North South Inter-Parliamentary Association

Second meeting

Type 2 Diabetes Mellitus

5th April 2013

Background briefing prepared by the Research and Information Service (RalSe) of the Northern Ireland Assembly and the Library & Research Service of the Houses of the Oireachtas (*Tithe an Oireachtais*)

Contents

Key Points

- Type 2 diabetes is a devastating, chronic disease which affects up to 90% of all people with diabetes. The chronic nature of the disease requires self-management by the patient and good medical support.

- Complications of Type 2 diabetes include heart disease, stroke, blindness, limb amputation and kidney failure to name but a few. These complications result in significant human, social and economic costs. The burden of the disease and its complications takes up considerable resources – accounting for approximately 10% of the healthcare budget.

- Evidence shows that Type 2 diabetes can, in some circumstances, be prevented or delayed. However, the disease frequently lacks any symptoms and can manifest for several years before clinical detection.

- Northern Ireland and Ireland do not have a national diabetes register in place to quantify exactly how many people are suffering from Type 2 diabetes. Estimates from Northern Ireland suggest that 75,000 people - almost **4%** of the population have diabetes (this includes people with both Type 1 and Type 2 diabetes). This figure does not include the estimated 10,000 who remain undiagnosed and are unaware that they have the disease.

- In the Republic, estimates suggest that in 2010, 135,000 people were living with diabetes (Type 1 and Type 2 diabetes) - almost **9%** of the population. This figure includes undiagnosed cases.

- The number of people affected by Type 2 diabetes is projected to rise dramatically in the next ten years. Increasing age, obesity and sedentary lifestyles are all contributing factors to the rising numbers of people with the disease.

- Whilst no cure for Type 2 diabetes currently exists, maintaining a healthy weight, eating a balanced diet and increasing physical activity can help to reduce complications and also prevent the onset of Type 2 diabetes.

- Policy in both jurisdictions emphasises education and awareness about healthy lifestyle choices, early detection and prevention of diabetes, as well as the promotion of integrated care models for diabetes patients - provided close to where they live.

- Very few cross-border initiatives specifically in relation to Type 2 diabetes care have taken place, and further work in this area could be explored.

1. Introduction

1.1 What is Type 2 diabetes?

Type 2 diabetes is the most common form of diabetes, affecting around 90% of all people with diabetes.[1] It is a serious lifelong condition which causes blood sugar levels to become too high. In particular, Type 2 diabetes occurs when the body is unable to produce enough insulin to function properly, or when cells in the body do not react to insulin (insulin resistance). Most of the food we eat is broken down into glucose - the main source of fuel in the body. For glucose to get into the body's cells, insulin must be present. In people with Type 2 diabetes, glucose builds up in the bloodstream and the body cannot make efficient use of its main source of fuel.

This form of diabetes is distinguished from Type 1 diabetes which occurs most frequently in children and is characterised by a lack of insulin.

2. Complications and risk factors

Type 2 diabetes is associated with long-term complications that affect almost every part of the human body. If left untreated, it can lead to serious macro and micro vascular complications; cardiovascular disease, kidney disease, nerve and eye disease, diabetic coma, foot problems as well as premature mortality (figure 1).[2] It is also suggested that life expectancy can be reduced by up to 10 years for a person with Type 2 diabetes.[3]

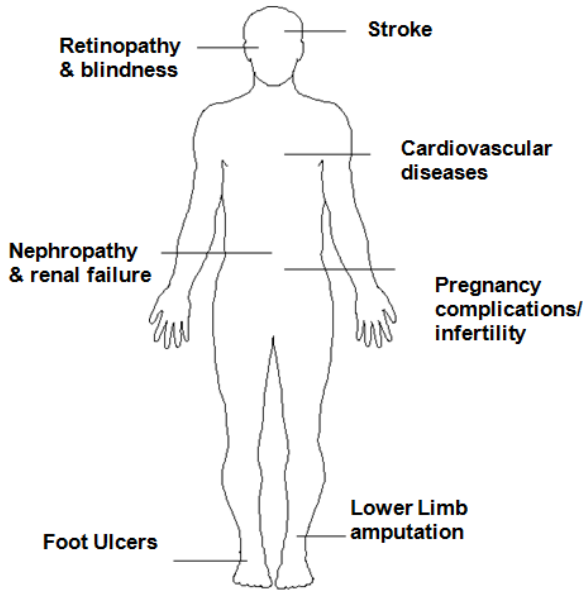

Figure 1. Complications associated with Type 2 diabetes

[1] World Health Organisation: Diabetes.
[2] International Diabetes Federation: Complications of diabetes.
[3] Diabetes.co.uk: Diabetes Life Expectancy.

However, the disease frequently lacks symptoms and can manifest up to several years before clinical detection, thus making it difficult to diagnose. A key problem is that by the time symptoms appear, significant complications and co-existing morbidities may have already developed.[4]

Type 2 diabetes is strongly genetic in origin, but lifestyle and environmental factors - for example, excess weight, inactivity, high blood pressure, smoking, alcohol and poor diet are also known to increase predisposition to the disease. The disease also falls disproportionately on older adults, minority ethnic groups and those from lower socio-economic backgrounds. Nevertheless, people can develop Type 2 diabetes at any age, even during childhood. Indeed, poor diet and a lack of exercise are thought to be the main contributing factors to the increasing number of younger adults developing Type 2 diabetes.

3. Prevalence, prevention and management

The global incidence of Type 2 diabetes is rising rapidly as a consequence of increasing age, obesity and sedentary lifestyles. At present, Type 2 diabetes affects around **8.5**% of the world's population.[5] Prevalence is escalating to such an extent that Type 2 diabetes has reached epidemic proportions.[6]

No cure for Type 2 diabetes currently exists, therefore the condition has to be managed.[7] Yet many of the long-term complications associated with diabetes can be avoided with early diagnosis and good treatment regimens. It is estimated that up to 80% of cases of Type 2 diabetes can be prevented or delayed through weight loss and increased physical activity.[8]

When a person is diagnosed with Type 2 diabetes, treatment aims to keep the level of blood glucose, blood pressure and blood lipids (such as cholesterol) within recommended targets. This helps to control symptoms and to minimise health complications. Educating patients is vital as they assume substantial responsibility for managing their condition through healthy lifestyle choices and regular exercise. However, as time progresses, adequate blood sugar levels may be more difficult to maintain and some patients may require medication and / or insulin injections. As complications affect many parts of the body, care is usually provided by a variety of health care specialists; therefore integrated care pathways are also important.[9]

[4] International Diabetes Federation; Types of diabetes.
[5] Diabetes.co.uk. Diabetes prevalence.
[6] International Diabetes Federation: Diabetes epidemic out of control.
[7] International Diabetes Federation: Management of diabetes.
[8] World Health Organization: Preventing chronic diseases: A vital investment, 2005.
[9] World Health Organization: Diabetes self-management

4. Position in Ireland

4.1 Statistics - Ireland

- In 2010, it was estimated that more than 135,000 (8.9%) adults aged over 45 years in the Republic have diabetes (diagnosed and undiagnosed).

- The rate of clinically diagnosed diabetes for all adults aged over 18 years is 3.2% (106,000 people).

- By 2020 the number of adults aged over 45 years with diabetes is expected to rise to more than 175,000 (9.1%). This represents a 30% increase (an additional 40,000 adults aged over 45 years) in ten years.

In August 2012, the Institute of Public Health in Ireland (IPH) called for a greater focus on the prevention, early detection and effective management of diabetes.[10] This call was made in the context of the projected rise to more than 175,000 in the number of adults aged over 45 with diabetes in the Republic (which would represent 9.1% of the population in that age cohort). [11] The research was conducted by the IPH in collaboration with the Health Research Board (Ireland) and the Centre of Excellence for Public Health (Northern Ireland). It is based on an analysis of the latest national health survey, SLÁN 2007.[12]

In addition, the research showed that:

- A subset of those aged over 45 years in the SLÁN 2007 survey were clinically examined. Of these, 2.7% (41,000) of all adults aged over 45 years had undiagnosed diabetes. Hence amongst adults aged over 45, 30% of all diabetes is undiagnosed.
- Undiagnosed diabetes is more common among men aged over 45 (4.0%) than women (1.5%) aged over 45 years.

[10] The Institute of Public Health in Ireland (IPH) promotes cooperation for public health on the island of Ireland.
[11] The diabetes report and detailed data tables are available online at: http://chronicconditions.thehealthwell.info/chronic-conditions/diabetes
[12] The report is available online at: http://www.dohc.ie/publications/pdf/slan07_report.pdf?direct=1

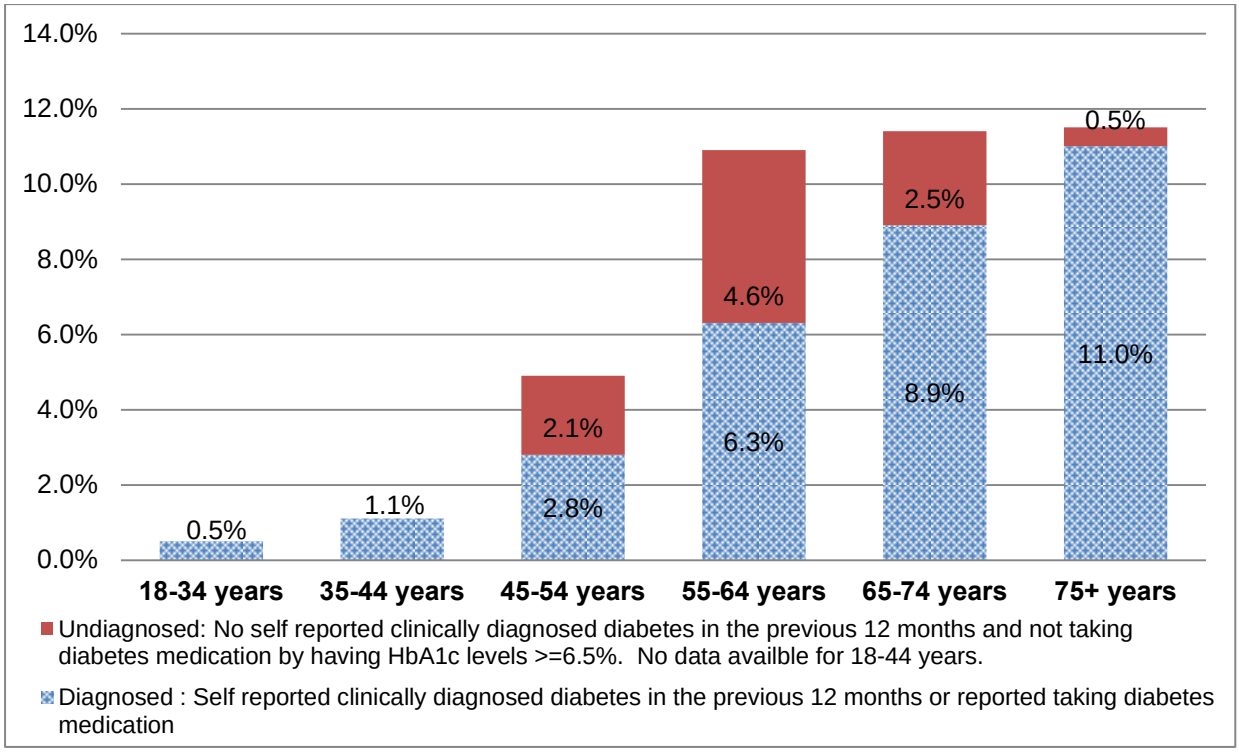

Figure 2 – Percentage of adults (over 18 years of age) with clinically diagnosed diabetes in the previous 12 months and the percentage of adults (over 45 years of age) with undiagnosed diabetes (Ireland).[13]

Commenting on these research findings, Professor Ivan Perry from the Health Research Board (HRB) Centre for Health and Diet Research, University College Cork, stated that:

> *"We are currently in the grip of a global epidemic of obesity and Type 2 diabetes. Ireland is clearly not immune from this phenomenon which has the potential to overwhelm health services over the next decade. Most people now understand the causes of obesity and diabetes. Unfortunately knowledge alone does not change behaviour. In the past we have over–emphasised the issue of personal choice and responsibility in the area of diet, physical activity and health and largely ignored the need to change both our food environment and physical environment in ways that will support healthy choices through public policy. In this context the current government proposals for increased taxation on sugar sweetened soft drinks is critical."*

[13] Source: IPH Diabetes Briefing (2012, p.3)

5. The policy context in Ireland

5.1 Overview of the development of diabetes care policy in Ireland

In January 2004 the Chief Medical Officer (CMO) in the Department of Health met with the Oireachtas Joint Committee on Health and Children.[14] In relation to the Department's general strategy for Diabetes and its new policy, the CMO explained that the Department had:

> *"begun to consider diabetes as an entity because in recent years, rather than develop generic services for dealing with the entire range of illnesses, some thought has been given to identifying illnesses of a significant public health importance, with high mortality and morbidity rates, whose natural history is reasonably well understood, and for which there is good evidence for interventions. Cardiovascular disease and cancer have been targeted in this way. The cancer strategy … and the cardio-vascular strategy … have shown the merit of dealing with these important disease entities in this co-ordinated and integrated way."*

The CMO identified the issue of strengthening primary care:

> *"This is about developing a model of care that will provide an appropriate structure within the community to allow the shifting of care from secondary specialist to primary generalist care and to deliver the full range of health and personal and social services that are appropriate."*

A number of additional issues were also identified by the CMO in 2004 including:

- the development of quality indicators in primary care focusing on diabetes;
- provision for a range of both staffing and bed capacity improvements because of the increasing need for diabetes services;
- the lack of comprehensive information, not only regarding the identification of people who either have or are at risk from diabetes, but also with regard to documenting the process and outcomes of the care that is given;
- developing capacity within the public health nursing stream. The public health nurse has access to the populace at large and in particular to children as part of the school programme. The whole issue of health promotion and developing healthy lifestyles for children is important;
- the whole area of developing chronic disease management protocols is important, particularly the inclusion of patients and their families in the development of those

[14] Transcript of Committee hearing available online at: http://debates.oireachtas.ie/HEJ/2004/01/22/00003.asp

protocols. Ultimately in illnesses such as diabetes, which is a lifelong condition, it is far better if the patient and his or her family are the ultimate managers of the condition with the assistance of the professionals;

- The importance of preventive initiatives, including new ones such as screening for retinal disease; and
- current provision, including the need to better integrate and co-ordinate existing services.

Following the CMO's appearance, the National Diabetes Expert Advisory Group was established in December 2006 and published its report in April 2008.

Amongst the key recommendations made by the Expert Advisory Group were:[15]

- The national implementation of an Integrated Model of Care (between primary, secondary and tertiary) and, to this end, the introduction of an effective Information and Communications Technology (ICT) system;
- Publication and updating of a detailed and comprehensive set of clinical guidelines for diabetes care;[16]
- The development of podiatry (foot-care), a critical area of diabetes care and one where complications lead to the most costly outcomes; and
- A service delivery model for a National Diabetic Retinopathy Screening Programme.

In the Republic, key strategies make recommendations to tackle obesity and prevent obesity related conditions such as diabetes as well as promoting awareness of diabetes and its symptoms. [17]

The Health Service Executive (HSE) is, in line with the approach set out by the CMO in 2004, developing chronic disease programmes which are particularly relevant to primary care: Diabetes; Stroke; Heart Failure; Asthma; and Chronic Obstructive Pulmonary Disease (COPD).

[15] First Report of the National Diabetes Expert Advisory group (2008, pp.8-9)
[16] The HSE published, in June 2008, *A Practical Guide to Integrated Type 2 Diabetes Care* available online at: http://www.hse.ie/eng/services/Publications/topics/Diabetes/A_Practical_Guide_to_Integrated_Type_II_Diabetes_Care.pdf
[17] Such as the Department of Health and Children's *Changing Cardiovascular Health: National Cardiovascular Health Strategy 2010-2019* and *Obesity the Policy Challenges – the Report of the National Taskforce on Obesity*

The HSE's **National Diabetes Programme** was established in May 2010. One of the aims of the Programme was to develop a model of care through which all diabetes patients could have access to a structured integrated care package to cover all aspects of their diabetic care.

The Programme has worked to design an Integrated Care Programme for all patients with diabetes. This model of care identifies best practice for the management of the condition based on type and severity, i.e.

- Uncomplicated Type 2 diabetes patients will be managed in Primary Care only (100,000 patients)
- Complicated Type 2 diabetes patients will be managed by both Primary and Secondary Care (60,000 patients)

The Minister for Health has clarified the objectives of the National Diabetes Programme which are to:[18]

- Develop a National Retinopathy Screening Programme for Diabetes to prevent blindness and visual loss from diabetes;
- Develop a foot care screening and treatment service to prevent foot ulceration and subsequent lower limb amputation;
- Develop an Integrated Care Programme for patients with Type 2 Diabetes;
- Improve Diabetes control (including paediatrics); and
- Develop a National Diabetes Register.

It was announced in November 2012 that a **National Steering Committee** had been set up to oversee implementation of the Diabetes programme and it is working through a number of key issues, including progression of ICT Development.[19]

Recent developments include the announcement in March 2013 of the appointment of 17 new Integrated Care Diabetes Nurse Specialists to work in an integrated way between hospitals and community supporting patients to manage all aspects of their diabetes. There will be one new post per HSE Integrated Service Area.[20]

[18] Written reply to a Parliamentary Question, 21st March 2012
[19] http://www.merrionstreet.ie/index.php/2012/11/speech-for-minister-reilly-national-primary-care-conference-mallow-14th-november-2012/
[20] The HSE's four Regions are divided into HSE Areas. Each HSE Area has an Area Manager who is responsible for managing all of the public health services in their area of operation. HSE Areas include all Hospital Services and Local Health Office services, integrated into one seamless health service for the people living in that area.

5.2 National Retinopathy Screening Programme[21]

A national Diabetic Retinopathy Screening (DRS) programme will be introduced, offering free, regular diabetic retinopathy screening to all persons with diabetes aged 12 years and older. The programme aims to reach, over time, an estimated growing population of 190,000 people.

Since a formal request by the National Directorate of Clinical Strategy and Programmes in February 2011 to commence the development of a national DRS programme, the National Cancer Screening Service (NCSS) has been preparing for the introduction, working closely with the National Directorate of Clinical Strategy and Programmes within the HSE, and the Department of Health. The NCSS will be responsible for screening and treatment of retinopathy diabetic patients within the programme.

5.3 Progress on other elements of the National Diabetes Programme

It is understood that the proposed National Integrated Care Scheme will encompass most of the elements of the existing 10 pilot primary care diabetes initiatives.[22]

The Minister for Health explained in May 2012 that the integrated model of care for diabetes is to be rolled out on a phased basis as resources permit.[23]

He confirmed that work is also continuing on progressing initiatives introduced in 2011, including the national multidisciplinary foot care programme.

The Minister confirmed that amongst the National Steering Committee key work streams are:

- Recruitment of Integrated Care Diabetes Nurse Specialists;
- Progression of ICT Development; and
- Discussions with the Irish Medical Organisation (IMO) and other relevant parties.

5.4 Cost of Diabetes care

The National Diabetes Expert Advisory group estimated in 2008 that based on a conservative estimated increase in prevalence of 37.5% over the period 2007-2015 that the increase in health service costs would be €524 million per annum. This is based on the UK estimate that Diabetes care and treatment amounts to 10% of their National Health System expenditure.

[21] This section is based on material available online at: http://www.cancerscreening.ie/news/news.php?idx=189
[22] http://www.imt.ie/clinical/2012/04/track-record-on-diabetes.html
[23] http://debates.oireachtas.ie/dail/2012/05/09/00177.asp

6. Position in Northern Ireland

6.1 Statistics from Northern Ireland

- In Northern Ireland, **75,000 people** - almost 4% of the population have diabetes (this figure includes Type 1 and Type 2 diabetes). In addition, many thousands of people are unaware that they have the disease.[24]

- Compared to the rest of the UK, the number of people living with diabetes has **increased by 33%** in Northern Ireland during the last five years, 25% in England, 20% in Wales and 18% in Scotland.[25] The fact that Type 2 diabetes is rising faster in Northern Ireland than these other countries is worrying.

- More than half of adults are overweight or obese in Northern Ireland and this will exacerbate the number of people presenting with Type 2 diabetes.[26] In addition, Northern Ireland has the fastest growing older population in the UK and as previously discussed, Type 2 diabetes is more prevalent in older adults.[27]

6.2 Costs of diabetes care

The chronic nature of Type 2 diabetes results in significant human, social and economic costs. There are costs for treating the diabetes itself, and much larger costs associated with treating and managing the complications of diabetes. Unfortunately, it is difficult to estimate the true cost of diabetes in Northern Ireland as no robust data on the care and treatment of the disease is available from the Department of Health Social Services and Public Safety (DHSSPS) and costs originate from various funding streams.[28]

Nevertheless, it is estimated that the health service in Northern Ireland currently spends 10% of its budget on diabetes care and the treatment of diabetic complications – around £400 million pounds per year.[29] Hospital in-patient costs for the treatment of diabetic complications are the largest single contributor to direct healthcare costs. Currently there are around 4,000 hospital admissions a year due to diabetes in Northern Ireland, with patients taking up 15,000 'bed days'.[30]

In addition, there are substantial indirect costs to the economy in terms of lost working days due to diabetes complications, early retirement and social benefits.

[24] Diabetes.org.uk. Diabetes in Northern Ireland
[25] Diabetes.org.uk. Diabetes in Northern Ireland
[26] Public Health Agency, Northern Ireland. Obesity Campaign (2013).
[27] Office of National Statistics – A demographic portrait of Northern Ireland, p 91.
[28] Personal correspondence from DHSSPS to NI Assembly Health Researcher. Response dated 11.6.12
[29] Diabetes in Northern Ireland; the human, social and economic challenge, p12.
[30] Northern Ireland Audit Office report: Obesity and Type 2 diabetes in Northern Ireland, p11.

Given the recent government budget constraints, the 'squeeze' on resources and the rise in the number of people presenting with diabetes, maintaining adequate levels of service provision will remain a huge challenge for the health and social care service in Northern Ireland. Moreover, commentators fear the current level of spending on diabetes and its complications is not sustainable and threatens to cripple the health service.

7. The policy context in Northern Ireland

7.1 Standards for Diabetes Care (Northern Ireland and the rest of the UK)

National Service Frameworks (NSFs) guidance has been rolled out by the Health Departments in England, Scotland, Wales and Northern Ireland. These frameworks aim to improve services for diabetes care by setting national standards.[31] Although they may vary in each country, their aim is to detect, treat, plan and manage services under one framework and therefore reduce variations in care. The Frameworks are also accompanied by a range of other guidelines and standards. The different diabetes frameworks in the UK are presented in Table 1.

Table 1. National care frameworks for diabetes in the UK.

England[32]	Department of Health (2001) National Service Framework for Diabetes
Scotland[33]	Scottish Executive (2002) Scottish Diabetes Framework
Wales[34]	Welsh Assembly Government (2002) National Service Framework for Diabetes
N. Ireland[35]	Diabetes UK/CREST (2003) A Blueprint for Diabetes Care in Northern Ireland in the 21st Century: Joint report

7.2 Policy Directions

The prevention of Type 2 diabetes requires a focus on controlling the environmental factors that pre-dispose individuals to the disease, and on encouraging people's capacity to improve their health through education and awareness. Since the publication of the joint Diabetes UK/CREST diabetes strategy for Northern Ireland, several other strategic frameworks - which are linked to diabetes, have been published by the DHSSPS. A brief summary of each of these is now provided.

In **2005**, *Fit Futures*, a cross-Departmental strategy was published to tackle obesity in young people. As previously mentioned, obesity is inextricably linked to Type 2 diabetes.[36] This was

[31] Royal College of Nursing Website: National Service Frameworks.
[32] Royal College of Nursing Website National Service Frameworks: England
[33] Royal College of Nursing Website National service Frameworks: Scotland
[34] Royal College of Nursing Website National service Frameworks: Wales
[35] Royal College of Nursing Website: National Service Frameworks: Northern Ireland

followed more recently with the publication of "*A Fitter Future for All"* (2012-2022) - a ten year strategy to tackle the prevalence of obesity in Northern Ireland. The strategy adopts a "life course" approach to obesity –that is, focussing on all ages of the population. Its key aim is to "*empower the population of Northern Ireland to make healthy choices, reduce the risk of overweight and obesity related diseases and improve health and wellbeing, by creating an environment that supports and promotes a physically active lifestyle and a healthy diet*". [37]

As Type 2 diabetes presents a significant risk factor for the development of cardiovascular disease, in **2009**, the DHSSPS published a *Service Framework for Cardiovascular Health and Wellbeing*. This framework includes the minimum standard of services that patients in Northern Ireland should expect, and the standards of care required. The framework also outlines three overarching standards for diabetes patients, namely:

- Everyone with diabetes should have the condition diagnosed;

- All diabetes patients should have access to education about their condition, as well as emotional and psychological support;

- All diabetes patients should be offered a review of their condition at least once a year by a suitably qualified treatment team.[38]

Despite the inclusion of diabetes in the *Service Framework for Cardiovascular Health and Wellbeing,* in 2009 and 2012, the Northern Ireland Assembly called on the HSSPS Minister to develop both a stand-alone and property resourced diabetes framework. In 2012, the Health Minister commissioned a specific review in 2012 of the 2003 CREST/ Diabetes UK framework for diabetes care in Northern Ireland.

In terms of models of care, in **2011** the DHSSPS published '*Transforming Your Care'* - a review of how health and social care services should be delivered in the future in Northern Ireland.[39] The review presents a new model for all health and social care services; that more services, including those for people with diabetes, will be available in the community and that specialist care will also be delivered in the community and primary care, resulting in less people spending time in acute care. It is proposed this model will be achieved for people with long term conditions through **integrated care teams** and GPs with a 'Special Interest' (GPSIs).[40] *Transforming Your Care* also proposes greater partnership working between health professionals and patients in order to enable patients to become more empowered in

[36] DHSSPS Fit Futures (2005) report to the Ministerial Group on Public Health http://www.dhsspsni.gov.uk/fit-futures-implementation-plan.pdf
[37] DHSSPS (2012) A Fitter Future For All, p7.
[38] Diabetes UK (Northern Ireland) Healthcare policy in Northern Ireland.
[39] DHSSPS Transforming your care (2011): A review of health and social care in Northern Ireland.
[40] DHSSPS Transforming your care (2011): A review of health and social care in Northern Ireland, p45

self-management of their condition. A greater emphasis will also be placed upon personalised care planning, community pharmacy and medication management, and opportunities to exploit tele-health technology to remotely support patients.[41]

In **2012** the DHSSPS also published a new strategic policy framework entitled "*Living with long term conditions*."[42] This framework - aimed at adults, asserts that many local services are underway to help adults with long term conditions, and that there is a need to ensure those people are "*able to maintain or enhance their quality of life through high quality services and supported self-management*." Similar to *Transforming Your Care*, the framework hopes to improve patient outcomes, reduce unnecessary hospital admissions and to move towards a community based model of care, whilst maintaining value for money services.[43] Yet, despite the emphasis on community care, it remains unknown how this model will work in practice, and what level of investment will be needed to ensure that adequate care for patients with diabetes is provided.

7.3 Types of diabetes services available in Northern Ireland

As care of Type 2 diabetes requires a multi-disciplinary approach from a variety of health specialists, each local health and social care (HSC) Trust currently offers a range of diabetes services and clinics. These include for example, consultant-led clinics, GP practice-based clinics, screening programmes, children's diabetes services, diabetes specialist nurses, podiatrists, and dieticians, exercise programmes, education programmes (such as the DESMOND programme), and diabetes network offices. A range of other supports and services are also available from the voluntary and community sector. In addition, the Public Health Agency has launched a range of public awareness campaigns linking obesity and diabetes.[44]

Figures obtained from the DHSSPS show that in June 2012 there were **34** consultants specialising in /or with a special interest in diabetes and **74** diabetes specialist nurses employed across all health Trusts in the North.[45] However, this figure does not take account of the many medical and allied health professionals that treat the complications associated with Type 2 diabetes.

In terms of commissioning services for diabetes, the Health and Social Care Board (HSCB) in Northern Ireland is responsible for working with the Trusts to develop services, and to ensure

[41] DHSSPS Transforming your care (2011): A review of health and social care in Northern Ireland, p77.
[42] DHSSPS (2011) Living with Long-Term Conditions A Policy Framework Consultation Document. Available online at http://www.dhsspsni.gov.uk/long-term-condition.htm
[43] DHSSPS (2011) Living with Long-Term Conditions A Policy Framework Consultation Document. Available online at http://www.dhsspsni.gov.uk/long-term-condition.htm p8. Website accessed 31.5.12
[44] http://www.publichealth.hscni.net/news/major-campaign-tackle-obesity
[45] Source: Northern Ireland Health and Social Care Trusts: correspondence to author

that local health and social care needs are being met. Each year a Commissioning Plan is published by the Board in conjunction with the Public Health Agency (PHA).[46] Details of 'commissioning intentions' are listed in the Commissioning Plan under twelve 'service groups'. Examples of service groups include 'long term conditions', 'acute care' and 'children and family' to name but a few. Each group is accompanied by a list of key priorities and actions to be taken. Diabetes is mentioned in several service groups, and in terms of "key actions", include 'increasing patient self-management' and 'the number of diabetes care pathways'.[47] Unfortunately the plan does not go into specific details about the range of services commissioned for diabetes, nor their costs.

7.4 Investment in Tele-health technology

As caring for diabetes requires patients to be involved in the long term management of their condition, the DHSSPS has recently invested £18 million over a 6 year period in connected health in order to support patients with a range of chronic diseases, including diabetes.[48] This enables patients to play an active role in monitoring their condition. Data on vital signs can be collected by the patient at home using various technologies which is then transmitted to clinicians at the point of care. This enables clinical intervention when patient readings are above normal, so that preventative action or treatment can take place at an earlier stage.

8. Cross border collaboration

Unfortunately there is very limited information on cross border projects specifically focused on Type 2 diabetes. However, examples of some initiatives are highlighted below.

8.1 CAWT cross border projects

Between 2004 and 2007 a project on the development of the role of the community pharmacist in raising awareness of Type 2 diabetes and in supporting the management of the condition was developed and delivered by the Primary Care Pharmacy Sub-group of Co-operation and Working Together (CAWT).[49] The project, entitled *Health Promotion and Care of Patients with Type 2 Diabetes,* had a central cross-border dimension. The rationale for the project stemmed from a number of issues including: that public awareness of Type 2 diabetes is limited and detection of the condition can be delayed, that access to treatment can present challenges - especially in the border region due to distance from services, and that some patients are unlikely to be seeking regular care. In turn the project had two aims namely:

[46] HSCB and PHA Commissioning Plan (2012)
[47] Ibid, page 100.
[48] DHSSPS and Invest NI Connected Health and Prosperity Memorandum of Understanding between The Department of Health, Social Services and Public Safety, and Invest Northern Ireland, p3.
[49] CAWT is the cross border health and social care partnership, comprising the Health Service Executive in the Republic of Ireland and the Southern and Western Health & Social Care Trusts, the Health and Social Care Board and the Public Health Agency in Northern Ireland.

- to improve the management and quality of life of Type 2 diabetic patients through community pharmacies;
- to improve public awareness of Type 2 diabetes and to identify undiagnosed patients and those at risk.

Amongst other recommendations, the project's evaluation report concluded:

> *"the project demonstrated the value of a cross-border approach to community pharmacy service development within the wider primary care context. The opportunity to further develop the role of community pharmacy in the management of Type 2 diabetes and other long-term conditions was confirmed, and the concept supported. While a number of continuing challenges were highlighted, this work in the area of Type 2 diabetes and similar service developments should continue."*[50]

Another example of a CAWT cross border project addressing diabetes care (though not specifically Type 2) is:

1) Pre-pregnancy care for women with diabetes; and

2) Diabetes education for children and young people.

This project, which began in 2010, intends to establish pre-pregnancy care clinics across the project region and to deliver structured patient education programmes which will be designed for children and adolescents with diabetes and their parents and carers.[51] It will cover all of Northern Ireland and the border counties of the Republic and has secured funding of €1,987,435 from the European Union INTERREG IVA programme to progress the project over a three and a half year timetable.

[50] CAWT. The Health promotion and care of patients with type 2 diabetes in primary care: The contribution of the community pharmacist p12.
[51] A update of the progress achieved to date is available online at: http://www.cawt.com/default.aspx?CATID=4245