

Diabetes and the disadvantaged: reducing health inequalities in the UK

World Diabetes Day 14 November 2006

A report by the All Parliamentary Group
for Diabetes and Diabetes UK



All-Party
Parliamentary Group
for Diabetes

Foreword



Adrian Sanders MP, Chair of the All Party Parliamentary Group (APPG) for Diabetes

“As the theme of World Diabetes Day 2006 is ‘Diabetes and the Disadvantaged’, it is imperative that we take this opportunity to explore the current situation in the UK.

There is no doubt that diabetes care provision in the UK is much further ahead than in less developed countries around the world. However, it is clear from this report that diabetes is still a significant problem amongst those at a socio economic disadvantage. Not only is diabetes more common among these groups, but the impact on their long term health is worse.

It is important that Ministers, parliamentarians and officials not only understand the evidence but implement strategies based on the ways forward suggested in this report. We must consider how policies developed in Westminster and Whitehall could help reverse the downward spiral experienced by people with diabetes from disadvantaged groups.

All the service frameworks for diabetes have placed emphasis on empowering people with diabetes to support their own care management. But, if people are not accessing this care or social barriers are preventing them from accessing care, their condition will deteriorate.

As Chair of the All Party Parliamentary Group for Diabetes, I am hopeful that this report will facilitate improvements where they are needed and enable the government to build on their proposals to improve public health, particularly amongst those who live in deprived areas or are vulnerable.”

A handwritten signature in black ink, appearing to be 'A. Sanders', written over a horizontal line.

Adrian Sanders MP
Chair, All Party Parliamentary Group for Diabetes

Contents

Foreword	3
Executive summary	5
1 Introduction	7
2 Socio economic disadvantage	8
3 Who and why?	10
4 Summary	15
5 Key recommendations	15
6 Examples of good practice	18
References	20

Executive summary

Diabetes is one of the greatest health challenges facing the UK today. The numbers diagnosed are expected to reach over 3 million by 2010. Around half these people will be from disadvantaged communities, who are less likely to access the appropriate care. This report looks at the current link between Type 2 diabetes, socio economic deprivation and diversity in the UK. It also examines possible solutions to tackling this pattern of high diabetes prevalence and poor health outcomes amongst diverse communities.

Diabetes in disadvantaged groups

- The most deprived in the UK are 2.5 times more likely to have diabetes.
- In the North East of England the prevalence of diabetes is 45 per cent higher in women and 28 per cent higher in men than the national average.
- 80 per cent of people with Type 2 diabetes are overweight or obese at diagnosis.
- 1.3 million people with diabetes are aged over 65.
- People from black and minority ethnic (BME) groups are up to six times more likely to develop diabetes.
- One in five people with a severe mental illness have diabetes.
- The prevalence of diabetes in nursing homes is up to 25 per cent compared to 3 per cent in the general population.
- Complications of diabetes such as heart disease, stroke and kidney damage are three and a half times higher in the lower socio economic groups.
- People from deprived or ethnic communities are less likely to have their body mass index or smoking status recorded. They are also less likely to have records for HbA1c, retinal screening, blood pressure, and neuropathy or flu vaccination.
- Those who are least well educated are more likely to have retinopathy, heart disease and poor diabetes control.

Inequalities in diverse groups

Deprivation 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 risk of diabetes or the risk of serious complications amongst those already diagnosed.

- 50 per cent of poor health is due to smoking and high blood pressure.
- People in lower socio economic groups are 50 per cent more likely to smoke than those in higher socio economic groups.
- Obesity is nearly 50 per cent higher amongst women in lower socio economic groups.

Key recommendations

It is vital that the government at all levels and the NHS take a long-term approach to diabetes and that interventions target diabetes in its early stages as well as addressing the risk factors. The following recommendations would help to address the current inequalities encountered by people in disadvantaged groups.

- **Protocols.** Primary Care Organisations (PCOs) should have written protocols for addressing the particular needs of diverse groups.
- **Discrimination.** Age alone should not dictate the level of diabetes care. Diagnosis, treatment and education should be the same at all ages.
- **Strategies.** Schemes aimed at reducing inequality of health outcomes should be developed. These should be multifaceted and developed with input from community networks and stakeholders. They should include awareness raising messages with communication appropriate to all diverse groups.
- **Funding.** Redressing inequalities is expensive. Particular initiatives such as providing care to the housebound need a dedicated budget. The government should acknowledge the additional costs of self-care and positive lifestyle choices for people with diabetes and explore mechanisms for reducing the economic burden on individuals living in poverty. The government should encourage PCOs to channel their funding according to their environment (diverse communities, deprived areas etc).
- **Training.** Staff working in institutions such as care homes or prisons should be appropriately trained to deal with people with diabetes.
- **Monitoring.** All health districts should establish a defined set of inequality indicators as well as measures for access to services, complications and satisfaction of care.
- **Prevention.** Targeted interventions are needed to help those at risk of diabetes.
- **Best practice.** Government and NHS need to learn from existing programmes of work with those in disadvantaged communities.

1 Introduction

Diabetes is one of the greatest health challenges facing the UK today.

The numbers diagnosed are expected to reach over 3 million by 2010. Around half these cases will be people from disadvantaged communities. These are also the people who are less likely to access the appropriate care. Unless it is diagnosed and effectively treated diabetes can put people at risk of complications such as heart and kidney disease, blindness, strokes and amputations. Deaths from diabetes are expected to rise by 25 per cent in the next 10 years.¹

This report looks at the current link between diabetes and socio economic deprivation in the UK. It also examines possible solutions to tackling this pattern of high diabetes prevalence and poor outcomes amongst diverse communities. These groups by definition include: people from black and minority ethnic (BME) communities, people with diabetes and severe mental illness, prisoners with diabetes, homeless people with diabetes and refugees/asylum seekers, young people, the elderly and people in residential homes. A common theme running through most of these groups is deprivation and socio economic disadvantage.

These groups have been specifically targeted as:

- they may be difficult to reach via mainstream channels
- they may face inequalities in accessing care
- their first language may not be English or they may have literacy difficulties
- their cultures, religious beliefs and lifestyles affect health care delivery and management.

It is important to consider the profile of those most likely to have diabetes. Of the 2.2 million people diagnosed with diabetes in the UK, 1.3 million people are aged over 65,² 344,000 are from black and minority ethnic groups³ and 80 per cent of people with Type 2 diabetes are overweight or obese at diagnosis.⁴

2 Socio economic disadvantage

Socio economic deprivation affects many people from diverse groups. Mortality and morbidity are also increased by deprivation. Complications of diabetes such as heart disease, stroke and kidney damage are three and a half times higher in the lower socio economic groups.⁵

The most deprived in the UK population are two-and-a-half times as likely to have diabetes at any given age.⁶ In the North East, prevalence of diabetes is 28 per cent higher in men and 45 per cent higher in women in the most deprived areas compared to the national average.⁷

2.1 Lifestyle

Inequality of health outcomes in people with diabetes has many causes. Around 50 per cent of increased morbidity is due to smoking and uncontrolled hypertension. Other factors include poor blood glucose control, raised cholesterol, obesity, lack of education, inaccessibility (e.g. older adults living alone), unemployment, housing status, ease of access to services and referral bias.⁸

In addition, aspects of individual psychosocial orientation, such as depression, hopelessness, 'cynical hostility', sense of coherence, and resistance to changing risk behaviour, are highly associated with health behaviour and poorer health outcomes.

This inequality in outcome has many causes, such as:

- Women from lower socio economic classes are 50 per cent more likely to be obese than those higher classes. Similarly, in children the proportion of girls who are obese is significantly higher among those from lower classes (19 per cent) compared to higher classes.(14 per cent).⁹
- Manual workers are 50 per cent more likely to smoke than non-manual workers.¹⁰
- Cholesterol levels are also higher in households with lower incomes.¹¹
- Deprived households have poor access to a healthy, balanced diet and facilities for physical activity and recreation. Hostile, unsafe environments do not promote walking, jogging or cycling but encourage indoor sedentary lifestyles where people feel protected.
- Eating fruit and vegetables is lowest in households with low incomes.¹¹
- Salt use in cooking is highest amongst older people and those on lower incomes.¹¹

2.2 Standards of care

Of the 17 quality indicators for diabetes care, 10 have been found to be adversely associated with deprivation and nine adversely associated with ethnicity.¹² This in turn means that these people are more likely to develop serious complications like heart disease, kidney failure, strokes, nerve damage and blindness.

Those from deprived or high ethnicity areas are less likely to have the following health checks:

- body mass index (BMI) recorded
- smoking status recorded or smoking advice given

- HbA1c recorded
- retinal screening
- blood pressure recorded
- neuropathy screening
- flu vaccination
- creatinine concentration recorded
- cholesterol recorded
- pulse checked
- microalbuminuria test.

These health checks should happen at least once-a-year for people with diabetes.

Poor diabetes care is associated with a 29 per cent increased risk of death over and above the effects of socio economic deprivation.⁷

If health measures are not recorded then preventative measures can not be put in place or interventions set into motion and serious health complications will develop unnoticed. The more information healthcare professionals and individuals have about their condition, the better it can be treated and managed.

2.3 Health outcomes

People with diabetes can experience a variety of health outcomes. Some are able to manage their condition effectively throughout their life, whilst for some this is more difficult and this may result in long term complications.

Those who are least well educated are more likely to have diabetic retinopathy, heart disease and higher HbA1c levels. They are more likely to feel that their condition has an adverse effect on their lives and be seen as non-adherent by healthcare professionals than those who are higher earners and educated to a higher standard.¹³

Improving the accessibility and acceptability of services is an important first step towards reducing inequality of outcome in deprived populations. Potential interventions to address the underlying causes of unhealthy lifestyles include policy initiatives, information and education, and individual behavioural interventions. Research suggests that interventions that successfully reduce inequalities in health outcomes are generally multi faceted and 'holistic' in approach, and align with local priorities, local ways of working and existing services.

3 Who and why?

3.1 Ethnicity and culture

People of South Asian origin are up to six times more likely, and Black African-Caribbean origin up to five times more likely, to develop diabetes compared to white people. Figures suggest that 20 per cent of the South Asian community and 17 per cent of the Black African and Caribbean community living in the UK have Type 2 diabetes in contrast to three per cent of the general population. For those with diabetes morbidity is also much higher, especially heart disease (two to three times higher in South Asians)¹⁴, renal failure (four times higher in Asians)¹⁵ and stroke (three times higher in African-Caribbeans).¹⁶

Reasons for this include socio economic deprivation, genetic risk factors, displacement and mobility, discrimination and racism, language, communication and literacy, cultural and religious influences on behaviour (including physical activity and food choices), the role and status of women, and access to services.

The Audit Commission Patient Survey¹⁷ highlighted significant gaps in patient knowledge, understanding and confidence in managing diabetes, which were substantially more pronounced for ethnic minorities than the white population.

The 2001 Census showed that six out of 10 ethnic minority households do not speak English as their main language at home. Services available are often inappropriate, where language and cultural barriers between patients and healthcare professionals lead to misunderstanding or even no information at all being given.

Analysis of the UKDIABS dataset,¹⁸ despite limitations, showed that people with diabetes from BME groups are less likely to have annual health checks for HbA1c, cholesterol and blood pressure etc. In 2004/2005, 40 per cent of Primary Care Trusts (PCTs) didn't have any strategies in place for BME communities.¹⁹

Research carried out by MORI in 2006²⁰ also showed awareness of diabetes and its complications to be extremely low from people in BME groups. Only 37 per cent thought that diabetes could lead to blindness and only 34 per cent thought it could lead to kidney failure compared to the average awareness of 63 per cent and 51 per cent respectively.

3.2 People with severe mental illness and diabetes

3.2.1 Severe mental illness

In the UK, two in 100 people will experience severe mental illness (SMI) at one time in their life.^{21,22} Those living with SMI are also significantly more at risk of developing major physical health related issues as a consequence of their mental illness. This is due to the lifestyle they are often forced to lead because of their socio economic circumstances and the way their condition is managed. Significantly higher incidences of long-term chronic diseases translate into rates of premature death which are up to three times higher than the general population.²³ On average, those with SMI die between 10 to 15 years earlier.²⁴

Diabetes and mental illness – is there a link?

Many studies have reported that impaired glucose tolerance and insulin resistance are more common amongst those living with SMI than the general population. Type 2 diabetes has also been found to be up to five times more common in those with SMI in comparison to the general population.²⁵

In a recent study of first-episode schizophrenia, 15 per cent were found to have impaired fasting glucose tolerance compared to none of the healthy controls.²⁶ Furthermore, in a pooled analysis of randomised clinical trials, patients receiving placebo and patients receiving antipsychotics appear to have similar rates of newly diagnosed diabetes.

Leading Endocrinology researcher, Dr Richard Holt believes that there is a genetic link between diabetes and schizophrenia. Up to 30 per cent of people with schizophrenia have a family history of diabetes, which is significantly higher than the general population.²⁷ Although to prove this relationship, additional clinical research is required. It is likely to be predominantly genetic and environmental with other potential factors including some possible effects of medication also playing a role.

People with SMI are emerging as a high risk group, so there is a need to ensure that a supportive, choice-driven approach is widely adopted into the everyday provision of care for those with diabetes, as well as the care delivered by family and healthcare professionals.

3.2.2 The issues surrounding people with severe mental illness and diabetes?

- Impaired judgement may mean people with severe mental illness may not be able to make informed choices about their diabetes.
- 30 to 50 per cent of the 10,000 people a year, who are homeless, have a SMI. For these people, accessing healthcare without a permanent address is very difficult but overall, health may not be viewed as a priority.
- There may be a lack of trust towards healthcare professionals.
- A lack of social skills may mean that communication around medical problems or symptoms is poor.

3.3 Older people

Advances in medical science and better living conditions mean that we are all living longer. In the UK, there are currently 11.4 million people aged over 65. In 2011, it is estimated this figure will rise to 12.2 million and in 2031 to over 15.2 million.²⁸

The prevalence of diabetes rises steeply with age, reaching around 5 per cent at 65 years and up to 20 per cent in the over 85s.²⁹ Diabetes in the elderly may be associated with other physical

problems and with psychological and social difficulties including anxiety, lack of confidence, social isolation and poor mobility.

Older people have been described as being "under researched, under diagnosed, under-valued and sometimes over-medicated".³⁰ There is also some evidence of delayed diagnosis (when symptoms of diabetes are wrongly attributed to ageing) and discrimination in the amount of active management offered compared to younger patients.

Diabetes is a progressive condition so older people are much more likely to develop complications. They are more likely to be admitted to hospital with a foot ulcer than with any other complication of diabetes.³¹

3.4 People living in residential and nursing homes

The prevalence of known diabetes in residential and nursing homes is estimated to be up to 25 per cent.³⁰ Care of residents with diabetes in institutional settings is often unstructured, ad hoc, and fragmented with no clear boundaries of clinical responsibility. Morbidity and mortality is high, especially from cardiovascular disease and infections.

Staff are generally untrained, dietary provision unsuitable (with research showing residents with diabetes only getting 50 per cent of their daily energy requirement) and some patients may go for years without a formal review.³²

Urgent improvements to services for institutionalised patients must include the introduction of written diabetes protocols that offer systematic, structured review for residents with known diabetes, and ongoing training of staff in the care of these people. In 2004/2005, 23 per cent of PCTs had not made any provisions to meet the needs of people with diabetes in residential care homes.¹⁹

3.5 Gender

There are few consistent gender differences in diabetes prevalence or outcome, but gender may compound other aspects of inequality. For example, women often bear the brunt of socio economic deprivation, especially in traditional societies. Socio economic differences in the prevalence of diabetes are more marked for women, probably because of differences in smoking rates, food choices and the prevalence of obesity.

Women and girls require support before, during and after pregnancy (including contraceptive advice). Babies of mothers with diabetes are nearly five times as likely to be stillborn, and nearly three times as likely to die in their first month of life than those of mothers without the condition. There are also twice as many babies born with major congenital malformations (42 for every 1000 births) as for babies of mothers without the condition.³³ It is thus vital that all mothers with diabetes get an appropriate level of care, before, during and after pregnancy.

Men with diabetes are at a higher risk of erectile dysfunction than those without the condition.

3.6 Young people

The number of young people with diabetes is increasing with more and more being diagnosed with Type 2 diabetes. There are over 1000 known cases of Type 2 diabetes, most of those

teenagers (but one aged 5) and it is believed the actual figure is much higher.

Young people can be a vulnerable group with high rates of psychological morbidity (especially anxiety, low self esteem, and eating disorders), acute problems (including recurrent ketoacidosis) and chronic morbidity following long periods of poor glycaemic control.

'Youth culture' may exacerbate junk food intake, smoking, excess alcohol, and self-neglect. But the peer group is also an important source of advice and support for individuals with a chronic condition.

Respect for the young person's lifestyle and choices must be sensitively combined with clear messages about health risks. Educational interventions must be realistic, non-judgemental and focus on coping strategies. Young people should be involved in the design and ongoing review of diabetes services.

3.7 Homeless people

Homelessness is a growing problem in the UK. The charity Crisis estimates that there are 380,000 hidden homeless people living in hostels, squats, bed and breakfast accommodation or sleeping on the floors of friends and family. Many are struggling with problems such as unemployment, family breakdown, mental illness and substance abuse.

It's very difficult to know how many homeless people have diabetes but they are certainly more likely to have chronic conditions. There is no doubt that the barriers they face in diabetes care and management are more acute than the general population.

Common problems include:

- Difficulties in obtaining food – little choice available in shelters.
- Difficulties in scheduling or managing their diabetes consistently due to lack of routine and lifestyle choices available.
- Some shelters may forbid residents possessing needles. There could be other fears surrounding possible theft of syringes from those using syringes to support their drug taking habits.
- Increased risk of hypoglycaemia due to alcohol abuse, lack of suitable remedies e.g. glucose, lack of awareness and training of those with whom they come into contact. Also, in the cold, damp weather, more carbohydrate may be needed to maintain their blood glucose levels.
- Increased walking and poor footwear accentuate problems with peripheral neuropathy or foot problems.
- They are more likely than others to present with a disease rather than at prevention or screening stages, and may use accident and emergency departments for their healthcare needs. They can feel alienated from health promotion materials, as these often require high levels of literacy. Although homeless people may be concerned about health related problems, low self esteem and low expectations prevent them from accessing healthcare.

3.8 Prisoners with diabetes

The prison population has three key features: it is largely young, overwhelmingly male and has a very high turnover. Prisoners are drawn from lower socio economic groups and have poor levels of education. Also, 10 per cent of the prison population is black. As we know the prevalence of diabetes is up to five times higher in this group it is fair to say that cases of diabetes within prisons are common.

There is a high incidence of mental health problems and one in ten prisoners has suffered from a psychotic disorder in the past year. Suicide is about eight times more common than the general population. For many prisoners who have had limited access to healthcare, a term of imprisonment may provide the first opportunity to have their health needs addressed.

Key issues for prisoners with diabetes:

- Half of prisoners are heavy alcohol users and similar numbers are dependent on drugs.³⁴
- Poor understanding of diabetes with good management are dependent on the interest and expertise of individual health care providers.
- Ignorance of prison officers – some may confuse hypoglycaemia with ‘acting up’ and fail to take appropriate action.³⁵
- A lack of education amongst staff and prisoners increases the possibility of misunderstandings or manipulation around basic management issues such as monitoring, diet and medications.³⁵

Prisoners have also voiced concerns that their diabetes is not taken seriously, that meals do not correspond with insulin doses, in content or timing, and that procedures for obtaining medication are laborious, conflict with medical confidentiality and are often unsuccessful. There also seems to be the lack of on-site, up-to-date literature about diabetes and lack of consistency in keeping inmate medical records that would allow for easy review of diabetic management and use in annual reviews.

For the next five years it is up to PCTs to commission the provision of health services. In 2004–2005 over half did not have any strategies in place for prisons.¹⁹ It has also been noted that the resources available do not come anywhere near meeting the needs of the clinical workload in prisons and that there are still tremendous manpower problems in terms of recruiting and retaining doctors. Training of all prison healthcare staff is also inadequate.

3.9 Refugees and asylum seekers

Asylum seekers and refugee families are particularly at risk of a number of health issues due to living in a ‘new and naive’ environment, facing social stigma and experiencing psychological trauma and domestic violence. Unemployment, communication difficulties, and worries about housing and children’s education may worsen the situation. Emotional, psychological and social issues must be addressed adequately.

- A specific problem is insufficient knowledge of the language which may make older refugees delay asking for health advice and can lead to worsening of health.
- Little faith in healthcare professionals.
- Alienated from the wider society as a whole.
- Very little or no support at a local level.

4. Summary

In summary the evidence suggests that inequality of diabetes risk, risk behaviour, access to services and health outcome in diabetes are all associated with poverty, social exclusion, non-white ethnicity and extremes of age. The fact that many people fall into multiple disadvantaged categories further compounds their problem and means they are less likely to be able to reverse the downward spiral.

To be successful, interventions to redress inequalities in diabetes outcome need to reflect their complex diversity. Improved access to services should be accompanied with multifaceted and context-specific local initiatives that involve both professional and community groups from the outset.

5. Key recommendations

It is vital that the government at all levels and the NHS take a long-term approach to diabetes, and that interventions target diabetes in its early stages as well as addressing the risk factors for diabetes. The health MOTs proposed in England may help to diagnose those with a condition early but they will only be useful to those already inclined to take a proactive approach to their health. People who are reluctant to visit their GP or those who are not NHS registered will still slip through the net. Diabetes UK would like to see regular, targeted screening of those most at risk of diabetes coupled with an increased awareness of diabetes in agencies that interact most regularly with people from disadvantaged or diverse groups.

People in socio economic disadvantaged groups are clearly not currently accessing the care they need and much more work is needed to address this.

5.1 Policies that reflect a commitment to equity

- Those responsible for planning and delivering diabetes services should have written policies that address the particular needs of minority ethnic groups, extremes of age, hard to reach groups (e.g. young adults, the housebound), people living in institutions, the socially excluded, and that take account of the different needs of both genders.
- Age alone should not be a bar to active management of diabetes and its complications, nor to specific investigations or treatments.

5.2 An inequalities strategy

In order to reduce the inequalities in the risk of developing Type 2 diabetes (Standard 1 of the National Service Framework for Diabetes) and reduce the inequality in outcome in diabetes, all health districts should develop and implement a strategy according to the following principles:

- Interventions should be multifaceted, involve all relevant stakeholders from design to implementation and integrate with existing initiatives.
- Policymakers should develop and enhance the input of user and community networks in mainstream decision-making. They should also promote and reward partnerships between community and statutory organisations.
- Health professionals should be aware of and liaise with voluntary and community support services for specific vulnerable groups. They should also ensure that patients are in contact with these services when appropriate.
- Take appropriate steps to raise awareness of diabetes and target prevention messages at high-risk groups in collaboration with user and community groups.
- Provide up-to-date, aggregated data on languages spoken, literacy levels, and learning styles (e.g. preference for different media) of different groups. Also, make appropriate provision for information, interpretation and advocacy services.
- Adapt both hospital and community services to reflect aspects of ethnicity and culture that impact on health behaviour and outcomes (including dietary practices and religious rituals and expectations).
- Ensure that, where possible, staff involved in delivering health services, including policymakers and managers, reflect the ethnic composition of the population, if necessary through active recruitment policies.
- Ensure that all staff receive adequate and ongoing training in the cultural and religious needs of the population they serve, and the specific implications for diabetes care.

5.3 Integrated care plans for those with complex needs

Some older people, those with learning difficulties, those in institutions, and some people from minority ethnic groups have complex needs.

- Vulnerable people with diabetes should be identified and offered a flexible and integrated care package that reflects their physical, psychological, social, and cultural needs and upholds their autonomy, dignity, privacy and personal choice. Each person's care package should be reviewed at least annually or whenever changes dictate along with a reassessment of the overall aims of care.
- Particular attention should be paid to the needs of individuals in multiple jeopardy such as older people who are poor and socially isolated.

- The care package should be co-ordinated by a named member of the primary health care team, the specialist diabetes team or some other key worker.

5.4 Funding

Redressing inequalities is expensive.

- Particular initiatives (such as providing care to the housebound) need a dedicated budget.
- The government should acknowledge the additional costs of self-care and positive lifestyle choices for people with diabetes and explore mechanisms for reducing the economic burden on individuals living in poverty. The government should encourage Primary Care Organisations to channel their funding according to their environment (diverse communities, deprived areas etc).

5.5 Institutional settings

- All residential and nursing homes should have a written protocol for diabetes care that includes the ongoing management of diabetes, detection of new cases through regular testing of all at risk residents and surveillance for complications.
- Staff in residential and nursing homes should be appropriately trained to care for residents with diabetes.
- At least one Diabetes Specialist Nurse (DSN) in each health district should have protected responsibility for older adults in long-term care homes.
- Those responsible for planning and delivering diabetes care should establish robust outcome measures to assess the efficacy and efficiency of the diabetes care within care homes. These should assess the quality of care delivered, the impact of diabetes on each resident and the impact of use of care home resources in providing diabetes care.

5.6 Monitoring

- All health districts should establish and maintain a defined dataset of inequality indicators including age, gender, ethnicity and some index of socio economic deprivation, as well as measures of structure (availability of services), process (uptake of services) and outcome (patient-relevant measures of morbidity, mortality and satisfaction) of care.
- These indicators should be standardised across different health districts made available for public scrutiny and should inform the allocation of resources.

5.7 Prevention

It is now well accepted that many cases of Type 2 diabetes could be delayed or prevented with lifestyle interventions.

- Government needs to act to restrict the advertising of foods high in sugar, salt and/or fat and ensure that food manufacturers adhere to Food Standards Agency guidelines. This will help consumers to be better informed about the contents of processed foods.

- Targeted interventions are also needed to help those people at particularly high risk of diabetes. The Diabetes Prevention Program, undertaken in the US, showed that modest changes to diet such as reducing fat intake combined with 30 minutes of routine exercise a day are effective in reducing the risk of diabetes by 64 per cent.³⁶ A similar study in Finland reported that losing weight by making small lifestyle changes could prevent the development of diabetes in up to 58 per cent of people with impaired glucose tolerance.³⁷ If we are able to identify the people most at risk of diabetes, these types of targeted prevention programmes could help to reverse the cycle of diabetes occurring in disadvantaged groups.

6. Examples of good practice

Government and the NHS need to look at existing programmes of work with those in disadvantaged communities to see what lessons can be learned on how we can better reach all people not currently receiving adequate diabetes care.

Although many of the BME population are relatively concentrated in particular areas, others are more widely scattered and services must not ignore these groups because there aren't large enough numbers to warrant prioritisation. The Equal Access to Diabetes Healthcare Pilot Study was established in Wolverhampton to identify, assess and evaluate in one local area if and why health inequalities exist. This should now serve as a template for reviews across the UK.

Case study 1

A study carried out in a deprived area of Wales showed that people were very aware that they were eating junk food and living unhealthily. However, their attitude was that healthy food was something reserved for "them", "the boring people" and "not us." But more interestingly, the survey showed that people did want a chance to change and through community based cookery lessons they became empowered to change their diet.³⁸

Case study 2

Slough PCT identified a growing diabetes problem in the community and developed the 'Action Diabetes' project. The project identified a significant number of people with undiagnosed diabetes, raised the profile of the condition and strengthened links with Asian communities. Since the project launch in October 2004, diabetes referrals have increased by 164 per cent.³⁹

Case study 3

Lewisham PCT undertook its own research into the health needs of people from BME populations in 2004, focusing on diabetes and hypertension. The existing service was found to be inadequate with cultural barriers. Community based diabetes awareness education which takes account of cultural beliefs and socio economic factors was recommended. It was suggested that cultural awareness training should be introduced to staff and that an African-Caribbean nutritional food guide should be developed.³⁹

Case study 4

Southampton PCT adopted a patient centred approach at a GP practice where 78 per cent of patients are black or Asian. At Nichols Town Surgery 6 per cent were identified as having diabetes, but few people had their eyes and HbA1c checked and there was no diabetes clinic. A new approach was developed to recognise the cultural barriers and a significant improvement to patient care was achieved. The numbers achieving recommended blood glucose levels improved and there was a 39 per cent reduction in drug costs.³⁹

Case study 5

Cardiff Heartlink project built a comprehensive primary care led service in areas where services were patchy and uncoordinated. A link-worker was provided to help overcome language and cultural communication problems, and to establish a health screening service. All healthcare professionals were encouraged to undergo up to date diabetes and racial awareness training. A 'core team' was developed to liaise with communities to develop culturally appropriate health education in various languages and deal with issues such as patients starting on insulin. Morbidity registers and screening services were adopted along with a dataset to carry all patient information. Care pathways between primary and secondary care were adopted.⁴⁰

Case study 6

Hackney Diabetes Centre has developed extensive resources to deliver and sustain diabetes services for the ethnic communities in the area. By recruiting, training and working with lay educators, the project has enabled the development of self-help groups, diabetes awareness sessions, screening and education.⁴¹

Case study 7

In Warwickshire, the Apnee Sehat Project was developed to stem the high instances of diabetes, strokes and heart attacks within the south Asian community. A special educational DVD – Apnee Sehat (Our Health) – was produced offering advice on how to reduce salt, fat and sugar intake whilst adapting a healthier, more active lifestyle. At the local temple, women are encouraged to take part in yoga sessions whilst volunteer cooks provide healthier meals. Local restaurants have also been encouraged to join in and have produced healthier menus following the principles of the campaign.⁴²

References

1. World Health Organisation (2005) Facing the facts: *The impact of chronic disease in the United Kingdom*. World Health Organisation, Geneva.
2. Yorkshire & Humber Public Health Observatory, National Diabetes Support Team (2006) Diabetes Key Facts. Yorkshire & Humber Public Health Observatory, York.
3. Diabetes UK (2006) Estimate based on a variety of sources.
4. Diabetes UK (2005) *Type 2 diabetes and obesity: a heavy burden*. Diabetes UK, London
5. Weng, C., Coppin, D.V. and Sonksen, P.H. (2002) Geographic and social factors are related to increased morbidity and mortality rates in diabetic patients. *Diabetic Medicine* **17(8)**: 612-617.
6. *Health Survey for England (2004)*. Department of Health. The Stationery Office, London.
7. Connolly, V. (2006). *Diabetes, deprivation and outcomes in the wealthy world*. *Diabetes Voice* **51(1)**: 39-40.
8. Erens, B., Primatesta, P. and Prior, G. (ed.) *Health Survey for England 1999: The Health of Minority Ethnic Groups (2001)*. The Stationery Office, London.
9. Zaninotto, P., Wardle, H., Stamatakis, E., Mindell, J. and Head, J (2006) *Forecasting Obesity to 2010*. Department of Health, London.
10. Fuller, E. (2005) *Smoking, drinking and drug use among young people in England in 2004*. The Stationery Office, London.
11. *Health Survey for England (2003)*. The Stationery Office, London.
12. Hippisley-Cox, J., O'Hanlon, S. and Coupland, C. (2004) *Association of deprivation, ethnicity, and sex with quality indicators for diabetes: population based survey of 53,000 patients in primary care*. *British Medical Journal* **329**:1267-1269.
13. Bachmann, M. O., Eachus, J., Hopper, C. D., Davey-Smith, G., Propper, C., Pearson, N. J., Williams, S., Tallon, D. and Frankel, S. (2003) *Socio-economic inequalities in diabetes complications, control, attitudes and health service use: a cross-sectional study*. *Diabetic Medicine* **20(11)**: 921-929.
14. *Coronary Heart Disease Statistics 2003* British Heart Foundation Statistics Database.
15. Earle et al (2001) Variation in the Progression of diabetic nephropathy according to racial origin *Nephrology Dialysis and Transplants*. **16** 286-90.
16. Shafer et al, (1990) *Brain infarction risk factors in black New York City Stroke patients*, 127-133
17. *Audit Commission Patient Survey (2004)* Healthcare Commission
18. Diabetes UK (2001) UKDIABS Annual Report. Diabetes UK, London.
19. Dr Foster (2005) *Your Local Care*. Diabetes UK, London. http://www.diabetes.org.uk/Guide-to-diabetes/What_care_to_expect/Your_local_care/
20. Ipsos MORI (2005) *Awareness of diabetes and Diabetes UK amongst the general public*. Mori, London.
21. *Primary Care Key Facts on Severe Mental Illness* (<http://www.scmh.org.uk>) Sainsbury Centre for Mental Health.

22. NHS Direct (2006) *Bipolar affective disorder*. Available from: <http://www.nhsdirect.org.uk>
23. Lambert, T. J. R., Velakoulis, D. and Pantelis, C. (2003) *Medical comorbidity in schizophrenia*. *Medical Journal of Australia* **178(9)Supp 5**:s67-s70.
24. Richardson, C. R., Faulkner, G., McDevitt, J., Skrinar, G. S., Hutchinson, D. S., and Piette, J. D. (2005) *Integrating physical activity into mental health services for persons with serious mental illness*. *Psychiatric services* **56(3)**:324–331.
25. Schizophrenia and Diabetes 2003' Expert Consensus Meeting (2004) Consensus summary. *The British Journal of Psychiatry* **184**:s112-S114.
26. Ryan et al (2003) *Impaired fasting glucose tolerance in first-episode, drug naive patients with schizophrenia*. *American Journal of Psychiatry*, 160, 284- 289.
27. Dixon et al (2004) *Prevalence and correlates of diabetes in national schizophrenic samples*. *Schizophrenic Bulletin*, **26**, 903 - 912.
28. Age Concern (2004), *Older people in the United Kingdom: Some basic facts*. Age Concern, London.
29. Age Concern (1999) *Healthcare rights for older people*. Age Concern, London.
30. British Diabetic Association (1999) *Guidelines of Practice for Residents with Diabetes in Care Homes*. British Diabetic Association, London.
31. Diabetes UK (2003) *Diabetes care today*. Diabetes UK London.
32. Benbow, S. J., Hoyte, R. and Gill, G. V. (2001) *Institutional dietary provision for diabetic patients*. *QJM* **94**:27-30.
33. Confidential Enquiry into Maternal and Child Health (CEMACH) (2005) *Pregnancy in women with Type 1 and Type 2 diabetes, England, Wales and Northern Ireland*. CEMACH, London.
34. Smith R, *Prison Health Care* (1984) British Medical Association. London.
35. Gill, G.V., MacFarlane, I.A., and Tucker, N (1992) *Diabetes Care in British Prisons: Existing Problems and Potential Solutions*. *Diabetic Medicine*. 9: 109–113.
36. Diabetes Prevention Program Research Group (2002) *Reduction in the incidence of Type 2 diabetes with lifestyle intervention or metformin*. *The New England Journal of Medicine* **346(6)**: 393-403.
37. Tuomilehto, J, Lindstrom, J, Eriksson, JG et al for the Finnish Diabetes Prevention Study Group (2001) *Prevention of Type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance*. *The New England Journal of Medicine* **344(18)**: 1343-1350.
38. <http://news.bbc.co.uk/1/hi/wales/5399588.stm>.
39. Diabetes in Black and Minority Ethnic Communities (2005) National Diabetes Support Team.
40. Cardiff LHB (2002-2005) Inequalities in Health Fund. Project number: IIH/2001/087
<http://www.cmo.wales.gov.uk>
41. Diabetes UK Shared Practice Database (2006)
http://www.diabetes.org.uk/Professionals/Shared_Practice/
42. www.swarkpct.nhs.uk/apneesehat

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Diabetes UK Northern Ireland	Telephone 028 9066 6646
Diabetes UK Scotland	Telephone 0141 332 2700
Diabetes UK Eastern	Telephone 01376 501390
Diabetes UK East Midlands	Telephone 0115 950 7147
Diabetes UK London	Telephone 020 7424 1116
Diabetes UK Northern & Yorkshire	Telephone 01325 488606
Diabetes UK North West	Telephone 01925 653281
Diabetes UK South East	Telephone 01372 720148
Diabetes UK South West	Telephone 01823 324007
Diabetes UK West Midlands	Telephone 01922 614500

Visit www.diabetes.org.uk/in_your_area/ for email addresses

Useful contacts

Become a member	Telephone 0800 138 5605
Customer Services	Telephone 0845 123 2399
Diabetes UK Careline (or if hearing impaired)	Telephone 0845 120 2960* Textphone 020 7424 1031
Publications orderline	Telephone 0800 585 088

Visit www.diabetes.org.uk for further information

***Diabetes UK Careline** is here to help. Call **0845 120 2960** for support and information (although unable to provide individual medical advice). Diabetes UK Careline is open Monday to Friday 9am to 5pm. Calls cost no more than 4p per minute. Calls from mobiles usually cost more.



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