

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

SCOPE

1 **Guideline title**

Medicines optimisation.

1.1 **Short title**

Medicines optimisation.

2 **The remit**

The Department of Health has asked NICE to develop guidance and a quality standard on medicines optimisation.

3 **Need for the guideline**

- a) Medicines optimisation ensures people obtain the best possible outcomes from their medicines while minimising the risk of harm. Medicines optimisation requires evidence-informed decision making about medicines, involving effective patient engagement and professional collaboration to provide an individualised, person-centred approach to medicines use, within the available resources.
- b) Medicines management considers the systems of processes and behaviours determining how medicines are used by patients and the NHS, whereas medicines optimisation focuses on outcomes for patients obtained from their medicines. Medicines management is an important enabler of medicines optimisation and is a term that has been used historically in the NHS for managing people's medicines.

- c) 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.
- d) 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.
- e) Adverse effects 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 effects of medicines.
- f) When patients [transfer between different care providers](#), such as at the time of hospital 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 their care is transferred.
- g) The NICE guidance on [Patient experience in adult NHS services](#) (2012) and 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.
- h) 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.

- i) Patients 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) 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.
- k) 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.
- l) As a result of significant financial challenges, initiatives have focused on supporting the NHS to improve the quality of prescribing and get better value from medicines. The NHS has made QIPP¹ savings of £700 million associated with medicines use and prescribing during 2011/12. However, 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.
- m) 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](#)').

¹ Quality, Innovation, Productivity and Prevention (QIPP)

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 people using medicines, with particular consideration of:
- children and adolescents
 - older people
 - people using multiple medicines (polypharmacy)
 - people with multiple long-term conditions
 - people using medicines who are admitted to, or discharged from hospital or who move in or out of prison services
 - people who are prescribed a new medicine
 - people who are not receiving medicines when they should or could benefit from medicines
- b) All practitioners who administer medicines

4.1.2 Groups that will not be covered

- a) None

4.2 *Setting*

- a) All publicly-funded health and social care provided in primary care, secondary care and in the community, including prisons.
- b) This guidance will be relevant to health and social care practitioners, and organisations commissioning or providing health and/or social care for people that involves medicines use.

4.3 Key issues

4.3.1 Areas that will be covered

Patient and carer engagement in shared decision making

- a) Evidence-informed decision making, including patient engagement.
- b) Use of medicines information to support decision-making for medicines use.
- c) Patient-centred care.
- d) Shared decision-making and shared decision aids.
- e) Individualised care and personalised care.
- f) Patient self-management, including self-administration.
- g) Information on medicines, including access to appropriate information received and public information campaigns.

Evidence-informed decision making

- a) Patient and carer information on medicines, including access to appropriate information, satisfaction with information received.
- b) Public information campaigns.
- c) Patient and carer education relating to medicines, including targeted support for specific patients, such as when patients are prescribed a new medicine.
- d) Dealing with patient concerns and complaints relating to medicines.
- e) Ability of patients to raise and discuss medicines issues, such as side effects.
- f) Shared decision-making and shared decision aids.

- g) Medicines management systems, including repeat dispensing, repeat prescribing, not to dispense schemes, patient's own drugs schemes, computerised decision support and management of waste medicines.

Intra- and inter- professional collaboration

- a) Inter- and intra- professional collaboration.
- b) Communication relating to medicines.
- c) Multidisciplinary team working to address sub-optimal use of medicines.
- d) Communication at critical points in the care pathway (for example, at discharge, out of hours, urgent care, across interfaces).
- e) Sharing good practice.
- f) Clinical networks.
- g) Working with the pharmaceutical industry.

Transferring medicines information across care settings

- a) Transfer of care relating to the sharing of information about medicines when patient care moves from one setting to another.
- b) [Medicines reconciliation.](#)
- c) Communication at critical points in the care pathway (for example, at discharge, out of hours, urgent care, across interfaces).
- d) Communication relating to medicines.
- e) Multidisciplinary team working.
- f) Inter- and intra- professional collaboration.

- g) Specific responsibilities of practitioners with a medicines optimisation remit, such as practice-based pharmacists and medicines management discharge technicians.
- h) Medicines management systems, including repeat dispensing, repeat prescribing, not to dispense schemes, patient's own drugs schemes, computerised decision support and management of waste medicines.

Reducing medicines-related patient safety incidents

- a) Interventions to reduce medicines-related patient safety incidents, including prescribing errors, dispensing errors, administration errors and monitoring errors.
- b) Adverse events.
- c) Near misses.
- d) Reporting systems and learning from medicines-related patient safety incidents.
- e) Review and monitoring of patient outcomes relating to medicines, including medication reviews, medicines use reviews and drug monitoring.
- f) Transfer of care relating to the sharing of information about medicines when patient care moves from one setting to another.
- g) [Medicines reconciliation.](#)
- h) Medicines management systems, including repeat dispensing, repeat prescribing, not to dispense schemes, patient's own drugs schemes, computerised decision support and management of waste medicines.
- i) Multidisciplinary team working to address sub-optimal use of medicines.

- j) Interventions to reduce inappropriate variations in prescribing, such as variation in the uptake of NICE-approved medicines and in the implementation of NICE guidance.

Reducing preventable medicines-related hospital admissions and re-admissions

- a) Interventions to reduce preventable medicines-related hospital admissions and re-admissions, including classes of medicines commonly associated with hospital admissions.
- b) [Medicines reconciliation.](#)
- c) Transfer of care relating to the sharing of information about medicines when patient care moves from one setting to another.
- d) Communication relating to medicines.
- e) Inter- and intra- professional collaboration.
- f) Review and monitoring of patient outcomes relating to medicines, including medication reviews, medicines use reviews and drug monitoring.
- g) Medicines management systems, including repeat dispensing, repeat prescribing, not to dispense schemes, patient's own drugs schemes, computerised decision support and management of waste medicines.
- h) Specific responsibilities of practitioners with a medicines optimisation remit, such as practice-based pharmacists and medicines management discharge technicians.

4.3.2 Areas that will not be covered

See [appendix 1](#) for reasons for exclusion of areas that will not be covered in the scope:

- a) Medicines adherence (see [CG76 – Medicines adherence: Involving patients in decisions about prescribed medicines and supporting adherence.](#))
- b) Specific named medicines.
- c) Specific clinical conditions.
- d) Shared care arrangements for medicines used across primary and secondary care - identified for good practice guidance development.
- e) Safe disposal of waste medicines.
- f) Recycling of waste medicines.
- g) Patient consent (see [CG 138 - Patient experience in adult NHS services: improving the experience of care for people using adult NHS services](#)).
- h) Access to medicines – including local-decision making for drugs not included on local formularies.
- i) Medicines shortages – including supply issues and discontinued medicines.
- j) Education and training of health and social care practitioners relating to medicines.

4.4 Main outcomes

- a) Mortality and morbidity.
- b) Hospitalisation and health-care utilisation.
- c) Planned and unplanned contacts.
- d) Medication-related problems, including prescribing errors, monitoring errors and adverse effects.

- e) Health-related quality of life.
- f) Patient-reported outcomes e.g. reduced uncertainty, satisfaction with decision-making.
- g) Other non-patient related outcomes such as, NICE compliance / uptake of NICE-approved medicines and reduction in waste medicines.

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) For all patients using medicines what is the effect of patient and carer engagement in improving shared decision making between patients, carers and health practitioners compared to usual care?
- b) For all patients using medicines what is the effect of evidence-informed decision making processes in improving patient outcomes from medicines compared to usual care?
- c) For all practitioners involved with medicines what is the effect of intra- and inter- professional collaboration on improving patient outcomes from medicines compared to usual care?
- d) For all patients using medicines what is the most effective system and process for transferring medicines information across care settings to reduce medicines related patient safety incidents compared to usual care?
- e) For all patients using medicines what is the most effective and cost-effective system and process for safe and appropriate prescribing,

at reducing medicines related patient safety incidents compared to usual care?

- f) For all patients using medicines what is the effect and cost-effectiveness of current systems and processes for safe and appropriate prescribing for reducing medicines-related hospital admissions and re-admissions 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 consultation draft of the scope. The consultation dates are 9th September to 4th October 2013.

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 February 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](#).

7 Appendices

Appendix 1. Reasons for exclusion of areas that will not be covered in scope

Area that will not be covered in scope	Reason
Specific named medicines	Medicines optimisation relates to the overarching principles of optimising the use of medicines to improve patient outcomes, and is not specific to individual named medicines
Specific clinical conditions	Medicines optimisation relates to the overarching principles of optimising the use of medicines to improve patient outcomes, and is not specific to individual clinical conditions
Shared care arrangements for medicines used across primary and secondary care	Topic selected for future NICE good practice guidance
Safe disposal of waste medicines	Does not address interventions to reduce medicines waste
Recycling of waste medicines	Does not address interventions to reduce medicines waste
Patient consent	Crosses remit of other national organisations, such as Department of Health. Broad area that is not exclusively related to medicines Crosses with NICE CG138 – Patient experience in adult NHS services
Access to medicines	Crosses remit of other national organisations, such as MHRA. Outside control of audience for this guidance
Medicines shortages	Crosses remit of other national organisations, such as MHRA. Outside control of audience for this guidance
Education and training of health and social care practitioners relating to medicines	Very broad area which crosses remit of other national organisations, such as Health Education England
Medicines adherence	Crosses with NICE CG76 - Medicines adherence: Involving patients in decisions about prescribed medicines and supporting adherence