

# POSITION STATEMENT

Title	Date
<b>Competency Frameworks in Diabetes</b>	October 2014
Authors	
<ul style="list-style-type: none"><li>• Every health employee comes into contact with people living with diabetes, and requires the appropriate knowledge, skills and attitudes to undertake their role in a safe, effective and meaningful way</li><li>• There is a concern that care is being provided for patients without an adequate level of knowledge and skills</li><li>• There is a risk of severe harm to the patient with diabetes, particularly where care is not delivered by a competent individual.</li><li>• There is no single agreed competency framework across the NHS for diabetes.</li><li>• To address these risks, Diabetes UK recommends that:<ol style="list-style-type: none"><li><b>1. All health care professionals should demonstrate their competency to provide care to those with diabetes at their level of clinical activity</b></li><li><b>2. Putting competency frameworks into place should be underpinned by national co-ordination of competency frameworks.</b></li><li><b>3. A phased approach to the introduction of such a competency programme across health organisations is required over a defined period of time (e.g. 2 years), including the following phases:</b><ol style="list-style-type: none"><li>3.1. Organisations identify all staff roles that could impact on the safety and quality of care for people with diabetes</li><li>3.2. Organisations should ensure professional development plans exist for all relevant posts that reflect the diabetes competencies required (including knowledge, skills and attitudes).</li><li>3.3. Organisations should demonstrate that staff have appropriate time for continuous professional development</li><li>3.4. Commissioners and equivalents in Wales, Scotland and Northern Ireland should expect all staff in NHS funded organisations, including primary, community and secondary care, to be credentialed in diabetes through assessment against existing competency frameworks, to the appropriate level for their position. This requirement should be embedded within existing and new contracts.</li></ol></li></ol></li></ul>	

- 3.5. Registration and Professional organisations such as the GMC, NMC and Royal Colleges should adopt a competency based approach to ongoing CPD and revalidation
4. Aspects requiring development include:
  - 4.1. Broadening of existing and new educational programmes to cover the whole competency architecture ('curriculum')
  - 4.2. Ways to link patient outcome measures with healthcare professional education.
  - 4.3. Ways to undertake observational assessments as appropriate for each discipline.

## Introduction

Diabetes is a significant health concern, both in the UK and globally. Right now there are over 3.8 million people in the UK living with Type 1 and Type 2 diabetes – 3.2 million diagnosed (1) and an estimated 630,000 people who have Type 2 diabetes but do not know it<sup>1</sup>. Since 1996, the number of people with diabetes in the UK has more than doubled from 1.4 million to 3.2 million(2). Ten per cent of people with diabetes have Type 1 and 90 per cent have Type 2 (3). Another 11.5 million people could be at high risk of developing Type 2 diabetes<sup>2</sup> (4), and the numbers are rising dramatically every year. If current trends continue, it is estimated that by 2025, five million people in the UK will have diabetes<sup>3</sup> (5). By 2030, it is predicted that in some local authority areas up to 14 per cent of people will have diabetes (6). It is currently estimated that about £10 billion is spent by the NHS on diabetes. This works out at around 10 per cent of the NHS budget (with a 2010/2011 budget for the NHS of approximately £103billion) (7). The total cost (direct care and indirect costs) associated with diabetes in the UK currently stands at £23.7 billion and is predicted to rise to £39.8 billion by 2035/6 (7). People with diabetes can develop any other health condition, adding complexity to their care. As every NHS employee comes into contact with people living with diabetes in their day to day work, all health workers require the appropriate knowledge, skills and attitudes to undertake their role safely.

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<sup>1</sup> This figure was worked out using the diagnosed figure from the 2012/3 Quality and Outcomes Framework and the AHPO diabetes prevalence model. A figure for Northern Ireland was not predicted by the AHPO model, so undiagnosed prevalence for Northern Ireland was extrapolated on the % undiagnosed figure for Scotland. Number

<sup>2</sup> Based on 2013 ONS data that predicts a UK wide population of people over the age of 19 as 48.9 million, minus the 3.2 million already diagnosed with diabetes: 25% = 11.4 million: <http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcn%3A77-322718>

<sup>3</sup> The APHO model estimates that by 2025 there will be 4,086,458 million people with diabetes in England, 371,310 people in Scotland, and 287,929 people in Wales. The model was not used to give a 2025 prediction for Northern Ireland so we are using the current APHO model estimate total for diagnosed and undiagnosed for 2010 of 109,000 [unpublished]. Adding these up gives us the estimate of five million people with diabetes in 2025 (4,854,697).

Diabetes care itself can be complex, often requiring high levels of knowledge and skills, and there is a widespread need for additional training (8,9). Significantly different skill sets are required to manage Type 1 diabetes, with its need to manage complete or nearly complete insulin deficiency, and other forms of diabetes, with a growing range of therapies and frequent clustering of co-morbidities. There is now growing evidence that people with diabetes may not be seeing health care professionals with the required skills and knowledge. For example, practice nurses trained to deliver the X-PERT Diabetes structured education programme reported that their prior knowledge in the lifestyle management of type 2 diabetes was inadequate and outdated (10). Similarly, patients with Type 1 diabetes who had undertaken DAFNE (Dose Adjustment For Normal Eating) reported primary care and inpatient hospital staff to lack the required level of competency, leading to incorrect and potentially unsafe advice (11). Such deficits in skills and knowledge can be associated with severe harm. For example, between August 2003 and August 2009, the National Patient Safety Agency received reports of 3,881 'wrong dose' incidents involving insulin (some of which resulted in death) (12) and it has been demonstrated that hospitalized patients are subject to 0.3 prescribing errors per day (13). It has been estimated that in the USA (no data are available for the UK) this costs \$4700 per patient (14,15). Errors included using the wrong syringes and abbreviating the term 'unit'. Insulin remains one of the medications most associated with patient harm (16).

Diabetes UK is concerned that no mechanism currently exists to ensure that people with diabetes see health staff with the necessary skills, knowledge and attitudes that are conducive to quality care, and that patients may be at increased risk of acute or long term complications as a result.

The aim of this position statement is to make recommendations that can guide those involved in commissioning either health care professional education or health services to lessen the risks to people with diabetes from health staff without the appropriate knowledge, skills and attitudes.

### **Current situation**

The provision of good, safe, quality care is dependent upon effective healthcare education, continuing professional development and evidence-based practice, which are inseparable and part of a continuum during the career of any health care practitioner (17). Sound education provides the launch pad for effective clinical management and positive patient experiences. Health professional education can improve diabetes care (18).

The need for diabetes health professional education across England was illustrated in a recent survey among English Clinical Commissioning Groups (43% of 200 responding) (19). While diabetes health professional education is not technically within the remit of a CCG,

safety was still considered important: one third of CCG's had a formal (written) policy on diabetes education, 56% funded health worker time to participate in diabetes related educational events and there was considerable interest in supporting health care professional diabetes education overall. Over the last 2-3 years, diabetes competency frameworks have been defined for diabetes care among adults with diabetes, commencing with nursing by the TREND (Training, Research and Education for Nurses on Diabetes) group (20) and subsequently for dietetics and frontline staff (21) and podiatry(22). One question has been how to implement these frameworks to facilitate professional development in diabetes.

Diabetes UK established a Healthcare Professional Education Steering Group to develop a strategy to ensure that Health Care Professionals have the right skills, knowledge and attitudes, ie are competent, to provide the care and self-management support that patients need to manage their diabetes/improve outcomes. The steering group included representatives from different disciplines and Diabetes UK. Background work included:

- A scoping of the existing diabetes professional educational standards, competencies and courses in the UK (23).
- Facilitating the alignment/development of competency frameworks for nursing, dietetic, podiatry and non-clinical staff by the relevant health professional bodies and defining a framework for doctors.
- Supporting a pilot of the implementation of the competency frameworks through the Cambridge Diabetes Education Programme (24).

The work has drawn from international experience on how to improve health professional education and be assured of competence from the International Diabetes Federation, USA, Australia and Canada (25-28).

After an initial scoping activity (23), work focused on continuing professional development, rather than foundation courses. Such courses would be expected to cover all aspects of the competency frameworks. While competency frameworks have focused on adults to date, the principles also apply to the care of young people.

Defining and introducing such a competency framework into the NHS would be consistent with the Francis report (29), that demanded 'measures for staff numbers and skills in each clinical setting required to enable compliance with fundamental standards.' Although no specific competency frameworks have been developed for some disciplines eg doctors, psychologists, optometrists, orthotists (among others!), the principle is that:

'For comparable activities, the competency frameworks for nurses, dietitians, podiatry and other front line staff should apply to other disciplines'

Further work will be needed though, extending the existing competency frameworks to these other disciplines and to wider activities as they are identified. While assessment of attitudes is part of the competency frameworks, this should be seen within wider developments on patient reported outcomes.

There is currently no mechanism for undertaking credentialing (see Appendix) in diabetes in the UK. Even revalidation and the sign off of the maintenance of professional standards generally only requires evidence of course attendance and perhaps others observations: not objective evidence of having the appropriate skills, knowledge or attitudes or positive effects on patient outcomes.

### Current position of Healthcare Professional Education

Healthcare professional education can be divided into 3 components:

- **Foundation** i.e. initial education leading to qualification to practice including degrees and medical specialist training
- **Continuing Professional Development** i.e. ongoing education that maintains an individuals' competency to practice
- **Personal Development** i.e. education that facilitates additional activity such as research, teaching or management

While the recent revalidation process for doctors (every 5 years), and the planned revalidation of nurses (every 3 years), will require the provision of certificates of training/professional development and reports from patients and other health professionals, the approach provides a very broad review of the clinical expertise and attitudes of any given individual. The revalidation process as it stands, cannot ensure that all healthcare professionals maintain their competency to practice in any given area (e.g. diabetes) and does not provide objective evidence that this has occurred. To do this requires an accredited competency framework and delivery methodology which hitherto has not existed across the UK (23).

The current approach to diabetes health professional education generates a range of issues including health professionals not being qualified to deliver all aspects of care, a lack of clear career progression in key areas, 'specialisms' not being recognised (e.g. practice nurses with an interest in diabetes) and patients not knowing the competence of staff (there is a particular problem around DSNs and possibly dietitians whose experience with e.g. Type 1 diabetes can be particularly limited if not part of a full multidisciplinary team).

Crucially, there is concern around the lack of competency within generic fields such as ward based staff, nursing and residential home and community staff. Moreover, education for healthcare professionals should include the concept of how to handle situations where the HCP does *not* have in-depth knowledge.

The creation of the competency frameworks, has defined the knowledge and skills required for dealing with patients with diabetes, at different levels of expertise. Although only

covering a proportion of the scope of practice for many health professionals, a number of components of the competency frameworks now have online learning and assessments that could provide certification for the competencies covered. These include:

- The Virtual College through the former NHS Diabetes has developed a suite of courses available in England (originally, but no longer, free at the point of use). This provides direct on line registration and completion by users including The Safe Use of Insulin Syringes, Pen Devices, Pumps and Sharps (30). At the time of evaluation, 83,986 health care professionals had registered, of whom, 58,188 had completed the module. Responses from 1,246 (15.3%) of 8,152 who were invited to complete a web based survey showed increased confidence in prescribing, handling or administering insulin and some changes in local working practice and policies. The College also runs 'The safe management of hypoglycaemia' and the safe use of non-insulin therapies for diabetes.
- [www.diabetesinhealthcare.co.uk](http://www.diabetesinhealthcare.co.uk) – Diabetes UK's free, RCN-accredited, introductory diabetes e-learning programme for healthcare professionals who are not diabetes specialists. Diabetes in Healthcare covers both Type 1 and Type 2 diabetes and was written by Diabetes UK's diabetes specialists and Bupa. It consists of 6, 20-minute modules and an assessment – once completed the learner gets a certificate and can attribute the time to their ongoing CPD.
- The Cambridge Diabetes Education Programme ([www.cdep.org.uk](http://www.cdep.org.uk)) has been explicitly developed to cover all competencies within a topic as part of ongoing learning, and to be delivered across health areas (e.g. a general practice, a hospital, an area health board, a clinical commissioning group area). The Nursing competency framework established by the TREND group has over 22 topics. The pilot covered the first 3 topics (what is diabetes, hypoglycaemia, hyperglycaemia) at TREND levels 1 (unregistered practitioner) and level 2 (general nurse) across Cambridgeshire general practices. This has now been extended to a further 5 topics and a module for general practice staff to provide certification for key Quality Outcomes Framework (QoF) activity (26). The programme pilot tested how such certification could be achieved systematically and found that:
  - developing an acceptable online education programme is labour intensive but can be achieved and can provide certification in relation to knowledge;
  - there is substantial demand for healthcare professional education;
  - the process within an area can be coordinated by the local post graduate medical centre and linked to non-on line educational activity;
  - although participation and certification can be achieved on line, credentialing i.e. the demonstration and sign off of knowledge and skills in practice, needs observation by those considered appropriate to undertake such an assessment. This was seen as a very complex (e.g. who signs off the assessors and using which criteria?) and potentially costly endeavour with a possible medico-legal risk to those undertaking the assessments.

There are other training programmes, but these do not link with the competency frameworks and/or have robust assessment (23).

## **Diabetes UK calls to action or Recommendations**

### What is needed to move ahead?

- A. An agreed credentialing framework for each health worker group
- B. Definition of relevant stakeholders
- C. A governance framework for rollout

### A: An agreed credentialing framework for each health worker group

The Diabetes UK Health Care Professional Education Steering Group recommends the following components for credentialing:

1. Categorisation of competencies within the frameworks into knowledge, skills and attitude-status:
  - a. This has already been completed for nursing, dietetics and frontline staff
  - b. Knowledge can be assessed by certification in part, but skills and attitudes require observation. There are therefore 3 levels for credentialing
    - i. Participation in continuing professional education
    - ii. Certification demonstrating appropriate knowledge without observation
    - iii. Certification demonstrating appropriate knowledge, skills and attitudes with observation (the 'gold standard')
2. Definition of key principles for a full credentialing approach:
  - a. Minimal cost
  - b. Minimal time
  - c. Minimal impact on clinical work time
  - d. Maintains relationships between colleagues
  - e. Transparent and fair: objective rather than subjective
  - f. Provision of evidence-based structured education – i.e. consistency and stated benefits.
3. Assessment of skills, implementation of knowledge and attitudes of healthcare professionals. Academic discourse has considered what constitutes effective assessment of competency. It considers that one-size does not fit all, with job role, number of years of experience and educational level all contributing to the need for a multifaceted approach that not only accommodates the aforementioned but also considers the logistics of the assessment process and reflects on effective outcome and improved patient care. Components include:
  - a. Original qualifications
  - b. Subsequent courses and training
  - c. Certification without observation (e.g. on line courses)

- d. Direct observation: this can be expensive and needs further work to define options and minimise cost eg
    - i. Local work based assessments by multiple local colleagues including 360 degree assessments
    - ii. Local work based assessments through DOPs (Direct Observational Procedures) by a local approved assessor
    - iii. Assessment by visiting or local 'Champions' (ie individuals shown to have the required expertise) e.g. within the Podiatry Framework or within the Royal College of General Practitioners Quality Practice Award programme (where a full day assessment visit is conducted by a panel of three, comprised of a combination of GPs, Nurses, and Managers: (<http://www.rcgp.org.uk/revalidation-and-cpd/practice-accreditation-and-quality-practice-award.aspx>))
    - iv. Structured feedback from patients
    - v. Videoing of activity and sending to central site for assessment– one example being the X-PERT Diabetes Structured Education where Educators are assessed against standards. Each standard is either fully, mostly, partly or not met. To date 65% of the 454 eligible X-PERT Educators have either been assessed or are currently going through the process with 3.2% receiving a timed action plan to obtain additional competencies.
  - e. Reflection was also suggested as a useful form of part of assessment but was thought to be effective only if taken seriously and when the individual is prepared to recognise their limitations. It is felt to add value to a formal assessment process e.g. if the HCP is videoed, the individual can complete a reflection diary and this can ascertain if they correctly identify strengths and weaknesses themselves.
4. Approval of individual assessors itself is complex and involves evidence of the appropriate level of knowledge, skills and attitudes as well as:
    - a. Time at a senior level
    - b. Currently involved in supervision and setting standards locally
    - c. Previously has been assessed and passed that assessment.
  5. The organisations that manage the assessors and coordination also require accreditation. This is needed to ensure that appropriate standards for both the assessment process and assessors are met, linking in with professional registration and revalidation processes as appropriate. There will need to be clearly defined training and Quality Assurance processes in place.

## B Definition of Relevant stakeholders

The NHS has 4 separate and different approaches to delivering health services. While Wales, Scotland and Northern Ireland have a centralised approach to managing the health economy and could 'buy in' a healthcare professional education framework, England has a more complex market model. Figure 1 shows the framework and components needed to

be 'on board' for a credentialing framework to be implemented in England. Further work is needed to define frameworks for Wales, Scotland and Northern Ireland.

In broad terms, the following structures need to be considered:

- Standards
  - NICE/SIGN e.g. Quality standards, QOF
  - Competency frameworks through professional organisations
- Recognition of standards within local policy
  - Registration bodies
  - Professional organisations
  - Health care quality organisations e.g. CQC, Monitor
  - Commissioning organisations e.g. NHS England, CCGs, Departments of Health
- Content and delivery
  - On line certification
  - Credentialing
  - Competency in education and at delivering educational programmes
- Commissioning and service planning
  - Health Education England and Local Education and Training Boards
  - Health organizations/employers to demonstrate qualification as a provider e.g. general practice, hospitals
  - Local commissioners and planners e.g. CCGs, Local Health Boards

### C A governance framework for rollout

Adoption by national bodies and consideration of how this framework can fit into their planning is now recommended. This document is intended to inform discussions for adoption, which in turn will inform roll out. There are a number of areas to consider besides 'fit' into the stakeholder plan including Governance and Local Coordination.

#### **Governance**

For example, governance for a given discipline could be by the Registration body for a discipline (eg Nursing Midwifery Council) or by the Professional body (eg Royal College of Nursing), or across disciplines by an NHS Educational body (eg Health Education England). The latter would allow economies of scale and the maintenance of a common framework.

#### **Local Coordination**

Local coordination and delivery could be by:

- i. Post graduate medical centre
- ii. Local Diabetes Network where these exist
- iii. LETB
- iv. Educational provider(s) e.g. universities, health services, not for profit educational organisations

Both governance and coordinating bodies should include:

- i. Include patient representatives e.g. Diabetes UK representative
- ii. Educationalist in some form
- iii. Respected authority
- iv. Capability and capacity to deliver the activities
- v. Defined QA processes to ensure consistency of approach and requirements

### ***Implementation tools***

These are seen to be generated by either the education market or through modification of existing tools.

Although on line certification programmes can assess knowledge, and focussed educational initiatives such as the X-pert, DESMOND and DAFNE educational quality assurance programmes, can provide aspects of credentialing, it is clear that level 3 assessments (observation) need to be further developed to allow more thorough credentialing, particularly for competencies requiring greater skill.

### **Recommendations**

1. There should a national recognition that diabetes is a large, growing and serious problem and this requires all health care professionals to demonstrate their competency to provide care to those with diabetes at their level of clinical activity
2. Putting competency frameworks into place on a local, district and national basis should be underpinned by national co-ordination of competency frameworks. For example, In England, Health Education England should require local commissioners and providers to improve diabetes knowledge and skills training and ensure staff are competent in delivering clinically accurate and person centred care for those with diabetes.
3. A phased approach to the introduction of such a competency programme across health organisations is required over a defined period of time (eg 2 years), including the following phases:
  - Phase 1: Organisations delivering care formally identify all staff roles that could impact on the safety and quality of care for people with diabetes.
  - Phase 2: Using the appropriate competency framework, organisations should ensure professional development plans exist for all relevant posts that reflect the diabetes competencies required (including knowledge, skills and attitudes). Staff appraisals should be used to map progress against competencies and plan training/support to address areas of need. Progress towards competencies should be undertaken as

part of continuing professional development, ongoing learning and appraisal/revalidation, rather than as a bureaucratic burden

- Phase 3: All organisations should demonstrate that staff have appropriate time for continuous professional development to build the portfolio and/or academic evidence that they meet the competencies.
- Phase 4: Commissioners and equivalents in Wales, Scotland and Northern Ireland should expect all staff in NHS funded organisations, including primary, community and secondary care, to be credentialed in diabetes through assessment against existing competency frameworks, to the appropriate level for their position. This requirement should be embedded within existing and new contracts
- Phase 5: Registration and Professional organisations such as the GMC, NMC and Royal Colleges should adopt a competency based approach to ongoing CPD and revalidation, as well as to accredit non medical specialist roles (as already exists for doctors).

4. Aspects for the implementation of the competency frameworks still require development. It is unclear the extent to which the costs of these developments will be covered by government, and/or non-government including 'market' sources:

4.1 Existing educational programmes (Foundation and continuing) should be broadened to cover the whole competency architecture ('curriculum'), as defined by national competency frameworks: competency frameworks should be extended where needed to cover the whole range of practice across all disciplines.

4.2 Methods should be developed to link patient outcome measures with healthcare professional education.

4.3 The development and implementation of Level 3 (observational) assessments should be undertaken as appropriate for each discipline. Methods can range from video-recording as in X-pert to direct observation.

## **Conclusion**

Quality, skills and attitudes of staff working in the healthcare system are central to multidisciplinary learning and working, and to the delivery of the quality of care patients expect. Patients want to know that the staff supporting them have the right knowledge and attitudes to work in partnership, particularly for conditions such as diabetes where 95% of all care is delivered by the person with diabetes themselves.

With the current changes in the NHS structures in England, and the potential for greater variation in the types of 'qualified provider', along with the recent scandal at Mid-Staffordshire Hospital, staff need to be shown to be competent and named / accredited or recognised as such. This will help to restore faith in an increasingly devolved delivery structure. The education and validation of competency, needs to be consistently delivered and assured to ensure standards are maintained for different roles and disciplines across each UK nation. Diabetes UK recommends that all NHS organisations prioritise healthcare professional education, training and competency through the implementation of a National Diabetes Competency Framework and the phased approach to delivery to address this need.

In this position statement, we group all health workers under the term 'Healthcare Professional'. This includes:

- Front line staff e.g. receptionists and orderlies
- Unregistered practitioners such as health care assistants
- Allied health professionals such as dietitians
- Nurses
- Doctors

There are many components to setting up a competency based framework, each of which uses phrases and words that require definition:

**Competency** is having the knowledge, skills, and attributes for a given task.

**Accreditation** is the process whereby an educational, social or health care institution is recognised as meeting established standards by the relevant official body.

**Revalidation** is the process by which the credentials of an individual are accepted as being adequate for their professional activities by the relevant official body.

**Assessment** is the process for evaluating the skills, knowledge or attitudes in relation to a given task.

**Certification** is the process of providing documentary evidence that an individual has fulfilled the requirements of a course. This may include participation or completion of formative or summative assessment for a defined area of practice.

**Credentialing** is the process by which competency is signed off as being maintained at the appropriate standard. The process was established to determine if clinical privileges to practice in a particular place were to be granted and included a review of the health professional's credentials, training, experience, or demonstrated ability, practice history and medical certification or license (25). In the context of credentialing to work with people with diabetes, we define credentialing as "the formative assessment/review of an individual's daily clinical practice that provides assurances of safe, effectively, evidence-based care provision." It provides assurances of multidimensional competency incorporating knowledge, skills and attitudes, placing service users at the heart of this process and considers specific healthcare contexts.

## Further information

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