Guidance to commissioners:

This sample service specification is based on the NICE Quality Standard for Diabetes and is non-mandatory. It is for commissioners to use as they wish. The sample specification has been developed with input and oversight from the National Clinical Director.

Please note that this sample service specification has been produced at a moment in time and will not be updated.

The Template:

Local detail must be added below the mandatory green headings. Text in **red** is guidance for commissioners and must be deleted before the service specification is included in the NHS Standard Contract. Text in **black** is suitable for inclusion in the NHS Standard Contract but may be varied locally by commissioners. The service specification documents should be read in conjunction with the <u>NHS Standard Contract</u> and the NHS Standard Contract 2014/15 Technical Guidance.

30 July 2014

The Diabetes Sample Service Specification

This service specification outlines the provision of high quality care for all those with diabetes, and differentiates the care needs of those with Type 1 diabetes mellitus (T1DM) from those with Type 2 diabetes mellitus (T2DM) where those care needs differ. It details the entire care pathway for people with diabetes, including those with the long-term complications of diabetes, according to the NICE Quality Standard (Appendix A).

The model of care detailed within this specification divides the care pathway into two broad elements:

- Generalist care and
- Specialist care.

In the example model used in this service specification, a community based multidisciplinary team that interfaces between general practice-based and specialist services is also included.

While good diabetes care today will avoid the development of the long term complications of diabetes in the future, many people are already living with the microvascular and macrovascular complications of diabetes, such as blindness, kidney failure or heart disease. People with diabetes may also have one or a number of other long-term conditions, such as chronic obstructive pulmonary disease (COPD), anxiety or depression. The challenge for the NHS in England is to deliver high quality holistic care to all such individuals.

Self-management, based on personalised care planning and the effective delivery of structured education, and person empowerment, are central to the way in which outcomes can be optimised for people with diabetes and other long-term conditions. The individual must be the starting point for any decisions about their care.

This service specification comprehensively addresses management of diabetes as set out in the NICE Quality Standard, and provides an example of how the generalist and specialist care needs of individuals can be successfully integrated.

The example pathway is set out in the below diagram.

See Appendix B for details on how the model aligns to the NICE Quality Standard.

Generalist



An individual's practice MDT will include their GP, practice nurse, and in many cases a community nurse and/or community podiatrist. Some may also include a sessional increased-access-to-psychological-therapies (IAPT) therapist

Annual care planning cycle (Quality Standard (QS) 3)

In some areas service provision may be provided by a community based multidisciplinary team



Community based multidisciplinary team (MDT) may provide:

- Patient education programmes (QS1)
- Pregnancy advice for women of childbearing age (QS7)
- Foot protection team (QS10)
- Clinical psychology support
- Additional support for those with Type 2 diabetes and poor glycaemic control

Community multidisciplinary team (MDT) to include a Physician (Consultant Diabetologist, but may additionally include GPwSI), Diabetes Specialist Nurse, Diabetes Specialist

Specialist



Specialist care services will be multidisciplinary, with membership of the MDT varying according to the specialty service. Specialist services will include:

- Transition service
- Diabetic foot service
- Diabetic antenatal service
- T1DM service, including insulin pump service
- Diabetic inpatient service
- Diabetic mental health service
- Diabetic kidney disease service
- Diagnostic service where there is doubt as to type of diabetes

There should be clear referral pathways for specialist care outside of

stockphoto.com #12433238

Figure 2 The exemplar care pathway outlined in this specification. Care delivery is based on a multidisciplinary approach whether the care setting is the GP practice, a community centre, or a hospital. The example illustrates a community based mutidisciplinary team (MDT) at the interface between generalist practice based care and specialist care. The community based mutidisciplinary team can support delivery of parts of the pathway that could not be delivered in every GP practice – an example could be delivery of structured education. Such teams should be innovatively exploring ways of generalists and specialists working together in the community using information technology and new technologies to ensure patient care is delivered in an appropriate setting local to the patient when possible. They need to have strong networking links and channels of communication with generalist and specialist colleagues working in the hospital and community.

The model of service provision

In the model described, the generalist *GP practice based service will have primary responsibility for the person with diabetes. Specialist services and the community based MDT will have responsibility for the episodes of care provided in those settings. However, accountability for the incidence of onset of complications and incidence of hard clinical endpoints such as amputation and blindness across the health economy should be shared by all providers of diabetes care. Therefore both generalist and specialist services will be jointly accountable for clinical outcomes.

*NOTE: The NHS Standard Contract is used for secondary healthcare not primary healthcare services (although the contract can be used for local enhanced services).

The community based MDT will act as the link between generalist clinicians and hospital-based specialists by representing both. Hospital-based specialists, who provide the specialist diabetes service, should spend a proportion of their time in the community advising and facilitating the work of the community based MDT. The presence of specialists in the MDT will facilitate fast-tracking of complications once diagnosed up to appropriate specialist settings and allow the team to provide more routine aspects of specialist care closer to the patient's home. Examples of services that can be delivered by the community based MDT include:

- 1. Structured education for those with Type 2 diabetes, for people whose GP practice does not provide this in-house.
- 2. Structured education for those with Type 1 diabetes
- 3. Type 2 diabetes with poor glycaemic control despite best efforts in primary care
- 4. Pregnancy advice for women of childbearing age (QS7)
- 5. Type 1 diabetes care when the MDT includes a Consultant Diabetologist
- 6. Clinical psychology support within the MDT environment for those with depression and anxiety that is related to their diabetes.

All people with T1DM will have access to specialist services if they so choose, given the relative rarity of Type 1 diabetes and the associated specific care needs. People with other forms of diabetes, such as monogenic diabetes (e.g. maturity-onset diabetes of the young (MODY), mitochondrial diabetes), diabetes due to chronic pancreatitis or total pancreatectomy, will also have access to specialist services given their specific care needs.

A small number of specialised services are commissioned by NHS England directly as part of NHS England's specialised commissioning role. These services include islet cell transplantation services, pancreas transplantation services, insulin-resistant diabetes

services, congenital hyperinsulinism services, Alstrom Syndrome services, Bardet-Biedl Syndromes services and Wolfram Syndrome services, and will be delivered by tertiary centres that specialise in these specific conditions. Service specifications for these specialised services will not be covered here, but are included in the work streams of the Diabetes Specialised Commissioning Clinical Reference Group at NHS England.

For the purposes of this specification the providers of specialist care have the following designated responsibilities:

- 1. Provision of transition diabetes service (ages 13-25 years)
- 2. Provision of diabetic foot service (see NICE support for commissioning foot care services)
- 3. Provision of diabetic antenatal service
- 4. Provision of diabetic kidney service, prior to renal replacement therapy
- 5. Provision of T1DM service, including insulin pump service (see NICE support for commissioning insulin pumps)
- 6. Provision of diabetic inpatient service
- 7. Provision of diabetic mental health service
- 8. Provision of a diagnostic service where there is doubt as to the type of diabetes if there is difficulty differentiating Type 1 from Type 2 diabetes, or if a rarer form of diabetes, such as MODY or mitochondrial diabetes, is suspected.

There may be additional services provided by the specialist provider, depending on local requirement that are not covered by this service specification. There will also be additional services that contribute to comprehensive diabetes care, that are dealt with through broader population based contracted services, such as ophthalmology/medical retinal services and retinal screening services. Where this is the case, it is however important that such services are still integrated within the diabetes care pathways – for example, that the recognition of significant diabetic retinopathy is associated with greater input and efforts to improve glycaemic and blood pressure control by diabetes care pathway generalists and/or specialists as appropriate. It is also important to ensure that the number screening positive with retinal screening is matched by appropriate capacity in ophthalmology/medical retinal services, even if such services are not included within the diabetes service specification.

The terms specialist services and community MDT services in this specification have been used to encompass those services that it could reasonably be considered would be commissioned by the CCG. Local discussions between the current care providers will help

to establish the specific local criteria, and any additional designated responsibilities for the providers.

This model of care is reliant on the seamless integration of generalist and specialist services. To achieve this it will be essential that patient records are integrated - and wherever possible shared or owned by the person with diabetes - and the two elements have good communication mechanisms to allow for continuity of care. Integration can be further supported by formal arrangements for specialists to support generalists through:

- Email advice e.g. a specified 1 working day turn-around for email advice
- Telephone contact support e.g. a dedicated daily time window for taking calls for advice.

For older people, many of whom will have complications of diabetes and hence will have multiple comorbidities and may also suffer frailty, there will need to be co-ordination of health and social care.

Competency of health care professionals and continuous professional development

The Provider must ensure that all staff involved in designing and delivering the service are trained in line with any national/professional recommendations and curricula to achieve key competencies that have been identified in their Job Role to deliver appropriate diabetes care. The Provider must make available time in job plans and resources to support relevant initial, and then continuous professional development for all staff contributing to the diabetes clinical pathway. This is crucial as many services are being redefined and delivered in different settings and members of the MDT may take on new responsibilities. This provides an opportunity to foster further interaction between generalists and specialists. The Provider must ensure that diabetes specialist physicians, nurses, dieticians, podiatrist and psychologist members of the MDT provide continuing diabetes-specific education to members of the generalist teams. These specialist members of the MDT can also provide support, advice and mentorship in diabetes management to members of the generalist teams.

Commissioning

The ideal service provision will therefore span primary, community, secondary, mental health and social care. As such it will require the commissioners responsible for these different sectors to collaborate (CCGs, Local Authorities and NHS England Area Teams). It may also require different CCGs to work together across a broader geographical area to commission diabetes services.

Commissioning of this specification would be facilitated by the development of an integrated commissioning model, which would allow for joint commissioning of the full pathway. Regardless of the commissioning environment, it is expected that all elements of care will be available for people with diabetes and that commissioners will work with patients, carers and providers to identify measurable outcomes for which service providers of diabetes care will be held jointly accountable. A goal should be shared responsibility and accountability by all providers for the incidence of onset of complications and incidence of hard clinical endpoints such as amputation, blindness, myocardial infarction and stroke for all those with diabetes in the population served.

The example service specification

The sample service specification has aligned all steps in the pathway to the NICE Quality Standard and other examples of good care. The specification is set out in the National Contract template. To allow for local flexibility the level of detail within the specification has been kept to a minimum. Example details about eligibility criteria, referral routes, frequency, discharge and outcomes measures are included in Appendix B at the end of the document.

This specification details both the specialist and generalist elements of care. These have been formatted into an example service structure based on examples of best practice currently available. It is intended that these services are commissioned together to allow for the essential overlap of generalists and specialists that will allow for continuity of care.

NOTE: the terms "generalist" and "specialist" are not recognised contractual terms and so when using the specification to commission services the term "Provider" should be used.

Where the specification is referring specifically to generalist care the font colour is blue, when specialist the font colour is green. Where a community based MDT is commissioned, suggested services delivered in this setting will be described in purple font. However, where a community based MDT is not commissioned, then the services described in purple font would usually be included in those delivered in the specialist setting – green font. Where the elements of care can equally be provided in generalist or specialist services, or where statements cover the whole pathway the font colour is black.

These differences are also made obvious in the text.

Type of care	Font colour
Generalist	Blue
Community based MDT	Purple

Specialist	Green
Both specialist and generalist/unspecified	Black

SCHEDULE 2 – THE SERVICES

A. Service Specifications

Mandatory headings 1 - 4. Mandatory but detail for local determination and agreement Optional headings 5-7. Optional to use, detail for local determination and agreement.

All subheadings for local determination and agreement

Notes for Commissioners are highlighted in RED and must be deleted before the service specification is inserted into the NHS Standard Contract.

Service Specification No.	Diabetes care for adults with diabetes mellitus.
Service	
Commissioner Lead	
Provider Lead	
Period	
Date of Review	

1. Population Needs

1.1 National/local context and evidence base

Background

Diabetes is a long-term condition caused by too much glucose in the blood. There are two main types of diabetes, Type 1 diabetes and Type 2 diabetes.

Type 1 diabetes (T1DM) develops if the body cannot produce any insulin. It usually appears before the age of 40 years, especially in childhood. It is the less common of the two types of diabetes. It cannot be prevented and it is not known why exactly it develops.

Type 1 diabetes is treated by daily insulin doses by injections or via an insulin pump.

Type 2 diabetes (T2DM) develops when the body can still make some insulin, but not enough, or when the insulin that is produced does not work properly (known as insulin resistance). Type 2 diabetes is treated with a healthy diet and increased physical activity. In addition, tablets and/or insulin can be required.

Ten per cent of people with diabetes have T1DM, and 90 per cent have T2DM. In addition, there are other less common forms.

Many of the service requirements for T1DM and T2DM will overlap. In other elements each disease will require discrete service provision; where the service requirements differ between the two diseases this will be made explicit in the following document.

Note: This sample specification provides an exemplar service provision, which incorporates the NICE Quality Standard relating to the care of people with diabetes (Appendix A).

1.2 National context and evidence base

Diabetes care is one of the major challenges facing the NHS in the coming years and the quality of care provision varies throughout the country. Diabetes is a major cause of premature mortality with at least 22,000 avoidable deaths each year¹ and the number of people in the UK with diabetes is increasing and is projected to rise from 3.1 million to 3.8 million by 2020². Due to the increasing obesity levels in the UK it is expected that the incidence of T2DM (which accounts for approximately 90% of diabetes in the UK3) will increase and as a result it is estimated the number of people with diabetes in the UK will rise to 4.6 million by 2030⁴. This makes it the long term condition with the fastest rising prevalence⁴. If diabetes is not managed properly it can lead to serious lifethreatening and life-limiting complications, such as blindness and stroke. An individual may also have diabetes and any other number of other long-term conditions, like, for example, chronic obstructive pulmonary disease (COPD). The NHS needs to rise to the challenge of multi-morbidity through proactive and comprehensive disease management, placing the individual firmly in the centre of their care. This sort of effective management of individuals, as described in this service specification, will impact positively on indicators across the five domains of the NHS Outcomes Framework (see below).

NOTE: NHS England recently produced "Action for Diabetes" which commissioners will also find helpful.



Diabetes care in the UK has improved significantly over the past 15 years^{5, 6} and the levels of premature mortality in the UK are lower than in 18 other wealthy countries⁵. In spite of these developments there is still room to improve the service delivery.

Currently, only around one in five people with diabetes are achieving all 3 of the recommended standards for glucose control, blood pressure and cholesterol². Moreover, the complications relating to diabetes are wide reaching, including:

- The most common reason for renal dialysis and the second most common cause of blindness in people of working age^{4,7}
- Increases the risk of cardiovascular disease (heart attacks, strokes) by two to four times⁸
- Increases the risk of chronic kidney disease, from an incidence of 5-10% in the general population to between 18% and 30% in people with diabetes⁴
- Results in almost 100 amputations each week, many of which are avoidable (approximately 8 out of 10 of these)⁹

1.3 Local Context

NOTE: For data relating to the local context see the CCG Outcomes Tool.

Indicators specific to diabetes care in the CCG Outcomes Indicator Set include:

- Myocardial infarction, stroke and stage 5 kidney disease in people with diabetes
- People with diabetes who have received the nine care processes
- People with diabetes diagnosed less than 9 months referred to structured education
- Unplanned hospitalization for diabetes in those under 19 years of age.
- Complications associated with diabetes including emergency admissions for diabetic ketoacidosis and lower limb amputation.

http://ccgtools.england.nhs.uk/ccgoutcomes/flash/atlas.html http://www.england.nhs.uk/resources/resources-for-ccgs/comm-for-value/ NDIS (national diabetes information service):

http://www.yhpho.org.uk/resource/view.aspx?RID=81090]

Additionally the HSCIC <u>CCG</u> and <u>provider</u> profiles benchmark each organisation against the nine NICE recommended care processes.

In order to estimate the local cost of implementing this pathway commissioners can refer to the NICE cost impact and commissioning assessment for diabetes in adults, March 2011).

References

- 1. National Diabetes Audit Mortality Analysis 2007-2008 NHS Information Centre, 2011
- The management of adult diabetes services in the NHS National Audit Office; 2012 in POSTNote Number 415 Preventing Diabetes, July 2012
- 3. Diabetes in the UK 2009: Key statistics on diabetes, Diabetes UK, 2009
- Commissioning Excellent Diabetes Care: an at a glance guide to the NHS Diabetes
 Commissioning Resource NHS Diabetes and Diabetes UK, February 2012, Second edition
- Murray, Christopher JL, et al. (2013) UK health performance: findings of the Global Burden of Disease Study 2010. The Lancet
- 6. Lind, M., et al. (2013) Mortality trends in patients with and without diabetes in Ontario, Canada and the UK from 1996 to 2009: a population-based study. *Diabetologia*: 1-8
- 7. State of the Nation, England Diabetes UK, 2012
- 8. Stamler J, Vaccaro O, Neaton J, Wentworth D. (1993) Diabetes, other risk factors, and 12-yr cardiovascular mortality for men screened in the multiple risk factor intervention trial Diabetes Care
- Best Practice for commissioning diabetes services: a integrated care framework –
 Diabetes UK, 2013

2. Outcomes

2.1 NHS Outcomes Framework Domains & Indicators

Domain 1	Preventing people from dying prematurely	Yes
Domain 2	Enhancing quality of life for people with long-term conditions	Yes
Domain 3	Helping people to recover from episodes of ill-health or following injury	Yes

Domain 4	Ensuring people have a positive experience of care	Yes
Domain 5	Treating and caring for people in safe environment and	Yes
	protecting them from avoidable harm	

2.2 Local defined outcomes

The Commissioner will operate a prioritisation system to triage referrals. In cases where the standard waiting times would be too detrimental to the Service User's condition or safety their assessment should be undertaken as soon as possible. The Provider may therefore need to fast track the Service User into specialist services.

NOTE: The commissioner may wish to define their own outcome indicators based on the local context and the example CQUINs detailed later in Appendix B. These may include:

- Increase rate of uptake of personalised care plans to 75% within 3 years
- Increase the proportion of service users with diabetes reporting positive experiences of diabetic care to 90% in 5 years
- Increase the uptake of structured education for service users with diabetes to 25% to facilitate the independent management of their condition
- Reduce the incidence of major amputation in service users with diabetes in 5 years to 1.25 per 1000 people with diabetes per year (representing the national average for the period 2009/10 to 2011/12 plus one standard deviation). The majority of CCGs will already be below this, in which case the aim should be to reduce the mean incidence of major amputation in service users with diabetes over 5 years to 0.90 per 1000 people with diabetes per year (representing the national average for the period 2009/10 to 2011/12). Those CCGs who currently have a major amputation rate of below 0.9 per 1000 people with diabetes are advised to ensure that their 5 year rate stays below the national average.
- Reduce the estimated number of service users who have undiagnosed diabetes in 5 years by 500,000
- Reduce the average years of life lost due to Type 2 diabetes from 6 to 4 in 10 years
- Reduce the average years of life lost due to Type 1 diabetes from 15 to 12 in 10 years
- Reduce the frequency of admission for service user's with diabetes, including
 episodes of diabetic ketoacidosis, hypoglycaemia, hyperosmolar non-ketotic state,
 by 20% in 3 years.

Outcomes could be measured using available data or indicators e.g. CCGOIS; HSCIC indicator portal, national audits/surveys). Many of these outcomes are measured in the

national diabetes audit.

3. Scope

NOTE: from this point forward the specification identifies which elements are relevant to generalist care, community-based MDT care and specialist care through colour coding.

Type of care	Font colour
Generalist	Blue
Community based MDT	Purple
Specialist	Green
Both specialist and generalist/unspecified	Black

For a definition of generalist and specialist care please refer to the cover note.

3.1 Aims and objectives of service

NICE have produced a Quality Standard (Appendix A), to help describe what constitutes high quality care for people with diabetes. This sample service specification integrates this standard into pathways of care for people with diabetes with the aim of improving outcomes. This sample specification details the whole pathway including episodes of specialist care. All service users are offered at least annual assessments.

NOTE: the mode through which the provider contacts the service user may wish to be specified here e.g. by letter, telephone, email etc.

The Provider will act as the lead of advice on diabetes care.

The Provider shall:

- Coordinate the specialist services and generalist services for Service Users with diabetes so that they fit around the needs of the Service User
- Provide high quality diabetes care, as defined by NICE Quality Standard (QS6), to all Service Users
- Provide a holistic approach to the management of diabetes for all Service Users
- Through personalised care planning, empower Service Users to self-manage their own diabetes
- Reduce the number of years of life lost for Service Users with diabetes
- Reduce the risk of complications for Service Users with diabetes
- Reduce duplication and gaps in the current diabetes service provision

- Deliver person-centred outcomes in a timely manner
- Provide a template for the high quality management of Service Users with multiple comorbidities that can be applied to other disease areas within the NHS in England
- Provide parity of esteem between mental and physical ill health for those with diabetes by reducing rates of depression, anxiety and self-harm in Service Users with diabetes and by increasing the rates of access to psychological therapies for the 20-40% of Service Users with comorbid depression and diabetes.

The Generalist Provider shall:

- Ensure a regular (at least annually) collaborative and Service User-centred care
 planning session for each Service User with diabetes that forms the basis of
 their management and self-management. This personalised care plan should be
 used (and if necessary further developed) in all care settings that the service
 user attends Appendix B.
- Provide initial and continuing assessment of a Service User's diabetes ensuring service user engagement – Appendix B.
- Signpost Service Users with diabetes to the practice or other local accredited structured education program – Appendix B.
- Refer Service Users with diabetes to the local retinal screening service
- Provide a Service User-centred approach to the continuing care of all aspects of their diabetes.
- Provide an easy-access, holistic approach to diabetes care, including access to dietetic and podiatric services
- Provide a multidisciplinary team who can provide care for routine aspects of the Service User's condition and refer into specialised services or a multidisciplinary community based team where appropriate – Appendix B.
- Provide regular monitoring/assessment and provide the information and outcomes of such assessments to the service user in an understandable form – Appendix B.
- Provide podiatry services, if available in-house, for the monitoring and management of those at high risk of foot disease relating to diabetes – Appendix B.
- Provide psychological assessment and appropriate treatment for Service Users
 with diabetes and identified mental health issues, such as anxiety or depression

- Appendix B.
- Contribute to a reduction in the severity and frequency of acute episodes including episodes of diabetic ketoacidosis, hypoglycaemia, hyperosmolar nonketotic state.
- Contribute to a reduction in the complications resulting from diabetes.
- Contribute to a reduction in the number of years of life lost for service users with diabetes.
- Contribute to a reduction in the 15 to 20 years of life lost for those with severe mental illness and diabetes.
- Contribute to enhanced independence for service users with diabetes.
- Ensure availability of necessary social care for frail service users with diabetes
- Provide generalist health care professionals to partake in continuing diabetes education ideally delivered by the community based MDT and/or the specialist team.

A community based MDT can consist of both generalists and specialists.

The community MDT Provider shall:

- Ensure that personalised care planning remains the mechanism of care delivery for, and interaction with, each Service User with diabetes. The Service User's single care plan is further developed in the community setting (a separate/second care plan should not be developed) *Appendix B*.
- Provide structured education for Service Users with Type 2 diabetes, for Service Users whose GP practice does not provide this in-house.
- Provide structured education for Service Users with Type 1 diabetes
- Provide a dedicated service to improve glycaemic control for Service Users with Type 2 diabetes whose glycaemic control is poor despite best efforts with selfmanagement and in primary care
- Provide pregnancy advice for women of childbearing age (QS7), if not provided in the GP practice.
- Provide specialist Type 1 diabetes care when the MDT includes a Consultant Diabetologist
- Provide clinical psychology support within the MDT environment for those with depression and anxiety that is related to their diabetes
- Where required the MDT provider shall provide continuing diabetes-specific education to members of the generalist teams

Where required the MDT provider shall provide support, advice and mentorship
in diabetes management to members of the generalist teams if members of the
generalist teams so choose

The Specialist Provider shall::

- Ensure that personalised care planning remains the mechanism of care delivery for and interaction with each Service User with diabetes. The Service User's single care plan is further developed in the specialist setting (a separate/second care plan should not be developed) – Appendix B.
- Provide specialist services for Service Users with diabetes where clinically appropriate.
- Provide specialist transition services between paediatric and adult services for those of appropriate ages (suggest up to 25 years)
- Provide specialist antenatal diabetes care.
- Provide specialist multidisciplinary foot care for intervention during acute foot issues – Appendix B.
- Provide kidney care for Service Users with progressive decline of renal function that is due to diabetes (and ensure that such decline is due to diabetes), and prior to renal replacement therapy.
- Provide specialist diabetes care for Service Users with T1DM, in an appropriate environment – Appendix B.
- Provide the full care and support required for Service Users treated with insulin pumps— Appendix B.
- Provide a review and consultation service for inpatient Service Users with diabetes— Appendix B.
- Contribute to enhanced independence for those inpatient Service Users with diabetes, in acute trusts and mental health inpatient settings.
- Contribute to a reduction in the frequency of acute episodes including episodes of diabetic ketoacidosis, hypoglycaemia, hyperosmolar non-ketotic state.
- Provide a coordinated pathway for the treatment of acute diabetic episodes.
- Provide specialist psychiatry and clinical psychology services.
- Provision of MDT mental health/diabetes care for Service Users who suffer both, in particular considering the specific diabetes care needs of those with severe mental illness, and contribute to a reduction in the 15 to 20 years of life lost for those with severe mental illness and diabetes.
- Provision of a diagnostic service where there is doubt as to the type of diabetes.

- Provide continuing diabetes-specific education to members of the generalist teams.
- Provide support, advice and mentorship in diabetes management to members of the generalist teams if members of the generalist teams so choose

NOTE: Specialist service objectives may also include other specified services, depending on locally specified diabetes service needs.

3.2 Service description/care pathway

The Provider shall:

- Ensure Service Users are provided with full access to all elements of the pathway when clinically appropriate.
- Ensure clinical staff are competent, qualified and/or trained in diabetes care (see: General Condition 5 of the Contract http://www.england.nhs.uk/wp-content/uploads/2013/12/sec-c-gen-cond-1415.pdf)
- Information is provided at the time of referral to enable the Service User to make informed decisions regarding care and requirements.
- Support, information and scheduled reassessments are provided at the time of first assessment.
- On-going support is provided where required.
- A responsive service is provided that addresses Service User's needs, provides service support and demonstrates that feedback is acted on and informs improved service delivery
- A responsive service is provided that regularly partakes in audit within and across all care settings, reviews data and uses it to inform and stimulate improvements in service delivery
- Education (in addition to the formal structured education courses) for Service Users in all settings to promote self-management.

Please see Appendix B for some details of the described service

The Generalist Provider shall:

- Undertake initial and subsequently at least annual collaborative and Service
 User-centred care planning sessions for each Service User with diabetes that
 forms the basis of their management and self-management, and involves input
 from all members of the MDT
- Provide a triage system for prioritising referrals if the generalist team is

- community based.
- Provide a MDT from the point of diagnosis, whether practice or community based
- Provide practice based education in addition to signposting to or provision of formal structured education programmes
- Provide regular monitoring and of the diabetic condition ensuring Service User engagement.
- Provide screening for diabetic foot conditions
- Provide MDT delivered psychological assessment
- Provide direct and easy access to the MDT

The Community MDT Provider shall:

- Provide structured education for Service Users with Type 2 diabetes, for Service Users whose GP practice does not provide this in-house, in line with NICE TA60.
- Provide structured education for Service Users with Type 1 diabetes in line with NICE TA60.
- Provide pre-pregnancy advice for women of childbearing age in line with NICE QS7 and NICE CG63 if not provided in the GP practice.
- Provide a dedicated service to improve glycaemic control for Service Users with Type 2 diabetes whose glycaemic control is poor despite best efforts with selfmanagement and in primary care in line with NICE CG87 and NICE TA203, NICE TA53, NICE TA248, NICE TA288, NICE TA315.
- Provide specialist Type 1 diabetes care when the MDT is supported by a Consultant Diabetologist in line with NICE CG15.
- Provide clinical psychology support within the MDT environment for those with depression and anxiety that is related to their diabetes in line with NICE CG91.

The Specialist Provider shall:

- Support and help manage the diabetes of all inpatient Service users with diabetes in line with NICE Quality Standard (QS) 12
- Provide specialist acute foot care for Service Users with diabetes in line with NICE CG10 and NICE CG119
- Provide specialist antenatal care for women with diabetes in line with NICE CG

62 and NICE CG 63

- Provide specialist acute care for Service Users with diabetes who have kidney disease in line with NICE CG 10 and NICE CG 15
- Provide specialist care for Service Users with T1DM in line with NICE CG 15
- Provide specialist care for Service Users with insulin pumps in line with NICE Technology Appraisal (TA)151.
- Provide dedicated transition services for young people moving between paediatric and adult service settings (please see NICE CG15 and NICE CG87).
- Provide MDT mental health/diabetes care for Service Users who suffer both, in particular considering the specific diabetes care needs of those with severe mental illness in line with NICE CG 82
- Provide a diagnostic service where there is doubt as to the type of diabetes

NOTE: Specialist service objectives may also include other specified services, depending on locally specified diabetes service needs.

Acceptance criteria

1. The Provider will accept referrals of Service Users (19 years and older) with diabetes, whether their condition is newly diagnosed or well established.

NOTE: although reading of NICE CG87 suggests that 15 years and older can be classified as an adult for individual's with T2DM, the specification of 19 years and older is in accordance with the more recent approach taken by the Best Practice Tariff guidance 2013/14 (see https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214902/PbR-Guidance-2013-14.pdf). Commissioners are reminded that this is a sample specification and commissioners are free to assign an age threshold locally.

- 2. The Provider will accept referrals for Service Users whose care is provided by a GP member of the contracting organisation
- 3. The Provider will ensure that it provides locally available information about the services it provides.

Generalist service:

 The Provider will act as the main care provider for Service Users with diabetes and will refer Service Users into community and specialist services when local

- criteria are met (see table below).
- The initial personalised care planning process may be used by the Provider to triage referrals directly into secondary care services or community based services where Service Users are experiencing issues which meet the locally defined criteria (the referral rate will be monitored by the Commissioner through information provided by the Provider).
- The Provider will be the generalist provider for Service Users with diabetes, referring Service Users with diabetes on to community and specialist services when local criteria are met (see table below).

Community MDT Service:

- The Provider will be the community MDT provider for Service Users with diabetes, accepting referrals when local criteria are met (See table below).
- The Provider will refer between its subset of community services and between specialist services as appropriate.

NOTE: attention will need to be paid to the financial arrangements for such referrers, however it is felt that it is in the best interest of the service user to create a simple referral pathway that allows for rapid access.

 The Provider will ensure that it provides locally available information about the services it provides.

Suggested local criteria for	Threshold level
community MDT referral	
Type 2 diabetes structured education, for people whose GP practice does not provide this inhouse	All Service Users within 9 months of diagnosis of Type 2 diabetes. All Service Users with pre-existing Type 2 diabetes who have not previously partaken in structured education.
Type 1 diabetes structured education	All Service Users within 9 months of diagnosis of Type 1 diabetes. All Service Users with pre-existing Type 1 diabetes who have not previously partaken in structured education.
Management of Type 2 diabetes with poor glycaemic control	All Service Users with T2DM whose glycaemic control is poor despite best efforts with self-management and in primary care
Pre-pregnancy advice for people whose GP does not provide this in-house.	Women with T1DM and T2DM of childbearing age considering conception.

T1DM when the community team	All Service Users with T1DM should be
is supported by a Consultant	offered access to specialist services at any
Diabetologist	point during their lifetime.
Clinical psychology support	For all Service Users with T1DM or T2DM
	with depression or anxiety related to their
	diabetes.

Specialist Service:

- The Provider will be the specialist provider for Service Users with diabetes, accepting referrals when local criteria are met (See table below).
- The Provider will refer between its subset of specialties and between community MDT services as appropriate.

NOTE: attention will need to be paid to the financial arrangements for such referrers, however it is felt that it is in the best interest of the service user to create a simple referral pathway that allows for rapid access.

• The Provider will ensure that it provides locally available information about the services it provides.

Suggested local criteria for specialist referral	Threshold level
Inpatient diabetes	Upon Service User admission to an acute environment when fulfilling the criteria outlined in the Think Glucose tool
Diabetic foot care	Upon Service User ulcer development or in line with the criteria in Appendix B
Antenatal diabetes	Upon Service User referral into the 'standard' antenatal pathway
Diabetic kidney disease	Upon the Service User meeting the locally agreed criteria, in alignment with CG15 & 87
T1DM	All Service Users with Type 1 diabetes should be offered access to specialist services at any point during their lifetime. Insulin pump therapy should be included within this service.
Transition service	For Service Users up to age 25 with any form of diabetes
Mental health service	For Service Users with depression and anxiety related to their diabetes. For Service Users with diabetes and severe mental illness.
Diagnostic service	Where there is doubt as to the type of diabetes.

Assessment and care planning/appointment

Generalist

The Provider shall ensure all Service Users are offered an initial generalist
assessment and personalised care planning appointment with a member of their
MDT within *4-6 weeks (2-3 weeks for antenatal) of referral if the generalist team is
community based.

The Provider shall ensure that the representative MDT member undertaking initial assessment and care planning is appropriately trained and experienced.

*Note: suggested timescales only (not set out in NICE Quality Standard)

The assessment must include:

- Referral for Retinal Screening
- Psychological assessment by a member of the MDT
- The offer of an education programme
- Physical activity and dietary advice
- Foot inspection and ulceration risk calculation
- Insulin-treated Service Users discussion about the self-management of their insulin

Recording of the nine care processes:

- HbA_{1C} levels
- Blood Pressure
- Cholesterol levels
- Serum Creatinine levels
- Urinary albumin to creatinine ratio
- Foot surveillance
- Body Mass Index
- Smoking Status
- Eye screening status

The Provider shall conduct a care planning cycle at least every 12 months.

The Provider shall adhere to the NICE guidelines relating to these processes (detailed in Appendix B).

Community MDT – the Provider shall:

- Ensure that personalised care planning remains the mechanism of care delivery for and interaction with each Service User with diabetes. The Provider shall further develop the Service User's single care plan in the community setting (a separate/second care plan should not be developed) – Appendix B.
- The Provider will ensure that structured education programs are consistent with NICE TA60 diabetes (Types 1 and 2) patient education models.
- The Provider will ensure that pre-pregnancy advice is consistent with NICE CG63.
- The Provider will ensure that Service Users with T2DM and poor glycaemic control will receive management consistent with NICE CG87 and NICE TA53, NICE TA203, NICE TA248, NICE TA288, NICE TA315.
- The Provider (only when supported by a Consultant Diabetologist) will ensure that Service Users with T1DM will receive management consistent with NICE CG15.
- The Provider will ensure that clinical psychology support within the MDT environment for Service Users with depression and anxiety that is related to their diabetes will be consistent with NICE CG91.
- For all specialist services the Provider will arrange follow-up appointments at clinically appropriate intervals.

Specialist – the Provider shall:

- Ensure that personalised care planning remains the mechanism of care delivery for and interaction with each Service User with diabetes. The Provider shall further develop the Service User's single care plan in the specialist setting (a separate/second care plan should not be developed) – Appendix B.
- The Provider will ensure that all eligible Service Users (according to the Think Glucose toolkit) are assessed by a member of the specialist multidisciplinary team within 24h of hospital admission or identification of an acute foot problem, and within an appropriate time frame for other referrals
- The Provider will ensure that pregnant women with diabetes are assessed at the intervals recommended in NICE CG63
- The Provider will have an emergency admission pathway for pregnant women with diabetes who have suspected ketoacidosis in line with NICE CG63
- The Provider should have a care pathway for the care of inpatients requiring diabetic foot care and care for inpatient diabetic nephropathy
- The Provider shall ensure that all inpatient Service Users with diabetes have direct

- access to a member of the specialist team if they so choose and given the choice to and facilitated in the self-management of their insulin
- For all specialist services the Provider will arrange follow-up appointments at clinically appropriate intervals.

Continuing care and assessment – the Provider shall ensure that:

 All Service Users have a designated care coordinator who is accountable for the management of the Service User's care.

NOTE: The specialty of the care coordinator could equally be a social worker, a specialist nurse or other relevant health professional.

 All Service Users have direct access to a member of their MDT through the provision of emergency contact details and the provision of 24h, open access services in line with NICE CG15 &87.

NOTE: This is a highly desirable aspect of the pathway and where 24h provision is not practical, efforts should be made to provide access within the shortest duration practically possible.

- All Service Users can easily access a member of their MDT who can review and alter their treatment in a timely manner.
- All Service Users have regular reviews of their HbA_{1c} levels, at a minimum 6 monthly in line with NICE CG87.
- All Service Users at risk of developing an ulcer undergo podiatry screening regularly in line with NICE CG10.
- All Service Users who need to initiate insulin therapy are provided with an education package around insulin self-administration.
- All Service Users who need to initiate other injectable therapies are provided with an education package around drug self-administration

Generalist – the Provider shall:

Offer Service Users structured education programs (provided in the community in this example service specification) and information in the following circumstances:

- Newly diagnosed Service Users should be offered an education programme specific to T1DM or T2DM. See NICE Commissioning Guide – Patient Education Programme for Type 2 diabetes (CG87).
- Service Users who have been acutely admitted with diabetic ketoacidosis (DKA).

Service Users who are planning to have a baby or who are pregnant.

All education programs should comply with NICE CG87 and TA60.

The Provider shall refer Service Users to the specialist care service in the following circumstances:

- If there is doubt as to the type of diabetes if there is difficulty differentiating Type 1 from Type 2 diabetes, or if a rarer form of diabetes, such as MODY or mitochondrial diabetes, is suspected.
- Referral to the specialist antenatal diabetes team Following a confirmation of pregnancy
- Referral to a specialist foot care team if ulcer present or suspicion of acute Charcot neuroarthropathy, then will need to be seen within 24 hours by the foot MDT.
- Referral to the specialist diabetes team following assessment by the MDT and suspicion of diabetic kidney disease
- Referral to a specialist diabetes team Following assessment by the MDT and determination of acute hypoglycaemia.
- Referral to the specialist diabetes team following acute episodes of hypoglycaemia
- Referral to the specialist diabetes team all those with Type 1 diabetes, including those for consideration of insulin pump therapy.

The Provider shall refer Service Users to other specialist care services under the locally determined conditions.

Specialist Service

The Provider of Specialist services will be responsible for Service Users for the duration of an acute phase, once the Service User's condition has stabilised and the Service User no longer requires specialist care the Provider shall refer the Service User back to the general practice-based MDT or to the community MDT. The exception to this involves Service Users with T1DM, who will require access to a specialist life-long if they so choose.

For all non-specialist diabetes care the individual Service User will remain under the care of their general practice-based MDT during their interaction with the specialist team.

The Provider shall work with and communicate with other providers involved in the

delivering the outcomes of the Service User's care pathway.

Community MDT Service

Providers of Community MDT services will be responsible for Service Users for that episode of care. For other aspects of care the Service User will remain under the care of their general practice-based MDT. The Provider shall establish and maintain clear communication mechanisms with other providers since all providers are jointly responsible for the outcomes of the care pathway.

3.3 Population covered

This specification covers the care of adult Service Users with diabetes (19 years and over) whose care is provided by a GP member of the commissioning organisation. This sample specification details the care of Service Users with diabetes for their adult lifetime or from registration with an in-area GP.

The Provider will triage all referrals and where the requirements of a Service User are beyond the scope of the generalist team, the Provider will ensure the Service User has a fast track referral into the specialist pathway.

The number of people with diabetes is increasing annually and the Provider will take this into account when designing their delivery model to ensure that all outcome measures are maintained for the duration of the contact.

NOTE: the commissioners of the pathway will need to consider whether different services within the pathway will be subject to service user choice.

3.4 Any acceptance and exclusion criteria and thresholds

NOTE: Access to the NHS service will be governed by geographic location and eligibility for NHS treatment. The Commissioner shall define the geographic area to be covered in accordance with "Establishing the Responsible Commissioner" and the NHS Plan.

The Provider will compile a list of accredited prescribers and provide it to the commissioner on request.

NOTE: The transition from pediatric to adult services will need to be considered. It should be a seamless, standardised transition which meets the needs of the service user whether they have T1DM, T2DM or other forms of diabetes. Please refer to the best practice guide developed by the Department of Health, Transition: Getting it right for young people.

3.5 Interdependence with other services/providers

The Provider will work together with all other providers of diabetes services for the covered population.

The Provider shall have a formal referral route onwards to the specialist diabetes services that fall outside this specification.

The Provider will work together with the general practitioners, secondary care clinicians, mental health clinicians and social workers to ensure that Service Users with diabetes receive the appropriate advice and support throughout the lifetime of their care.

Staffing requirements

The staffing requirements of some elements of the pathway are set out in Appendix B. The staffing establishment will ensure service coverage by all specialties 52 weeks a year.

The Provider shall ensure that policies and procedures are in place that ensures:

- 1. All staff employed or engaged by the Provider are informed and aware of the standards of performance they are required to promote.
- Staff performance is routinely monitored and that any remedial action is taken where levels of performance are not in line with the agreed standards of performance.
- 3. There are clear lines of responsibility and accountability for all members of staff.
- 4. Conflicts of interest are resolved without impact on the service provision.

NOTE: when determining the monitoring requirements of the service provider in the standard contract, the commissioner may wish to consider including the following in the monitored data:

- 1. Referring GP practice/clinician
- 2. Patient NHS number, patient details and date of birth
- 3. Date the referral was received and the date of the initial assessment and care planning with MDT
- 4. The number of specialist care referrals
- 5. The cycle length of the care planning process
- 6. Cost for each care episode.

4. Applicable Service Standards

4.1 Applicable national standards (e.g. NICE)

This pathway specification is based on the NICE Quality Standard for Diabetes (QS6) and takes into consideration the guidance detailed below.

Note: NICE has also produced a "cost impact and commissioning assessment for diabetes in adults" commissioning support tool which can be found at:

http://guidance.nice.org.uk/QS6/CommissionerSupport/pdf/English

NICE Clinical Guidance

- CG10 Type 2 diabetes footcare (2004)
- CG15 Type 1 diabetes in children, young people and adults: NICE guideline (2005)
- CG62 Antenatal Care (2008)
- CG63 Diabetes in pregnancy (2008)
- CG87 Type 2 diabetes: full guidance (partial update of CG66) (2009)
- CG91 Depression with a chronic physical health problem: quick reference guide (2009)
- CG119 Diabetic foot problems inpatient management: quick reference guide (2012)
- CG82 Schizophrenia Core interventions in the treatment and management of schizophrenia in adults in primary and secondary care (2009)

NICE Clinical guidelines / Technology Appraisals in development

<u>Title</u>	Wave	Anticipated publication date	Proces <u>s</u>
<u>Diabetes in children and young people</u>	R	Aug-15	CG
Diabetes in pregnancy	R	Feb-15	CG
<u>Diabetic foot problems</u>	0	TBC	SCG
Type 1 Diabetes (update)	R	Aug-15	CG
Type 2 diabetes	0	Aug-15	CG

<u>Diabetes - buccal insulin [ID311]</u>		TBC	STA
<u>Diabetic foot ulcers - new treatments [ID381]</u>		TBC	MTA
Diabetic retinopathy - ruboxistaurin [ID382]		TBC	STA

NICE Technology Appraisals

- TA53 Diabetes (types 1 and 2) long acting insulin analogues (2002)
- TA60 Guidance on the use of patient-education models for diabetes (2003)
- TA151 Diabetes- Insulin pump therapy (2008)
- TA203 liraglutide (2010)
- TA248 exenatide (prolonged release) (2012)
- TA274 Macular oedema (diabetic) ranibizumab: guidance (2013)
- TA288 Dapagliflozin combination therapy (2013)
- TA315 Canagliflozin combination therapy (2014)

Other

National Service Framework for Diabetes: Standards (2001)

National Service Framework for Diabetes: Delivering Strategy (2002)

Minding the Gap: The provision of psychological support and care for people with diabetes in the UK - A report from Diabetes UK

Emotional and Psychological Support and Care in Diabetes: a report by Diabetes UK

Think Glucose – NHS Institute for Innovation and Improvement

http://www.institute.nhs.uk/quality and value/think glucose/welcome to the website for thinkglucose.html

4.2 Applicable standards set out in Guidance and/or issued by a competent body (e.g. Royal Colleges)

Royal college of Ophthalmologists

Diabetic Retinopathy guidelines (Dec 2012)

Diabetic Retinopathy Screening (DRSS) and the Ophthalmology Clinic set up in England (Sept 2010)

Royal College of Obstetricians and Gynaecologists

Diagnosis and Treatment of Gestational Diabetes (Scientific Impact Paper 23)

HbA1c monitoring in gestational diabetes - query bank

Royal college of Physicians

Commissioning diabetes and endocrinology services [online]. Available at: http://www.rcplondon.ac.uk/projects/clinical-commissioning-hub/commissioning-diabetes-endocrinology-services

Royal College of Nursing

Starting injectable treatment in adults with type 2 diabetes – RCN guidance for nurses (2012)

The role of the link nurse in infection prevention and control (IPC): developing a link nurse framework (2012)

4.3 Applicable local standards

NOTE: The commissioners will need to determine the local standards. These should include:

- Response times based on the current local context
- Minimum data set for referral
- Staffing qualification requirements

Ensure that the Service operates within budgetary constraints and with appropriate regard to the management of resources with due consideration to local eligibility criteria and priorities.

Effective and economical deployment of limited resources, giving the greatest good for the greatest number, requires prescription of the best value for money with consideration to the whole life costs, which will meet the applicant's assessed clinical and lifestyle needs. The Commissioner and Service Provider should give consideration to whole life costs.

5. Applicable quality requirements and CQUIN goals

5.1 Applicable quality requirements (See Schedule 4 Parts A-D)

Diabetes is not included in the National Operational Requirements or the National Quality Requirements. For these elements of the pathways, quality will therefore be regulated through local quality requirements.

Diabetes care is included in the Quality and Outcomes Framework (QOF). NOTE: please

refer to the QOF indicators in Appendix C.

To ensure quality across the pathway, the Provider of specialist and generalist services will have an integrated patient record. This will facilitate joint awareness of the quality metrics and allow the metrics to be viewed by the Service User's GP and the National Diabetes Audit.

The Provider shall review the data jointly with other providers of diabetes care services on a regular basis. .NOTE: *it is suggested that this should be done quarterly.*

The Provider will fully participate in the National Diabetes Audit.

5.2 Applicable CQUIN goals (See Schedule 4 Part E)

There are no nationally applicable CQUINs for diabetes

NOTE: It suggested that if commissioners would like to create some local CQUINS they use the performance and outcomes measures in Appendix B as a template. When determining the local CQUINS the commissioners will need to take into account that a rapid reduction in the proportion of their budget that is spent on diabetes care is unlikely because the complications associated with diabetes accrue over years.

Commissioners may wish to incorporate the NICE Quality Standard as part of this process. Individual improvement (statements) areas may be amenable to a CQUIN.

6. Location of Provider Premises

The Provider's Premises are located at:

NOTE: There is no preference surrounding where this service is delivered. For generalist diabetes care the delivery location could equally be a GP practice, hospital out-patient clinic or community setting. For specialist services it is expected that these would be delivered form an acute hospital base, however this is not mandated and some aspects of service delivery may be community based. It is suggested that should commissioner wish to specify a location they take into account the different steps in the pathway.

It is essential that all facilities provided are comfortable, mindful of discretion and patient safety and are easily accessible. The hours of service must fit around the needs and requirements of the Service Users.

NOTE: 7 day services should be provided wherever possible. If the provision of 7-day services is not possible at the time of commissioning, work should be ongoing to develop

this option.

7. Individual Service User Placement

NOTE: It is suggested that should commissioner wish to specify a location they take into account the different steps in the pathway.

APPENDIX A

The NICE Quality Standard for Diabetes Care (Quality Standard 6)

NICE Quality Standard for Diabetes (QS6)

<u>Statement 1</u>. People with diabetes and/or their carers receive a structured educational programme that fulfils the nationally agreed criteria from the time of diagnosis, with annual review and access to ongoing education.

Statement 2. 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.

Statement 3. People with diabetes participate in annual care planning which leads to documented agreed goals and an action plan.

Statement 4. People with diabetes agree with their healthcare professional a documented personalised HbA_{1c} target, usually between 48 mmol/mol and 58 mmol/mol (6.5% and 7.5%), and receive an ongoing review of treatment to minimise hypoglycaemia.

Statement 5. 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.

Statement 6. Trained healthcare professionals initiate and manage therapy with insulin within a structured programme that includes dose titration by the person with diabetes.

Statement 7. 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.

Statement 8. People with diabetes receive an annual assessment for the risk and presence of the complications of diabetes, and these are managed appropriately.

Statement 9. People with diabetes are assessed for psychological problems, which are then managed appropriately.

Statement 10. People with diabetes at risk of foot ulceration receive regular review by a foot protection team in accordance with NICE guidance.

Statement 11. People with diabetes with a foot problem requiring urgent medical attention are referred to and treated by a multidisciplinary foot care team within 24 hours.

Statement 12. People with diabetes admitted to hospital are cared for by appropriately trained staff, provided with access to a specialist diabetes team, and given the choice of self-monitoring and managing their own insulin.

Statement 13. People admitted to hospital with diabetic ketoacidosis receive educational and psychological support prior to discharge and are followed up by a specialist diabetes team.

Statement 14. People with diabetes who have experienced hypoglycaemia requiring medical attention are referred to a specialist diabetes team.

APPENDIX B

Outcome metrics associated with the NICE Quality Standard

These have been associated with the relevant steps in the example model of service provision

(This appendix does not cover the whole of the example model of service provision, only some elements that it is suggested could be a mechanism for the delivery of the outcome metrics specified in the NICE Quality Standard 6)

Care planning process with the multidisciplinary team (MDT)

Provision of a patient education programme

Provision of information and specialist care if planning to have a baby or are pregnant

Access to a Foot Protection Team as outlined in NICE Clinical Guidance (CG)10 and 119

Specialist Foot Care Team as outlined in NICE Clinical Guidance 10 and 119

Structured insulin pathway as described in NICE CG15

Specialist care for people with T1DM and Insulin pump therapy as outlined in TA151

Appropriate management of inpatients with diabetes

^{*}Other suggested metrics are available, please see: Better Metrics v. 8;4.11

^{**}Not all elements of the proposed service model have been included in this appendix

Care planning process with th	e multidisciplinary team (MDT)			
Eligibility	All people with diabetes in the service area should be assigned a multidisciplinary team. Teams should be assigned to people with both T1DM and T2DM. An annual review should take place for everyone with diabetes, more frequent reviews and monitoring will be required for all those with T1DM and many with T2DM			
Process	Relevant Standards	Performance indicators/ surrogate outcome metrics	Outcome measures	
Care planning process with the MDT. MDT at a minimum should include: GP and practice nurse Best practice would include a representative specialist diabetes nurse, dietician, specialist physician (such as a GPSI or consultant) and a representative from social care on the MDT and a diabetes specialist podiatrist For more specifics see Skills for Health – Competencies for Diabetes The first cycle should occur immediately after diagnosis and determine the educational needs. This needs to address the individual patient's needs and co-morbidities	Aligned to Quality Standard 2-10 NICE Clinical Guideline 15 (2005) NICE Clinical Guideline 87 (2009) NICE Clinical Guidance 91 (2009) NICE Technology Appraisal 60 (2003)	Proportion of people with diabetes who participate in annual care planning including documenting and agreeing goals and an action plan in the past 12 months. (QS 3). Proportion of people with diabetes who are offered annual care planning including documenting and agreeing goals and an action plan (QS 3). The proportion of people with diabetes who have received personal nutritional advice from an appropriately trained professional (QS2) The proportion of people with diabetes who have received personal physical activity advice from an appropriately trained professional (QS2) The proportion of people with diabetes who have an agreed HbA _{1c} target level (QS 4) Proportion of people with diabetes who have received a review of treatment to minimize hypoglycemia in the previous 12months. (QS 4) Proportion of people with diabetes who have received a medication review in the past 12 months (QS 5) Proportion of people with diabetes whose medications are not managed according to NICE guidance who have medical notes documenting clinical reasons for exception (QS 5) Proportion of people with diabetes whose blood glucose, blood pressure and blood lipids are managed in accordance with NICE guidance (QS 5) Evidence of local arrangements to ensure that people with diabetes are assessed annually for the risk and presence of complications, and these are managed appropriately. (QS 8) Evidence of local arrangements to ensure that people with diabetes are assessed for psychological problems, which are then managed appropriately (QS9) Proportion of people with diabetes and psychological problems whose psychological problem is managed appropriately (QS9)	Domain 1 – Preventing people from dying prematurely Domain 2 – Enhancing quality of life for people with long-term conditions Domain 3 – Helping people recover from episodes of ill-health or following injury Domain 4 – Ensuring people have a positive experience of care Reduction in complications associated with diabetes (QS4) Reduction in the incidence of complications associated with diabetes (QS 8)	
Referral routes	Existing patients, without a team, [DN for commissioners: The trans	e assigned a multidisciplinary team. should be identified and assigned a team over time. sition of individuals from pediatric care into this adult service will need to be standardised.	-	
Frequency / Discharge route	First care plan assessment should be as soon as possible after diagnosis [DN for commissioners: it is recommended that a local target if designed around the time from diagnosis to assessment] The frequency will vary with the duration of the condition i.e. in the first year of diagnosis people with diabetes will require more frequent contact with their MDT than they will later on in their condition. There should be an annual care plan review every 12 months for everyone with diabetes This should be an on-going process for the life time of the condition Patients should have a direct line of contact to a member of that team			

Provision of a patient education	n programme			
Eligibility	People with diabetes (T1DM & T2	2DM) and their carers, particularly those who have been recently diagnosed or are experien	ncing difficulties managing their condition	
Process	Relevant Standards	Performance indicators/ surrogate outcome metrics	Outcome measures	
Provision of a patient education programme e.g. DAFNE, DESMOND, X-PERT, BERTIE or a locally developed programme. A specific programme should be designed for those patients who have been acutely admitted with Diabetic ketoacidosis (DKA) All programs should be annually reviewed	Aligned to Quality Standard 1 Aligning to Quality Standard 13 NICE Clinical Guideline 15 (2005) NICE Clinical Guideline 63 (2008) NICE Clinical Guideline 87 (2009) NICE Technology Appraisal 60 (2003)	Proportional of people who have been newly diagnosed with diabetes who are offered a course (QS1) Proportional of newly diagnosed people with diabetes who attend a course (QS 1) Evidence of local arrangements to ensure that people admitted to hospital with diabetic ketoacidosis receive educational and psychological support prior to discharge and are followed up by a specialist diabetes team (QS13) Proportion of people admitted to hospital with diabetic ketoacidosis who receive educational and psychological support by a specialist diabetes team prior to discharge (QS13) [DN for commissioners: QS13 metrics refer to T1DM in the main]. [DN for commissioners: The Structured Diabetes Education Tool can be used to help determine the quality of the education programme (NICE Commissioning Tool)]	Domain 1 – Preventing people from dying prematurely Domain 2 – Enhancing quality of life for people with long-term conditions Domain 3 - Helping people to recover from episodes of ill-health or following injury Domain 4 – Ensuring people have a positive experience of care Reduction in complications associated with diabetes (QS4) Reduction in the incidence of complications associated with diabetes (QS 8) Reduction in readmission rates within 12 months for people admitted with diabetic ketoacidosis (QS13) Reduced rates of acute admissions (QS 13)	
			Domain 1 – Preventing people from dying prematurely and Domain 2 – Enhancing quality of life for people with long-term conditions and Domain 3 - Helping people to recover from episodes of ill-health or following injury Reduction in rate of recurrence of an episode of hypoglycemia requiring medical attention over 12 months (QS14). Reduction in number of people with diabetes requiring medical attention as a result of a hypoglycemic episode (QS14).	
Referral routes	Upon initial diagnosis During the annual care planning purchase with the struggling to make the struggling the struggling to make the struggling the strugglin	process nanage their condition i.e. if the MDT think it is appropriate after an acute experience of wh	en the patient contacts the service.	

	Upon hospital admission with DKA
Frequency / Discharge route	These should be accredited structured education programs with a finite time span

Provision of information and	specialist care if planning to hav	e a baby or are pregnant				
Eligibility	People with diabetes (T1DM &	People with diabetes (T1DM & T2DM) and their carers (where appropriate), particularly those who have been recently diagnosed or are experiencing difficulties managing their condition				
Process	Relevant Standards	Performance indicators/ surrogate outcome metrics	Outcome measures			
Provision of information and	Aligned to Quality Standard 7	Proportion of women of childbearing age with diabetes who are regularly informed	[DN for commissioners: there are no specific NICE Quality standard metrics			
specialist care if planning to		about the benefits of preconception glycemic control and of any risks including	associated with the outcomes relating to this. However, it is suggested that a			
have a baby or are pregnant.	NICE Clinical Guideline 15 (2005)	medication that may harm an unborn child (QS 7).	case note review should be conducted and lessons learnt in the following cases when related to diabetes:			
This could be delivered as part		Proportion of women of childbearing age with diabetes planning a pregnancy who are				
of a structured education	NICE Clinical Guideline 63	offered preconception care from an appropriately trained healthcare professional (QS	Congential malformations			
programme or by the MDT.	(2008)	7).	Large-for-date			
The advice given should be annually appraised for	NICE Clinical Guideline 87 (2009)	Proportion of women of childbearing age with diabetes not planning a pregnancy who are offered advice on contraception (QS 7).	Neonatal hypoglycaemiaStillbirthEclampsia			
accuracy.		Evidence of local arrangements to ensure that women of childbearing age with diabetes	Perinatal mortality			
		are regularly informed about the benefits of preconception glycemic control and of any	Maternal mortality			
		risks, including medication which may harm an unborn child. (QS 7)	Incident microvascular complications during pregnancy			
Referral routes	From the MDT and Care Planni	ng process				
Frequency / Discharge route	Dependent on the individuals no	eeds				

Access to a Foot Protection Tea	m as outlined in NICE Clinical (Guidance 10 and 119	
Eligibility	All patients with diabetes		
Process	Relevant Standards	Performance indicators/ surrogate outcome metrics	Outcome measures
Foot Protection Team	Aligned to Quality Standard 10	Proportion of people with diabetes at risk of foot ulceration who receive regular	Domain 1 – Preventing people from dying prematurely
establishment, comprising: Diabetes specialist podiatrists	& 11	review by a foot protection team in accordance with NICE guidance (QS10).	Domain 2 – Enhancing quality of life for people with long-term conditions
with access to orthotic services. Team should take care of common podiatry issues relating	NICE Clinical Guidance 10 (2004) NICE Clinical Guidance 119	Evidence of local arrangements to ensure that people with diabetes at risk of foot ulceration receive regular review by a foot protection team in accordance with NICE guidance (QS10). Proportion of people with diabetes with a foot problem requiring urgent medical	Domain 3 - Helping people to recover from episodes of ill-health or following injury Domain 4 - Ensuring people have a positive experience of care
to diabetes.	(2012)	attention referred to and treated by a multidisciplinary foot care team within 24 hours (QS11).	Domain 5 – Treating and caring for people in a safe environment and protecting them from avoidable harm
The 5-year survival rate following foot ulceration is approximately 50% - mortality is largely attributed to CVD. As part of this process CVD risk factors should be optimized.		Proportion of people with diabetes with a foot problem requiring urgent medical attention referred to a multidisciplinary foot care team who are treated in accordance with NICE guidance (QS11). Evidence of local arrangements to ensure that people with diabetes with a foot problem requiring urgent medical attention are treated by a multidisciplinary foot care team within 24 hours (QS11).	Reductions in the incidence of foot ulceration (QS10). Reduced rates of lower limb amputation (QS11)
Referral routes	People with diabetes at risk of fo	oot ulceration will be referred into the Foot Protection Team by their MDT	
Frequency / Discharge route	This will depend on the individual patient's needs. If the patient is at risk of developing an ulcer then reviews should take place 1-3 monthly If a patient's podiatry issue requires more specialist care they should be referred onwards to the specialist service provision Referred to Specialist service's Diabetic Foot Care Team if presents with foot ulcer or if presents with possibility of Charcot neuroarthropathy For detailed referral routes please see: http://www.nice.org.uk/nicemedia/live/10934/29243/29243.pdf		

Specialist Foot Care Team as or	utlined in NICE Clinical Guidanc	e 10 and 119		
Eligibility	All patients with diabetes who are experiencing severe foot care needs, including: [DN: a set of local criteria should be developed by the commissioners in conjunction with their local acute specialists, these may include: Ischaemia/gangrene Ulceration Suspected / confirmed Charcot joints For a detailed referral pathway please see: http://www.nice.org.uk/nicemedia/live/10934/29243/29243.pdf] Performance indicators/ surrogate outcome metrics Outcome measures			
The urgent management of diabetic foot disease issues by a multidisciplinary foot care team. Foot care team: may comprise:	Aligned to Quality Standard 10 & 11 NICE Clinical Guidance 10 (2004) NICE Clinical Guidance 119 (2012)	Proportion of people with diabetes with a foot problem requiring urgent medical attention referred to and treated by a multidisciplinary foot care team within 24 hours (QS11). Proportion of people with diabetes with a foot problem requiring urgent medical attention referred to a multidisciplinary foot care team who are treated in accordance with NICE guidance (QS11). Evidence of local arrangements to ensure that people with diabetes with a foot problem requiring urgent medical attention are treated by a multidisciplinary foot care team within 24 hours (QS11).	Domain 1 – Preventing people from dying prematurely Domain 2 – Enhancing quality of life for people with long-term conditions Domain 3 - Helping people to recover from episodes of ill-health or following injury Domain 4 – Ensuring people have a positive experience of care Domain 5 – Treating and caring for people in a safe environment and protecting them from avoidable harm Reduced rates of lower limb amputation (QS11)	
Referral routes	Referred to Specialist service's I	ere problems are detected as specified by the agreed criteria Diabetic Foot Care Team if presents with foot ulcer or if presents with possibility se see: http://www.nice.org.uk/nicemedia/live/10934/29243/29243.pdf	of Charcot neuropathy	
Frequency / Discharge route	Once presenting issues have be	een resolved the patient will be discharged back into the care of the generalist M	MDT	

Structured insulin pathway for	all people with diabetes who ne	eed to start insulin therapy		
Eligibility	Everyone who has insulin-treated diabetes (T1DM)			
Process	Relevant Standards	Performance indicators/ surrogate outcome metrics	Outcome measures	
Structured insulin pathway. The provision of adequate education and training to safely allow patients ownership over their own administration and dose, wherever possible (this may not be possible where individual have conditions such as cognitive impairment or dementia).	Aligned to Quality Standard 6 NICE Clinical Guidance 15 (2005) NICE Technology Appraisal 53 (2002) NICE Technology Appraisal 151 (2008)	Proportion of people with diabetes starting insulin therapy that is initiated by a trained healthcare professional (QS 6). Proportion of healthcare professionals initiating insulin therapy who have documented appropriate training for starting and managing insulin (QS 6). Consideration should be given to the minimum number of insulin starts supervised per year in order that a trained healthcare professional can maintain competencies Proportion of people with diabetes who receive ongoing structured support to initiate and manage insulin therapy (QS 6) Evidence of local arrangements for a structured programme for initiating and managing insulin therapy including training and support for the healthcare professionals and the patients (QS 6). Evidence of local arrangements and locally agreed criteria for healthcare professionals to demonstrate and document training and competencies in initiating and managing insulin (QS 6). Consideration should be given to the minimum number of insulin starts supervised per year in order that a trained healthcare professional can maintain competencies	Domain 2 – Enhancing quality of life for people with long-term conditions Domain 3 - Helping people to recover from episodes of ill-health or following injury Domain 4 – Ensuring people have a positive experience of care Domain 5 – Treating and caring for people in a safe environment and protecting them from avoidable harm	
Referral routes		eting the self-management of insulin should be discussed and the patients referred ### IDT that they are experiencing problems should be referred to a diabetologist	ed to specialist for education/further education if necessary	
Frequency / Discharge route	This pathway will continue for the duration of the individuals condition, the intensity of clinical engagement will vary as per the individual's requirements at any particular time Review by the MDT of HbA _{1c} will depend on the patients requirements – at a minimum 6 monthly There should be an annual review of the injection sight (clinical needs may be require more frequent review)			

Specialist care for people with	T1DM and Insulin pump therapy	as outlined in TA151	
Eligibility	Everyone who has T1DM		
Process	Relevant Standards	Performance indicators/ surrogate outcome metrics	Outcome measures
Everyone with T1DM should have access to specialist services throughout their life time, when they feel appropriate and at least annually. Including the provision of care during acute presentations of T1DM and the provision and advice and aftercare of insulin pumps.	Aligned to Quality Standard 6 Aligned to Quality Standard 14 NICE Clinical Guidance 15 (2005) NICE Technology Appraisal 53 (2002) NICE Technology Appraisal 151 (2008)	Evidence of local arrangements for a structured programme for initiating insulin immediately on diagnosis and managing insulin or insulin pump therapy including training and support for the healthcare professionals and the patients (QS 6). Evidence of local arrangements and locally agreed criteria for healthcare professionals to demonstrate and document training and competencies in initiating and managing insulin or insulin pump therapy (QS 6).	Domain 1 – Preventing people from dying prematurely Domain 2 – Enhancing quality of life for people with long-term conditions Domain 3 - Helping people to recover from episodes of ill-health or following injury Domain 4 – Ensuring people have a positive experience of care Domain 5 – Treating and caring for people in a safe environment and protecting them from avoidable harm Reduction in incidents relating to insulin causing harm (QS 12).
Referral routes Frequency / Discharge route	This pathway will continue for the	e with T1DM poglycemia	

Eligibility	All patients with diabetes				
Process	Relevant Standards	Performance indicators/ surrogate outcome metrics	Outcome Measures		
Appropriate management of	Aligned to Quality Standard 12	Evidence of local arrangements to ensure that all inpatients with diabetes			
patients with diabetes in		are cared for by appropriately trained staff, provided with access to a	Domain 1 – Preventing people from dying prematurely		
hospital through the use of	NICE Clinical Guidance 15 (2005)	specialist diabetes team, and given the choice of self-monitoring and	Domain 2 – Enhancing quality of life for people with long-term conditions		
the Think Glucose Toolkit		managing their own insulin (QS 12).			
and the multidisciplinary		Proportion of staff on inpatient wards who are appropriately trained to care	Domain 3 - Helping people to recover from episodes of ill-health or following injury		
specialist diabetic team.		for people with diabetes (QS12)	Domain 4 – Ensuring people have a positive experience of care		
Allowing inpatients with diabetes to manage their		Proportion of inpatients with diabetes who are provided with access to a specialist diabetes team (QS12).	Domain 5 – Treating and caring for people in a safe environment and protecting them from avoidable harm Reduction in incidents relating to insulin causing harm (QS 12).		
own insulin and diet wherever possible.		Proportion of inpatients with diabetes on insulin therapy who are given the choice of self-monitoring and managing their own insulin (QS12).	Reduction in rate of recurrence of an episode of hypoglycemia requiring medical attention over 12 months (QS14).		
Foot check and risk assessment within 24 hours of admission		Proportion of people admitted to hospital with diabetic ketoacidosis who receive follow-up within 30 days after discharge by a specialist diabetes team (QS13)	Reduction in number of people with diabetes requiring medical attention as a result of a hypoglycemic episode (QS14).		
Seen within 24 hours by foot		Proportion of people with diabetes who have experienced hypoglycemia			
MDT if ulceration present		requiring medical attention who are referred to a specialist diabetes team	Domain 4 – Ensuring people have a positive experience of care		
		(QS14).			
			Increase in patient satisfaction with their care in hospital (QS 12).		
		Evidence of local arrangements to ensure that people with diabetes who have experienced hypoglycemia requiring medical attention are referred to a	Increased patient satisfaction during inpatient stay (QS 12)		
		specialist diabetes team (QS 14)	Reduced number of complaints from inpatients with diabetes and their families/carers (QS 12)		
Referral routes	,	nment the patient will be flagged to the inpatient diabetes team			
	[DN for commissioners: capacity lim	itations may mean that the Think Glucose Tool will be used to determine patien	nt need]		
Frequency / Discharge route	Duration of the acute stay				

APPENDIX C

Diabetes QOF indicators for 2014/15

QOF indicators 2014/15

Diabetes	mellitus ((DM)
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Diabetes				
No.	Indicator	Amendments	Points	Achievement Thresholds
DM001	The contractor establishes and maintains a register of all patients aged 17 or over with diabetes mellitus, which specifies the type of diabetes where a diagnosis has been confirmed		6	_
DM002	The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less		8	53–93%
DM003	The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 140/80 mm Hg or less		10	38–78%
DM004	The percentage of patients with diabetes, on the register, whose last measured total cholesterol (measured within the preceding 12 months) is 5 mmol/l or less		6	40–75%
DM006	The percentage of patients with diabetes, on the register, with a diagnosis of nephropathy (clinical proteinuria) or micro-albuminuria who are currently treated with ACE-I (or ARBs)		3	57–97%
DM007	The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 59 mmol/mol or less in the preceding 12 months		17	35–75%
DM008	The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 64 mmol/mol or less in the preceding 12 months		8	43–83%
DM009	The percentage of patients with diabetes, on the register, in whom the last IFCC-HbA1c is 75 mmol/mol or less in the preceding 12 months		10	52–92%
DM018	The percentage of patients with diabetes, on the register, who have had influenza immunisation in the preceding 1 August to 31 March	Minor wording change	3	55–95%

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DM012	The percentage of patients with diabetes, on the register, with a record of a foot examination and risk classification: 1) low risk (normal sensation, palpable pulses), 2) increased risk (neuropathy or absent pulses), 3) high risk (neuropathy or absent pulses plus deformity or skin changes or previous ulcer) or 4) ulcerated foot within the preceding 12 months		4	50–90%
DM014	The percentage of patients newly diagnosed with diabetes, on the register, in the preceding 1 April to 31 March who have a record of being referred to a structured education programme within 9 months after entry on to the diabetes register		11	40–90%
		Total points	86	