as the AMR action plan²⁰ and STOMP (stopping over medication of people with a learning disability, autism or both with psychotropic medicines)²¹ set out in the Long Term Plan, into their local implementation of SMRs, medicines optimisation and related work. Open data, eg OpenPrescribing,²² can further support this work.

Service requirement 7: New Medicine Service

3.23 PCNs are required to work with community pharmacies to connect patients appropriately to the [New Medicine Service](#),²³ which supports adherence to newly prescribed medicines. The service currently supports people with the following conditions who have been prescribed a new medicine:

- asthma
- chronic obstructive pulmonary disease (COPD)

²⁰ <https://www.gov.uk/government/publications/uk-5-year-action-plan-for-antimicrobial-resistance-2019-to-2024>

²¹ <https://www.england.nhs.uk/learning-disabilities/improving-health/stomp/>

²² www.OpenPrescribing.net

²³ <https://www.nhs.uk/using-the-nhs/nhs-services/pharmacies/new-medicine-service-nms/>

Classification: Official

- type 2 diabetes
- high blood pressure (hypertension)
- who have been given a new blood-thinning medicine.

Annex A: Further information that PCNs may wish to consider

NHS Community Pharmacist Consultation Service

PCNs are encouraged to implement a referral process as part of an integrated pathway to access the [NHS Community Pharmacist Consultation Service \(CPCS\)](#),²⁴ so that a patient can have a confidential consultation to receive advice and treatment for a range of minor illnesses. This will build on the referral to access the New Medicines Service (Section 3.23) and encourage patient confidence to support self-care decisions where appropriate.

Health literacy

Health literacy is the personal characteristics and social resources needed for individuals and communities to access, understand, appraise and use information and services to make decisions about health. This should be given particular consideration when communicating information about risk. As 43–61% of the English working-age population do not always understand the health information they are given,²⁵ the onus is on the practitioner to communicate effectively.

Public health – brief advice interventions

Smoking

The stop smoking very brief advice (VBA) is a brief (30-second) evidence-based²⁶ intervention that can be delivered by clinical or non-clinical staff. It is designed to identify smokers (ASK), recommend that the best way of quitting is with a combination of pharmacotherapy and behavioural support (ADVISE), and offer an onward referral into local stop smoking support (ACT).

²⁴ <https://www.england.nhs.uk/primary-care/pharmacy/community-pharmacist-consultation-service/>

²⁵ Institute of Health Inequality, 2015. *Local action on health inequalities. Improving health literacy to reduce health inequalities*: <http://www.instituteofhealthinequality.org/resources-reports/local-action-on-health-inequalities-health-literacy-to-reduce-health-inequalities/health-literacy-improving-health-literacy-to-reduce-health-inequalities-full.pdf>

²⁶ <https://www.nice.org.uk/guidance/ng92/evidence>

Online training for stop smoking VBA is freely available at:

https://www.ncsct.co.uk/publication_very-brief-advice.php

Falls and frailty

A SMR could be an ideal opportunity to signpost appropriately to strength and balance exercise for those at risk. This would have the additional benefit of helping to reduce social isolation.

For further training in promoting health behaviours and prevention of falls and fractures please see All Our Health (which includes e-learning modules and other content on falls and fractures, physical activity, obesity and dementia): [AOH Falls and fractures](#).

Physical activity

Brief advice on physical activity should be a fundamental consideration for the health and wellbeing of anyone with multiple conditions (eg due to association between multiple long-term conditions and unhealthy behaviours; role of behaviour change for condition management and secondary prevention; efficacy of brief advice). See [Health Matters](#) for more information.

Weight management

A SMR could be an opportunity to advocate behaviour change (around diet and physical activity), providing the service user with brief advice,²⁷ referral or signposting to locally commissioned weight management services, or signposting to a community pharmacy where staff can offer brief intervention or a weight management service (depending on what has been contracted).²⁸

Alcohol

SMR practitioners should be encouraged to review patients' alcohol use as alcohol could be impacting on their general health and creating risks from interactions with medicines.

²⁷ <https://www.sciencedirect.com/science/article/pii/S0140673616318931?via%3Dihub>

²⁸ Further information can be found at: <https://www.gov.uk/government/publications/adult-weight-management-a-guide-to-brief-interventions>

[Health Matters](#) contains important facts and evidence for effective interventions.

Alcohol identification and brief advice (IBA) aims to identify and influence patients who are drinking above the [UK Chief Medical Officers' low risk guidelines](#). [Cochrane Library research](#) suggests that IBA can reduce weekly drinking by 12% on average. Reducing regular consumption by any amount reduces the risk of ill health.

Healthcare professionals can deliver a suitable intervention via short informal conversation using the [AUDIT C](#) tool, and providing appropriate [follow-up information](#), which may include a [leaflet](#).

Healthcare professionals who identify patients as potentially dependent drinkers should [refer them for a specialist alcohol assessment](#).

Health Education England (HEE) provides a free [e-learning course](#) covering very brief advice on smoking and alcohol identification and brief advice, and a range of more comprehensive e-learning on [alcohol identification and brief advice](#). This includes [video clips](#) suitable for use in face-to-face sessions.

Annex B: Example tools for audit, identification and analysis of patients for SMRs

Product	Summary of tool (including point of prescribing vs audit tool)	CCG or practice focus
GP IT Clinical Systems (Foundation solutions)	<p>These systems remain the key gateway to accessing patient records to identify groups of patients who may benefit from a SMR. To support the review process, each core system has facilities for templates, searches and bespoke reporting at GP level. Specific templates may need to be developed to highlight key items to be addressed with appropriate data quality checks. Future developments will include PCN-level reporting.</p>	<p>CCGs, including federation/PCN staff and those involved in medicine optimisation work, use these facilities to identify patients, update any review outcomes, medicine change reasons and record authorised prescribing changes.</p>
NHS BSA Polypharmacy Prescribing comparators	<p>National (NHS BSA) primary care prescribing data. These comparators help PCNs and GP practices understand the variation in prescribing of multiple medicines. They can be used to highlight to clinicians the patients who are more likely to be exposed to the risks associated with taking large numbers of medicines or certain combinations of medicines known to cause harm.</p> <p>For access and further information see: https://wessexahsn.org.uk/projects/55/polypharmacy https://www.nhsbsa.nhs.uk/epact2/dashboards-and-specifications/medicines-optimisation-polypharmacy</p>	<p>Web-based; provides data at GP practice, CCG, STP, AHSN, regional and national level. (PCN-level data under development.)</p> <p>Individual NHS numbers can be requested by clinicians working in the general practice setting. This enables prioritisation of those who may benefit from a SMR.</p> <p>For case studies demonstrating the impact of this, see: https://wessexahsn.org.uk/projects/55/polypharmacy</p>

Product	Summary of tool (including point of prescribing vs audit tool)	CCG or practice focus
PINCER intervention	<p>PRIMIS searches embedded in GP clinical systems are used to identify patients at risk of medication error for 13 specific prescribing safety indicators. Pharmacists trained in the PINCER approach use quality improvement tools to address any patient safety issues identified and put systems in place to prevent their recurrence. The 13 PINCER prescribing safety indicators have now been embedded into third-party software solutions, resulting in the PINCER indicators being both an audit tool and a point of prescribing tool.</p>	<p>The intervention takes place at GP practice level with input from a clinical pharmacist (either employed by the practice or based in a PCN/CCG). Requires CCG engagement and support.</p>
PrescQIPP CIC www.prescqipp.info	<p>Audit tools</p> <p>Pre-built clinical system searches supporting the identification of patients suitable for review, including a set aligned to the NHS BSA polypharmacy dashboard and a set to support the identification of patients on dependency forming medicines.</p> <p>Clinical audit tools to support patient review across a range of therapeutic areas.</p> <p>Point of prescribing tools</p> <p>Medication review templates, de-prescribing algorithms covering a range of drugs/drug classes. Guide to medication reviews in care homes.</p> <p>Bulletins and briefings covering evidence base and practical implementation available on a wide range of topics and clinical areas, including polypharmacy, high risk medicines, medicines safety and dependency forming medicines.</p> <p>Implementation tools such as patient letters, information videos and guides to support shared decision-making.</p> <p>Educational packages to support upskilling in areas of polypharmacy and de-prescribing, anticholinergic burden, pain management and prescribing of dependency-forming medicines as well as other clinical areas.</p> <p>Virtual professional groups as a support network.</p>	<p>CCG medicines optimisation teams are the lead subscribers (in some areas, CSUs purchase on behalf of several CCGs). Subscription covers practice and PCN staff too.</p>

Product	Summary of tool (including point of prescribing vs audit tool)	CCG or practice focus
OpenPrescribing www.OpenPrescribing.net	OpenPrescribing.net is an online data explorer of NHS prescribing patterns in England. It has prescribing dashboards for GP practices and PCNs with various prescribing measures related to safety, effectiveness and cost as well as bespoke email alerts to highlight any changes in your prescribing.	Both
CPRD (Clinical Practice Research Datalink) www.cprd.com	<p>Prescribing safety reports</p> <p>Practices are able to receive confidential and bespoke drug prescribing reports. These include a pseudonymised list of patients who the practice can re-identify to facilitate SMRs, audits and use towards QoF and annual appraisals. Some reports show the GP practice's prescribing trends over time and its prescription rate benchmarked against other participating practices. New indicators will continue to be developed for practices over time – indicators to date have been for:</p> <p><i>Cardiovascular</i></p> <ol style="list-style-type: none"> 1. Prescribing of non-steroidal anti-inflammatory drugs (NSAIDs) in patients with heart failure 2. Prescribing of thiazolidinediones (glitazones) 3. Prescribing of NSAIDs in patients with chronic kidney disease 4. Aspirin monotherapy in patients with atrial fibrillation. <p><i>Learning disabilities – based on NHS England's STOMP project</i></p> <ol style="list-style-type: none"> 5. Prescribing antidepressants in patients aged 16 and over with a diagnosis of a learning disability, autism or both 6. Prescribing of antipsychotics in adults with a learning disability, autism or both. <p><i>Valproate</i></p> <ol style="list-style-type: none"> 7. Women of child-bearing potential who have received a prescription for valproate. 	Practice focus

Product	Summary of tool (including point of prescribing vs audit tool)	CCG or practice focus
	<p>Public health benefit</p> <p>CPRD is a government not-for-profit research organisation, jointly supported by the Medicines and Healthcare products Regulatory Agency (MHRA) and the National Institute of Health Research (NIHR), supplying anonymised health data for studies to improve health outcomes. For more than 30 years, CPRD has provided routinely collected, anonymised health data to enable vital research into healthcare delivery, drug safety, effectiveness of medicines and risk factors for disease.</p> <p>Practices that join CPRD share de-identified, coded data with CPRD, enabling their patient population to be represented in studies, clinical guidance and evidence-based medicine.</p> <p><i>Research and income opportunities</i></p> <p>Practices gain the opportunity to take part in optional research activity. They are paid for this work, which may involve completion of short questionnaires, patient referral services or real-world pragmatic interventional research trials run in the primary care setting.</p>	