

Medicines optimisation

Overview

Medicines are the most common intervention in healthcare for the prevention, treatment and/or management of many illnesses. As life expectancy increases and as the population ages, more people are living with several long-term conditions that are being managed with an increasing number of medicines. Medicines use can be complex and how patients can take their medicines safely and effectively is a challenge for the health service.

Multimorbidity (the presence of 2 or more long-term conditions) is associated with a greater use of health services, higher mortality, higher treatment burden (due to polypharmacy or multiple appointments), and reduced quality of life. The risk of patients suffering harm from their medicines increases with polypharmacy, and treatment regimens (including non-pharmacological treatments) can very easily become burdensome for patients with multimorbidity and can lead to care becoming fragmented and uncoordinated. Prescribers should consider the risks and benefits of treatments recommended from guidance for single health conditions, as the evidence for these recommendations is regularly drawn from patients without multimorbidity and who are taking fewer prescribed regular medicines. The management of risk factors for future disease can also be a major treatment burden for patients with multimorbidity and should be taken into consideration. Medicines optimisation encompasses many aspects of medicines use and helps to ensure that they are taken as intended, thus supporting the management of long-term conditions, multimorbidities, and appropriate polypharmacy. Through the adoption of a patient-focused approach to safe and effective medicines use, medicines optimisation changes the way patients are supported to get the best possible outcomes from their medicines. The use of shared decision-making informed by the best available evidence to guide decisions, ensures all patients have the opportunity to be involved in decisions about their medicines, taking into account their needs, preferences and values.

To reduce the risk of harm, ensure patients taking multiple medicines are receiving the most appropriate treatments for their needs, and to manage the spend on medicines, the Department of Health and Social Care are reviewing over-prescribing in the NHS.

Optimisation tools

Medicines optimisation includes aspects of care such as clinical assessment, clinical audits, disease prevention, health education, individual reviews and monitoring, and risk management. Having effective processes and systems in place can minimise the risk of preventable medicines-related problems (such as interactions with other medicines or comorbidities, and side-effects). Health and social care organisations should consider the use of multiple methods for identifying medicines-related patient safety incidents; learning from these incidents is important for guiding practice and minimising patient harm.

When optimising patient care, areas of intervention to consider include: deprescribing; medicines reconciliation, reviews and repeat prescribing; problematic polypharmacy; reducing medication waste and errors; and self-management plans. Self-management plans can be patient or health professional led and vary in their content depending on the individual needs of the patient, with the aim of supporting both their involvement and empowerment in managing their condition.

Medication reviews involve a structured critical examination of a patient's medicines to optimise treatment, minimise the number of medication-related problems, and reduce waste.

These should be led by an appropriate health professional with effective communication skills, technical knowledge in the processes for managing medicines, and therapeutic knowledge on medicines use. Reviews can be carried out in different care settings, such as Primary Care Networks utilising pharmacists within the GP practice. For further information on review services available from community pharmacists, such as the 'New Medicines Service' and 'Medicines Use Review', see *Advanced pharmacy services*. To support the medicines optimisation agenda, The Royal Pharmaceutical Society have produced good practice guidance for health professionals, which details four guiding principles for medicines optimisation. These are:

- Aim to understand the patient's experience;
- Evidence-based choice of medicines;
- Ensure medicines use is as safe as possible;
- Make medicines optimisation part of routine practice.

For further guidance around medicines optimisation and tools to use, NHS England have compiled useful links as part of **RightCare**; NICE have produced guidelines on **Medicines optimisation**, **Medicines adherence**, and **Multimorbidity**; and the Scottish Government have produced a guideline on **Polypharmacy**, see *Useful resources*.

Advanced Pharmacy Services Advanced Services are provided as part of the NHS Community Pharmacy Contractual Framework, and include services such as the New Medicines Service and Medicines Use Review service. These services are provided by accredited community pharmacists, with the aim of targeting specific patients to help manage their medicines more effectively, improve adherence, and reduce medicines wastage.

New Medicines Service The New Medicines Service (NMS) provides education and support to patients who are newly prescribed a medicine to manage a long-term condition. The service is split into three stages; patient engagement, intervention and follow-up. As of 2018, this service is available for patients living in England who have either been prescribed a new medicine for one of the following conditions – asthma, chronic obstructive pulmonary disease (COPD), type 2 diabetes or hypertension, or have been prescribed a new antiplatelet or anticoagulant. Patients can be offered the service by prescriber referral, or opportunistically by the community pharmacy. For further information, see: psnc.org.uk/services-commissioning/advanced-services/nms/.

Medicines Use Review The Medicines Use Review (MUR) service consists of structured adherence-centred reviews with patients on multiple medicines, particularly those receiving medicines for long-term conditions. The service is undertaken periodically, not usually more than once a year, and can also be prompted when an adherence issue is identified during the dispensing service.

The pharmacist providing the MUR service must ensure that at least 70% of all MURs undertaken in a year are for patients who fall within the two national target groups. The national target groups for MURs in England are:

- patients taking high-risk medicines (NSAIDs, anticoagulants (including low molecular weight heparin), antiplatelets, or diuretics);
- patients recently discharged from hospital who have had changes made to their medicines while they were in hospital.

For further information, see: psnc.org.uk/services-commissioning/advanced-services/murs/.

Wales, Northern Ireland, and Scotland have variations on this service, including different national target groups.