NICE National Institute for Health and Care Excellence

NICE quality standard

Drug allergy

Quality standard
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This standard is based on CG183 and CG134.

This standard should be read in conjunction with QS6, QS15, QS85, QS110, QS120, QS118 and QS119.

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Quality statement 1: Documentation using the structured assessment guide

Quality statement

People with suspected drug allergy have their drug reaction documented using the structured assessment guide.

Rationale

After a person has a suspected allergic reaction to a drug, it is important that full and accurate information is recorded so that prescribing errors and adverse drug reactions can be avoided in the future. A healthcare professional can achieve this by following the structured assessment guide when recording the drug reaction and its severity. The guide is also important for educating patients about the signs, patterns and timings of allergic reactions. This should prevent morbidity and improve health outcomes.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that people with suspected drug allergy have their drug reaction documented using the structured assessment guide.

Data source: Local data collection.

Process

Proportion of people with suspected drug allergy who have their drug reaction documented using the structured assessment guide.

Numerator – the number in the denominator who have their drug reaction documented using the structured assessment guide.

Denominator – the number of people with suspected drug allergy.

Data source: Local data collection.

Outcome

a) Medication errors (inappropriate prescribing or administration of drugs).

Data source: Local data collection.

b) Number of repeat allergic drug reactions (including patient-reported episodes).

Data source: Local data collection.

What the quality statement means for different audiences

Service providers (GPs, A&E departments and secondary care services) ensure that people with suspected drug allergy have their drug reaction documented using the structured assessment guide.

Healthcare professionals use the structured assessment guide to document drug reactions of people with suspected drug allergy.

Commissioners (NHS England area teams) commission services in which people with suspected drug allergy have their drug reaction documented using the structured assessment guide.

People with suspected drug allergy should be examined by their GP or, for severe reactions, by A&E staff, who should also ask questions about the symptoms. They should record details of the reaction using a standard approach. They should ask how soon the symptoms started after taking the drug or how many doses were taken, and whether the person has had a similar reaction to that drug or type of drug before. If the doctor thinks that a person might have a drug allergy they should discuss what this means with them

(and their family members or carers as appropriate). They should also give them some written information.

Source guidance

Drug allergy: diagnosis and management. NICE guideline CG183 (2014), recommendations 1.1.1 (key priority for implementation) and 1.2.3 (key priority for implementation)

Definitions of terms used in this quality statement

Structured assessment guide

The structured assessment guide (tables 1 to 3) sets out the signs, allergic patterns and timing of onset of allergic reactions. Healthcare professionals should use tables 1 to 3 as an assessment guide when deciding whether symptoms may be caused by a drug allergy.

Table 1 Immediate, rapidly evolving reactions

Signs and allergic patterns of suspected drug allergy	Timing of onset
Anaphylaxis – a severe multi-system reaction characterised by: • erythema, urticaria or angioedema and • hypotension and/or bronchospasm	Onset usually less than 1 hour after drug exposure (previous exposure not always confirmed)
Urticaria or angioedema without systemic features	Onset usually less than 1 hour after drug exposure (previous exposure not always confirmed)
Exacerbation of asthma (for example, with non-steroidal anti-inflammatory drugs [NSAIDs])	Onset usually less than 1 hour after drug exposure (previous exposure not always confirmed)

Table 2 Non-immediate reactions without systemic involvement

Signs and allergic patterns of suspected drug allergy	Timing of onset
Widespread red macules or papules (exanthema-like)	Onset usually 6 to 10 days after first drug exposure or within 3 days of second exposure
Fixed drug eruption (localised inflamed skin)	Onset usually 6 to 10 days after first drug exposure or within 3 days of second exposure

Table 3 Non-immediate reactions with systemic involvement

Signs and allergic patterns of suspected drug allergy	Timing of onset
Drug reaction with eosinophilia and systemic symptoms (DRESS) or drug hypersensitivity syndrome (DHS) characterised by: • widespread red macules, papules or erythroderma • fever • lymphadenopathy • liver dysfunction • eosinophilia	Onset usually 2 to 6 weeks after first drug exposure or within 3 days of second exposure
Toxic epidermal necrolysis or Stevens–Johnson syndrome characterised by: • painful rash and fever (often early signs) • mucosal or cutaneous erosions • vesicles, blistering or epidermal detachment • red purpuric macules or erythema multiforme	Onset usually 7 to 14 days after first drug exposure or within 3 days of second exposure

Signs and allergic patterns of suspected drug allergy	Timing of onset
Acute generalised exanthematous pustulosis (AGEP) characterised by: • widespread pustules • fever • neutrophilia	Onset usually 3 to 5 days after first drug exposure
Common disorders caused, rarely, by drug allergy: • eczema • hepatitis • nephritis • photosensitivity • vasculitis	Time of onset variable

[NICE's guideline on drug allergy, recommendation 1.1.1 (key priority for implementation)]

Quality statement 2: Advice about carrying personal structured drug information

Quality statement

People with a new diagnosis of drug allergy are advised to carry structured information about their drug reaction at all times.

Rationale

Carrying structured information about their drug reaction at all times can minimise a person's fear of having another reaction, enhance their communication with healthcare professionals and enable the person to better manage their drug allergy.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that people with a new diagnosis of drug allergy are advised to carry structured information about their drug reaction at all times.

Data source: Local data collection.

Process

Proportion of people with a new diagnosis of drug allergy who are advised to carry structured information about their drug reaction at all times.

Numerator – the number in the denominator who are advised to carry structured information about their drug reaction at all times.

Denominator – the number of people with a new diagnosis of drug allergy.

Data source: Local data collection.

Outcome

Self-management of drug allergy.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers (primary and secondary care services) ensure that healthcare professionals advise people with a new diagnosis of drug allergy to carry structured information about their drug reaction at all times.

Healthcare professionals advise people with a new diagnosis of drug allergy to carry structured information about their drug reaction at all times.

Commissioners (NHS England area teams) commission services that advise people with a new diagnosis of drug allergy to carry structured information about their drug reaction at all times.

People who have just been told they have a drug allergy are advised to keep the information they have been given about the allergy with them at all times.

Source guidance

Drug allergy: diagnosis and management. NICE guideline CG183 (2014), recommendations 1.2.3 (key priority for implementation) and 1.3.4

Definition of terms used in this quality statement

Structured information about a drug reaction

When a person presents with a new diagnosis of drug allergy they are advised to carry structured information about their drug reaction that includes:

- the generic and proprietary name of the drug or drugs suspected to have caused the reaction, including the strength and formulation
- a description of the reaction (see structured assessment guide)
- the indication for the drug being taken (or description of the illness if there is no clinical diagnosis)
- the date and time of the reaction
- the number of doses taken or number of days on the drug before onset of the reaction
- the route of administration
- which drugs or drug classes to avoid in future.

If the person is unable to carry this information themselves (for example, neonates or those with additional needs), it may need to be given to a carer or family member instead, but confidentiality and safeguarding must be observed.

[Adapted from NICE's guideline on drug allergy, recommendation 1.2.3 (key priority for implementation)]

Equality and diversity considerations

All written information and advice should 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 receiving information about drug allergy should have access to an interpreter or advocate if needed.

Quality statement 3: Referral to specialist drug allergy services

Quality statement

People with a suspected or confirmed anaphylactic reaction, or severe non-immediate cutaneous reaction to a drug, or reaction to a general anaesthetic are referred to a specialist drug allergy service.

Rationale

It is important to ensure appropriate referral to specialist drug allergy services so that all people with drug allergy receive the care they need. Expert clinical opinion suggests that some people who are currently referred do not need specialist services whereas others need specialist referral but this is not offered.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that people with a suspected or confirmed anaphylactic reaction, or severe non-immediate cutaneous reaction to a drug, or reaction to a general anaesthetic are referred to a specialist drug allergy service.

Data source: Local data collection.

Process

a) Proportion of people with a suspected or confirmed anaphylactic reaction to a drug who are referred to a specialist drug allergy service.

Numerator – the number in the denominator who are referred to a specialist drug allergy service.

Denominator – the number of people with a suspected or confirmed anaphylactic reaction to a drug.

Data source: Local data collection.

b) Proportion of people with a severe non-immediate cutaneous reaction to a drug who are referred to a specialist drug allergy service.

Numerator – the number in the denominator who are referred to a specialist drug allergy service.

Denominator – the number of people with a severe non-immediate cutaneous reaction to a drug.

Data source: Local data collection.

c) Proportion of people with a reaction to a general anaesthetic who are referred to a specialist drug allergy service.

Numerator – the number in the denominator who are referred to a specialist drug allergy service.

Denominator – the number of people with a reaction to a general anaesthetic.

Data source: Local data collection.

Outcome

a) Mortality.

Data source: Local data collection.

b) Number of repeat allergic drug reactions.

Data source: Local data collection.

c) Length of hospital stay.

Data source: Local data collection.

d) Inappropriate avoidance of drugs.

Data source: Local data collection.

e) Further anaesthetics without problems.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers (GP, A&E departments, dentists and secondary care services) ensure that people with a suspected or confirmed anaphylactic reaction, or severe non-immediate cutaneous reaction to a drug, or reaction to a general anaesthetic are referred to a specialist drug allergy service.

Healthcare professionals refer people with a suspected or confirmed anaphylactic reaction, or severe non-immediate cutaneous reaction to a drug, or reaction to a general anaesthetic to a specialist drug allergy service.

Commissioners (NHS England area teams) commission local specialist drug allergy services for people with suspected or confirmed anaphylactic reactions, or severe non-immediate cutaneous reactions to a drug, or reactions to general anaesthetics.

People are referred to a specialist drug allergy service for advice if they have a severe 'shock-like' reaction straight after taking a drug, or if they have a severe skin reaction that develops later, or if they have a reaction to a general anaesthetic.

Source guidance

- Drug allergy: diagnosis and management. NICE guideline CG183 (2014), recommendations 1.4.2, 1.4.8 (key priority for implementation), 1.4.10 and 1.4.11 (key priority for implementation)

- Anaphylaxis: assessment and referral after emergency treatment. NICE guideline CG134 (2011), recommendation 1.1.9

Quality statement 4: Recording drug allergy status in electronic medical records

Quality statement

People with drug allergy have their status documented in their electronic medical record using the recommended coding framework.

Rationale

At present, the coding is not used consistently in electronic documentation systems to differentiate between a side effect and an allergic reaction. Consistent and comprehensive recording of drug allergy status is important to ensure that all patients with confirmed or suspected drug allergy have a full and accurate record of this in their electronic medical record. Accurate recording of drug allergy status will prevent the prescription and administration of drugs inducing allergic reactions and will improve patient safety.

Quality measures

Structure

Evidence of local arrangements to ensure that people with drug allergy have their status documented in their electronic medical record using the recommended coding framework.

Data source: Local data collection.

Process

Proportion of electronic medical records with a drug allergy status documented using the recommended coding framework.

Numerator – the number in the denominator with a drug allergy status documented using

the recommended coding framework.

Denominator – the number of electronic medical records.

Data source: Local data collection.

Outcome

a) Mortality.

Data source: Local data collection.

b) Repeat allergic drug reactions.

Data source: Local data collection.

c) Length of hospital stay.

Data source: Local data collection.

d) Inappropriate avoidance of drugs.

Data source: Local data collection.

e) Anaphylaxis.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers (primary and secondary care services) ensure that healthcare professionals document a person's drug allergy status in their electronic medical record using the recommended coding framework.

Healthcare professionals document a person's drug allergy status in their electronic medical record using the recommended coding framework.

Commissioners (NHS England area teams) commission services in which healthcare professionals document a person's drug allergy status in their electronic medical record using the recommended coding framework.

People have a note in their electronic medical record of whether or not they have a drug allergy. This should be noted as 'drug allergy', 'none known' or 'unable to ascertain' (doctors aren't sure whether a reaction is due to drug allergy or not). If doctors aren't sure they should investigate further.

Source guidance

Drug allergy: diagnosis and management. NICE guideline CG183 (2014), recommendation 1.2.1

Definitions of terms used in this quality statement

Coding framework for drug allergy status

Use 1 from the following coding framework when documenting a person's drug allergy status in their medical records:

- 'drug allergy'
- 'none known'
- 'unable to ascertain' (document it as soon as the information is available).

[NICE's guideline on drug allergy, recommendation 1.2.1]

Quality statement 5: Updating information on drug allergy status

Quality statement

People with a new diagnosis of drug allergy who are being referred or discharged have their drug allergy status updated in all GP referral and hospital discharge letters.

Rationale

Updating information on drug allergy status and sharing this information among services is important for improving patient safety and reducing the costs associated with treating allergic reactions. Improved communication between primary and secondary healthcare providers will also allow safe prescription of alternative drugs and reduce inappropriate drug avoidance. Full details of the drug and allergic reaction are important if the same drug is needed again and also improve diagnostic accuracy if the patient needs specialist investigation of the allergy.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that people with a new diagnosis of drug allergy who are being referred or discharged have their drug allergy status updated in all GP referral and hospital discharge letters.

Data source: Local data collection.

Process

a) Proportion of GP referral letters for people with a new diagnosis of drug allergy with updated drug allergy status.

Numerator – the number in the denominator with updated drug allergy status.

Denominator – the number of GP referral letters for people with a new diagnosis of drug allergy.

Data source: Local data collection.

b) Proportion of hospital discharge letters for people with a new diagnosis of drug allergy with updated drug allergy status.

Numerator – the number in the denominator with updated drug allergy status.

Denominator – the number of hospital discharge letters for people with a new diagnosis of drug allergy.

Data source: Local data collection.

Outcome

a) Mortality.

Data source: Local data collection.

b) Repeat allergic drug reactions.

Data source: Local data collection.

c) Length of hospital stay.

Data source: Local data collection.

d) Inappropriate avoidance of drugs.

Data source: Local data collection.

e) Anaphylaxis.

Data source: Local data collection.

What the quality statement means for different audiences

Service providers (primary and secondary care services) ensure that healthcare professionals update drug allergy status in all GP referral and hospital discharge letters for people with a new diagnosis of drug allergy.

Healthcare professionals update drug allergy status in all GP referral and hospital discharge letters for people with a new diagnosis of drug allergy.

Commissioners (NHS England area teams) commission services in which healthcare professionals update information on drug allergy status in all GP referral and hospital discharge letters for people with a new diagnosis of drug allergy.

People have any new information about drug allergy added to their records. The information is also included by their GP in all letters referring them to a hospital or clinic, and in all letters sent to their GP when they leave hospital.

Source guidance

Drug allergy: diagnosis and management. NICE guideline CG183 (2014), recommendation 1.2.7

Quality statement 6 (developmental): Prescription information on drug avoidance

Developmental quality statements set out an emerging area of service delivery or technology currently found in a minority of providers and indicating outstanding performance. They will need specific, significant changes to be put in place, such as redesign of services or new equipment.

Developmental quality statement

People with a drug allergy have information included on their prescriptions about which drugs or drug classes to avoid.

Rationale

Recording information on drug avoidance on a prescription is important for patient safety. Expert opinion suggests that only some hospitals have prescription forms which include drug allergy status.

Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

Structure

Evidence of local arrangements to ensure that prescriptions have drug allergy information included about which drugs or drug classes to avoid.

Data source: Local data collection.

Process

a) Proportion of paper prescriptions issued in any healthcare setting which have drug allergy information included about which drugs or drug classes to avoid.

Numerator – the number in the denominator which have drug allergy information about which drugs or drug classes to avoid.

Denominator – the number of paper prescriptions issued in any healthcare setting.

Data source: Local data collection.

b) Proportion of electronic prescriptions issued in any healthcare setting which have drug allergy information included about which drugs or drug classes to avoid.

Numerator – the number in the denominator which have drug allergy information about which drugs or drug classes to avoid.

Denominator – the number of electronic prescriptions issued in any healthcare setting.

Data source: Local data collection.

Outcome

a) Mortality.

Data source: Local data collection.

b) Repeat allergic drug reactions.

Data source: Local data collection.

c) Inappropriate avoidance of drugs.

Data source: Local data collection.

What the quality statement means for different

audiences

Service providers (secondary care) ensure that people with a drug allergy have information included on their prescriptions about which drugs or drug classes to avoid.

Healthcare professionals issue prescriptions which have drug allergy information included about which drugs or drug classes to avoid.

Commissioners (NHS England area teams) commission services in which people with a drug allergy have information included on their prescriptions about which drugs or drug classes to avoid.

People with a drug allergy are given prescriptions which include information on any drugs or types of drug that they should avoid.

Source guidance

Drug allergy: diagnosis and management. NICE guideline CG183 (2014), recommendation 1.2.4

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.

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, this may not always be appropriate in practice. Taking account of safety, shared decision-making, choice and professional judgement, desired levels of achievement should be defined locally.

Information about how NICE quality standards are developed is available from the NICE website.

See our webpage on quality standards advisory committees for details about our standing committees. Information about the topic experts invited to join the standing members is available from the webpage for this quality standard.

NICE has produced a quality standard service improvement template to help providers make an initial assessment of their service compared with a selection of quality statements. This tool is updated monthly to include new quality standards.

NICE guidance and quality standards apply in England and Wales. Decisions on how they apply in Scotland and Northern Ireland are made by the Scottish government and Northern Ireland Executive. NICE quality standards may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

Diversity, equality and language

Equality issues were considered during development and equality assessments for this quality standard are available. Good communication between healthcare professionals and

adults, young people and children with drug allergy, 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 with drug allergy and their families or carers (if appropriate) should have access to an interpreter or advocate if needed.

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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.

- British Association of Dermatologists (BAD)
- Royal College of General Practitioners (RCGP)
- Anaphylaxis Campaign
- Royal College of Physicians (RCP)