Medicines optimisation

Quality standard
Published: 24 March 2016
www.nice.org.uk/guidance/qs120
Contents

Introduction ........................................................................................................................................................................ 5
  Why this quality standard is needed .......................................................................................................................... 5
  How this quality standard supports delivery of outcome frameworks ................................................................. 6
Safety and people’s experience of care .................................................................................................................... 11
Coordinated services .................................................................................................................................................. 12
List of quality statements ........................................................................................................................................... 13
Quality statement 1: Shared decision-making ........................................................................................................... 14
  Quality statement ...................................................................................................................................................... 14
  Rationale ................................................................................................................................................................. 14
  Quality measures ..................................................................................................................................................... 14
  What the quality statement means for service providers, healthcare professionals and commissioners .. 15
  What the quality statement means for patients, service users and carers ........................................................... 15
  Source guidance ...................................................................................................................................................... 15
  Definitions of terms used in this quality statement ............................................................................................... 16
  Equality and diversity considerations .................................................................................................................... 16
Quality statement 2: Patient involvement in reporting medicines-related patient safety incidents ..................... 17
  Quality statement ...................................................................................................................................................... 17
  Rationale ................................................................................................................................................................. 17
  Quality measures ..................................................................................................................................................... 17
  What the quality statement means for service providers, healthcare professionals and commissioners .. 18
  What the quality statement means for patients, service users and carers ........................................................... 18
  Source guidance ...................................................................................................................................................... 18
  Definitions of terms used in this quality statement ............................................................................................... 19
  Equality and diversity considerations .................................................................................................................... 19
Quality statement 3: Learning from medicines-related patient safety incidents .................................................... 20
  Quality statement ...................................................................................................................................................... 20
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality measures</td>
<td>31</td>
</tr>
<tr>
<td>What the quality statement means for service providers, healthcare</td>
<td>32</td>
</tr>
<tr>
<td>professionals and commissioners</td>
<td></td>
</tr>
<tr>
<td>What the quality statement means for patients, service users and</td>
<td>33</td>
</tr>
<tr>
<td>carers</td>
<td></td>
</tr>
<tr>
<td>Source guidance</td>
<td>33</td>
</tr>
<tr>
<td>Definitions of terms used in this quality statement</td>
<td>33</td>
</tr>
<tr>
<td>Equality and diversity considerations</td>
<td>34</td>
</tr>
<tr>
<td>Using the quality standard</td>
<td>35</td>
</tr>
<tr>
<td>Quality measures</td>
<td>35</td>
</tr>
<tr>
<td>Levels of achievement</td>
<td>35</td>
</tr>
<tr>
<td>Using other national guidance and policy documents</td>
<td>35</td>
</tr>
<tr>
<td>Diversity, equality and language</td>
<td>36</td>
</tr>
<tr>
<td>Development sources</td>
<td>37</td>
</tr>
<tr>
<td>Evidence sources</td>
<td>37</td>
</tr>
<tr>
<td>Policy context</td>
<td>37</td>
</tr>
<tr>
<td>Definitions and data sources for the quality measures</td>
<td>38</td>
</tr>
<tr>
<td>Related NICE quality standards</td>
<td>39</td>
</tr>
<tr>
<td>Published</td>
<td>39</td>
</tr>
<tr>
<td>Future quality standards</td>
<td>39</td>
</tr>
<tr>
<td>Quality Standards Advisory Committee and NICE project team</td>
<td>40</td>
</tr>
<tr>
<td>Quality Standards Advisory Committee</td>
<td>40</td>
</tr>
<tr>
<td>NICE project team</td>
<td>42</td>
</tr>
<tr>
<td>About this quality standard</td>
<td>44</td>
</tr>
</tbody>
</table>
Introduction

This quality standard covers the safe and effective use of medicines for all people who take medicines, including people who are receiving suboptimal benefit from medicines.

It does not cover aspects of managing medicines specific to care home settings because this is covered by the NICE quality standard on medicines management in care homes (QS85). For more information see the medicines optimisation topic overview.

Why this quality standard is needed

Medicines optimisation is defined as 'a person-centred approach to safe and effective medicines use, to ensure people obtain the best possible outcomes from their medicines'. Medicines optimisation applies to people who may or may not take their medicines effectively.

Getting the most from medicines for both patients and the NHS is becoming increasingly important because more people are taking more medicines. Medicines prevent, treat or manage many illnesses or conditions and are the most common intervention in healthcare. However, it has been estimated that between 30% and 50% of medicines prescribed for long-term conditions are not taken as intended (World Health Organization 2003). This issue is affected by the increasing number of people with long-term conditions.

In 2012, the Department of Health published Long-term conditions compendium of information: third edition, which defines a long-term condition as 'a condition that cannot, at present, be cured but is controlled by medication and/or other treatment/therapies'. The report suggested that about 15 million people in England have a long-term condition and the number of long-term conditions a person has increases with age: 14% of people under 40 and 58% of people over 60 have at least 1 long-term condition. The presence of 2 or more long-term conditions in a person is called 'multimorbidity'. In 2008, the number of people with multimorbidity was 1.9 million, but this is expected to rise to 2.9 million by 2018. Twenty-five per cent of people aged over 60 report having 2 or more long-term conditions.
Data from the Health and Social Care Information Centre shows that between 2003 and 2013, the average number of prescription items a year for every person in England increased from 13 to 19. With an ageing population, the use of multiple medicines (polypharmacy) is increasing.

In 2013, the Royal Pharmaceutical Society produced 4 guiding principles to describe medicines optimisation in practice and the outcomes it is intended to affect. The 4 principles 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.

The quality standard is expected to contribute to improvements in the following outcomes:

- harm attributable to errors in medication
- patient satisfaction with outcomes from the use of medicines
- quality of life for people with long-term conditions
- preventable mortality
- preventable morbidity
- life expectancy for people with long-term conditions.

**How this quality standard supports delivery of outcome frameworks**

NICE quality standards are a concise set of prioritised statements designed to drive measurable improvements in the 3 dimensions of quality – safety, experience and effectiveness of care – for a particular area of health or care. They are derived from high-quality guidance, such as that from NICE or other sources accredited by NICE. This quality standard, in conjunction with the guidance on which it is based, should contribute to the improvements outlined in the following 3 outcomes frameworks published by the Department of Health:

- NHS Outcomes Framework 2015–16
- Adult Social Care Outcomes Framework 2015–16
• Public Health Outcomes Framework 2013–16.

Tables 1–3 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

**Table 1** NHS Outcomes Framework 2015–16

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching indicators and improvement areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Preventing people from dying prematurely</td>
<td>Overarching indicators</td>
</tr>
<tr>
<td></td>
<td>1a Potential Years of Life Lost (PYLL) from</td>
</tr>
<tr>
<td></td>
<td>causes considered amenable to healthcare</td>
</tr>
<tr>
<td></td>
<td>i Adults ii Children and young people</td>
</tr>
<tr>
<td></td>
<td>1b Life expectancy at 75</td>
</tr>
<tr>
<td></td>
<td>i Males ii Females</td>
</tr>
<tr>
<td>2 Enhancing quality of life for people with long-term conditions</td>
<td>Overarching indicator</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>2 Health-related quality of life for people with long-term conditions**</td>
<td></td>
</tr>
<tr>
<td><strong>Improvement areas</strong></td>
<td></td>
</tr>
<tr>
<td>Ensuring people feel supported to manage their condition</td>
<td></td>
</tr>
<tr>
<td>2.1 Proportion of people feeling supported to manage their condition</td>
<td></td>
</tr>
<tr>
<td>Improving functional ability in people with long-term conditions</td>
<td></td>
</tr>
<tr>
<td>2.2 Employment of people with long-term conditions* ***</td>
<td></td>
</tr>
<tr>
<td>Reducing time spent in hospital by people with long-term conditions</td>
<td></td>
</tr>
<tr>
<td>2.3 i Unplanned hospitalisation for chronic ambulatory care sensitive conditions</td>
<td></td>
</tr>
<tr>
<td>ii Unplanned hospitalisation for asthma, diabetes and epilepsy in under 19s</td>
<td></td>
</tr>
<tr>
<td><strong>Enhancing quality of life for carers</strong></td>
<td></td>
</tr>
<tr>
<td>2.4 Health-related quality of life for carers**</td>
<td></td>
</tr>
<tr>
<td><strong>Enhancing quality of life for people with mental illness</strong></td>
<td></td>
</tr>
<tr>
<td>2.5 i Employment of people with mental illness**</td>
<td></td>
</tr>
<tr>
<td>ii Health-related quality of life for people with mental illness**</td>
<td></td>
</tr>
<tr>
<td>Improving quality of life for people with multiple long-term conditions</td>
<td></td>
</tr>
<tr>
<td>2.7 Health-related quality of life for people with three or more long-term conditions**</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3 Helping people to recover from episodes of ill health or following injury</th>
<th>Overarching indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>3a Emergency admissions for acute conditions that should not usually require hospital admission</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Ensuring that people have a positive experience of care</td>
<td><strong>Overarching indicators</strong></td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>4a Patient experience of primary care</td>
<td>4a Patient experience of primary care</td>
</tr>
<tr>
<td>i GP services</td>
<td>i GP services</td>
</tr>
<tr>
<td>ii GP Out-of-hours services</td>
<td>ii GP Out-of-hours services</td>
</tr>
<tr>
<td>4b Patient experience of hospital care</td>
<td>4b Patient experience of hospital care</td>
</tr>
<tr>
<td>4c Friends and family test</td>
<td>4c Friends and family test</td>
</tr>
<tr>
<td>4d Patient experience characterised as poor or worse</td>
<td>4d Patient experience characterised as poor or worse</td>
</tr>
<tr>
<td>i Primary care</td>
<td>i Primary care</td>
</tr>
<tr>
<td>ii Hospital care</td>
<td>ii Hospital care</td>
</tr>
</tbody>
</table>

**Improvement areas**

Improving people’s experience of outpatient care

4.1 Patient experience of outpatient services

Improving access to primary care services

4.4 Access to i GP

Improving experience of healthcare for people with mental illness

4.7 Patient experience of community mental health services

Improving children and young people’s experience of healthcare

4.8 Children and young people’s experience of inpatient services

Improving people’s experience of integrated care

4.9 People’s experience of integrated care**
5 Treating and caring for people in a safe environment and protecting them from avoidable harm

**Overarching indicators**

5a Deaths attributable to problems in healthcare
5b Severe harm attributable to problems in healthcare

**Improvement areas**

Improving the culture of safety reporting
5.6 Patient safety incidents reported

**Alignment with Adult Social Care Outcomes Framework and/or Public Health Outcomes Framework**

* Indicator is shared
** Indicator is complementary

Indicators in italics in development

---

**Table 2** The Adult Social Care Outcomes Framework 2015–16

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching and outcome measures</th>
</tr>
</thead>
</table>
| 1 Enhancing quality of life for people with care and support needs | **Overarching measure**
1A Social care-related quality of life*

**Outcome measures**

People manage their own support as much as they wish, so that are in control of what, how and when support is delivered to match their needs
1B Proportion of people who use services who have control over their daily life
Carers can balance their caring roles and maintain their desired quality of life.
1D Carer-reported quality of life*

**Aligning across the health and care system**

* Indicator complementary

---

**Table 3** Public Health Outcomes Framework for England, 2013–16

<table>
<thead>
<tr>
<th>Domain</th>
<th>Objectives and indicators</th>
</tr>
</thead>
</table>
### 4 Healthcare public health and preventing premature mortality

**Objective**  
Reduced numbers of people living with preventable ill health and people dying prematurely, whilst reducing the gap between communities

**Indicators**  
4.3 Mortality rate from causes considered preventable**  
4.11 Emergency readmissions within 30 days of discharge from hospital*  
4.13 Health-related quality of life for older people

**Alignment with Adult Social Care Outcomes Framework and/or NHS Outcomes Framework**

* Indicator is shared
** Indicator is complementary

### Safety and people's experience of care

Ensuring that care is safe and that people have a positive experience of care is vital in a high-quality service. It is important to consider these factors when planning and delivering services relevant to medicines optimisation.

NICE has developed guidance and an associated quality standard on patient experience in adult NHS services (see the NICE pathway on patient experience in adult NHS services), which should be considered alongside this quality standard. They specify that people receiving care should be treated with dignity, have opportunities to discuss their preferences, and be supported to understand their options and make fully informed decisions. They also cover the provision of information to people using services. Quality statements on these aspects of patient experience are not usually included in topic-specific quality standards. However, recommendations in the development sources for quality standards that affect patient experience and are specific to the topic are considered during quality statement development. For this quality standard on medicines optimisation, statement 1 relates to patient involvement in making decisions about the use of medicines.

Patient safety is an explicit component of statements 2 and 3 of this quality standard on medicines optimisation, as well as being one of the overarching aims of the whole quality standard.
Coordinated services

The quality standard on medicines optimisation specifies that services should be commissioned from and coordinated across relevant agencies encompassing the use of medicines. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to people who take medicines in health and social care settings.

The Health and Social Care Act 2012 sets out a clear expectation that the care system should consider NICE quality standards in planning and delivering services, as part of a general duty to secure continuous improvement in quality. Commissioners and providers of health and social care should refer to the library of NICE quality standards when designing high-quality services. Other quality standards that should also be considered when choosing, commissioning or providing a high-quality medicines optimisation service are listed in related quality standards.

Training and competencies

The quality standard should be read in the context of national and local guidelines on training and competencies. All health and social care professionals involved in caring for people who take medicines, or who could benefit from medicines, should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard. Quality statements on staff training and competency are not usually included in quality standards.

Role of families and carers

Quality standards recognise the important role families and carers have in supporting people who are taking medicines in health and social care settings. If appropriate, healthcare professionals should ensure that family members and carers are involved in the decision-making process about investigations, treatment and care.
List of quality statements

Statement 1. People are given the opportunity to be involved in making decisions about their medicines.

Statement 2. People who are prescribed medicines are given an explanation on how to identify and report medicines-related patient safety incidents.

Statement 3. Local health and social care providers monitor medicines-related patient safety incidents to inform their learning in the use of medicines.

Statement 4. People who are inpatients in an acute setting have a reconciled list of their medicines within 24 hours of admission.

Statement 5. People discharged from a care setting have a reconciled list of their medicines in their GP record within 1 week of the GP practice receiving the information, and before a prescription or new supply of medicines is issued.

Statement 6. Local healthcare providers identify people taking medicines who would benefit from a structured medication review.
Quality statement 1: Shared decision-making

Quality statement

People are given the opportunity to be involved in making decisions about their medicines.

Rationale

Clinical outcomes and patient satisfaction are likely to be better when decisions about medicines are made jointly between the person taking the medicine and the prescriber (shared decision-making). A person's preferences and how they value treatment options and outcomes should be taken into account. People also need to have enough information to make informed choices. Patient decision aids can be used to support shared decision-making. Choices may include decisions not to take specific medicines.

Quality measures

Structure

a) Evidence that prescribers give people information about the potential benefits and harms of using medicines.

Data source: Local data collection.

b) Evidence that prescribers take into account people's preferences and values about treatment options that includes the use of medicines.

Data source: Local data collection.

c) Evidence that prescribers offer people the opportunity to use available decision aids to make informed choices about the use of medicines that take account of the trade-off between potential benefits and harms.

Data source: Local data collection.

Outcome

a) Medicines adherence.
Data source: Local data collection.

b) Patient satisfaction with outcomes from the use of medicines.

Data source: Local data collection.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (such as primary and secondary care and pharmacy services) ensure that people are given the opportunity to be involved in making decisions about their medicines in partnership with professionals who prescribe medicines.

Healthcare professionals (such as prescribers and community pharmacists) ensure that people are given the opportunity to be involved in making decisions about their medicines. For example, healthcare professionals can use patient decision aids to support shared decision-making and they should ensure that people who take medicines have information about the potential benefits and harms.

Commissioners (such as clinical commissioning groups and NHS England) ensure they commission services in which people are given the opportunity to be involved in making decisions about their medicines in partnership with professionals who prescribe medicines.

What the quality statement means for patients, service users and carers

People who are considering whether or not to take a medicine are given the opportunity to be involved in making the decision with their healthcare professional. The decision should be in line with the person's preferences and what they consider is important, and should take into account information about the potential benefits and harms of the medicine.

Source guidance

- Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5, recommendations 1.6.1, 1.6.2, 1.6.4 and 1.6.6
Definitions of terms used in this quality statement

Involved in making decisions

Patients should have the opportunity to make informed decisions about their medicines, in partnership with their healthcare professionals. Healthcare professionals should take account of a person's values and preferences by discussing what is important to them about treating or managing their condition(s) and their medicines. They should ask open questions to understand the person's ideas, concerns and expectations. This process can be helped by using patient decision aids. The person's values and preferences about treatment options may be different from those of the healthcare professional, and making assumptions about these should be avoided.

[Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5, recommendation 1.6.2 and full guideline]

Equality and diversity considerations

People who are offered or prescribed medicines may have different values and preferences to those of their healthcare professional, and these values and preferences may affect their choices about medicines. Healthcare professionals should be sensitive and supportive to ensure that everyone can express their preferences about the use of medicines and take part in shared decision-making. Healthcare professionals should take into account that some people may need additional support in communicating their preferences or in understanding the information given to them. This might be, for example, because English is not their first language or they have communication or sensory difficulties.
Quality statement 2: Patient involvement in reporting medicines-related patient safety incidents

Quality statement

People who are prescribed medicines are given an explanation on how to identify and report medicines-related patient safety incidents.

Rationale

Reporting of, and learning from, medicines-related patient safety incidents can be more effective when the people who are prescribed medicines are encouraged and empowered to report incidents. People can be told about identifying and reporting medicines-related patient safety incidents when a prescription is written or dispensed, or when medication is reviewed. Patient involvement can increase the number of incidents reported through better identification, and can aid learning by health and social care practitioners and organisations responsible for medicines optimisation.

Quality measures

Structure

a) Evidence of arrangements to ensure that people who are prescribed medicines have an explanation of how to identify medicines-related patient safety incidents.

Data source: Local data collection.

b) Evidence of arrangements to ensure that people who are prescribed medicines have an explanation of how to report medicines-related patient safety incidents.

Data source: Local data collection.

Process

Proportion of new prescriptions of medicines for which patients are given an explanation on how to identify and report medicines-related patient safety incidents.

Numerator – the number in the denominator for which patients are given an explanation on how to
identify and report medicines-related patient safety incidents.

Denominator – the number of new prescriptions of medicines.

**Data source:** Local data collection.

**Outcome**

Harm attributable to errors in medication.

**Data source:** Local data collection.

**What the quality statement means for service providers, healthcare professionals and commissioners**

**Service providers** (such as primary and secondary care and pharmacy services) ensure that people who are prescribed medicines to have an explanation on how to identify and report medicines-related patient safety incidents.

**Healthcare professionals** (such as prescribers and community pharmacists) ensure that they explain to people who are prescribed medicines how to identify and report medicines-related patient safety incidents. Healthcare professionals can do this when a prescription is written or dispensed, or when medication is reviewed.

**Commissioners** (such as clinical commissioning groups and NHS England) ensure that they commission services that explain to people who are prescribed medicines how to identify and report medicines-related patient safety incidents.

**What the quality statement means for patients, service users and carers**

People who are prescribed medicines are told what a medicines-related patient safety incident is, how to identify and report an incident, and who they can ask for help. They can be told this when a prescription is written or dispensed, or when medication is reviewed.

**Source guidance**

- [Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes](https://www.nice.org.uk/guidance/NG5) (2015) NICE guideline NG5, recommendations 1.1.2 and 1.1.6
Definitions of terms used in this quality statement

Medicines-related patient safety incidents

Medicines-related patient safety incidents are unintended or unexpected incidents that were specifically related to medicines use, which could have, or did, lead to patient harm. These include:

- potentially avoidable medicines-related hospital admissions and re-admissions
- prescribing errors
- dispensing errors
- administration errors
- monitoring errors
- potentially avoidable adverse events
- missed doses of medicines
- near misses (a prevented medicines-related patient safety incident which could have led to patient harm).

Medicines-related patient safety incidents do not include expected medicines side effects.

Equality and diversity considerations

Healthcare professionals should recognise that people's ability to understand the issue of medicines-related patient safety incidents may differ, and take this into account in discussions with the person. Some people may need additional support to understand the information being discussed or to express their concerns about a possible medicines-related patient safety incident, especially if English is not their first language or if they have communication or sensory difficulties. Healthcare professionals should also take into account that some people may not be able to report an incident online due to lack of access to information technology or because they have insufficient knowledge on how to use it.
Quality statement 3: Learning from medicines-related patient safety incidents

Quality statement

Local health and social care providers monitor medicines-related patient safety incidents to inform their learning in the use of medicines.

Rationale

Monitoring medicines-related patient safety incidents can help to identify trends and causes of incidents. Learning from incident reporting and reviewing clinical case notes, and sharing the outcome of learning among local health and social care providers can lead to effective action. This might include setting up computer alerts and delivering continuing professional development. Learning from past incidents can help to minimise the risk of future medicines-related patient safety incidents and produce better outcomes for people who take medicines.

Quality measures

Structure

a) Evidence of local arrangements to ensure that health and social care providers monitor medicines-related patient safety incidents.

Data source: Local data collection.

b) Evidence of local arrangements to ensure that health and social care providers report medicines-related patient safety incidents using national patient safety reporting systems.

Data source: Local data collection, the National Reporting and Learning System, the Yellow Card Scheme.

c) Evidence of local arrangements to ensure that health and social care providers learn from the monitoring and reporting of medicines-related patient safety incidents.

Data source: Local data collection.

d) Evidence that local health and social care providers have arrangements to share learning about
medicines-related patient safety incidents. This can include feedback on trends or significant incidents to support continuing professional development.

**Data source:** Local data collection.

**Process**

Proportion of reported medicines-related patient safety incidents that are investigated.

Numerator – the number in the denominator that are investigated.

Denominator – the number of reported medicines-related patient safety incidents.

**Data source:** Local data collection.

**Outcome**

Harm attributable to errors in medication.

**Data source:** Local data collection.

**What the quality statement means for service providers, health and social care practitioners, and commissioners**

**Service providers** (such as primary and secondary care, community care and social care) ensure that they have effective systems to monitor and report medicines-related patient safety incidents, and that they share learning with other local health and social care organisations to ensure the safe use of medicines.

**Health and social care practitioners** (such as prescribers, community pharmacists, and residential care practitioners) report medicines-related patient safety incidents using national reporting systems, contribute to the local monitoring of medicines-related patient safety incidents, and contribute to shared learning with other local health and social care organisations.

**Commissioners** (such as clinical commissioning groups, local authorities and NHS England) ensure that providers demonstrate monitoring of medicines-related patient safety incidents and learning from those incidents.
What the quality statement means for patients, service users and carers

People who take medicines are cared for by local health and social care providers who monitor and report patient safety incidents related to medicines. The providers share the information with other local care providers to ensure the safe use of medicines.

Source guidance

- Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5, recommendations 1.1.3, 1.1.5 and 1.1.11

Definitions of terms used in this quality statement

Medicines-related patient safety incidents

Medicines-related patient safety incidents are unintended or unexpected incidents that were specifically related to medicines use, which could have, or did, lead to patient harm. These include:

- potentially avoidable medicines-related hospital admissions and re-admissions
- prescribing errors
- dispensing errors
- administration errors
- monitoring errors
- potentially avoidable adverse events
- missed doses of medicines
- near misses (a prevented medicines-related patient safety incident which could have led to patient harm).

Medicines-related patient safety incidents do not include expected medicines side effects.

[Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5, recommendation 1.1 and expert opinion]
Monitoring medicines-related patient safety incidents

Monitoring involves organisations having robust and transparent processes in place to identify, report, prioritise, investigate and learn from medicines-related patient safety incidents, in line with national patient safety reporting systems. This process should then encourage organisational learning.

[Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5, recommendation 1.1.3]
Quality statement 4: Medicines reconciliation in acute settings

Quality statement

People who are inpatients in an acute setting have a reconciled list of their medicines within 24 hours of admission.

Rationale

Medicines-related patient safety incidents are more likely when medicines reconciliation happens more than 24 hours after a person is admitted to an acute setting. Undertaking medicines reconciliation within 24 hours of admission to an acute setting (or sooner if clinically necessary) enables early action to be taken when discrepancies between lists of medicines are identified.

Quality measures

Structure

Evidence of local arrangements to ensure that people who are inpatients in an acute setting have a reconciled list of their medicines within 24 hours of admission.

Data source: Local data collection and Medicines optimisation dashboard.

Process

Proportion of people who are inpatients in an acute setting who have a reconciled list of their medicines within 24 hours of admission.

Numerator – the number in the denominator who have a reconciled list of their medicines within 24 hours of admission.

Denominator – the number of people who are inpatients in an acute setting.

Data source: Local data collection.

Outcome

a) Harm attributable to errors in medication following acute inpatient admission.
Data source: Local data collection.

b) Patient satisfaction with outcomes from the use of medicines.

Data source: Local data collection.

c) Number of patient complaints relating to medication issues.

Data source: Local data collection.

What the quality statement means for service providers, healthcare professionals and commissioners

Service providers (such as secondary care and mental health providers) ensure that systems are in place for people who are inpatients in an acute setting, to have a reconciled list of their medicines within 24 hours of admission.

Healthcare professionals (such as doctors, nurses, pharmacists and pharmacist technicians) ensure that they reconcile a list of medicines for people who are inpatients in an acute setting within 24 hours of admission (or sooner if clinically necessary).

Commissioners (such as clinical commissioning groups and NHS England) ensure that they commission acute services that reconcile a list of medicines for people who are inpatients in an acute setting within 24 hours of admission.

What the quality statement means for patients, service users and carers

People who go into hospital as inpatients have an up-to-date list of their medicines in their hospital record within 24 hours. They may be involved in this process if they wish to be. This ensures that any mistakes with their medicines are quickly noticed and sorted out.

Source guidance

- Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5, recommendations 1.3.1 and 1.3.5
Definitions of terms used in this quality statement

**Acute care settings**

Acute care settings include secondary care, tertiary care and mental health services.

[Expert opinion]

**Reconciled list**

Medicines reconciliation is the process of identifying an accurate list of a person's current medicines and comparing it with the current list in use. The information can be obtained from a variety of sources such as: medication brought to hospital by the patient, GP surgery patient records, repeat prescription slips, hospital case notes, community pharmacy patient medication records and care home medicines administration record. The list should include name, dosage, frequency and route of administration. Any discrepancies should be identified and any changes documented. The result is a complete list of medicines, accurately communicated to all health and social care professionals involved in the person's care, in which any issues with the medicines, such as wrong dosage or omission, have been addressed.

[Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5 and expert opinion]

**Within 24 hours of admission**

Medicines reconciliation for people who are inpatients in an acute setting should occur within 24 hours of admission, regardless of the time of admission or the day of the week.

[Expert opinion]

**Equality and diversity considerations**

Healthcare professionals should recognise that people's ability to understand the issue of medicines reconciliation may differ, and take this into account in discussions with the person. Some people may need additional support to understand the issue, for example, if English is not their first language or if they have communication or sensory difficulties.
Quality statement 5: Medicines reconciliation in primary care

Quality statement

People discharged from a care setting have a reconciled list of their medicines in their GP record within 1 week of the GP practice receiving the information, and before a prescription or new supply of medicines is issued.

Rationale

Medicines-related patient safety incidents are more likely when medicines reconciliation happens more than a week after discharge from a care setting such as a hospital or care home. Undertaking medicines reconciliation in primary care within 1 week of the GP practice receiving the information, and before a prescription or new supply of medicines is issued, allows early action to be taken when discrepancies between lists of medicines are identified. For example, it can prevent people from being prescribed medicines that were stopped while they were in hospital.

Quality measures

Structure

a) Evidence of local arrangements to ensure that people discharged from a care setting have a reconciled list of their medicines in their GP record within 1 week of the GP practice receiving the information.

Data source: Local data collection.

b) Evidence of local arrangements to ensure that people discharged from a care setting are not issued a prescription or new supply of medicines until they have a reconciled list of their medicines in their GP record.

Data source: Local data collection.

Process

a) The proportion of people on medicines discharged from a care setting who have a reconciled list of their medicines within 1 week of the GP practice receiving the information.

Numerator – the number in the denominator who have a reconciled list of their medicines within...
1 week of the GP practice receiving the information.

Denominator – the number of people on medicines who are discharged from a care setting.

**Data source:** Local data collection.

b) Proportion of new prescriptions within 1 month of discharge from a care setting where there was a reconciled list of medicines in the patient’s GP record.

Numerator – Number in the denominator where there was a reconciled list of medicines in the patient’s GP record.

Denominator – Number of new prescriptions within 1 month of discharge from a care setting.

**Data source:** Local data collection.

**Outcome**

a) Harm attributable to errors in medication following discharge from a care setting.

**Data source:** Local data collection.

b) Patient satisfaction with outcomes from the use of medicines.

**Data source:** Local data collection.

c) Number of patient complaints relating to medication issues following discharge from a care setting.

**Data source:** Local data collection.

**What the quality statement means for service providers, health and social care practitioners, and commissioners**

**Service providers** (such as GP practices, secondary care and mental health providers) ensure that systems are in place for people discharged from a care setting to have a reconciled list of their medicines in their GP record within 1 week of the GP practice receiving the information, and before a prescription or new supply of medicines is issued. Care providers should ensure
comprehensive and accurate information on medicines is supplied to general practices in a timely manner on discharge. GP practices should have systems in place to act on the information received within 1 week.

Health and social care practitioners (such as GPs, secondary care consultants and residential care practitioners) ensure that people discharged from a care setting have a reconciled list of their medicines in their GP record within 1 week of the GP practice receiving the information, and before a prescription or new supply of medicines is issued. Health and social care practitioners should send comprehensive and accurate information on medicines to general practices in a timely manner on discharge. GPs should undertake medicines reconciliation within 1 week, and should not issue new prescriptions or supplies of medicines before medicines reconciliation is complete. General practices may also liaise with community pharmacies about any medicines discharge information the pharmacies receive.

Commissioners (such as clinical commissioning groups and NHS England) commission services that ensure that people discharged from a care setting have a reconciled list of their medicines in their GP record within 1 week of the GP practice receiving the information, and before a prescription or new supply of medicines is issued.

What the quality statement means for patients, service users and carers

People who take medicines who are discharged from a care setting such as a hospital or residential care have an up-to-date list of any medicines they are taking in their GP record within 1 week of the GP practice receiving the information. The person may be involved in making the list if they wish to be. The GP practice should not give new prescriptions or a new supply of medicines until the person's list of medicines has been made and checked.

Source guidance

- Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5, recommendations 1.3.3 and 1.3.5

Definitions of terms used in this quality statement

Care settings

Care settings from which people are discharged include hospitals, mental health settings and social care residential settings. These care settings should provide lists of medicines to general practices for medicines reconciliation in primary care.
**Reconciled list**

Medicines reconciliation is the process of identifying an accurate list of a person's current medicines and comparing it with the current list in use. The information can be obtained from a variety of sources such as: medication brought to hospital by the patient, GP surgery patient records, repeat prescription slips, hospital case notes, community pharmacy patient medication records and care home medicines administration record. The list should include name, dosage, frequency and route of administration. Any discrepancies should be identified and any changes documented. The result is a complete list of medicines, accurately communicated to all health and social care professionals involved in the person’s care, in which any issues with the medicines, such as wrong dosage or omission, have been addressed.

[Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5 and expert opinion]

**Equality and diversity considerations**

Primary healthcare professionals should recognise that people's ability to understand the issue of medicines reconciliation may differ, and take this into account if the person wishes to be involved in the medicines reconciliation process. Health and social care practitioners should consider that people may need additional support to understand the issue, for example, if English is not their first language or if they have communication or sensory difficulties.
Quality statement 6: Structured medication review

Quality statement

Local healthcare providers identify people taking medicines who would benefit from a structured medication review.

Rationale

A structured medication review, with the clear purpose of optimising the use of medicines for some people (such as those who have long-term conditions or who take multiple medicines), can identify medicines that could be stopped or need a dosage change, or new medicines that are needed. Structured medication review can lead to a reduction in adverse events. To offer a structured medication review to people who would benefit, local healthcare providers must first have systems in place to identify those people.

Quality measures

Structure

a) Evidence that local healthcare providers have arrangements to identify people taking medicines who would benefit from a structured medication review.

Data source: Local data collection.

b) Evidence that local healthcare providers have arrangements to offer structured medication reviews to people who are likely to benefit.

Data source: Local data collection.

Process

a) Proportion of people taking medicines for long-term conditions who are identified as potentially benefiting from a structured medication review.

Numerator – the number in the denominator who are identified as potentially benefiting from a structured medication review.

Denominator – the number of people taking medicines for long-term conditions.
b) Proportion of people taking multiple medicines who are identified as potentially benefiting from a structured medication review.

Numerator – the number in the denominator who are identified as potentially benefiting from a structured medication review.

Denominator – the number of people taking multiple medicines.

*Data source:* Local data collection.

c) The proportion of people identified as potentially benefiting from a structured medication review who have a structured medication review.

Numerator – the number in the denominator who have a structured medication review.

Denominator – the number of people identified as potentially benefiting from a structured medication review.

*Data source:* Local data collection.

**Outcome**

a) People with long-term conditions gain optimum outcomes from use of medicines.

*Data source:* Local data collection.

b) People using multiple medicines gain optimum outcomes from use of medicines.

*Data source:* Local data collection.

c) Patient satisfaction with outcomes from the use of medicines.

*Data source:* Local data collection.

*What the quality statement means for service providers, healthcare professionals and commissioners*

*Service providers* (such as GP practices, acute and mental health services) ensure that systems are
in place to identify people taking medicines who would benefit from a structured medication review. Such patients may include people taking medicines for long-term conditions and people taking multiple medicines.

**Healthcare professionals** (such as GPs and pharmacists) ensure that they identify people taking medicines who would benefit from a structured medication review. Such patients may include people taking medicines for long-term conditions and people taking multiple medicines. Healthcare professionals should carry out the review with patients who agree to attend when the need and purpose of the structured medication review is clear. The healthcare professional should take into account the person's views, whether the person has had or has any risk factors for developing adverse drug reactions and any monitoring that is needed.

**Commissioners** (such as clinical commissioning groups and NHS England) ensure that they commission services that identify people taking medicines who would benefit from a structured medication review. Where the need and purpose is clear, structured medication reviews should be carried out with patients who agree to attend.

**What the quality statement means for patients, service users and carers**

People who may benefit from a structured medication review of their medicines are invited to talk about this with their healthcare professional. They might be asked because they are taking several medicines or are taking medicines for long-term conditions. The review can help to identify any medicines that are no longer needed or any that need the dosage changed. The healthcare professional should listen to the person's views and take these into account. They should also think about whether the person has had or has any risk factors for developing adverse drug reactions and whether any monitoring is needed.

**Source guidance**

- Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5, recommendations 1.4.1, 1.4.2 and 1.4.3

**Definitions of terms used in this quality statement**

**Structured medication review**

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.
Equality and diversity considerations

Healthcare professionals should recognise that people's ability to understand the importance of medication reviews may differ, and ensure that people are supported to understand the purpose and benefits of a structured medication review. Healthcare professionals should take into account that people may need additional support to understand the issue, for example, if English is not their first language or if they have communication or sensory difficulties.
Using the quality standard

Quality measures

The quality measures accompanying the quality statements aim to improve the structure, process and outcomes of care in areas identified as needing quality improvement. They are not a new set of targets or mandatory indicators for performance management.

We have indicated if current national indicators exist that could be used to measure the quality statements. These include indicators developed by the Health and Social Care Information Centre through its Indicators for Quality Improvement Programme. If there is no national indicator that could be used to measure a quality statement, the quality measure should form the basis for audit criteria developed and used locally.

See NICE’s what makes up a NICE quality standard? for further information, including advice on using quality measures.

Levels of achievement

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of 100% should be aspired to (or 0% if the quality statement states that something should not be done). However, NICE recognises that this may not always be appropriate in practice, taking account of safety, choice and professional judgement, and therefore desired levels of achievement should be defined locally.

NICE’s quality standard service improvement template helps providers to make an initial assessment of their service compared with a selection of quality statements. It includes assessing current practice, recording an action plan and monitoring quality improvement.

Using other national guidance and policy documents

Other national guidance and current policy documents have been referenced during the development of this quality standard. It is important that the quality standard is considered alongside the documents listed in development sources.
Diversity, equality and language

During the development of this quality standard, equality issues have been considered and equality assessments are available.

Good communication between health, public health and social care practitioners and people who are taking medicines in health and social care settings, and their families or carers (if appropriate), is essential. Treatment, care and support, and the information given about it, should be both age-appropriate and culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. People who are taking medicines in health and social care settings and their families or carers (if appropriate) should have access to an interpreter or advocate if needed.

Commissioners and providers should aim to achieve the quality standard in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.
Development sources

Further explanation of the methodology used can be found in the quality standards process guide.

Evidence sources

The documents below contain recommendations from NICE guidance or other NICE-accredited recommendations that were used by the Quality Standards Advisory Committee to develop the quality standard statements and measures.

- Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5

Policy context

It is important that the quality standard is considered alongside current policy documents, including:

- NHS England (2014) Principles for sharing the benefits associated with more efficient use of medicines not reimbursed through national prices
- Care Quality Commission (2013) The safer management of controlled drugs
- General Medical Council (2013) Good practice in prescribing and managing medicines and devices
- King’s Fund (2013) Polypharmacy and medicines optimisation: making it safe and sound
- Royal College of Nursing (2013) Better medicines management: advice for nursing staff and patients
- Royal Pharmaceutical Society (2013) Medicines optimisation: helping patients to make the most of medicines
- Department of Health (2012) Improving the use of medicines for better outcomes and reduced
- waste: an action plan

- Department of Health (2011) Impact assessment on the introduction of the new medicine service

- Department of Health (2011) Making best use of medicines: report of a Department of Health roundtable event hosted by The King’s Fund

- Department of Health (2010) Mixing of medicines prior to administration in clinical practice: medical and non-medical prescribing

Definitions and data sources for the quality measures

- Medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes (2015) NICE guideline NG5
Related NICE quality standards

Published

- Drug allergy (2015) NICE quality standard 97
- Patient experience in adult NHS services (2012) NICE quality standard 15

Future quality standards

This quality standard has been developed in the context of all quality standards referred to NICE, including the following topics scheduled for future development:

- Antimicrobial stewardship: changing risk-related behaviours in the general population
- Medicines management: managing the use of medicines in community settings for people receiving social care

The full list of quality standard topics referred to NICE is available from the quality standards topic library on the NICE website.
Quality Standards Advisory Committee and NICE project team

Quality Standards Advisory Committee

This quality standard has been developed by Quality Standards Advisory Committee 4. Membership of this committee is as follows:

Miss Alison Allam
Lay member

Dr Harry Allen
Consultant Old Age Psychiatrist, Manchester Mental Health and Social Care Trust

Mrs Moyra Amess
Associate Director, Assurance and Accreditation, CASPE Health Knowledge Systems

Mrs Jane Bradshaw
Neurology Nurse Consultant, Nationwide

Mr Derek Cruickshank
Consultant Gynaecological Oncologist/Chief of Service, South Tees NHS Foundation Trust

Dr Allison Duggal
Consultant in Public Health, Public Health England

Dr Nadim Fazlani
Chair, Liverpool Clinical Commissioning Group

Mr Tim Fielding
Consultant in Public Health, North Lincolnshire Council

Mrs Frances Garraghan
Lead Pharmacist Antimicrobials, Central Manchester Foundation Trust

Mrs Zoe Goodacre
Network Manager, South Wales Critical Care Network

Ms Nicola Hobbs
Assistant Director of Quality and Contracting, Northamptonshire County Council

Mr Roger Hughes
Lay member

Ms Jane Ingham
Chief Executive Officer, Healthcare Quality Improvement Partnership

Mr John Jolly
Chief Executive Officer, Blenheim Community Drug Project, London

Dr Asma Khalil
Consultant in Maternal and Fetal Medicine and Obstetrics, St George’s Medical School

Professor Damien Longson (Chair)
Consultant Liaison Psychiatrist, Manchester Mental Health and Social Care Trust

Mrs Annette Marshall
Independent Patient Safety Nurse, Palladium Patient Safety

Dr Rubin Minhas
GP Principal, Oakfield Health Centre, Kent

Mr Alaster Rutherford
Primary Care Pharmacist, NHS Bath and North East Somerset

Mr Michael Varrow
Information and Intelligence Business Partner, Essex County Council

Mr David Weaver
Head of Quality and Safety, North Kent Clinical Commissioning Group

The following specialist members joined the committee to develop this quality standard:

Dr Weeliat Chong
Chief Pharmacist, Humber NHS Foundation Trust

Mr David Erskine
Director, London and South East Medicine Information Service, Guy's and St Thomas' NHS Foundation Trust

Dr Tessa Lewis
GP and Medical Advisor in Therapeutics, Aneurin Bevan University Health Board

Mr Richard Seal
Chief Pharmacist, NHS Trust Development Authority

Dr David Terry
Director, Academic Practice Unit (Pharmacy), Birmingham Children's Hospital and Aston University

Mrs Mary Weatherstone
Specialist Commissioning Pharmacist and Practice Pharmacist, NEL CSU and Coastal Villages Partnership

Mr Nigel Westwood
Lay member

NICE project team

Nick Baillie
Associate Director

Karen Slade
Consultant Clinical Adviser

Tony Smith
Technical Adviser

Karyo Angeloudis
Technical Analyst

Esther Clifford
Programme Manager

Jenny Mills
About this quality standard

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

The methods and processes for developing NICE quality standards are described in the quality standards process guide.

This quality standard has been incorporated into the NICE pathway on medicines optimisation.

NICE produces guidance, standards and information on commissioning and providing high-quality healthcare, social care, and public health services. We have agreements to provide certain NICE services to Wales, Scotland and Northern Ireland. Decisions on how NICE guidance and other products apply in those countries are made by ministers in the Welsh government, Scottish government, and Northern Ireland Executive. NICE guidance or other products may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

Copyright

© National Institute for Health and Care Excellence 2016. All rights reserved. NICE copyright material can be downloaded for private research and study, and may be reproduced for educational and not-for-profit purposes. No reproduction by or for commercial organisations, or for commercial purposes, is allowed without the written permission of NICE.

ISBN: 978-1-4731-1780-8

Endorsing organisation

This quality standard has been endorsed by NHS England, as required by the Health and Social Care Act (2012)

Supporting organisations

Many organisations share NICE’s commitment to quality improvement using evidence-based
guidance. The following supporting organisations have recognised the benefit of the quality standard in improving care for patients, carers, service users and members of the public. They have agreed to work with NICE to ensure that those commissioning or providing services are made aware of and encouraged to use the quality standard.

- Royal Pharmaceutical Society
- Guild of Healthcare Pharmacists
- British Thoracic Society