Contents

Introduction .......................................................................................................................................................................... 6
Why this quality standard is needed ........................................................................................................................................ 6
How this quality standard supports delivery of outcome frameworks ....................................................................................... 8
Safety and people's experience of care ................................................................................................................................... 15
Coordinated services .............................................................................................................................................................. 15
List of quality statements ......................................................................................................................................................... 17
Quality statement 1: Preventing type 2 diabetes ........................................................................................................................ 19
Quality statement ...................................................................................................................................................................... 19
Rationale .................................................................................................................................................................................... 19
Quality measures ....................................................................................................................................................................... 19
What the quality statement means for service providers, health and public health practitioners, and commissioners ................. 20
What the quality statement means for patients, service users and carers ..................................................................................... 20
Source guidance ......................................................................................................................................................................... 21
Definitions of terms used in this quality statement .................................................................................................................. 21
Equality and diversity considerations ......................................................................................................................................... 21
Quality statement 2: Structured education programmes for adults with type 2 diabetes ................................................................. 23
Quality statement ...................................................................................................................................................................... 23
Rationale .................................................................................................................................................................................... 23
Quality measures ....................................................................................................................................................................... 23
What the quality statement means for service providers, healthcare professionals and commissioners ........................................ 24
What the quality statement means for patients, service users and carers ..................................................................................... 25
Source guidance ......................................................................................................................................................................... 25
Definitions of terms used in this quality statement .................................................................................................................. 25
Equality and diversity considerations ......................................................................................................................................... 26
Quality statement 3: Structured education programmes for adults with type 1 diabetes ................................................................. 27
Quality statement ...................................................................................................................................................................... 27

© NICE 2019. All rights reserved. Subject to Notice of rights (https://www.nice.org.uk/terms-and-conditions#notice-of-rights). Last updated August 2016
Quality statement 4: First intensification of blood glucose lowering therapy in type 2 diabetes ....31

Quality statement

Rationale ........................................................................................................................................................................... 31
Quality measures ................................................................................................................................................................27
What the quality statement means for service providers, healthcare professionals and commissioners .. 28
What the quality statement means for patients, service users and carers .......................................................... 29
Source guidance.............................................................................................................................................................. 29
Definitions of terms used in this quality statement ................................................................................................. 29
Equality and diversity considerations.......................................................................................................................... 30

Quality statement 5: Referral for adults at moderate or high risk of diabetic foot problems .................35

Quality statement

Rationale ........................................................................................................................................................................... 35
Quality measures ................................................................................................................................................................35
What the quality statement means for service providers, healthcare professionals and commissioners .. 36
What the quality statement means for patients, service users and carers ......................................................... 36
Source guidance.............................................................................................................................................................. 36
Definitions of terms used in this quality statement ................................................................................................. 36

Quality statement 6: Referral for urgent diabetic foot problems.................................................................38

Quality statement

Rationale ........................................................................................................................................................................... 38
Quality measures ................................................................................................................................................................38
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>What the quality statement means for service providers, healthcare</td>
<td>39</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>39</td>
</tr>
<tr>
<td>carers</td>
<td></td>
</tr>
<tr>
<td>Source guidance</td>
<td>40</td>
</tr>
<tr>
<td>Definitions of terms used in this quality statement</td>
<td>40</td>
</tr>
<tr>
<td>Quality statement 7: Inpatient care for adults with type 1 diabetes</td>
<td>42</td>
</tr>
<tr>
<td>Quality statement</td>
<td>42</td>
</tr>
<tr>
<td>Rationale</td>
<td>42</td>
</tr>
<tr>
<td>Quality measures</td>
<td>42</td>
</tr>
<tr>
<td>What the quality statement means for service providers, healthcare</td>
<td>43</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>43</td>
</tr>
<tr>
<td>carers</td>
<td></td>
</tr>
<tr>
<td>Source guidance</td>
<td>43</td>
</tr>
<tr>
<td>Definitions of terms used in this quality statement</td>
<td>44</td>
</tr>
<tr>
<td>Using the quality standard</td>
<td>45</td>
</tr>
<tr>
<td>Quality measures</td>
<td>45</td>
</tr>
<tr>
<td>Levels of achievement</td>
<td>45</td>
</tr>
<tr>
<td>Using other national guidance and policy documents</td>
<td>45</td>
</tr>
<tr>
<td>Diversity, equality and language</td>
<td>46</td>
</tr>
<tr>
<td>Development sources</td>
<td>47</td>
</tr>
<tr>
<td>Evidence sources</td>
<td>47</td>
</tr>
<tr>
<td>Policy context</td>
<td>47</td>
</tr>
<tr>
<td>Definitions and data sources for the quality measures</td>
<td>48</td>
</tr>
<tr>
<td>Related NICE quality standards</td>
<td>49</td>
</tr>
<tr>
<td>Published</td>
<td>49</td>
</tr>
<tr>
<td>Future quality standards</td>
<td>49</td>
</tr>
<tr>
<td>Quality standards advisory committee and NICE project team</td>
<td>50</td>
</tr>
<tr>
<td>Quality standards advisory committee</td>
<td>50</td>
</tr>
<tr>
<td>NICE project team</td>
<td>52</td>
</tr>
<tr>
<td>Update information</td>
<td>53</td>
</tr>
</tbody>
</table>
Introduction

This quality standard covers

- preventing type 2 diabetes in adults (18 years and older)
- structured education programmes for adults with diabetes
- care and treatment for adults with diabetes
- preventing and managing foot problems in adults with diabetes.

It does not cover diabetes in pregnancy or diabetes in children and young people (see related NICE quality standards).

For more information see the diabetes in adults topic overview.

This quality standard has been updated. It was identified for update after the annual review of quality standards in 2014. The review identified that there had been changes in the areas for improvement for diabetes in adults. For further information about the update, see update information. Statements from the 2011 quality standard that are no longer national priorities for improvement but are still underpinned by current accredited guidance are included after the updated statements in the list of quality statements.

Why this quality standard is needed

Diabetes is a condition resulting from loss of insulin-secreting cells (type 1 diabetes) or insulin resistance or insufficient pancreatic insulin production (type 2 diabetes). Diabetes is one of the most common chronic diseases in the UK and its prevalence is increasing. Around 3.5 million people in the UK have been diagnosed with diabetes, and an estimated 549,000 have diabetes but have not been diagnosed. It is estimated that 5 million people in the UK will have diabetes by 2025 (Diabetes: facts and stats Diabetes UK).
Many cases of type 2 diabetes are preventable through lifestyle changes. The NHS Diabetes Prevention Programme has been established to help people to reduce their risk of developing type 2 diabetes.

The life expectancy of people with diabetes is shortened by up to 15 years, and 75% die of macrovascular complications, such as heart attacks and strokes. Diabetes care is estimated to account for up to 10% of NHS expenditure\(^1\). Foot complications are common in people with diabetes. It is estimated that 10% of people with diabetes will have a diabetic foot ulcer at some point in their lives. The rate of amputations in England for people with diabetes was 26 per 10,000 people in 2011–2014, although there are wide variations across England (Putting feet first position statement Diabetes UK).

Multiple vascular risk factors and wide-ranging complications make care for people with diabetes complex and time-consuming, and many areas of healthcare services need to be involved for optimal management. Necessary lifestyle changes, the complexities of care and possible side effects of therapy mean that patient education and self-management are important aspects of diabetes care. The risk of complications is greatly reduced by treatment that keeps circulating glucose levels as near normal as possible, reducing tissue damage.

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

- incidence of type 2 diabetes
- control of blood glucose levels
- hypoglycaemia
- cardiovascular risk
- incidence of complications
- rates of ulceration, infection, complications and amputation of feet and lower limbs
- hospital admissions and readmissions
- quality of life
- life expectancy.
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 2016–17
- Public Health Outcomes Framework 2016–19

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 2016–17

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching indicators and improvement areas</th>
</tr>
</thead>
</table>
| 1 Preventing people from dying prematurely | **Overarching indicators**  
1a Potential Years of Life Lost (PYLL) from causes considered amenable to healthcare  
i Adults  
1b Life expectancy at 75  
i Males ii Females  
**Improvement areas**  
Reducing premature mortality from the major causes of death  
1.1 Under 75 mortality rate from cardiovascular disease* |
2 Enhancing quality of life for people with long-term conditions

<table>
<thead>
<tr>
<th>Overarching indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Health-related quality of life for people with long-term conditions**</td>
</tr>
</tbody>
</table>

**Improvement areas**

- Ensuring people feel supported to manage their condition
  - 2.1 Proportion of people feeling supported to manage their condition
- Improving functional ability in people with long-term conditions
  - 2.2 Employment of people with long-term conditions*
- **Improving quality of life for people with multiple long-term conditions**
- 2.7 *Health-related quality of life for people with three or more long-term conditions**

**Reducing time spent in hospital by people with long-term conditions**

- 2.3 i Unplanned hospitalisation for chronic ambulatory care sensitive conditions
  - ii Unplanned hospitalisation for asthma, diabetes and epilepsy in under 19s
- Enhancing quality of life for carers
  - 2.4 Health-related quality of life for carers**
### 3 Helping people to recover from episodes of ill health or following injury

**Overarching indicators**

- 3a Emergency admissions for acute conditions that should not usually require hospital admission
- 3b Emergency readmissions within 30 days of discharge from hospital*

**Improvement areas**

Improving outcomes from planned treatments

- 3.1 Total health gain as assessed by patients for elective procedures
  - i Physical health-related procedures

### 4 Ensuring that people have a positive experience of care

**Overarching indicators**

- 4a Patient experience of primary care
  - i GP services
- 4b Patient experience of hospital care
- 4c *Friends and family test*
- 4d *Patient experience characterised as poor or worse*
  - i Primary care
  - ii Hospital care

**Improvement areas**

Improving people's experience of outpatient care

- 4.1 Patient experience of outpatient services

Improving hospitals' responsiveness to personal needs

- 4.2 Responsiveness to inpatients' personal needs
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 Public Health Outcomes Framework for England, 2016–19**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Objectives and indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Improving the wider determinants of health</td>
<td><strong>Objective</strong>&lt;br&gt;Improvements against wider factors that affect health and wellbeing and health inequalities&lt;br&gt;<strong>Indicators</strong>&lt;br&gt;&lt;br&gt;1.08 Employment for those with long-term health conditions including adults with a learning disability or who are in contact with secondary mental health services* **&lt;br&gt;1.09 Sickness absence rate&lt;br&gt;1.16 Utilisation of outdoor space for exercise/health reasons</td>
</tr>
</tbody>
</table>
### 2 Health improvement

**Objective**
People are helped to live healthy lifestyles, make healthy choices and reduce health inequalities

**Indicators**
- 2.11 Diet
- 2.12 Excess weight in adults
- 2.13 Proportion of physically active and inactive adults
- 2.17 Estimated diagnosis rate for people with diabetes mellitus
- 2.22 Take up of the NHS Health Check programme – by those eligible
- 2.23 Self-reported well-being

### 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**
- 4.03 Mortality rate from causes considered preventable**
- 4.04 Under 75 mortality rate from all cardiovascular diseases (including heart disease and stroke)*
- 4.11 Emergency readmissions within 30 days of discharge from hospital*
- 4.12 Preventable sight loss
- 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

---

**Table 3** The Adult Social Care Outcomes Framework 2015–16

<table>
<thead>
<tr>
<th>Domain</th>
<th>Overarching and outcome measures</th>
</tr>
</thead>
</table>

© NICE 2019. All rights reserved. Subject to Notice of rights (https://www.nice.org.uk/terms-and-conditions#notice-of-rights). Last updated August 2016
| 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 they 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**  
People are able to find employment when they want, maintain a family and social life and contribute to community life, and avoid loneliness or isolation  
1I Proportion of people who use services and their carers, who reported that they had as much social contact as they would like |
| 2 Delaying and reducing the need for care and support | **Overarching measure**  
2A Permanent admissions to residential and nursing care homes, per 100,000 population  
**Outcome measures**  
Everybody has the opportunity to have the best health and wellbeing throughout their life, and can access support and information to help them manage their care needs  
Earlier diagnosis, intervention and reablement means that people and their carers are less dependent on intensive services  
2B Proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into reablement/rehabilitation services*  
2D The outcomes of short-term services: sequel to service  
*Placeholder 2E The effectiveness of reablement services
### 3 Ensuring that people have a positive experience of care and support

**Overarching measure**
People who use social care and their carers are satisfied with their experience of care and support services

3A Overall satisfaction of people who use services with their care and support

**Outcome measures**

- Carers feel that they are respected as equal partners throughout the care process
- 3C The proportion of carers who report that they have been included or consulted in discussions about the person they care for
- People know what choices are available to them locally, what they are entitled to, and who to contact when they need help
- 3D The proportion of people who use services and carers who find it easy to find information about support

People, including those involved in making decisions on social care, respect the dignity of the individual and ensure support is sensitive to the circumstances of each individual

This information can be taken from the Adult Social Care Survey and used for analysis at the local level.

### 4 Safeguarding adults whose circumstances make them vulnerable and protecting from avoidable harm

**Overarching measure**
4A The proportion of people who use services who feel safe**

**Outcome measures**

- Everyone enjoys physical safety and feels secure
- People are protected as far as possible from avoidable harm, disease and injuries
- People are supported to plan ahead and have the freedom to manage risks the way that they wish
**Alignment with NHS Outcomes Framework and/or Public Health Outcomes Framework**

* Indicator is shared  
** Indicator is complementary  
Indicators in italics in development

---

**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 diabetes.

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 people's experience of using services and are specific to the topic are considered during quality statement development.

**Coordinated services**

The quality standard for diabetes in adults specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole diabetes care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to adults with diabetes.

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 diabetes service are listed in related NICE quality standards.
Resource impact considerations

NICE quality standards should be achievable by local services. The potential resource impact is considered by the quality standards advisory committee, drawing on resource impact work for the source guidance. Organisations are encouraged to use the resource impact products for the source guidance to help estimate local costs.

- costing report and template for the NICE guideline on type 2 diabetes: prevention in people at high risk
- costing report and template for the NICE guideline on type 1 diabetes in adults: diagnosis and management
- costing report and template for the NICE guideline on diabetic foot problems: prevention and management
- resource impact report for the NICE guideline on type 2 diabetes in adults: management.

Training and competencies

The quality standard should be read in the context of national and local guidelines on training and competencies. All health, public health and social care practitioners involved in assessing, caring for and treating adults with diabetes 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. However, recommendations in the development sources on specific types of training for the topic that exceed standard professional training are considered during quality statement development.

Role of families and carers

Quality standards recognise the important role families and carers have in supporting adults with diabetes. If appropriate, health, public health and social care practitioners 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 Adults at high risk of type 2 diabetes are offered a referral to an intensive lifestyle-change programme. [new 2016]

Statement 2 Adults with type 2 diabetes are offered a structured education programme at diagnosis. [2011, updated 2016]

Statement 3 Adults with type 1 diabetes are offered a structured education programme 6–12 months after diagnosis. [2011, updated 2016]

Statement 4 Adults with type 2 diabetes whose HbA1c level is 58 mmol/mol (7.5%) or above after 6 months with single-drug treatment are offered dual therapy. [new 2016]

Statement 5 Adults at moderate or high risk of developing a diabetic foot problem are referred to the foot protection service. [2011, updated 2016]

Statement 6 Adults with a limb-threatening or life-threatening diabetic foot problem are referred immediately for specialist assessment and treatment. [2011, updated 2016]

Statement 7 Adults with type 1 diabetes in hospital receive advice from a multidisciplinary team with expertise in diabetes. [2011, updated 2016]

In 2016 this quality standard was updated and statements prioritised in 2011 were updated (2011, updated 2016) or replaced (new 2016). For more information, see update information.

Statements from the 2011 quality standard for diabetes in adults that may still be useful at a local level, but are no longer considered national priorities for improvement:

- People with diabetes receive personalised advice on nutrition and physical activity from an appropriately trained healthcare professional or as part of a structured educational programme.

- People with diabetes participate in annual care planning which leads to documented agreed goals and an action plan.

- People with diabetes agree with their healthcare professional a documented personalised HbA1c target, and receive an ongoing review of treatment to minimise hypoglycaemia.
People with diabetes agree with their healthcare professional to start, review and stop medications to lower blood glucose, blood pressure and blood lipids in accordance with NICE guidance.

Trained healthcare professionals initiate and manage therapy with insulin within a structured programme that includes dose titration by the person with diabetes.

Women of childbearing age with diabetes are regularly informed of the benefits of preconception glycaemic control and of any risks, including medication that may harm an unborn child. Women with diabetes planning a pregnancy are offered preconception care and those not planning a pregnancy are offered advice on contraception.

People with diabetes receive an annual assessment for the risk and presence of the complications of diabetes, and these are managed appropriately.

People with diabetes are assessed for psychological problems, which are then managed appropriately.

People with diabetes with an active foot problem that is not limb-threatening or life-threatening are referred to the multidisciplinary foot care service or foot protection service within 1 working day and triaged with 1 further working day.

People admitted to hospital with diabetic ketoacidosis receive educational and psychological support prior to discharge and are followed up by a specialist diabetes team.

People with diabetes who have experienced hypoglycaemia requiring medical attention are referred to a specialist diabetes team.

The 2011 quality standard for diabetes in adults is available as a pdf.
Quality statement 1: Preventing type 2 diabetes

Quality statement

Adults at high risk of type 2 diabetes are offered a referral to an intensive lifestyle-change programme. [new 2016]

Rationale

Many cases of type 2 diabetes are preventable through changes to a person's diet and physical activity levels. Evidence-based intensive lifestyle-change programmes can significantly reduce the risk of developing the condition for those at high risk.

Quality measures

Structure

Evidence of local arrangements to ensure that adults at high risk of type 2 diabetes are offered a referral to an intensive lifestyle-change programme.

Data source: Local data collection.

Process

a) Proportion of adults at high risk of type 2 diabetes who are referred to an intensive lifestyle-change programme.

Numerator – the number in the denominator who are referred to an intensive lifestyle-change programme.

Denominator – the number of adults at high risk of type 2 diabetes.

Data source: Local data collection.

b) Proportion of adults at high risk of type 2 diabetes who attend an intensive lifestyle-change programme after a referral.

Numerator – the number in the denominator who attend an intensive lifestyle-change programme.
Denominator – the number of adults at high risk of type 2 diabetes who are referred to an intensive lifestyle-change programme.

*Data source:* Local data collection.

**Outcome**

a) Weight loss of participants in intensive lifestyle-change programmes.

*Data source:* Local data collection.

b) Incidence of type 2 diabetes in adults.

*Data source:* Local data collection.

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

**Service providers** (such as local authorities who provide the NHS Health Check programme) ensure that systems are in place for adults at high risk of type 2 diabetes to be offered a referral to an intensive lifestyle-change programme.

**Health and public health practitioners** (such as those carrying out diabetes risk assessments and other health checks, GPs and pharmacists) ensure that they offer adults at high risk of type 2 diabetes a referral to an intensive lifestyle-change programme.

**Commissioners** (such as local authorities and NHS England) ensure that they commission services in which adults at high risk of type 2 diabetes are offered a referral to an intensive lifestyle-change programme.

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

**Adults** who have been told they are at high risk of getting type 2 diabetes are offered a referral to a programme that will help them to change their lifestyle (for example, by become more physically active and improving their diet) and so reduce their risk.
Source guidance

- Type 2 diabetes: prevention in people at high risk (2012) NICE guideline PH38, recommendation 5

Definitions of terms used in this quality statement

High risk of type 2 diabetes

A fasting plasma glucose level of 5.5–6.9 mmol/litre or an HbA1c level of 42–47 mmol/mol (6.0–6.4%) indicates that a person is at high risk of type 2 diabetes.

Fasting plasma glucose or HbA1c tests should be offered to adults with high risk scores from a validated computer-based risk-assessment tool or a validated self-assessment questionnaire. A blood test should also be considered for those aged 25 and over of South Asian or Chinese descent whose BMI is greater than 23 kg/m².

[Introduced from NICE’s guideline on Type 2 diabetes: prevention in people at high risk, recommendations 4 and 5]

Intensive lifestyle-change programme

A structured and coordinated range of interventions provided in different venues for people identified as being at high risk of developing type 2 diabetes. It should be local, evidence-based and quality-assured. The aim is to help people to become more physically active and improve their diet. If the person is overweight or obese, the programme should result in weight loss. Programmes may be delivered to individuals or groups (or involve a mix of both) depending on the resources available. They can be provided by primary care teams and public, private or community organisations with expertise in dietary advice, weight management and physical activity.

An example is the NHS Diabetes Prevention Programme.

[Introduced from NICE’s guideline on Type 2 diabetes: prevention in people at high risk, recommendation 5 and glossary]

Equality and diversity considerations

Information should be provided in an accessible format (particularly for people with physical, sensory or learning disabilities and those who do not speak or read English) and educational
materials should be translated if needed.

Programmes should be offered at times, and in locations, that meet the needs of groups such as older people, people from minority ethnic backgrounds and vulnerable or socially disadvantaged people. Provision should also be made for people who may have difficulty accessing services in conventional healthcare venues.
Quality statement 2: Structured education programmes for adults with type 2 diabetes

Quality statement

Adults with type 2 diabetes are offered a structured education programme at diagnosis. [2011, updated 2016]

Rationale

Type 2 diabetes is a progressive long-term medical condition that the person predominantly self-manages. Managing type 2 diabetes involves lifestyle changes, and treatment can be complex. Structured education programmes can help adults with type 2 diabetes to improve their knowledge and skills and also help to motivate them to take control of their condition and self-manage it effectively.

Quality measures

Structure

Evidence of local arrangements to ensure that adults with type 2 diabetes are referred for a structured education programme at diagnosis.

Data source: Local data collection.

Process

a) Proportion of adults with type 2 diabetes who are referred for a structured education programme at diagnosis.

Numerator – the number in the denominator who are referred for a structured education programme at diagnosis.

Denominator – the number of adults newly diagnosed with type 2 diabetes.

Data source: Local data collection. National data are collected in the Quality and Outcomes Framework indicator DM014 and the National Diabetes Audit.
b) Proportion of adults with type 2 diabetes who attend a structured education programme after a referral.

Numerator – the number in the denominator who attend a structured education programme.

Denominator – the number of adults with type 2 diabetes who are referred for a structured education programme at diagnosis.

**Data source:** Local data collection. National data are collected in the National Diabetes Audit.

c) Proportion of adults with type 2 diabetes who complete a structured education programme.

Numerator – the number in the denominator who complete a structured education programme.

Denominator – the number of adults with type 2 diabetes who attend a structured education programme.

**Data source:** Local data collection.

**Outcome**

Patient satisfaction with ability to self-manage their type 2 diabetes after attending a structured education programme.

**Data source:** Local data collection.

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

**Service providers** (such as GPs and community healthcare providers) ensure that systems are in place for adults with type 2 diabetes to be offered a structured education programme at diagnosis.

**Healthcare professionals** (such as GPs, practice nurses and community healthcare providers) ensure that they offer a structured education programme to adults with type 2 diabetes at diagnosis.

**Commissioners** (clinical commissioning groups and NHS England) ensure that they commission structured education programmes for adults with type 2 diabetes.
What the quality statement means for patients, service users and carers

Adults with type 2 diabetes are offered a course to help them improve their understanding of type 2 diabetes and how to manage it in their everyday life. This course should be offered at the time of diagnosis.

Source guidance

- Type 2 diabetes in adults: management (2015) NICE guideline NG28, recommendation 1.2.1 (key priority for implementation)

Definitions of terms used in this quality statement

Structured education programme

Should include the following components:

- It is evidence-based, and suits the needs of the person.
- It has specific aims and learning objectives, and supports the person and their family members and carers in developing attitudes, beliefs, knowledge and skills to self-manage diabetes.
- It has a structured curriculum that is theory-driven, evidence-based and resource-effective, has supporting materials, and is written down.
- It is delivered by trained educators who have an understanding of educational theory appropriate to the age and needs of the person, and who are trained and competent to deliver the principles and content of the programme.
- It is quality assured, and reviewed by trained, competent, independent assessors who measure it against criteria that ensure consistency.
- The outcomes are audited regularly.

Further information on these components can be found in the Department of Health's Structured patient education in diabetes: report from the Patient Education Working Group.

Information given to adults with type 2 diabetes should cover aspects of lifestyle modification that may be necessary, such as dietary advice, and weight loss for adults who are overweight.

[Adapted from NICE's guideline on Type 2 diabetes in adults: management, recommendations]
1.2.2, 1.3.2 and 1.3.4, and expert opinion]

Equality and diversity considerations

Structured education programmes should meet the cultural, linguistic, cognitive and literacy needs in the local area. Information should be provided in an accessible format (particularly for people with physical, sensory or learning disabilities and those who do not speak or read English) and educational materials should be translated if needed.

Alternative programmes of equal standard should be made available for people unable to participate in group education.
Quality statement 3: Structured education programmes for adults with type 1 diabetes

Quality statement

Adults with type 1 diabetes are offered a structured education programme 6–12 months after diagnosis. [2011, updated 2016]

Rationale

Adults with type 1 diabetes need to acquire a large range of new skills and knowledge, such as how to manage their insulin therapy. Patient education enables self-management, which is important in diabetes management. It allows adults with type 1 diabetes to adapt their diabetes management to changes in their daily lives and to maintain a good quality of life. The first few months after diagnosis involve considerable adjustment, so although information should be given from diagnosis, a more intensive structured education programme will be more beneficial 6–12 months after diagnosis.

Quality measures

Structure

Evidence of local arrangements to ensure that adults with type 1 diabetes are referred for a structured education programme 6–12 months after diagnosis.

Data source: Local data collection.

Process

a) Proportion of adults with type 1 diabetes who are referred for a structured education programme 6–12 months after diagnosis.

Numerator – the number in the denominator who are referred for a structured education programme 6–12 months after diagnosis.

Denominator – the number of adults diagnosed with type 1 diabetes in the last 12 months.

Data source: Local data collection. National data are collected in the Quality and Outcomes
Framework indicator DM014 and the National Diabetes Audit.

b) Proportion of adults with type 1 diabetes who attend a structured education programme after a referral.

Numerator – the number in the denominator who attend a structured education programme.

Denominator – the number of adults with type 1 diabetes who are referred for a structured education programme.

**Data source:** Local data collection. National data are collected in the National Diabetes Audit.

c) Proportion of adults with type 1 diabetes who complete a structured education programme.

Numerator – the number in the denominator who complete a structured education programme.

Denominator – the number of adults with type 1 diabetes who attend a structured education programme.

**Data source:** Local data collection.

**Outcome**

Patient satisfaction with ability to self-manage their type 1 diabetes after attending a structured education programme.

**Data source:** Local data collection.

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

**Service providers** (such as GPs and secondary care providers) ensure that systems are in place for adults with type 1 diabetes to be offered a structured education programme 6–12 months after diagnosis.

**Healthcare professionals** (such as GPs, diabetologists and diabetes specialist nurses) ensure that they offer a structured education programme to adults with type 1 diabetes 6–12 months after diagnosis.
Commissioners (clinical commissioning groups) ensure that they commission structured education programmes for adults with type 1 diabetes.

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

Adults with type 1 diabetes are offered a course to help them improve their understanding of type 1 diabetes and how to manage it in their everyday life. This should cover checking their blood glucose levels, using insulin and advice about having a healthy lifestyle. The course should be offered between 6 months and a year after they are diagnosed.

**Source guidance**

- [Type 1 diabetes in adults: diagnosis and management](https://www.nice.org.uk/guidance/ng17) (2015) NICE guideline NG17, recommendation 1.3.1 (key priority for implementation)

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

**Structured education programme**

Should include the following components:

- It is evidence-based, and suits the needs of the person.
- It has specific aims and learning objectives, and supports the person and their family members and carers in developing attitudes, beliefs, knowledge and skills to self-manage diabetes.
- It has a structured curriculum that is theory-driven, evidence-based and resource-effective, has supporting materials, and is written down.
- It is delivered by trained educators who have an understanding of educational theory appropriate to the age and needs of the person, and who are trained and competent to deliver the principles and content of the programme.
- It is quality assured, and reviewed by trained, competent, independent assessors who measure it against criteria that ensure consistency.
- The outcomes are audited regularly.

An example is the DAFNE (dose-adjustment for normal eating) programme.

[Adapted from NICE’s guideline on Type 1 diabetes in adults: diagnosis and management, recommendations 1.3.1 and 1.3.4]

**Equality and diversity considerations**

Structured education programmes should meet the cultural, linguistic, cognitive and literacy needs in the local area. Information should be provided in an accessible format (particularly for people with physical, sensory or learning disabilities and those who do not speak or read English) and educational materials should be translated if needed.

Alternative programmes of equal standard should be made available for people unable to participate in group education.
Quality statement 4: First intensification of blood glucose lowering therapy in type 2 diabetes

Quality statement

Adults with type 2 diabetes whose HbA1c level is 58 mmol/mol (7.5%) or above after 6 months with single-drug treatment are offered dual therapy. [new 2016]

Rationale

Good blood glucose control in people with type 2 diabetes is important for mitigating the risk of microvascular and macrovascular complications associated with hyperglycaemia, such as damage to the eyes, kidneys and nerves. If HbA1c levels are not well controlled with single-drug treatment, it is important to offer intensification of drug treatment, as well as reinforcing advice about diet, lifestyle and adherence to drug treatment and supporting the person to aim for an HbA1c level of 53 mmol/mol (7.0%). A timescale of 6 months allows time to improve diet, lifestyle and adherence to drug treatment, while also ensuring that first intensification is not unnecessarily delayed. Timely first intensification can delay the need for second intensification, which may involve insulin therapy.

Quality measures

Structure

Evidence of local arrangements to ensure that adults with type 2 diabetes are offered dual therapy if their HbA1c level is 58 mmol/mol (7.5%) or above after 6 months with single-drug treatment.

Data source: Local data collection.

Process

Proportion of adults with type 2 diabetes who are started on dual therapy when their HbA1c level is 58 mmol/mol (7.5%) or above after 6 months with single-drug treatment.

Numerator – the number in the denominator who are started on dual therapy.

Denominator – the number of adults with type 2 diabetes whose HbA1c level is 58 mmol/mol (7.5%) or above after 6 months with single-drug treatment.
Data source: Local data collection.

Outcome

a) Adults with type 2 diabetes feel supported to aim for an HbA1c level of 53 mmol/mol (7.0%) or less.

Data source: Local data collection.

b) Incidence of diabetes-related complications.

Data source: Local data collection. National data are collected in the National Diabetes Audit.

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

Service providers (such as GPs and community healthcare providers) ensure that processes are in place so that adults with type 2 diabetes whose HbA1c level is 58 mmol/mol (7.5%) or above after 6 months with single-drug treatment are offered dual therapy.

Healthcare professionals (such as GPs, practice nurses and community healthcare providers) ensure that they offer dual therapy to adults with type 2 diabetes whose HbA1c level is 58 mmol/mol (7.5%) or above after 6 months with single-drug treatment. They also reinforce advice about diet, lifestyle and adherence to treatment.

Commissioners (clinical commissioning groups and NHS England) ensure that they commission services in which adults with type 2 diabetes whose HbA1c level is 58 mmol/mol (7.5%) or above after 6 months with single-drug treatment are offered dual therapy.

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

Adults with type 2 diabetes who need medication to control their blood glucose levels usually start off by taking a single medicine. If after 6 months this first medicine doesn't help or their diabetes gets worse over time, despite advice about diet, lifestyle and taking the medicine properly, they are offered another type of medicine as well as the one they already take.
Definitions of terms used in this quality statement

Dual therapy

Consider dual therapy with:

- metformin and a DPP-4 inhibitor or
- metformin and pioglitazone[^1] or
- metformin and a sulfonylurea.

If metformin is contraindicated or not tolerated, consider dual therapy[^1] with

- a DPP-4 inhibitor and pioglitazone[^1] or
- a DPP-4 inhibitor and a sulfonylurea or
- pioglitazone[^1] and a sulfonylurea.

Treatment with combinations of medicines including sodium–glucose cotransporter 2 (SGLT-2) inhibitors may be appropriate for some people with type 2 diabetes; see the NICE guidance on canagliflozin in combination therapy for treating type 2 diabetes, dapagliflozin in combination therapy for treating type 2 diabetes and empagliflozin in combination therapy for treating type 2 diabetes.

[^1]: Adapted from NICE’s guideline on Type 2 diabetes in adults: management, recommendations 1.6.25 and 1.6.26

Equality and diversity considerations

An individualised approach to diabetes care should be taken that is tailored to the needs and circumstances of each adult with type 2 diabetes. The target HbA1c level may need to be relaxed on a case-by-case basis. Examples include adults who have a reduced life expectancy, adults for whom tight blood glucose control poses a high risk of the consequences of hypoglycaemia and adults with significant comorbidities for whom intensive management would not be appropriate.
Particular consideration should be given for people who are older or frail.

[1] When prescribing pioglitazone, exercise particular caution if the person is at high risk of the adverse effects of the drug. Pioglitazone is associated with an increased risk of heart failure, bladder cancer and bone fracture. Known risk factors for these conditions, including increased age, should be carefully evaluated before treatment: see the manufacturers' summaries of product characteristics for details. Medicines and Healthcare products Regulatory Agency (MHRA) guidance (2011) advises that 'prescribers should review the safety and efficacy of pioglitazone in individuals after 3–6 months of treatment to ensure that only patients who are deriving benefit continue to be treated'.

[3] Be aware that the drugs in dual therapy should be introduced in a stepwise manner, checking for tolerability and effectiveness of each drug.
Quality statement 5: Referral for adults at moderate or high risk of diabetic foot problems

**Quality statement**

Adults at moderate or high risk of developing a diabetic foot problem are referred to the foot protection service. [2011, updated 2016]

**Rationale**

Referring people at moderate or high risk of developing a diabetic foot problem to the foot protection service allows their feet to be assessed at an early stage and then reassessed at regular intervals. This can reduce the likelihood of them getting foot ulcers or other foot problems.

**Quality measures**

**Structure**

Evidence of local arrangements to ensure that adults at moderate or high risk of developing a diabetic foot problem are referred to the foot protection service.

*Data source:* Local data collection. Contained in the National Diabetes Foot Care Audit.

**Process**

Proportion of adults at moderate or high risk of developing a diabetic foot problem who are referred to the foot protection service.

Numerator – the number in the denominator who are referred to the foot protection service.

Denominator – the number of adults at moderate or high risk of developing a diabetic foot problem.

*Data source:* Local data collection.

**Outcome**

Incidence of foot and lower limb amputations in people with diabetes.

*Data source:* The National Diabetes Audit collects information on minor and major amputations in
people with diabetes.

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

**Service providers** (such as GPs and community services) ensure that adults at moderate or high risk of developing a diabetic foot problem are referred to the foot protection service.

**Healthcare professionals** (such as podiatrists, GPs, practice nurses and district nurses) ensure that they refer adults at moderate or high risk of developing a diabetic foot problem to the foot protection service.

**Commissioners** (clinical commissioning groups and NHS England) ensure that they commission services in which adults at moderate or high risk of developing a diabetic foot problem are referred to the foot protection service.

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

**Adults with diabetes** have regular foot checks, and if a check shows that they have a moderate or high risk of having a foot problem related to their diabetes, they are referred to see another healthcare professional in the foot protection service.

**Source guidance**

- Diabetic foot problems: prevention and management (2015) NICE guideline NG19, recommendation 1.3.8 (key priority for implementation)

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

**Moderate or high risk of developing a diabetic foot problem**

Assess the person's current risk of developing a diabetic foot problem or needing an amputation using the following risk stratification:

- Moderate risk:
  - deformity or
  - neuropathy or
- non-critical limb ischaemia.

- High risk:
  - previous ulceration or
  - previous amputation or
  - on renal replacement therapy or
  - neuropathy and non-critical limb ischaemia together or
  - neuropathy in combination with callus and/or deformity or
  - non-critical limb ischaemia in combination with callus and/or deformity.

[Adapted from NICE's guideline on Diabetic foot problems: prevention and management, recommendation 1.3.6]

Foot protection service

A service for preventing diabetic foot problems, and for treating and managing them in the community. It should be led by a podiatrist with specialist training in diabetic foot problems and have access to healthcare professionals with skills in:

- diabetology
- biomechanics and orthoses
- wound care.

[Adapted from NICE's guideline on Diabetic foot problems: prevention and management, recommendations 1.2.1 and 1.2.2]
Quality statement 6: Referral for urgent diabetic foot problems

Quality statement

Adults with a limb-threatening or life-threatening diabetic foot problem are referred immediately for specialist assessment and treatment. [2011, updated 2016]

Rationale

Rapid referral to specialist services for adults with a limb-threatening or life-threatening diabetic foot problem, so that they can be assessed and an individualised treatment plan put in place, can reduce the risk of amputation and death.

Quality measures

Structure

Evidence of local arrangements to ensure that adults with a limb-threatening or life-threatening diabetic foot problem are referred immediately for specialist assessment and treatment.

Data source: Local data collection.

Process

a) Proportion of presentations of limb-threatening or life-threatening diabetic foot problems that are referred immediately for specialist assessment and treatment.

Numerator – the number in the denominator that are referred immediately for specialist assessment and treatment.

Denominator – the number of presentations of limb-threatening or life-threatening diabetic foot problems.

Data source: Local data collection.

b) Proportion of presentations of limb-threatening or life-threatening diabetic foot problems in which the multidisciplinary foot care service is informed.

Numerator – the number in the denominator in which the multidisciplinary foot care service is informed.
Denominator – the number of presentations of limb-threatening or life-threatening diabetic foot problems.

**Data source:** Local data collection.

**Outcome**

Incidence of foot and lower limb amputations in people with diabetes.

**Data source:** The National Diabetes Audit collects information on minor and major amputations in people with diabetes.

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

**Service providers** (such as foot protection services, GPs and community services) ensure that systems are in place so that adults with a limb-threatening or life-threatening diabetic foot problem are referred immediately for specialist assessment and treatment, and the multidisciplinary foot care service is informed.

**Health and social care practitioners** (such as podiatrists, GPs, practice nurses and district nurses) ensure that they refer adults with a limb-threatening or life-threatening diabetic foot problem immediately for specialist assessment and treatment, and inform the multidisciplinary foot care service.

**Commissioners** (clinical commissioning groups and NHS England) ensure that they commission services in which adults with a limb-threatening or life-threatening diabetic foot problem are referred immediately for specialist assessment and treatment, and the multidisciplinary foot care service is informed.

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

**Adults with diabetes** who have a serious foot problem are sent to hospital immediately, so that they can be assessed and treated straight away. Serious foot problems are those that might result in amputation or even death, and include a diabetic foot ulcer with a fever or any other symptoms of blood poisoning (the medical name for this is sepsis), a problem with the blood supply to the foot,
gangrene, or a severe foot or bone infection.

**Source guidance**

- [Diabetic foot problems: prevention and management](https://www.nice.org.uk/guidance/ng19) (2015) NICE guideline NG19, recommendation 1.4.1 (key priority for implementation)

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

**Limb-threatening or life-threatening diabetic foot problem**

Limb-threatening and life-threatening diabetic foot problems include:

- ulceration with fever or any signs of sepsis
- ulceration with limb ischaemia (see the NICE guideline on [lower limb peripheral arterial disease](https://www.nice.org.uk/guidance/qs49))
- clinical concern that there is a deep-seated soft tissue or bone infection (with or without ulceration)
- gangrene (with or without ulceration).

[Adapted from NICE’s guideline on [Diabetic foot problems: prevention and management](https://www.nice.org.uk/guidance/ng19), recommendation 1.4.1]

**Specialist assessment and treatment**

The specialist service should be the multidisciplinary foot care service wherever possible. However, if the multidisciplinary foot care service is not available (for example, if the person presents out of hours) then, in order to avoid any delay in treatment, the person should be referred immediately to acute services and the multidisciplinary foot care service informed.

The multidisciplinary foot care service should be led by a named healthcare professional, and consist of specialists with skills in the following areas:

- diabetology
- podiatry
- diabetes specialist nursing
vascular surgery
microbiology
orthopaedic surgery
biomechanics and orthoses
interventional radiology
casting
wound care.

The multidisciplinary foot care service should have access to rehabilitation services, plastic surgery, psychological services and nutritional services.

[Adapted from NICE's guideline on Diabetic foot problems: prevention and management, recommendations 1.2.3 and 1.2.4, and expert opinion]
Quality statement 7: Inpatient care for adults with type 1 diabetes

Quality statement

Adults with type 1 diabetes in hospital receive advice from a multidisciplinary team with expertise in diabetes. [2011, updated 2016]

Rationale

Adults with type 1 diabetes may be admitted to hospital for diabetes-related or unrelated conditions. This can disturb normal routines, affecting carbohydrate intake and insulin therapy, and special regimens may be needed in response to procedures that affect the usual management of diabetes. The person’s expertise in managing their own diabetes should be respected, and the specialist multidisciplinary team has the knowledge to help the person understand how to best to adapt management when in hospital. The person should be supported to continue to self-manage their diabetes and administer their own insulin if they are willing and able and it is safe for them to do so. Input from a multidisciplinary specialist team can reduce the length of hospital stay for adults with type 1 diabetes and improve their experience of hospital.

Quality measures

Structure

Evidence of local arrangements to ensure that adults with type 1 diabetes in hospital receive advice from a multidisciplinary team with expertise in diabetes.

Data source: Local data collection.

Process

Proportion of hospital admissions for adults with type 1 diabetes in which they receive advice from a multidisciplinary team with expertise in diabetes.

Numerator – the number in the denominator in which the person receives advice from a multidisciplinary team with expertise in diabetes.

Denominator – the number of hospital admissions for adults with type 1 diabetes.

Data source: Local data collection. Contained in the National Diabetes Inpatient Audit.
Outcome

a) Length of hospital stay.

*Data source:* Local data collection.

b) Patient satisfaction that staff met their diabetes needs while in hospital.

*Data source:* Local data collection. Contained in the National Diabetes Inpatient Audit.

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

**Service providers** (hospitals) ensure that adults with type 1 diabetes in hospital receive advice from a multidisciplinary team with expertise in diabetes.

**Healthcare professionals** (members of the multidisciplinary team) ensure that they provide advice to adults with type 1 diabetes who are in hospital, and enable them to continue to administer their own insulin if they are willing and able and it is safe for them to do so.

**Commissioners** (clinical commissioning groups) ensure that they commission services in which adults with type 1 diabetes in hospital receive advice from a multidisciplinary team with expertise in diabetes.

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

**Adults with type 1 diabetes** who go into hospital if they are ill or need an operation get advice from a team of specialists in diabetes, who will respect their expertise in managing their own diabetes. They are supported to carry on injecting their own insulin if they want to and can do so safely, although sometimes intravenous insulin will be needed instead (for example, if they can't eat or are having an operation that affects blood glucose levels).

*Source guidance*

Definitions of terms used in this quality statement

Multidisciplinary team with expertise in diabetes

The basic structure of a specialist inpatient diabetes team should comprise:

- for every 300 beds, at least 1 diabetes inpatient specialist nurse whose focus is predominantly on inpatient care
- a consultant specialist in diabetes management.

There should also be access to a diabetes specialist:

- podiatrist
- dietitian.

[Adapted from Commissioning specialist diabetes services for adults with diabetes: a Diabetes UK task and finish group report (2010)]
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. 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. This tool is updated monthly to include new quality standards.

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 adults with diabetes is essential. Treatment, care and support, and the information given about it, should be 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. Adults with diabetes 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.

- Type 2 diabetes in adults: management (2015) NICE guideline NG28
- Diabetic foot problems: prevention and management (2015) NICE guideline NG19
- Type 1 diabetes in adults: diagnosis and management (2015) NICE guideline NG17
- Type 2 diabetes: prevention in people at high risk (2012) NICE guideline PH38
- Type 2 diabetes prevention: population and community-level interventions (2011) NICE guideline PH35

Policy context

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

- Public Health England (2014) Adult obesity and type 2 diabetes
- Department of Health (2011) Assessment of services to reduce diabetes-related mortality
Definitions and data sources for the quality measures

- Health and Social Care Information Centre (2016) National diabetes audit
- Health and Social Care Information Centre (2016) National diabetes foot care audit
- NHS Employers (2015) Quality and outcomes framework
- Health and Social Care Information Centre (2014) National diabetes inpatient audit
Related NICE quality standards

Published

- Diabetes in children and young people (2016) NICE quality standard 125
- Medicines optimisation (2016) NICE quality standard 120
- Obesity in adults: prevention and lifestyle weight management programmes (2016) NICE quality standard 111
- Diabetes in pregnancy (2016) NICE quality standard 109
- Cardiovascular risk assessment and lipid modification (2015) NICE quality standard 100
- Peripheral arterial disease (2014) NICE quality standard 52
- Hypertension (2013) NICE quality standard 28
- Patient experience in adult NHS services (2012) NICE quality standard 15
- Chronic heart failure in adults (2011) NICE quality standard 9
- Chronic kidney disease in adults (2011) NICE quality standard 5

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:

- Long-term conditions, people with comorbidities, complex needs
- Preventing sight loss

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 2. Membership of this committee is as follows:

Mr Barry Attwood
Lay member

Professor Gillian Baird
Consultant Developmental Paediatrician, Guys and St Thomas NHS Foundation Trust, London

Dr Ashok Bohra
Consultant Surgeon, Royal Derby Hospital

Dr Guy Bradley-Smith
Freelance GP and Clinical Commissioning Lead for Learning Disability, North, East and West (NEW) Devon Clinical Commissioning Group

Mrs Julie Clatworthy
Governing Body Nurse, Gloucester Clinical Commissioning Group

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

Mr Michael Fairbairn
Quality Manager, NHS Improvement

Mrs Jean Gaffin
Lay member

Dr Anjan Ghosh

Mr Jim Greer
Principal Lecturer, Teesside University

© NICE 2019. All rights reserved. Subject to Notice of rights (https://www.nice.org.uk/terms-and-conditions#notice-of-rights). Last updated August 2016
Mr Malcolm Griffiths  
Consultant Obstetrician and Gynaecologist, Luton and Dunstable University Hospital NHS Foundation Trust

Dr Ulrike Harrower  
Consultant in Public Health Medicine, NHS Somerset

Mr Gavin Lavery  
Clinical Director, Public Health Agency

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

Ms Robyn Noonan  
Area Service Manager Learning Disability, Oxfordshire County Council

Dr Michael Rudolf (Chair)  
Hon. Consultant Physician, London North West Healthcare NHS Trust

Dr Anita Sharma  
GP and Clinical Director of Vascular and Medicine Optimisation, Oldham Clinical Commissioning Group

Dr Amanda Smith  
Director of Therapies and Health Service, Powys Teaching Health Board

Ms Ruth Studley  
Director of Strategy and Development, Healthcare Inspectorate Wales

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

Mr Arthur Durrant  
Lay member

Mr Laurie King  
Clinical Lead Podiatrist, Oxford Centre for Diabetes, Endocrinology and Metabolism

Dr Ian Lewin
Honorary Consultant Endocrinologist, North Devon District Hospital

Dr Kevin Shotliff
Consultant Physician, Chelsea and Westminster Hospital

Dr Vinesh Sobha
GP with special interest in diabetes, The Village Practice, Thornton-Cleveleys

Miss Lucy Turnbull
Clinical Lead Dietician, Central London Community NHS Trust

Ms Perdy Van Den Berg
Clinical Lead, Oxfordshire Community Diabetes Service

NICE project team

Nick Baillie
Associate Director

Alison Tariq
Senior Technical Analyst

Kirsty Pitt
Lead Technical Analyst

Esther Clifford
Programme Manager

Jenny Mills
Project Manager

Nicola Cunliffe
Coordinator
Update information

August 2016: This quality standard was updated and statements prioritised in 2011 were replaced.

Statements are marked as [new 2016] or [2011, updated 2016]:

- [new 2016] if the statement covers a new area for quality improvement
- [2011, updated 2016] if the statement covers an area for quality improvement included in the 2011 quality standard and has been updated.

Statements numbered 1, 10, 11 and 13 in the 2011 version have been updated and included in the updated quality standard, marked as [2011, updated 2016] (statement 1 from the 2011 standard has been updated into 2 statements in the 2016 standard [statements 2 and 3]).

Statements from the 2011 version (numbered 2, 3, 4, 5, 6, 7, 8, 9, 12, 14 and 15) that are no longer considered national priorities for improvement but may still be useful at a local level are included after the updated statements in the list of quality statements section.

The 2010 quality standard for diabetes in adults is available as a pdf.

Minor changes since publication

June 2017: Statements from the 2011 version that are no longer national priorities but may be useful locally have been moved to the list of quality statements section.
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 pathways on foot care for people with diabetes, preventing type 2 diabetes, type 1 diabetes in adults and type 2 diabetes in adults.

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.

ISBN: 978-1-4731-1395-4

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 Prosthetists and Orthotists
• Royal College of Pathologists
• Royal College of Physicians
• Dose Adjustment for Normal Eating (DAFNE)
• Diabetes UK
• Association of British Clinical Diabetologists
• Faculty of General Dental Practice