TOWER HAMLETS

'Type 2 Diabetes ': *Factsheet*

Tower Hamlets Joint Strategic Needs Assessment

UPDATED November 2015

Executive Summary

Diabetes is a serious long-term illness. Severe complications can occur if diabetes and other risk factors are poorly controlled. The condition increases risk of having a heart disease, stroke, blindness, amputation and kidney failure. Prevalence of Type 2 diabetes is high in Tower Hamlets, partly due to the large Bangladeshi community who are more susceptible to this illness. Based on the current population estimates suggest that Type 2 diabetes is set to increase significantly in Tower Hamlets[1] over the next few years.

Diabetes is caused when the amount of glucose in your blood is too high and your body is unable to use it properly. There are two main types of diabetes;

- Type 1 diabetes occurs when the body is unable to produce insulin; 688 (2.3 per 1000) of the local population were diagnosed with Type 1 in Tower Hamlets in 2015[2].
- Type 2 diabetes occurs when either the body produces insufficient insulin or when insulin is produced but does not work properly.

This fact sheet focuses on Type 2 diabetes, which is common amongst South Asian populations, and is increasingly occurring in younger age groups in this population. Type 2 diabetes is a long-term condition currently affecting 14915[3] adults in Tower Hamlets (June 2014) on the local GP registers. However an estimated 1800 [4]people remain undiagnosed in the borough.

In Tower Hamlets a programme of care for those with diabetes has been established in the general practices, since 2010, to provide patient centered care plans to enable individuals to manage their diabetes and to prevent the onset of further complications to their health. This is based on the NICE Guidance[5] 'The management of type 2 diabetes' (2008) which provides the current recommendations for management of this disease.

In 2014 the results from this package of care in general practice were shown to be the best in the country demonstrating that more people with diabetes had better control of the disease and achieved the highest levels of blood pressure and cholesterol control in this group of patients. Success in these areas continues to endorse the current strategy in Tower Hamlets to continue the programmes of care in general practice.

Less people with diabetes in Tower Hamlets are being admitted to hospital and the care received within The Royal London hospital has been demonstrated to be improving. 72 % of those with diabetes are accessing the local Diabetes Retinal Screening Service to detect changes in their eyes to prevent blindness and more needs to be done to increase attendances. There is insufficient local information on certain groups of the population who have a particular susceptibility to diabetes such as those with enduring serious mental health problems.

Providing more accessible and acceptable programmes for people living with Type 2 diabetes in Tower Hamlets to improve their lifestyles to prevent serious health complications are key elements of the wider public health programme to prevent premature morbidity and mortality from this disease.

[1] Diabetes Risk 2011 CEG
[2] TH CEG JSNA dashboard Apr 2015
[3] GEPS data base 2013-14 –end of June 2014 - http://www.hscic.gov.uk/terms-and-conditions
[4] Diabetes risk 2011 CEG
[5] http://www.nice.org.uk/guidance/cg87

It is important to note that Type 2 diabetes is preventable. Recent Nice Guidance[6] "Preventing type 2 diabetes" July 2012, indicates that a range of interventions need to be considered at the individual, community and strategic levels to tackle the increasing prevalence of this condition. This will be mentioned but not focused on in any depth in this fact sheet.

Recommendations

- To continue to monitor the outcomes of the GP based diabetes programme of care to ensure the performance maintains the high level of results which are currently being achieved.
- To scrutinise the comments from patients with diabetes which have started to be collected in general practice on their diabetes care to identify what changes are required to further improve this care programme.
- To provide more opportunities for testing for Type 2 diabetes
    - in general practices for example at New Patient check and NHS Health Checks.
    - By providing targeted information to the high risk communities living in Tower Hamlet on the importance of being tested for Type 2 diabetes
    - By providing targeted opportunities in the community to randomly test for Type 2 diabetes
- To improve the outcomes of this vulnerable group of people.
- To continue to audit the inpatient care for people living with diabetes receive when admitted to The Royal London hospital to ensure optimum levels of diabetes care are achieved .
- For Public Health to establish with partners the priorities which need to be address over the next few years and to establish work-streams to implement the planned priorities and to monitor the progress of this work. To report to the Health and Well Being Board on developments.
- To organise a systematic approach to raise awareness on the prevention of Type 2 diabetes to all age groups in Tower Hamlets and to train local lay educators such as the Health Trainers to deliver sessions to those high at risk of diabetes based on NICE guidance.

1. What is diabetes?

Diabetes is a long term illness and the current prevalence in the UK indicates that over 3.2[7]million are affected with a further estimated 600,000 people living with borderline diabetes who are undiagnosed[8]. Diabetes is a serious condition and if poorly managed, can lead to heart disease, stroke, blindness, kidney failure and amputee of the lower limbs.

There are two main types of diabetes; Type 1 diabetes and Type 2 diabetes which is the central focus of this factsheet:.

- Type 1 develops when the body cannot produce any insulin. Type 1 diabetes usually has an early onset and appears before the age of 40. It is the least common of the two main types of diabetes and accounts for around 10 per cent of all people with diabetes across the country. Type 1 diabetes is treated with daily insulin injections, a healthy diet and regular physical activity.

- Type 2 develops when the body can still make some insulin, but not enough, or when insulin is produced does not work properly (known as insulin resistance). This type of diabetes commonly appeared in people over the age of 40; however this is no longer the case. In South Asian and African-Caribbean people, it can

[6] http://guidance.nice.org.uk/PH35
[7] http://www.yhpho.org.uk/default.aspx?RID=81090
[8] Diabetes Risk 2011 CEG

appear from a much earlier age with even children being diagnosed with this condition.

Obesity is the most serious risk factor for Type 2 diabetes and can result in a person being diagnosed with this condition in a relatively short period of time. Obesity accounts for over 80% of Type 2 diagnosis in individuals and underlies the current global spread of the condition[9]. People with a close family member who has Type 2 diabetes are also more susceptible to developing the disease. The increasing prevalence of Type 2 diabetes in younger people can be attributed to the obesity epidemic in these age groups. For people living with Type 2 diabetes, obesity together with smoking and poor control of diabetes increases the risk for vascular complications.

Deprivation[10] is strongly associated with higher levels of obesity, physical inactivity, unhealthy diet, smoking and poor blood pressure control. All these factors are inextricably linked to the development of Type 2 diabetes or the risk of developing serious complications for those already diagnosed. The most deprived people in the UK are 2 ½ times more likely to have diabetes at any given age. Diabetes UK report in 2012/13 (Diabetes in the UK) highlighted that women in England living in homes with the lowest income are over four time more likely to get Type 2 diabetes than women who live in homes with the highest income.

Women experiencing gestational diabetes have a 7% increased risk of developing Type 2 diabetes (for more information - JSNA factsheet on gestational diabetes). Type 2 diabetes is four times more prevalent in South Asian communities, who also tend to experience more complications and increased mortality when compared with the British white population.[11] Life expectancy is reduced, on average, by up to 10 years for people with Type 2 diabetes[12] It is estimated that 15 per cent of deaths occurring in England can be attributed to diabetes.

Impact of diabetes

When diabetes is controlled a person's health is likely to be well maintained. However conversely if the diabetes is not controlled and remains uncontrolled then it can have a serious impact on an individual's health and lead to a range of chronic health conditions highlighted below:

Cardiovascular disease (includes heart disease and strokes) is a major cause of death and disability in people with diabetes, accounting for 52% in people with Type 2 diabetes. Those with Type 2 diabetes have a two-fold increase risk of stroke within the first five years of diagnosis compared with the general population.

Kidney disease is more common in people who have diabetes and hypertension. Almost one in three people with Type 2 diabetes develops overt kidney disease. Diabetes is the single most common cause of end stage renal disease and accounts for 21% deaths in Type 1 diabetes and 11% in Type 2.

Eye disease called retinopathy is common in those with diabetes and can severely affect an individual's eye sight. People with diabetes are 10 to 20 times more likely to go blind than people without. Diabetes is the leading cause of blindness in people of working age in the UK. It is estimated that there are 4,200 people in England who are blind due to diabetic retinopathy. Within 20 years of diagnosis nearly all people with Type 1 and almost two thirds of people with Type 2 diabetes have some degree of retinopathy. People with diabetes are twice more likely to suffer from cataracts or glaucoma than the general population.

Amputations of the lower limbs are most common in individuals with diabetes. People with diabetes account for just under half of lower limb amputations in adults with 100 amputations carried out each week. Around one in twenty people with diabetes will develop a foot ulcer in one year and more than one in ten foot ulcers result in

[9] http://www.diabetes.org.uk/Documents/Reports/Diabetes-in-the-UK-2011-12.pdf
[10] http://www.diabetes.org.uk/Documents/Reports/Diabetes-in-the-UK-2011-12.pdf
[11] Diabetes Risk 2011 CEG
[12] http://www.diabetes.org.uk/Documents/Reports/Diabetes-in-the-UK-2011-12.pdf

the amputation of a foot or a leg. Up to 70 per cent of people die within five years of having an amputation as a result of diabetes.

Depression is a common mental health condition associated with diabetes, the prevalence being twice as high as the general population. Coming to terms with the diagnosis, the development of a complication, the side effects of medication, or dealing with the daily responsibility of self-managing diabetes can take their toll on emotional wellbeing. As well as depression it can lead to anxiety, eating disorders, or phobias.

Neuropathy causes damage to the nerves that transmit impulses to and from the brain and spinal cord, to the muscles, skin, blood vessels and other organs. In men this can cause erectile dysfunction. Neuropathies (or nerve damage) may affect up to 50 per cent of patients with diabetes. Chronic painful neuropathy is estimated to affect about one in six people with diabetes, compared with one in 20 in a similar matched group in the population.

2. What is the policy context?

National :

Department of Health (2002), National Service Framework for Diabetes*:*
Although this document is a number of years old it has been included as it refers to standards, rationales, key interventions and analysis which can still be utilised for the planning of services for those living with diabetes. The standards of care (Appendix 1) were developed in this document and expanded on further in this JSNA.

NHS Modernisation Agency (2004), *Good care planning for people with long-term conditions.*
The Government introduced a model designed to help improve the care of people with long term conditions. This followed the setting of a national Public Service Agreement (PSA) target for improving outcomes for people with long term conditions by offering a personalised care plan for vulnerable people most at risk, and reducing emergency bed days by five per cent by 2008 through improved care in primary and community settings**.**

Department of Health (2006), *Supporting people with long term conditions to self-care: a guide to developing* local strategies and good practice.Self-care was highlighted in the NHS Plan as one of the key building blocks for a patient-centred health service. More recently self-care featured as a key component of the model for Supporting People with Long Term Conditions. Research shows that supporting self-care can improve health outcomes, increase patient satisfaction and help in deploying the biggest collaborative resource available to the NHS and social care - patients and the public. Helping people self-care represents an exciting opportunity and challenge for the NHS and social care services to empower patients to take more control over their lives.

Improving quality of life for people with long term conditions (March 2013): In 2012 the first NHS Mandate, was published which sets out what NHS England must achieve. It gives NHS England responsibility for:

- identifying plans to help make life better for people with long term conditions
- helping them to get the skills to manage their own health
- agreeing with them a care plan that is based on their personal needs

- making sure their care is better coordinated

London Assembly : Blood Sugar diabetes time bomb in London (April 2014) – identifies the crisis facing the capital by highlighting the scale of the problems – 75% increase in 10yrs and identifies strategies to improve the situation including an integrated approach to care and the joining up policies. 5 recommendations were made:

- For Health and Well Being Board to identify priorities for planning in health
- For NHSE to take a prominent role in demonstrating good practice and methods to identify what standards of care is being delivered for analysis.
- For the alignment of public policy at a local level including local planning, health, public health and social care
- Local measures to tackle obesity
- DH National Obesity Forum to strengthen the impact of the responsibility deal with leading supermarkets and food manufacturer

Local:

Tower Hamlets Health and Well Being Plan (2013): Type 2 Diabetes is recognised as one of the key long-term health conditions in Tower Hamlets which increases both premature morbidity and mortality in the local population. The strategy identifies that as a long-term condition it has a significant impact on quality of life; reducing the ability of those experiencing them to participate in employment, social and family life, contributing to the development of disability, reducing life expectancy and affecting mental wellbeing.

Tower Hamlets has some of the highest premature death rates from three of the most life threatening conditions which includes cardiovascular (heart) disease with diabetes being a significant risk factor.
The plan highlights that people with long term conditions often report that there is a need for health and social care services to be more joined up and integrated in their approach to delivering care and support, and take a holistic and person centred approach to supporting them.

Diabetes Network Incentive Scheme : This scheme is base in general practices in Tower Hamlet and has been developed to implement the recommendations based on the current evidence for best practice to deliver a high standard of care to individuals living with Type 2 diabetes, to both maintain their health and prevent the onset of complications. Regular multi-disciplinary meetings are organised within networks of practices with the local Consultant for Diabetes to ensure best practice is being maintained and delivered in Tower Hamlets. The national standards used to measure the effectiveness of local general practice programmes for diabetes, known as QOF (Quality Outcome Frameworks[13] *)* in 2014 identified Tower Hamlets as being a the top performing areas in the country.

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3. What are the effective interventions?

This section will initially describe the effective interventions for an individual living with Type 2 diabetes and then review the initiatives which need to take place on a wider scale to impact on the outcomes for those living with this condition.

The Diabetes Type 2 NICE Guidelines [14] completed in 2008, highlighted a range of clinical and non-clinical interventions, which could take place to keep the diabetes under control and to prevent the range of complications occurring. A summary of the interventions are described below:

Education

Offering structured education to every person with Type 2 diabetes together with their significant other such as partner or carer at or around the time of diagnosis. The NICE guidance states that the education available should meet the cultural, linguistic, cognitive, and literacy needs of the local population within a given locality and the education programme should meet the criteria laid down by the Department of Health and Diabetes UK Patient Education Working Group[15].

Dietary recommendations

Providing individualised and on-going healthy eating advice from a healthcare professional with expertise in this area is another key element of support for individual with Type 2 diabetes. NICE guidance recommends that the advice needs to be sensitive to the individual's needs, culture and beliefs as well as being sensitive to their willingness to change, and the effects on their quality of life. The advice needs to be given in the context of a lifestyle modification plan to include increasing physical activity and weight loss if appropriate.

Control

A key issue for an individual who has Type 2 diabetes is to maintain a healthy level of glucose in their blood. This can in some instances be solely managed by a person adopting a healthy life style. However it often requires both medical interventions (usually tablets) and the adoption of a healthy life style to bring down the glucose to safe levels in the blood.

The NICE guidance recommends that the individual is fully involved in the management of their disease to help them to take decisions about the control of their diabetes. It is recommended that individuals understand the target level of glucose in the blood they should be aiming for to keep healthy. The blood test which measures the levels of glucose in the blood is called HbA1c and identifies the levels of glucose over a 3 month period. When a person is initially diagnosed it is recommended that regular measurement of the glucose levels on at least 2-6monthly take place to reinforce the importance of meeting the target level and to achieve stability in the disease.

Mental Health

The NICE guidance recognises that people with Type 2 diabetes may develop psychological and/or depressive disorders which should be managed by professionals in accordance with current national guidelines (NICE Guidance CG 23 Managing Depression in Primary and Secondary Care 2009). Recent figures from Health and Social Care Information / QMAS[16] 2011 -2012 in London highlighted over 88% of those diagnosed with diabetes and /or coronary heart disease had at least one or more episodes of depression in the previous 15months.

[14] http://guidance.nice.org.uk/CG66/Guidance/pdf/English
[15] http://www.nice.org.uk/guidance/qs6/chapter/Quality-statement-1-Structured-education
[16] http://qof.hscic.gov.uk/search/index.asp

Annual Reviews

It is recommended in the NICE guidance that all those with Type 2 diabetes should be seen on at least a yearly basis in general practice where an agreed care plan[17] is discussed which involves extended family and carers where possible. The annual review will provide regular surveillance for long-term complications with timely, appropriate and effective investigation and treatment of long-term complications of Type 2 diabetes.

The following areas of assessment at the annual care plan are considered essential:

- **A cardiovascular review :** Measurements to diagnose any cardiovascular problems should take place on a yearly basis at the annual review including the measurement of blood pressure.
- **A renal review:** All people attending the annual diabetes review should bring in a first pass morning urine sample. This specimen should be used to provide the estimate for the albumin : creatinine ratio which can indicate any kidney dysfunction.
- **An eye test :** The annual review should reinforce to the individual the importance of getting their eyes tested on a yearly basis to detect any deterioration to the eye sight which may require medical attention.
- **An assessment of feet:** As part of annual review, trained personnel should examine the individual's feet to detect risk factors for ulceration. They should be able to classify the risk to give the appropriate advice and recommendation for treatment if required.[18]
- **A neuropathy assessment:** During the annual review a formal enquiry should take place on the development of neuropathic symptoms which may be causing distress. The professionals conducting the review needs to be alert to the psychological consequences of chronic painful diabetic neuropathy and offer psychological support according to the needs of the individual
- **A review of erectile dysfunction:** This issue should be review annually with men and provide assessment and education to address contributory factors and treatment options.

Supportive measures for those living with Type 2 Diabetes

Wider recommendations were made from the National Service Framework for Diabetes[19], and although this was published in 2001 themes from this document are still relevant today:

- Ensuring that services are planned to meet the needs of the population, including specific groups within the population, and are appropriate to individuals' needs.
- Drawing on the knowledge and skills of health and social care professionals across a multidisciplinary diabetes health care team, including primary care and social care as well as specialist services.
- Narrowing the inequalities gap between those groups whose outcomes are poorest and the rest; minimising the risk of developing diabetes and its complications and maximising the quality of life for individuals by empowering staff to deliver, evaluate and measure care
- Increasing awareness of the symptoms and signs of diabetes among both health professionals and the general public can result in the earlier identification of people with diabetes.
- Following up and regular testing of individuals known to be at increased risk of developing diabetes (people who have previously been found to have impaired glucose regulation and women with a history

[17] NHS Care Planning in Diabetes Dec 2006

[18] NICE clinical guideline CG10 'Type 2 diabetes: prevention and management of foot problems ´

[19] https://www.gov.uk/government/publications/national-service-framework-diabetes

of gestational diabetes) can lead to the earlier diagnosis of diabetes.

- Raising awareness of the symptoms and signs of diabetes among the public, particularly among sub-groups of the population at increased risk of developing diabetes.
- Developing local plans to ensure that health and other professionals most likely to come into contact with people with undiagnosed diabetes are aware of the symptoms and signs of diabetes
- Developing and monitoring agreed protocols for rapid and effective treatment of diabetic emergencies by appropriately trained health care professionals.
- Reviewing the systems to ensure when people with pre-existing diabetes are admitted to hospital, they continue to receive effective diabetes care and are enabled to continue to manage their own diabetes wherever possible.
- Developing partnerships at all levels of care: between patients, their carers and families, and NHS staff; between the health and social care sectors; across different government departments; between the public sector, voluntary organisations and private providers to ensure a patient-centred service

4. What is the local picture?

On 31st March 2015, there were 15870[20] cases of Type 2 diabetes in Tower Hamlets representing 7% of the local population[21] Local estimates in 2011 indicated that over 1800 people in Tower Hamlets were living with undiagnosed diabetes and national predictive models have indicated that the prevalence of diabetes is set to rise to 10.1% by 2030.

Figure 1 using data from the GP Quality Outcome Framework (QOF)

Figure 1: Rate of increase of diabetes patients in Tower Hamlets, London and England 2008- 2015 (QOF)

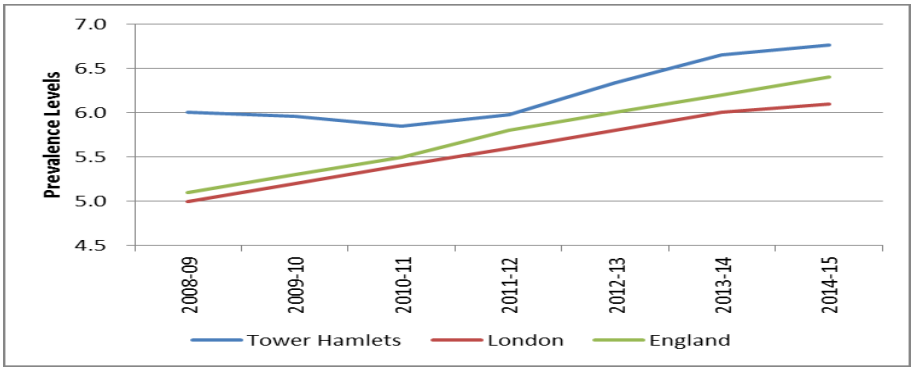


Table 1 indicates that diabetes prevalence is set to continue to increase dramatically in Tower Hamlets over the next 20 years, according to the APHO Diabetes Prevalence model.

Table 1: Diabetes Prevalence Projections in Tower Hamlets 2013-2030, APHO Diabetes Prevalence Model, 2010[22]

	2013	2015	2020	2025	2030
Number	14,405	14,987	16,871	18,968	21,314
Prevalence	7.9%	8.1%	8.7%	9.3%	10.1%

[20] CEG March 2015 Type 2 diabetes dashboard for Tower Hamlets

[21] National Diabetes Information Service 2013

[22] http://www.apho.org.uk/resource/item.aspx?RID=49317

The numbers of deaths associated with diabetes is not easy to estimate as the primary cause of death is most likely to be circulatory disease. However, age-adjusted deaths directly attributable to diabetes in Tower Hamlets are 8.93 per 100,000 (LCL 6.4, UCL 12.05), compared to 5.06 across London and 5.06 across England (2010-12, NCHOD). Tower Hamlets had the highest death rate from diabetes in London for the period from 2010 to 2012.

A snapshot of the diabetes' register in 2015, demonstrated in Figure 2 found the following distribution of cases across three of the inequalities strands (gender, age and ethnicity) Over 59% of those with diabetes come from the South Asian community (mainly Bangladeshi) in Tower Hamlets.

Figure 2: Distribution of cases of diabetes in Tower Hamlets, April 2015 (CEG GP registers)

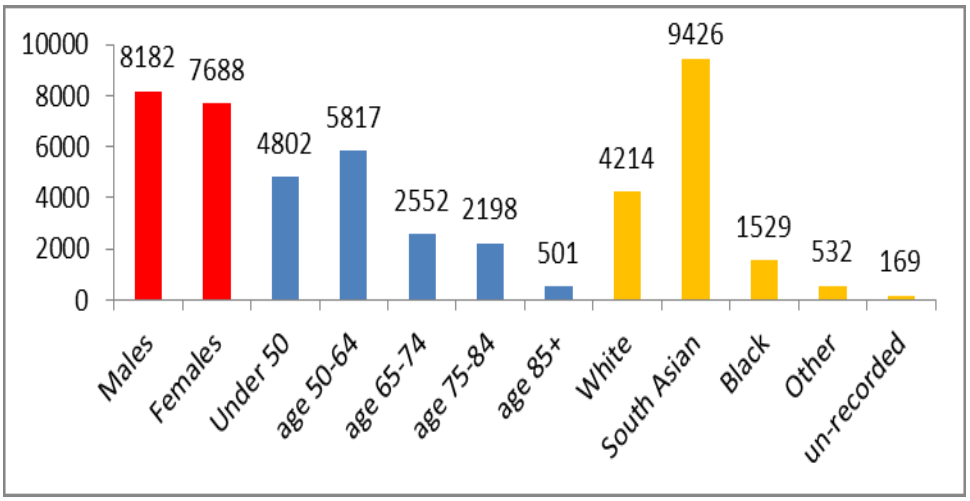
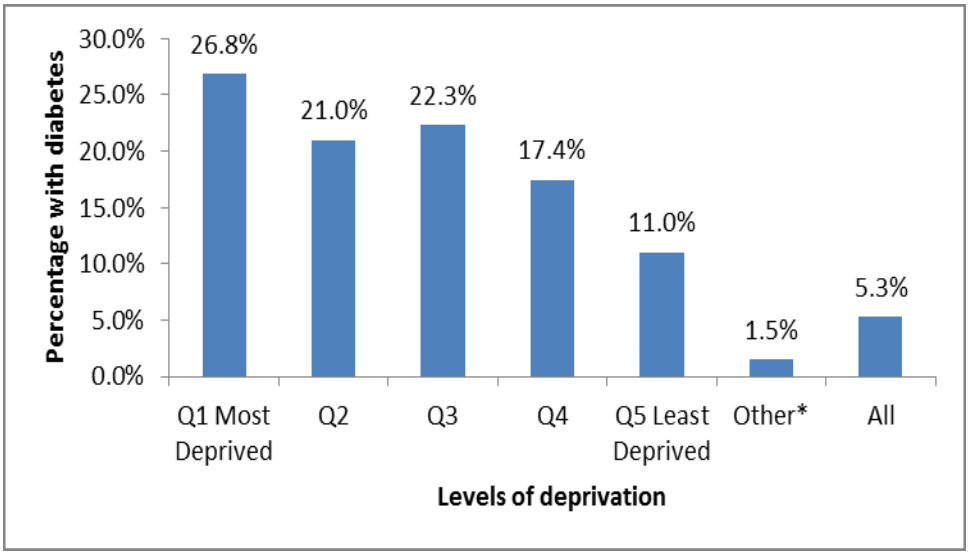


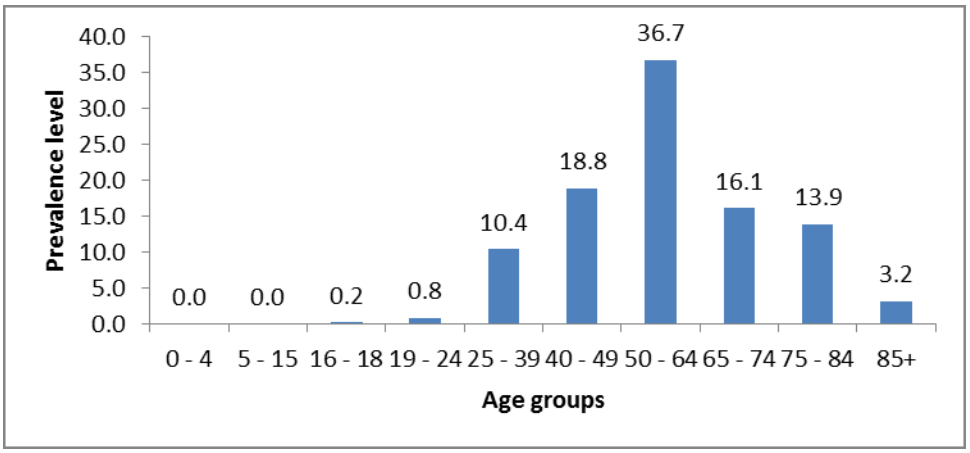
Figure 3 demonstrates that the rate of diabetes in Tower Hamlets significantly increases in the population who are living in higher levels of poverty.

Figure 3 Prevalence rates of diabetes in relation to poverty in Tower Hamlets :April 2015 (CEG)



Although the average prevalence figures for diabetes are reaching 7% across Tower Hamlets, Figure 4 highlights that rate of diabetes amongst the middle aged groups aged 50 – 64yrs are currently above 36%.

Figure 4 The prevalence rates of diabetes found in the different age groups in Tower Hamlets (CEG data on 1-4-2015 from Tower Hamlets GP registers)



In June 2014 national statistics reporting on the Quality Outcomes Framework (QOF) for GP practices highlighted that Tower Hamlets achieved the highest level in these target as shown in table 2 below.

Table 2 Comparison of targets achieved under QOF targets for diabetes in June 2014 by Tower Hamlets with London and England

QOF measure	Tower Hamlets	London	England
Good blood sugar control in patients	60.1%	58.8%	60.4%
Good blood pressure control in patients	79.7%	71.4%	71.2%
Good cholesterol control in patients	81.2%	70.7%	70.8%

Prevalence of complications

The National Diabetes Audit[23] collates data on the risk of complications and mortality in people with diabetes as compared to the general population for each borough in London and county in England. These figures do include both Type 1 and Type 2 diabetes.

In Tower Hamlets compared to the general population, of those with diabetes 61.8% were more likely to have a heart attack and 42.1% more likely to have a stroke. They were also more likely to have a hospital admission where heart failure was recorded. In Tower Hamlets people with diabetes have a 16.2% greater chance of dying in a one year period than the general population. Minor amputations for those living with diabetes in Tower Hamlets is approximately 4.8 times higher than the general population and it was confirmed in the Tower Hamlets diabetes dashboard in March 2013 produced by the local Clinical Effectiveness Group[24] that 26.7% had limb complications. The local diabetes dashboard highlighted that 17.7% of those with diabetes had an eye complication. 19.46% were recorded as cigarette smokers and 37% were recorded as obese both of which can contribute to a person living with diabetes having a greater risk of having serious complications affecting their quality of life.

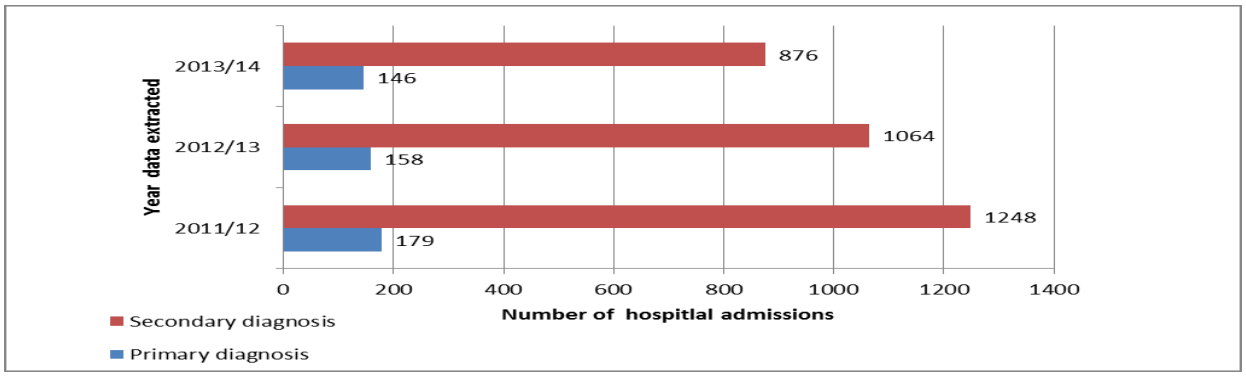
Figure 4 is demonstrating the number of hospital admissions from 2011 to 2014 of people living with diabetes. The figures have been separated into two sections:

[23] http://www.hscic.gov.uk/nda
[24] http://blizard.qmul.ac.uk/research-groups/253-clinical-effectiveness-group.html

- those with diabetes who were admitted into hospital in which diabetes was recorded as the main reason for admittance (primary)
- those with diabetes who were being admitted into hospital for other problems (secondary)

The numbers admitted with diabetes being the primary reason for needing hospital treatment have dropped by 18%. The numbers who had diabetes but were being admitted to hospital for other reason have significantly dropped from 2011 to 2014 by almost 30% (29.80)

Figure 5- The numbers of hospital admissions of those with diabetes as a primary and secondary diagnosis from 2011 -2014 in The London Hospital extracted by NELCSU from admission data



NHS Tower Hamlets spent approximately £4.9m on prescriptions for diabetes (for both Type 1 and 2) items between April 2011 and March 2012 which is the equivalent to £373.73 for each adult with diabetes which was found to be lower than the England averages however the difference was not statistically significant.[25]

5. What is being done locally to address this issue?

A range of initiatives are taking place within Tower Hamlets to address Type 2 diabetes. This section has been broken down into 3 areas :

- Primary prevention – focusing on the population who are at high risk of Type 2 diabetes and what initiatives are taking place in Tower Hamlets to prevent the condition occurring.
- Secondary prevention – focusing on the population with Type 2 diabetes and the initiatives to maintain their health and to prevent further complications
- Tertiary prevention – focusing on the population with Type 2 diabetes experiencing complications and the initiatives to maintain optimum health.

Primary prevention

Those living in Tower Hamlets with obesity are at high risk of getting Type 2 diabetes. People with obesity have access to a range of healthy lifestyle services tackling obesity and lack of physical activity. For more information on these please refer to the following JSNA Factsheets :

- Obesity

[25] http://www.hscic.gov.uk/qof (2012)

- Physical activity
- Healthy Eating

The NHS Health Check programme which is organised within general practices in Tower Hamlets for those aged 40 -75 years began in 2009. This check includes the calculation of an individual's risk of getting diabetes within the next 10 years and is a key initiative for identifying individuals who already have Type 2 diabetes but who have not previously been diagnosed.

Local awareness raising events are being run throughout Tower Hamlets to provide more information to those who live in and work with local communities on this issue and in particularly to emphasis on how Type 2 Diabetes can be prevented. Examples have included training session for the local Health Trainers and Imams together with events held in different parts of the borough to coincide with World Diabetes Day (November) and Diabetes Week (June).

The Diabetes Centre has started to offer workshops to local people who are at high risk of diabetes. These are proving to be popular, with local people either referring themselves or being referred by their GP. Public Health is intending to widen the availability of these classes in the community.

Secondary Prevention

For those who are living with Type 2 Diabetes and registered with a Tower Hamlets general practice a package of care for each of these individuals has been available since September 2009. This approach includes care planning sessions on at least an annual basis which provides the opportunity for the individual, with their GP or Practice Nurse, to organise a tailored plan to meet their individual needs and circumstances for the following year. Tower Hamlets Community Commissioning Group (CCG) worked with the charity Diabetes UK to develop a tool to evaluate individual's experience of the diabetes care package, to shape this programme for the future which was implemented from April 2014.

To continue to maintain the standards of care for those with diabetes in primary care the Diabetic consultant from Bart's Health (The London Hospital) is regularly liaising and attending meetings with general practitioners to ensure that adherence to the clinical recommendations in the NICE guidance[26] continues**.**

All newly diagnosed individuals with Type 2 diabetes are offered a structured education programme through Diabetes Centre which is based in Mile End Hospital. For the year April 2012 – March 2013 365 people attend the centre for the education programme of which 283 completed. The content is based on the nationally accredited programme which has been adapted to meet the needs of the local Tower Hamlets population.

There are a number of services for people with diabetes provided by the Diabetes Centre. The Diabetes Retinal Screening Service screens people on the diabetes register annually for retinopathy. Currently this service is achieving a 72% (2013) uptake and work is taking place to improve this uptake. The Diabetes Specialist Nurse team provide a range of services including the glycaemic control clinic, education sessions for both patients and healthcare professionals and insulin pump and Type 1 services. Specialist dietician, podiatrist and psychological services are also available.

A number of local voluntary sector organisations in Tower Hamlets have been offering specific support to those living with diabetes, particularly amongst the Somali and Bangladeshi population. They have been involved in conducting research to improve the local services and to make a positive impact the long-term health outcomes for individuals from these communities.

[26] http://www.nice.org.uk/nicemedia/live/11983/40803/40803.pdf

Tertiary prevention

Although the recent admissions data from The London Hospital (figure 4) indicates that the numbers of people with diabetes requiring hospital treatment is decreasing it is very important that there is a continuity of care for any being admitted.

In the 2010 National Diabetes Inpatient Audit the London Hospital scored below average for a number of patient satisfaction measures including care planning, meal times, confidence in staff and reporting a positive experience. However since this initial audit in 2013 a "mini NaDIA" (National Diabetes Inpatient Audit) was undertaken and demonstrated that the inpatient care plan was having a positive impact on the quality of inpatient care for people with diabetes. The following improvements were demonstrated:

- The number of people visited by the diabetes team more than doubled
- Insulin prescription errors reduced by 75%
- Insulin management errors reduced by 85%
- Percentage of people given a foot assessment increased from 10% to 64%
- Patient Satisfaction increased from 66% to 72.6%

This area of work is being overseen by the Tower Hamlets CCG Diabetes Working Group which brings together local hospital specialists and primary care clinicians. One of their key objectives is to improve the standards of care offered to individuals with diabetes who are admitted into hospital.

6. What evidence is there that we are making a difference?

The current statistics in Tower Hamlets demonstrate that the numbers of people with Type 2 diabetes is set to rise due to the demographics of the population, the rise in obesity and the estimated numbers of people living with the disease who are undiagnosed. Therefore any evidence of making a difference in Tower Hamlets has to put into this context. This has been separated in primary, secondary and tertiary prevention to identify the evidence that a difference is being made in Tower Hamlets.

Primary Prevention

In Tower Hamlets there a large numbers of people who are at a high risk of getting Type 2 diabetes. More testing is taking place in general practice to measure people's level of risk in relation to Type 2 diabetes. This is taking place through the NHS Health Check Programme (for people aged 40 – 74yrs who are offered a cardiovascular check which included a diabetes check if indicated every 5 years), new patient checks (when someone registers with a practice) and on an opportunistic basis. A majority of practices in Tower Hamlets have lists of registered people who fall in the high risk category and some are being offered structure programmes providing support to help prevent the onset of Type 2 diabetes. Local evaluation of this programme and an expansion of sessions is required. This is however a key recommendation from the NICE guidance on prevention of Type 2 diabetes[27].

Secondary Prevention

One of the important measures to indicate that Tower Hamlets is making a difference is the rise in the number of people being diagnosed with Type 2 diabetes. As previously stated, in Tower Hamlets, there are high numbers of people living with Type 2 diabetes who have not been diagnosed and may require medical attention to maintain their optimum health and prevent the onset of complications. Over the last 12 months general

[27] Preventing type 2 diabetes: risk identification and interventions for individuals at high risk PH:38 2012

practices have started to report a higher numbers of people being diagnosed with Type 2 diabetes. More work is required to identify why there has been a sudden increase and if this is making an impact on the numbers with undiagnosed diabetes living in Tower Hamlets.

Of those know to be living with diabetes 89.5% in March 2013 of these individuals had received a written care plan within the last 15mths in primary care[28]. For the year from April 2012/2013 Tower Hamlets succeeded in being amongst the best for blood pressure and cholesterol control in England and Wales and for achieving the best figures in England and Wales for all the process involved in a diabetes care plan[29].

Tertiary Prevention

As highlighted in Figure 4 the numbers of hospital admissions for those with diabetes indicated a reduction from 2012 to 2014. The recent in patient audit carried out in 2013 in The Royal London highlighted that the inpatient care has greatly improved from a previous audit which was carried out in 2010.

Impact on indicators

Contributions to Public Health Outcomes Framework in particular :

Domain 1 : Preventing people from dying prematurely – Public Health responsibilities is to develop strategies to prevent the increase of type 2 diabetes and to ensure that those with Type 2 diabetes are well controlled to prevent the contribution of this condition to premature mortality.

Domain 2 : Enhancing quality of life for people with long-term conditions – this is the key domain for ensuring that those with diabetes are given every opportunity to maintain their health whilst living with this condition. QOF Indicators: a range of indicators which are measured to the gauge the performance of general practices across the country on how well they are caring for those registered with their practice who have been diagnosed with diabetes.

7. What is the perspective of the public?

A number of opportunities took place in 2013/14 to obtain the views of the public on the subject of diabetes.

From January to April 2013, Public Health commissioned a 'participatory appraisal' initiative to engage people living in one of the most deprived estates in the borough, as part of a strategy to mobilise a neighbourhood around diabetes. 'Participatory appraisal' is a method that values local people as 'experts in their own lives'.

The methodology involved training a team of people from the community in participatory community research. This team then engaged with residents, health professionals and workers in the estate to find out about the different perspectives, knowledge and attitudes in the community towards diabetes.

250 people were consulted from all sections of the community (including local professionals). Findings challenged the prevailing perception that people would not want to talk about diabetes. In fact the opposite was the case.

As researchers were from the local community they were able to engage with people in their mother tongues (eg Bengali, Somali) and enable richer and more meaningful conversation. The initiative has both established engagement with the community and identified ideas from the community to prevent diabetes and support people living with diabetes.

[28] CEG published diabetes dashboard for Tower Hamlets (March 2013) using local GP data.
[29] http://www.hscic.gov.uk/qof

The four main findings from this initiative found:

- Local residents were not aware of the range of funded projects and opportunities on the estate to participate in which could contribute to improvements to their health such as the Health Trainer programme.
- People were keen for more work to be done with the younger generations and their families to prevent the onset of Type 2 diabetes. There was particular enthusiasm from young mothers to learn more about cooking healthily and to be involved in physical activity with their children.
- Residents were keen to have improvements to their estate especially the open spaces to make them more attractive and safe.
- People wanted an improvement to the food offer especially the opportunity to buy more fresh fruit and vegetables.

Tower Hamlets Health Watch spoke to 30 people between the ages of 26 – 70yrs, from a variety of backgrounds, who had been diagnosed with diabetes and were attending the Diabetes Centre . A majority were very happy with the service they were receiving and had found information from the 6 week programme they had attended had increased their knowledge about their condition and what to do to maintain their health. Most of the participants were complementary about the service they received from their GP. Some mentioned the importance of prevention and regretted not knowing anything about the condition until they were diagnosed.

Tower Hamlets Health Watch conducted another survey with 40 young people aged 13 – 25 years in a range of youth settings. Six were interviewed individually, with remainder were spoken to in groups. The themes explored included :

- Awareness and information on diabetes
- Potential differences in younger Bangladeshi people and older Bangladeshi peoples (i.e. parents, grandparents) outlook on health and health information
- Ways in which younger people can gain information and awareness about diabetes and suggestions on 'healthy lifestyle initiative'

The findings found that a majority of the young people had a basic understanding of diabetes however it was often discussed in relation to eating too much sugar and the use of 'blood sugar' further confuses this issue. From this survey it was found that the young people did not have a very good working knowledge of what is considered healthy eating and many of the participants reported buying the 'cheap, tasty and filling food' from chicken and chip outlets in Tower Hamlets.

Most of the young people reported obtaining their information on diabetes from friends, families and schools. They tend to think it is a disease of old age so are not unduly concerned. A majority felt there was not enough available information on this condition and one participant mentioned that more awareness raising events in busy parts of Tower Hamlets such as the markets would be useful.

8. What more do we need to know?

- To understand and assess the needs of those living with diabetes in Tower Hamlets to shape future programmes and care planning for this section of the community.
- What will motivate local people, particularly those, who unknowingly have Type 2 diabetes, to take a test for this condition.

- To identify the numbers of those living with Type 2 diabetes who are making positive change to their life style behaviours (ie stopping smoking, healthy eating, physical activity) and to understand what motivated them to make these changes
- To ways of supporting people with diabetes and mental illness in the community.
- To establish if the diabetes care planning process in general practices is successfully reducing emergency admission to hospital for this section of the population.
- To assess when people living with diabetes receive the right level of care when they require hospital in-patient treatment.

9. What are the priorities for improvement?

Current State	Evidence for Effective Intervention	Recommendations
The Diabetes Care packages are being delivered to a high standard in primary care in Tower Hamlets.	The national Quality Outcome Framework (QOF) indicators provide information on how well general practices are delivering against specific aspects of a diabetes service.	To continue to monitor the outcomes of the GP based diabetes programme of care to ensure the performance maintains the high level of results which are currently being achieved.
Limited local information on the needs and improvements to services required for those living with Type 2 diabetes	NICE Guidance on the management of Type 2 diabetes : http://www.nice.org.uk/guidance/cg87 which indicates that providing person centred care plans in primary care are important to improving the outcomes of individuals living with Type 2 diabetes .	To scrutinise the comments from patients with diabetes which have started to be collected in general practice on their diabetes care to identify what changes are required to further improve this care programme.
There are approximately 2000 people in Tower Hamlets who are not aware that they have Type 2 diabetes.	NICE Guidance encourages the early detection of Type 2 diabetes to prevent the onset of complications which can be caused by this condition.	To provide more opportunities for testing for Type 2 diabetes • In general practices for example at New Patient check and NHS Health Checks. • By providing targeted information to the high risk communities living in Tower Hamlet on the importance of being tested for Type 2 diabetes • By providing targeted opportunities in the community to randomly test for Type 2 diabetes
There is little local information on those who have a serious mental health condition and are living with diabetes to understand their	NICE Guidance highlights that those with SMI are very susceptible to Type 2 diabetes due to poor lifestyle habits and side effects from treatment they may be receiving for their mental	To improve the outcomes of people living with a serious mental illness and diabetes in Tower Hamlets.

needs and how these can be addressed.	condition.	
Recent in-patient audit mini – NADRA highlighted that those admitted with diabetes are getting a better quality of care than the original audit in 2010.	NICE Guidance on the management of diabetes highlights the importance of managing a person's diabetes to a high standard if they have been admitted into hospital.	To continue to audit the inpatient care for people living with diabetes receive when admitted to The London hospital to ensure optimum levels of diabetes care are achieved.
Public Health in the Local Authority have established a working group to oversee the plans for improving the prevention of Type 2 diabetes and to support the improvements for those living with this condition.	NICE Guidance highlights the importance of establishing local partnerships to support those with diabetes and to promote the prevention of diabetes which requires local implementation.	For Public Health to establish with partners the priorities which need to be address over the next few years and to establish work-streams to implement the planned priorities and to monitor the progress of this work. To report to the Health and Well Being Board on developments.
There have been limited interventions in Tower Hamlets to raise awareness about the prevention of Type 2 diabetes. Local GPs practices are recording people who are at high risk from diabetes. Currently the Diabetes Centre is organizing pre-diabetes sessions but is unable to meet the demand.	NICE Guidance on preventing Type 2 Diabetes: http://guidance.nice.org.uk/PH35 promotes brief awareness raising interventions to prevent the onset of Type 2 diabetes in those most at risk.	A systematic approach is required to raise awareness on the prevention of Type 2 diabetes to all age groups in Tower Hamlets. To work with lay educators such as the Health Trainers to deliver sessions based on NICE guidance for people who are at high risk from Type 2 diabetes.

10. Contacts / Stakeholder Involvement

Contacts: **CCG Diabetes Working Group** (included diabetes centre / Barts Health Consultants / primary care clinical specialist / public health and CCG leads)

	NAME	CONTACT DETAILS
UPDATED BY		
SIGNED OFF BY	Abigail Knight	

Stakeholders

Appendix 1

NSF 12 standards of care:

Standard 1: The NSF will develop, implement and monitor strategies to reduce the risk of developing Type 2 diabetes in the population as a whole and to reduce the inequalities in the risk of developing Type 2 diabetes.

Standard 2: The NSF will develop, implement and monitor strategies to identify people who do not know they have diabetes.

Standard 3: All children, young people and adults with diabetes will receive a service which encourages partnership in decision-making, supports them in managing their diabetes and helps them to adopt and maintain a healthy lifestyle. This will be reflected in an agreed and shared care plan in an appropriate format and language. Where appropriate, parents and carers, should be fully engaged in this process.

Standard 4: All adults with diabetes will receive high quality care throughout their lifetime, including support to optimise the control of their blood glucose blood pressure and other risk factors for developing the complications of diabetes.

Standards 5 and 6: All children and young people with diabetes will receive consistently high quality care and they, with their families and others involved in their day-to-day care, will be supported to optimise the control of their blood glucose and their physical, psychological, intellectual, educational and social development.
All young people with diabetes will experience a smooth transition of care from paediatric diabetes services to adult diabetes services, whether hospital or community based, either directly or via a young people's clinic. The transition will be organised in partnership with each individual and at an age appropriate to and agreed with them.

Standard 7: The NSF will develop, implement and monitor agreed protocols for rapid and effective treatment of diabetic emergencies by appropriate trained healthcare professionals. Protocols will include the management of acute complications and procedures to minimise the risk of recurrence.

Standard 8: All children, young people and adults with diabetes admitted to hospital, for whatever reason, will receive effective care of their diabetes. Wherever possible they will continue to be involved in decisions concerning the management of their diabetes.

Standard 9: The NHS will develop, implement and monitor policies that seek to empower and support women with pre-existing diabetes and those who develop diabetes during pregnancy to optimise the outcomes of their pregnancy.

Standards 10, 11 and 12: All young people and adults with diabetes will receive regular surveillance for the long-term complications of diabetes. The NHS will develop, implement and monitor agreed protocols and systems of care to ensure that all people who develop long-term complications of diabetes receive timely, appropriate and effective investigation and treatment to reduce their risk of disability and premature death. All people with diabetes requiring multi-agency support will receive integrated health and social care.