

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

SCOPE

1 **Guideline title**

Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes

1.1 **Short title**

Medicines optimisation.

2 **The remit**

The Department of Health has asked NICE to develop guidance on medicines optimisation.

3 **Need for the guideline**

- a) Medicines optimisation has not been formally defined in the published literature. For the purpose of this guidance, medicines optimisation is defined as: ‘a person-centred approach to safe and effective medicines use, enabling people to obtain the best possible outcomes from their medicines’.
- b) Medicines management considers the systems of processes and behaviours determining how medicines are used by patients and the NHS. Medicines management has primarily been led by pharmacy teams and is the term that has been used historically in the NHS for managing people’s medicines.
- c) Medicines management is an important enabler of medicines optimisation. However, medicines optimisation focuses on actions taken by all health and social care practitioners and requires

greater patient engagement and professional collaboration across health and social care settings.

- d) [Liberating the NHS white paper](#) (2010) emphasised the need to improve the outcomes of healthcare for all, to deliver care that is safer, more effective, and that provides a better experience for patients. It established improvement in quality and healthcare outcomes as the primary purpose of all NHS-funded care.
- e) The [Francis Report](#) (2013) emphasised the need to put patients first at all times, and that they must be protected from avoidable harm. The [Berwick report](#) (2013) recommends 4 guiding principles for improving patient safety, including:
 - place the quality and safety of patient care above all other aims for the NHS
 - engage, empower, and hear patients and carers throughout the entire system, and at all times.
- f) The [NHS constitution for England](#) (2013) gives people the right to be involved in discussions and decisions about their health and care, and to be given information to enable them to do this.
- g) Medicines are the most common intervention in healthcare. Over 1 billion prescription items were [dispensed in the community](#) in England in 2012, at a cost of £8.5 billion.
- h) The [cost of waste prescription medicines](#) in primary and community care in England is estimated to be £300 million a year, with up to half of that figure likely to be avoidable. An estimated £90 million worth of unused prescription medicines are retained in people's homes at any one time.
- i) Patients and their carers often have inadequate information about their medicines. Up to half of all patients may not be taking their medicines as recommended by the prescriber.

- j) Adverse events of medicines represent a [considerable burden](#) on the NHS and have a significant impact on patients. Approximately 5% to 8% of all hospital admissions are due to preventable adverse events of medicines.
- k) When patients [transfer between different care providers](#), such as at the time of hospital admission or discharge, there is a greater risk of poor communication and unintended changes to medicines. 30% to 70% of patients have an error or unintentional change to their medicines when they move from one care setting to another.
- l) An [analysis](#) of the prevalence and causes of prescribing errors in general practice found that 1 in 20 prescription items contained either a prescribing or monitoring error, which affected 1 in 8 patients. In the [National Diabetes Inpatient Audit](#) (2012) of hospitals in England and Wales, almost one in three patients with diabetes experienced at least 1 medication error in the previous 7 days of their hospital stay.
- m) NICE develops national evidence-based guidance to improve health and social care. There is variation in the uptake of [NICE-approved medicines](#) and implementation of NICE guidance.
- n) There are still wide variations in prescribing across primary care organisations. [Limited data](#) on secondary care prescribing also shows variation, but these data are not routinely available.
- o) This guideline aims to provide further clarity on medicines optimisation to ensure NHS patients get the best possible outcomes from their medicines.

4 The guideline

The guideline development process is described in detail on the [NICE website](#) (see section 6, '[Further information](#)').

This scope defines what the guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health.

The areas that will be addressed by the guideline are described in the following sections.

4.1 *Population*

4.1.1 Groups that will be covered

- a) All children, young people and adults using medicines.¹
- b) All children, young people and adults who are receiving sub-optimal benefit from medicines, for example, not receiving a medicine when they should or could benefit from medicines.
- c) All practitioners who prescribe, supply and/or administer medicines.

4.1.2 Groups that will not be covered

- a) None.

4.2 *Setting*

- a) All publicly-funded health and social care commissioned or provided by NHS organisations, local authorities (in England), independent organisations or independent contractors.
- b) This guidance will be relevant to health and social care practitioners, and organisations commissioning or providing health and/or social care for children, young people and adults that involves medicines use.

¹ The term 'medicines' covers all healthcare treatments, such as oral medicines, topical medicines, inhaled products, injections, wound care products, appliances and vaccines.

4.3 Key issues

4.3.1 Areas that will be covered

1. Reducing medicines-related patient safety incidents

This will cover the following interventions to reduce medicines-related patient safety incidents, such as potentially avoidable medicines-related hospital admissions and re-admissions, prescribing errors, dispensing errors, administration errors, monitoring errors and near misses:

- a) Systems for monitoring medicines-related patient safety incidents.
- b) Medication reviews.
- c) Medicines reconciliation.

2. Evidence-informed decision making

This will cover the following interventions to support evidence-informed decision making, including patient-centred care, patient choice, patient experience and patient and carer engagement:

- a) Decision support.
- b) Shared-decision aids in consultations.
- c) Self-management plans.

3. Professional collaboration

This will cover the following interventions to support collaboration and communication within individual professional groups, across multidisciplinary teams, across different providers at critical points in the care pathway (e.g. out of hours) and with the pharmaceutical industry:

- a) Models of profession-led and multidisciplinary team-led collaborative working.

- b) Models of cross-organisational collaborative working, such as between health and social care, with the pharmaceutical and homecare industries.
- c) Communication systems relating to medicines when patients move from one care setting to another.

4.3.2 Areas that will not be covered

- a) Specific named medicines.
- b) Specific clinical conditions.
- c) Patient consent (see [CG138 – Patient experience in adult NHS services: improving the experience of care for people using adult NHS services](#)).
- d) Patient and service user experience (see [CG138 – Patient experience in adult NHS services](#) and [CG136 – Service user experience in adult mental health](#)).
- e) Patient education.
- f) Public information campaigns.
- g) Medicines adherence (see [CG76 – Medicines adherence: Involving patients in decisions about prescribed medicines and supporting adherence](#)).
- h) Shared care arrangements for medicines used across primary and secondary care - identified for good practice guidance development.
- i) Repeat dispensing and repeat prescribing systems.
- j) Access to medicines, including local-decision making for drugs not included on local formularies.

- k) Medicines shortages, including supply issues and discontinued medicines.
- l) Prescription charges
- m) Waste medicines.
- n) Education and training of health and social care practitioners.

4.4 *Main outcomes*

- a) Mortality
- b) Clinical outcomes.
- c) Hospitalisation and health and social care utilisation.
- d) Planned and unplanned contacts.
- e) Medicines-related problems, such as prescribing errors, administration errors, dispensing errors, monitoring errors, near misses and adverse effects.
- f) Health and social care related quality of life.
- g) Patient-reported outcomes, such as medicines adherence, patient experience, patient satisfaction with decision-making.

4.5 *Review questions*

Review questions guide a systematic review of the literature. They address only the key issues covered in the scope, and usually relate to interventions, diagnosis, prognosis, service delivery or patient experience. Please note that these review questions are draft versions and will be finalised with the Guideline Development Group.

- a) What reporting and learning systems are effective and cost-effective in reducing medicines-related patient safety incidents, compared to usual care?

- b) What is the effectiveness and cost-effectiveness of medication reviews to reduce sub-optimal use of medicines and medicines-related patient safety incidents, compared to usual care?
- c) What is the effectiveness and cost-effectiveness of medicines reconciliation to reduce sub-optimal use of medicines and medicines-related patient safety incidents, compared to usual care?
- d) What is the effectiveness and cost-effectiveness of using decision support to improve patient outcomes from medicines, compared to usual care?
- e) What is the effectiveness and cost-effectiveness of using patient decision aids in consultations to improve shared decision-making between patients, carers and practitioners, compared to usual care?
- f) What is the effectiveness and cost-effectiveness of using self-management plans to improve patient outcomes from medicines, compared to usual care?
- g) What models of profession-led or multidisciplinary team-led working are effective and cost-effective in reducing sub-optimal use of medicines and improving patient outcomes from medicines, compared to usual care?
- h) What models of cross-organisational collaborative working are effective and cost-effective in reducing sub-optimal use of medicines and improving patient outcomes from medicines, compared to usual care?
- i) What communication systems are effective and cost-effective in reducing sub-optimal use of medicines and improving patient outcomes from medicines when patients move from one care setting to another, compared to usual care?

4.6 Economic aspects

Developers will take into account both clinical and cost effectiveness when making recommendations involving a choice between alternative interventions. A review of the economic evidence will be conducted and analyses will be carried out as appropriate. The preferred unit of effectiveness is the quality-adjusted life year (QALY), and the costs considered will usually be only from an NHS and personal social services (PSS) perspective. Further detail on the methods can be found in [‘The guidelines manual’](#) (see [‘Further information’](#)).

4.7 Status

4.7.1 Scope

This is the final scope.

4.7.2 Timing

The development of the guideline recommendations will begin in November 2013.

5 Related NICE guidance

5.1 Published guidance

5.1.1 Other related NICE guidance

Medicines optimisation incorporates many other NICE guidance, particularly condition specific guidelines. For this reason all related condition specific guidance is not included in this section.

Good practice guidance

- [Patient Group Directions](#). NICE good practice guidance 2 (2013)
- [Developing and updating local formularies](#). NICE good practice guidance 1 (2012)

Clinical guidelines and quality standards

- [Medicines adherence](#). NICE clinical guideline 76 (2009).

- [Service user experience in adult mental health](#). NICE clinical guideline 136 and quality standard 14 (2011)
- [Patient experience in adult NHS services](#). NICE clinical guideline 138 and quality standard 15 (2012).

Patient safety guidance

- [Technical patient safety solutions for medicines reconciliation on admission of adults to hospital](#). NICE patient safety guidance 1 (2007).

5.2 Guidance under development

NICE is currently developing the following related guidance (details available from the NICE website):

- [Managing medicines in care homes](#). NICE good practice guidance. Publication expected March 2014.
- [Drug allergy](#). NICE clinical guideline. Publication expected October 2014.
- [Safe use and management of controlled drugs](#). NICE good practice guidance. Publication expected January 2015.
- [Domiciliary care](#). NICE social care guidance. Publication expected July 2015.
- [Older people with long-term conditions](#). Publication expected September 2015.
- [Multi-morbidities: system integration to meet population needs](#). Publication expected [TBC].

6 Further information

Information on the guideline development process is provided in the following documents, available from the NICE website:

- [‘How NICE clinical guidelines are developed: an overview for stakeholders the public and the NHS’](#)
- [‘The guidelines manual’](#).

Information on the progress of the guideline will also be available from the [NICE website](#).