

# The National Survey of People with Diabetes

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# 1 EXECUTIVE SUMMARY

## Overview

- This survey formed part of the Healthcare Commission's National Patient Experience Survey Programme. This was the first survey to focus on people with diabetes, and is the largest survey of its kind in the world.
- The survey included all 152 PCTs in England. Questionnaires were returned by 68,501 people with diabetes – a response rate of 55%.

## Diabetes type

- Respondents with Type 2 diabetes were more likely than those with Type 1 to be wrong about, or say that they didn't know, their diabetes type. When compared with various 'check' questions to ascertain diabetes type, nearly a quarter (24%) of respondents with Type 2 diabetes (compared with 20% of those with Type 1) either did not know what type they were, or classified themselves incorrectly.
- A quarter of respondents said that their diabetes affected their day-to-day activities: a greater proportion of those with Type 1 (41%) than Type 2 (24%) diabetes.
- In contrast, people with Type 1 were more likely to report being in excellent or very good health (37% compared with 28%). This was particularly marked among the younger age groups, but became less marked as age increased, and the reverse was true for those in the oldest age group (i.e. respondents with Type 2 diabetes were more likely to report very good/excellent health).

## Diagnosis

- The provision of verbal information at the time of diagnosis is much better than the provision of written information: 73% of respondents reported having received the right amount of verbal information, compared with 57% of respondents when it came to written information.
- The oldest group were the most likely to say that they had received the right amount of verbal information (77%). The oldest and youngest age group were the most likely to have received 'the right amount' of written information (60% of both groups), and those aged 36-50 were the least likely (50%).
- Those diagnosed in the last five years were more likely to receive the right amount of information (both written and verbal) than those diagnosed longer ago.
- Respondents with Type 2 diabetes were more likely to report that they received 'about the right amount' of verbal information when they were first diagnosed: 73%, compared with 67% of respondents with Type 1. They were also more likely to say that they received the right amount of written information (58% compared with 51%).



### **Check-ups**

- Overall, the majority of service users were seen at their doctor's surgery (79%, compared with 18% at a hospital clinic). The majority (85%) of those with Type 2 diabetes said they had their check-up at their doctor's surgery, with only 13% attending a hospital clinic; whereas the majority of those with Type 1 diabetes had their check-up at a hospital clinic (63%) and just under a third (32%) had their check-up at their GP's surgery.
- Overall, the findings suggest that older respondents tended to fare worse than younger respondents when it came to having the opportunity to discuss goals (36%) and ideas (45%) about the best way to manage their diabetes (compared with 43% and 50%, respectively, of those aged 16-35). However, they were more likely to be given a chance to discuss medications (30%), and to agree appointments (72%) and care plans (47%) (compared with 27%, 63% and 41%, respectively, of those aged 16-35).
- Overall, less than half of the sample (47%) said they always/almost always agreed a plan to manage their diabetes: 47% of those aged 66 and over, compared with 41% of those in the youngest age group.
- A higher proportion of service users in QIMD1 (the least deprived group) said that they always/almost always agreed a plan to manage their diabetes (49% compared to 44% in QIMD5 (most deprived)). Similarly, respondents with no formal education were the least likely to agree a care plan (37%, compared with 47% who left education aged 16 or younger, and 48% who left education aged 19 years or older).
- Black/ Black British and White respondents were more likely to say that they always/almost always agreed a plan to manage their diabetes (48% and 47%), whereas service users from the Mixed ethnic group were least likely (41%).
- The results suggest that people with Type 1 diabetes were less likely to be provided with advice aimed at helping them to adopt a healthy lifestyle than those with Type 2 diabetes. Service users with Type 2 were more likely to always/almost always be given personal advice about food (47% compared with 29% of those with Type 1). Similarly, over a third (36%) of those with Type 2 and less than a quarter with Type 1 (23%) said they were always/almost always given personal advice about physical activity levels.

### **Tests and examinations**

- In the last 12 months, 98% of service users had their blood pressure measured, 91% had the HbA1c test, and the same proportion had been weighed. Eighty nine percent and 87% had cholesterol and urine test for protein respectively, 83% had their bare feet examined and 80% had retinography. Only 23% of respondents reported having seen a dietitian within the last 12 months.
- Previous research has suggested that patients from more affluent areas generally receive more frequent clinical monitoring and preventative treatments. Our findings appeared to support this for the HbA1c test, but the opposite was found for retinography, and results were somewhat ambiguous for foot examinations.

- Asian/Asian British respondents were the ethnic group who were least likely to have a HbA1c test in the last 12 months (84%, compared with 91% of White and 92% of respondents from a Mixed ethnic group).
- Asian/Asian British respondents were also less likely to say a doctor had taken their blood pressure in the last 12 months (96%), whereas White and Black/Black British respondents were the most likely (98% for both groups).
- Similarly, a higher proportion of White respondents (90%) had a cholesterol test than Asian/Asian British or Black/Black British respondents (83%). Black/Black British respondents were most likely to have had retinography (83%), whereas the Asian/Asian British and the Mixed ethnic group were least likely (76%).
- White respondents were the most likely to have had their bare feet examined by a doctor or nurse: 85%, compared with just 67% of Asian/Asian British respondents. Asian /Asian British respondents were also the least likely to have been weighed by a doctor or nurse (88%), whereas those from Chinese or other ethnic groups were most likely (92%).
- In contrast, White respondents were least likely to have seen a dietitian: 22%, compared with 25% of Asian/Asian British, and 30% for Black/Black British, Mixed, and Chinese or other ethnic group.

### **Self-management and knowledge**

- Overall, 27% of respondents said that they 'never' monitored their blood glucose, 34% said 'less than once a day', 18% said 'once a day', 16% said '2 or 3 times a day' and 6% said '4 or more times a day'.
- Thirty one percent with Type 1 diabetes said they checked their blood glucose 4 or more times a day, compared with just 3% with Type 2. Similarly just 4% with Type 1 said that they never monitored their blood glucose, compared with 29% with Type 2 diabetes.
- Three-quarters of respondents said they knew enough about what they should eat to manage their diabetes, 18% said they would like to know a bit more and 7% said they would like to know a lot more. This varied by diabetes type, with those with Type 1 being somewhat more likely to say they knew enough (80%, compared with 74% with Type 2).
- Respondents were asked about how good they are at eating the right foods to manage their diabetes. Overall, 22% said they were very good, 61% said they were fairly good, 14% said they were not very good and 2% said they were not at all good. Younger respondents were less likely to say they were very good at eating the right foods, 16% of those aged 16-35 compared with 27% of those aged 66 years and over.
- A slightly higher proportion of those in QIMD1 (least deprived) (76%) than in QIMD5 (most deprived) (73%) said they knew enough about what they should eat to help them manage their diabetes.

- Seventy-one per cent of those in the least deprived category said they knew enough about the role of physical activity in managing their diabetes, compared with 64% of the most deprived quintile. Likewise, those who had stayed in education longer were more likely to report that they knew enough about the role of physical activity in managing their diabetes (71% of those who left aged 19 or older, compared with 67% who left aged 16 or younger and 57% with no formal education).
- White respondents were most likely to say they knew enough about what they should eat to help manage their diabetes, (76%) whereas respondents from a Mixed ethnic group were least likely (66%).
- White respondents were also most likely to say they knew enough about the role of physical activity in managing their diabetes (69%) whereas as Black /Black British were least likely (54%).

### **Education and training**

- Overall, just 10% of respondents had participated in an education or training course on ways to manage their diabetes. Participation was highest in the youngest age group (12%) and lowest in the oldest group (9%).
- Those who had not taken part in an education or training course were asked whether they had ever wanted to take part in one. Almost three quarters said they did not want to take part (74%).
- Black/Black British and those in the Mixed ethnic group were most likely to have participated in an education or training course on how to manage their diabetes (16%), whereas Asian/Asian British were least likely (8%).

### **Psychological support**

- Just 3% of respondents said they had needed to see a specialist for psychological support to help cope with their diabetes within the last year. Respondents with Type 1 diabetes were more likely to have needed support (7%, compared with 3% of respondents with Type 2 diabetes).
- Younger respondents were more likely to have needed psychological support than older respondents (8% of respondents aged 16-35 years, compared with only 2% of respondents' aged 66 and over).
- Of those who reported needing psychological support, just over half (53%) said they had actually received the support they needed. There were no differences by diabetes type, age or sex.
- White respondents were least likely to have needed to see a specialist for psychological support to cope with their diabetes (3%) whereas those from the mixed category were most likely (11%). However, of respondents who did need psychological support, those of Mixed ethnicity were more likely to be able to see a specialist than White respondents (68% and 51%, respectively).

### **Hospital stays**

- Less than a fifth of service users (19%) had stayed in hospital overnight, but this varied with age. A higher proportion of those in the youngest (22% aged 16-35) and oldest (21% aged 66 and over) age groups said they had stayed in hospital in the last 12 months (compared with 15% aged 36-50 and 16% aged 51-65).
- Service users were asked about whether the staff who cared for them during their stay provided what they needed to manage their diabetes. Fifty-eight percent said that 'all of the staff helped provide what I needed', 19% said 'most of the staff', 13% said 'some', and 9% said 'none of the staff provided what I needed'. This varied by age, with older respondents being more likely to say that 'all of the staff provided what I needed' (62% of those aged 66 and over, compared with 46% aged 16-35).

## 2 ABOUT THE SURVEY

### 2.1 Background and policy context

The 2006 National Survey of People with Diabetes aimed to find out about the experiences of services provided by the NHS, of adults (aged 16 and over) with diabetes. The survey was part of one of a number of National Patient Experience Survey Programmes, managed by the Healthcare Commission and was the first survey to focus on people with diabetes. The Healthcare Commission appointed the National Centre for Social Research (NatCen) to act as the Coordination Centre for this survey: to develop the questionnaire and survey methodology, oversee the survey implementation, collate the data and report on the findings.

Diabetes is a major public health concern associated with increased morbidity, mortality and cost for health services<sup>1</sup>. In 2001, the National Service Framework (NSF) for People with Diabetes<sup>2</sup> was published. This highlighted twelve 'standards of care and delivery' with the aim of improving the delivery of diabetes services, and promoting effective self-management and patient-centred care.

The survey covered adults with a diagnosis of diabetes who are registered with a general practitioner. It asked about their experiences in relation to key aspects of the NSF and a range of issues identified by patients as important to them.

The survey is the largest national survey on people with diabetes since the Audit Commission conducted a postal survey as part of a review of diabetes services in 2000<sup>3</sup>. This survey included almost 1400 people with diabetes attending hospitals and primary care and showed that, while there was much to be commended in the health care that people with diabetes receive, there was also much scope for improvement<sup>4</sup>.

This report describes the development and methodology for the 2006 National Survey of People with Diabetes, and presents the national findings.

The Healthcare Commission published the survey results for each Primary Care Trust (PCT) in April 2007, alongside a brief national report. Although every PCT in England took part in the survey, the Healthcare Commission only published results from 142 of the 152 newly formed PCTs. This was due to low numbers of respondents in some areas, as too few general practices had agreed to take part in the survey.

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<sup>1</sup> Diabetes in Europe. Towards a European Framework for Diabetes Prevention and Care. International EU Workshop Proceedings. Diabetes Federation. (2004).

<sup>2</sup> National Service Framework for Diabetes. Department of Health. (2001)  
[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4002951](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4002951), accessed 29.08.07

<sup>3</sup> Testing Times. A review of diabetes services in England and Wales. Audit Commission (2000).

<sup>4</sup> Diabetes National Service Framework: Analysis Of Audit Commission Survey Data On People With Diabetes. Raleigh, V.S. and Clifford, G.M., commissioned by the Department of Health (2000).

The survey results also fed into the Healthcare Commission's service review of diabetes<sup>5</sup>. This assessed the quality of healthcare for adults (aged 17 and over) with diabetes in England, by looking at how well PCTs commissioned services to help people with diabetes to look after their condition. The aim is to improve the services commissioned by primary care trusts (PCTs), to ensure that adults with diabetes are offered the support that they require to look after themselves. The Healthcare Commission and strategic health authorities will continue working with the PCTs that were identified as having areas requiring improvement.

A national report was published for the service review, including a breakdown of responses by particular groups. Unlike the findings presented here, the service review national analysis used multiple logistic regression models to analyse some of the survey-based indicators from the service review of diabetes, plus some individual questions from the survey. As a consequence, some of the conclusions in the service review national report may differ from the findings presented here.

**Please note:** Caution must be exercised when interpreting the findings presented here. Given the complexity of the relationships between variables, further work would be required before any conclusions are made in terms of the differences between particular groups of people with diabetes.

## **2.2 Questionnaire development**

Determining the content of the questionnaire itself formed part of the early stages of this work, and a number of different stages were involved in the development of the questionnaire. These stages were: (1) literature review, (2) expert consultation, (3) consultation of people with diabetes, (4) questionnaire design and expert panel, and (5) cognitive testing. The question development phase was extremely important, being the first time that a survey of people with diabetes had been undertaken as part of the Healthcare Commission's long-term conditions programme.

### ***2.2.1 Literature review and expert consultation***

#### ***2.2.2 Overview***

An initial review of existing literature helped us to identify key topics and themes to inform the focus groups and qualitative in-depth interviews conducted with diabetes stakeholders or 'experts' in May 2005.

A topic guide was then developed (see appendix A) and consultations held with 25 experts including academics and policy makers, clinicians from both primary and secondary care (including GPs and hospital specialists, a diabetes specialist nurse, a podiatrist, optometrists, dietitians, a diabetes advisor and a pharmacist). The expert topic guide focused on: *diabetes diagnosis, access to diabetes care services, the diabetes review, care planning, self-management of diabetes, and psychological and*

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<sup>5</sup> Service Review of Diabetes. Healthcare Commission  
<http://www.healthcarecommission.org.uk/serviceproviderinformation/reviewsandinspections/improvementreviews/diabetes.cfm>, accessed 29.08.07

*educational support*. A detailed report on this stage was delivered to the Healthcare Commission<sup>6</sup>.

### **2.2.3 Consultation with people with diabetes**

The findings from these interviews informed the next stage of questionnaire development – focus groups and in-depth interviews with people with diabetes, considered 'experts by experience', to explore the pertinent issues already raised by experts as well as any new emerging issues. These interviews aimed to explore people's different and direct experiences of diabetes services. Again, a topic guide was developed (see appendix B) and depth interviews, plus one focus group, were conducted with 15 people with diabetes in July 2005. The range of topics explored with respondents was broadly similar to those discussed with the experts at the previous stage. A purposive sampling method was used to ensure that people with a range of experiences were included in the sample. The criteria used were: sex, age, region, ethnicity and type of diabetes. Each respondent was given a £15 gift voucher to thank them for their help. A detailed report on this stage was delivered to the Healthcare Commission<sup>7</sup>.

### **2.2.4 Questionnaire design and expert panel**

Following these stages the main questionnaire topics were established and a sixteen page draft questionnaire was put together consisting of only closed questions. In addition to the questions specifically about diabetes, we were asked by the Healthcare Commission to include a set of general questions on access to GP services, which were placed at the end of the questionnaire. These were included in the survey in order to provide data to feed into the Healthcare Commission's 2006/07 Annual Health Check, within the New National Targets for Primary Care Trusts. The questionnaire was then subjected to an 'expert panel', whereby researchers with an expertise in question design were asked to comment on the questions themselves as well as the overall structure and layout. Following the expert panel, revisions were made prior to cognitive question testing.

### **2.2.5 Cognitive testing**

Two rounds of cognitive testing were conducted with a total of 19 respondents during August 2005<sup>8</sup>. This phase aimed to test the draft survey questions, uncovering any problems they raised in advance of the mainstage fieldwork. There are two main cognitive interviewing techniques: think aloud (or protocol analysis) and probing. In the former respondents are asked to 'think aloud' as they answer survey questions. In the latter respondents are asked specific questions about how they answered<sup>9</sup>. Probes can be asked concurrently, as the respondent answers the survey question, or retrospectively, after the survey questions have been administered. We used both of these techniques during the cognitive interviews and found both to work effectively (the question and probe sheet can be found in appendix C). Respondents'

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<sup>6</sup> [http:// www.nhspatientsurveys.org](http://www.nhspatientsurveys.org)

<sup>7</sup> [http:// www.nhspatientsurveys.org](http://www.nhspatientsurveys.org)

<sup>8</sup> For more information on cognitive testing see Collins D (2003) *'Pretesting survey instruments: An overview of cognitive methods'* in *'Quality of Life Research 12'* Kluwer Academic Publishers.

<sup>9</sup> Willis G (2005) *'Cognitive Interviewing: A tool for Improving Questionnaire Design'* Sage Publications, Inc.

interpretation of questions was explored, as well as their views on the language and terminology used. Where problems were highlighted, possible alternatives were discussed. A purposive sampling method was used to ensure that people with a range of experiences were included in the sample. The criteria used were sex, age and type of diabetes. Again, a full report was delivered to the Healthcare Commission<sup>10</sup>.

### **2.2.6 Analysis**

Interviews at each of these three stages (expert interviews, interviews with people with diabetes and cognitive interviews) were tape-recorded, with the permission of respondents, and were analysed using 'Framework'. Framework is a systematic and accessible approach to qualitative data analysis developed by the Qualitative Unit at NatCen. The use of Framework helps to facilitate both thematic and case by case analysis and helps to ensure that all of the data are systematically included in the analysis.

### **2.2.7 Dress rehearsal and the final questionnaire**

Following the cognitive testing, the questionnaire was refined and improved ready for the dress rehearsal in February 2006. The dress rehearsal involved 5 PCTs, after which the questionnaire was slightly modified for the mainstage fieldwork from July to November 2006. The questionnaire contained eight sections: diagnosis; check-ups; tests; management of your diabetes; education and training; psychological and emotional support; stays in hospital; access to services; and background. The final questionnaire can be found in appendix F.

## **2.3 Sampling and methodology**

The survey included all 152 Primary Care Trusts (PCTs) in England. In October 2006 the configuration of PCTs in England changed from 303 to the current 152. At the time of the survey many Trusts were due to be affected by this, therefore PCTs had the option to carry out the survey in either their pre or post October 2006 configuration<sup>11</sup>. Twelve of the PCTs took part under their old PCT configurations (comprising 35 configurations in total); the other 140 took part under their new PCT configurations. This resulted in a total of 175 configurations.

Approximately 850 patients<sup>12</sup> from each PCT were chosen. The selection method involved first selecting 10 GP practices from each configuration and then sampling each of the 10 chosen practices to ensure that 850 patients were selected from each PCT. The practice sampling approach meant that there was a good mix of practices of different list sizes and the sample drawn from each practice was proportionate to the practice list size. Further details of the sampling strategy are provided in appendix E. Questionnaires were posted by PCTs, or their appointed approved survey contractor, to those in the selected sample. To achieve a good response rate up to two reminders were sent to non-responders.

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<sup>10</sup> [http:// www.nhspatientsurveys.org](http://www.nhspatientsurveys.org)

<sup>11</sup> All presentation of findings in this report refer to the current 152 PCTs.

<sup>12</sup> Due to the rounding of the calculated sample sizes the exact figure was not always 850. The exact figure varied from 840 to 859 patients.



## **2.4 Weighting strategy**

The data were weighted for analysis at national level. The purpose of weighting data is to compensate for the fact that the respondents do not form an exactly representative sample from the population; the weighted sample is a better representation of the population. Weighting is needed in order to account for disproportionate sampling (some individuals in the survey were more likely to be chosen than others) and to adjust for survey non-response. The weighting variable was calculated by combining three components: selection weights, post-stratification weights for age and sex, and grossing weights. The three weights were combined to produce the final analysis weight and, for ease of interpretation, this was scaled so that the weighted sample size was the same as the unweighted sample size. Further details of the weighting strategy are provided in the appendix D.

Additional weights were provided to produce spreadsheet reports for each trust, available on the Healthcare Commission's website. The idea behind spreadsheet reports is to compare trusts, so the weights were obtained by standardising each trust to give them similar age-sex profiles. This creates a "level playing field" in that trusts with an unusual patient profile (such as those with a high proportion of elderly patients) will not score well or poorly simply because of their patient profile. Doing this allows trusts with different patient profiles to be compared.

These standardisation weights are used only to measure trusts against each other and should not be used to obtain estimates of the actual proportion of patients in any trust giving a particular response to any question.

## **2.5 Response rate**

Questionnaires were returned by 68,501 service users, making this the world's largest survey of people with diabetes. After taking account of undelivered questionnaires, people who had died or who were found to be ineligible for inclusion in the survey, the response rate was just over 55%.

### 3 CHARACTERISTICS OF SURVEY SAMPLE

#### 3.1 Introduction

This section provides an overview of the survey sample in terms of socio-demographics and health characteristics, including diabetes type. Where relevant the profile of the sample is described according to type of diabetes, age and sex. Full details of the profile of the survey sample are provided in section 1.5 (Characteristics of the sample: tables).

#### 3.2 Diabetes type

During the development of the questionnaire it became clear that many people with diabetes are unsure as to whether they have Type 1 or Type 2, therefore the questionnaire included four questions to help ascertain *probable diabetes type* (see Figure 3.1) The same approach was also used by the recent Audit Commission Survey<sup>13</sup>. In this section, unless stated otherwise, all reference to Type 1 or Type 2 diabetes relates to this classification of probable diabetes based on these questions.

**Figure 3.1 Overview of the questions and answers used for the estimate of 'probable diabetes type'**

**Q1. How old were you when you were first diagnosed with diabetes?**

*(Asked to all)*

35 or under suggests Type 1

Over 35 suggested Type 2

**Q4. Did you begin injecting insulin within the first three months of being diagnosed with diabetes?** *(Asked to all)*

Yes suggests Type 1

No suggest Type 2

**Q5. Did you continue injecting insulin for more than one year after you first began injecting insulin?**

*(Asked if answer to Q4 was Yes)*

Yes suggests Type 1

No suggests Type 2

**Q6. Do you have Type 1 or Type 2 diabetes?** *(Asked to all)*

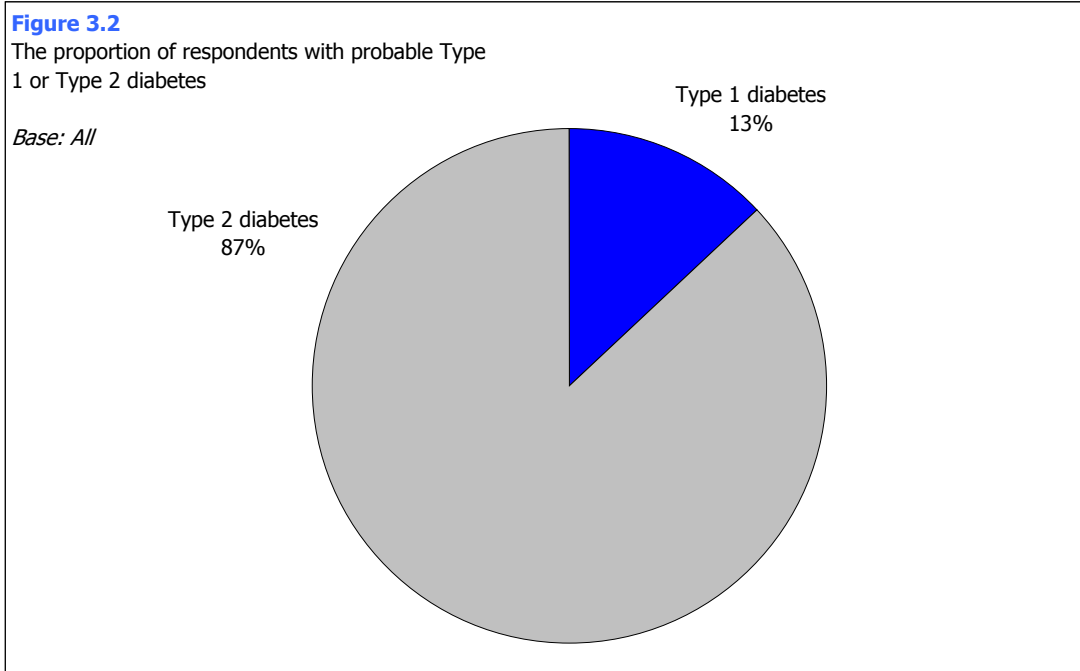
Type 1

Type 2

Don't know

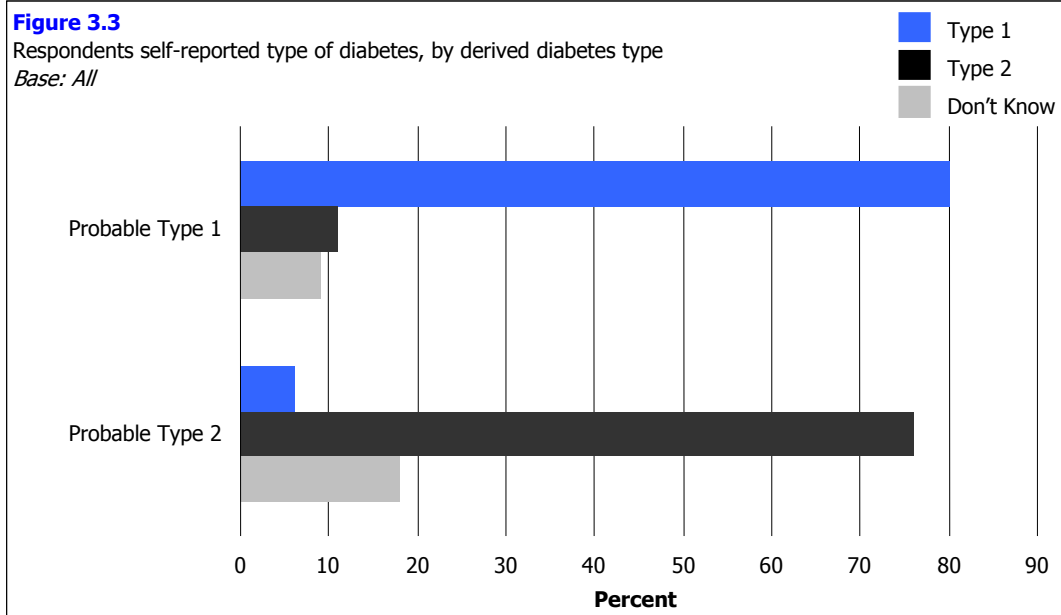
Respondents were asked if they had Type 1 or Type 2 diabetes; 14% said Type 1, 69% Type 2, and 17% said that they did not know. Using the classification of probable diabetes type, 13% of respondents were classed as having Type 1 diabetes and 87% classed as having Type 2 diabetes (see figure 3.2). This proportion is similar to the estimate by Diabetes UK that up to 15% of people with diabetes have Type 1.

<sup>13</sup> Testing Times. A review of diabetes services in England and Wales. Audit Commission (2000).



When comparing self-reported type with those from the derived variable, it appears that probable Type 2 respondents were less likely to say they could identify which type of diabetes they have (18% said that they didn't know, compared with 9% of respondents with Type 1). Figure 3.3 suggests that probable Type 2 people were also more likely to be wrong about their Type. Of those classified by the 'check' variable as Type 2, 76% also reported being Type 2. Of those classified as probable Type 1, 80% also reported themselves as having Type 1.

As would be expected, those with probable Type 1 diabetes tended to be diagnosed at an earlier age than those with Type 2 diabetes (mean age 28 and 57 respectively); and those classed as having Type 2 diabetes were generally older (mean age 65 years), than those classed as having Type 1 (mean age 48 years).



### 3.3 Age and ethnic group

The respondent profile consisted of more men than women (54% men, 46% women) and was very similar to the survey's sampling frame profile (which was 55% men and 45% women). Almost half (49%) of the sample were aged 66 years or over, 33% were aged 51-65, 14% were aged 36-50, and 4% were aged 16-35. Again, this compared favourably to the sampling frame age profile (see table 3.2).

Eighty nine percent of respondents described their ethnic group as 'White', 6% described their ethnic group as 'Asian or Asian British', 3% as 'Black or Black British', 1% as 'Mixed' and less than 1% as 'Chinese or other ethnic group'<sup>14</sup>. Overall, most respondents (69%) had left full-time education aged 16 or younger, but, as would be expected, there were differences by age group, with fewer younger respondents leaving full time education before the age of 16 (e.g. only 32% of those aged 16-35 left at 16 or younger, compared with 79% of those aged 66 or over).

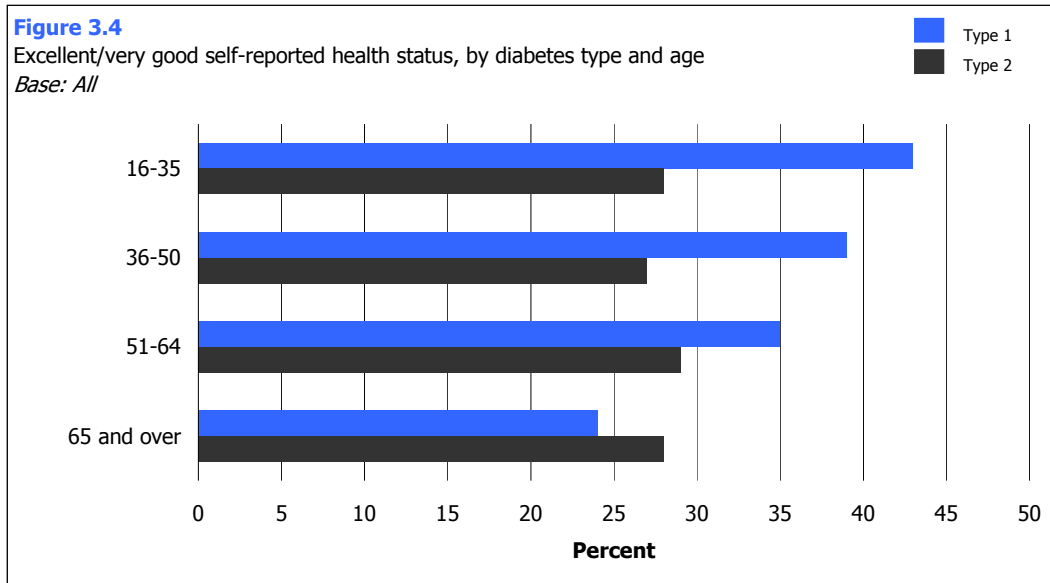
### 3.4 Self-reported health status

A quarter of respondents said that their diabetes affected their day-to-day activities. When analysed by type of diabetes, a greater proportion of those with Type 1 than Type 2 reported that their diabetes affected their day-to-day life (41% and 24% respectively).

Respondents were asked to rate their overall health in the past four weeks. Thirty eight percent of respondents rated their health as 'poor'/'fair', 33% as 'good', and 29% as 'excellent'/'very good'. A higher proportion of those with Type 1 said their health was 'excellent'/'very good' than those with Type 2 diabetes (37% and 28% respectively). This was particularly true for younger respondents, but the association became less marked as age increased and, interestingly, the reverse was true for

<sup>14</sup> Ethnic group data was not available from the sampling frame.

those in the oldest age group, where those with Type 2 diabetes were more likely to report 'very good'/'excellent' health (28% compared with 24%) (see figure 3.4).



Respondents were also asked about any other long-standing physical or mental health problems. Just under half (48%) reported no other long-standing health problems, 42% reported physical health problems, 2% mental health problems and 4% both physical and mental health problems. As would be expected, older adults tended to have more physical health problems (50% of those aged 66 or over, compared with 14% of those aged 16-35). Respondents with Type 2 diabetes were more likely to have other long-standing physical health problems than those with Type 1 diabetes (44% and 29% respectively), but this is likely to be because they were older.

Respondents who said they had some kind of long-standing health problem were then asked if this affected their day-to-day life. Twelve percent said 'no' and 41% 'to some extent', while 46% said it 'definitely' affected day-to-day life.

### 3.5 Characteristics of the survey sample: tables

**Table 3.1**

**Respondents' self-reported type of diabetes, by probable diabetes type.**

| Self reported diabetes type | Diabetes type      |                    |              | Total<br>% |
|-----------------------------|--------------------|--------------------|--------------|------------|
|                             | Probable<br>Type 1 | Probable<br>Type 2 |              |            |
|                             | %                  | %                  |              |            |
| Type 1                      | 80                 | 6                  | 14           |            |
| Type 2                      | 11                 | 76                 | 69           |            |
| Don't Know                  | 9                  | 18                 | 17           |            |
| <i>Weighted bases</i>       | <i>7224</i>        | <i>51230</i>       | <i>65110</i> |            |
| <i>Unweighted bases</i>     | <i>6896</i>        | <i>51625</i>       | <i>65188</i> |            |

**Table 3.2**

**Sex and age, by diabetes type**

| Sex and age             | Diabetes type |              |              | Total<br>%    | Sampling<br>frame<br>% |
|-------------------------|---------------|--------------|--------------|---------------|------------------------|
|                         | Type 1        | Type 2       |              |               |                        |
|                         | %             | %            |              |               |                        |
| <b>Sex</b>              |               |              |              |               |                        |
| Male                    | 56            | 55           | 54           | 55            |                        |
| Female                  | 44            | 45           | 46           | 45            |                        |
| <i>Bases weighted</i>   | <i>7616</i>   | <i>53358</i> | <i>68498</i> | -             |                        |
| <i>Bases unweighted</i> | <i>7276</i>   | <i>53673</i> | <i>68499</i> | -             |                        |
| <b>Age</b>              |               |              |              |               |                        |
| 16-35                   | 24            | 1            | 4            | 5             |                        |
| 36-50                   | 35            | 13           | 14           | 15            |                        |
| 51-65                   | 24            | 35           | 33           | 32            |                        |
| 66 or over              | 16            | 51           | 49           | 49            |                        |
| <i>Mean age</i>         | <i>48</i>     | <i>65</i>    | <i>64</i>    | -             |                        |
| <i>Bases weighted</i>   | <i>7616</i>   | <i>53361</i> | <i>68500</i> | -             |                        |
| <i>Bases unweighted</i> | <i>7276</i>   | <i>53673</i> | <i>68499</i> | <i>126558</i> |                        |

**Table 3.3****Ethnic group, by diabetes type**

| <i>All</i>              |                      | <i>2006</i> |              |              |
|-------------------------|----------------------|-------------|--------------|--------------|
| <b>Ethnic group</b>     | <b>Diabetes type</b> | Type 1      | Type 2       | Total        |
|                         |                      | %           | %            | %            |
| <b>Ethnic group</b>     |                      |             |              |              |
| White                   |                      | 93          | 88           | 89           |
| Mixed                   |                      | 1           | 1            | 1            |
| Asian or Asian British  |                      | 3           | 7            | 6            |
| Black or Black British  |                      | 2           | 3            | 3            |
| Chinese or other        |                      | 0           | 1            | 0            |
| <i>Bases weighted</i>   |                      | <i>7447</i> | <i>51468</i> | <i>66037</i> |
| <i>Bases unweighted</i> |                      | <i>7111</i> | <i>51786</i> | <i>66038</i> |

**Table 3.4****Age at which left full time education, by age group**

| <i>All</i>                          |            | <i>2006</i> |             |              |              |              |
|-------------------------------------|------------|-------------|-------------|--------------|--------------|--------------|
| <b>Age left full time education</b> | <b>Age</b> | 16-35       | 36-50       | 51-65        | 66 or over   | Total        |
|                                     |            | %           | %           | %            | %            | %            |
| 16 years or younger                 |            | 32          | 53          | 67           | 79           | 69           |
| 17 or 18 years                      |            | 22          | 22          | 15           | 10           | 14           |
| 19 years or older                   |            | 34          | 21          | 16           | 9            | 14           |
| I am still in full time education   |            | 11          | 1           | 0            | 0            | 1            |
| I have not had any formal education |            | 1           | 3           | 3            | 2            | 2            |
| <i>Bases weighted</i>               |            | <i>2553</i> | <i>9855</i> | <i>22567</i> | <i>33525</i> | <i>68501</i> |
| <i>Bases unweighted</i>             |            | <i>2251</i> | <i>8398</i> | <i>23453</i> | <i>34397</i> | <i>68501</i> |

**Table 3.5****Age at diagnosis, self-reported health and effect of diabetes on day-to-day life by diabetes type**

| <i>All</i>   | <i>2006</i>          |              |              |
|--|----------------------|--------------|--------------|
| <b>Health characteristics</b>                      | <b>Diabetes type</b> |              | <b>Total</b> |
|  | Type 1<br>%          | Type 2<br>%  |              |
| <b>Age at diabetes diagnosis</b>                   |                      |              |              |
| Under 16 years                                     | 29                   | 1            | 4            |
| 16 to 35   | 43                   | 5            | 9            |
| 36 to 50   | 15                   | 27           | 24           |
| 51 to 65   | 9                    | 41           | 38           |
| 66 and over  | 5                    | 26           | 25           |
| <i>Mean age</i>                                    | <i>28</i>            | <i>57</i>    | <i>54</i>    |
| <b>Overall health in past 4 weeks</b>              |                      |              |              |
| Excellent  | 11                   | 7            | 7            |
| Very good  | 26                   | 21           | 22           |
| Good   | 31                   | 33           | 33           |
| Fair   | 21                   | 29           | 28           |
| Poor   | 11                   | 9            | 10           |
| <b>Does diabetes affect day-to-day activities?</b> |                      |              |              |
| Yes  | 41                   | 24           | 25           |
| No   | 59                   | 76           | 75           |
| <i>Bases weighted*</i>                             | <i>7616</i>          | <i>53362</i> | <i>66992</i> |
| <i>Bases unweighted*</i>                           | <i>7276</i>          | <i>53675</i> | <i>66980</i> |

\* Base figures are for age at diabetes diagnosis

**Table 3.6****Any other longstanding health problems, by diabetes type**

| <i>All</i>   | <i>2006</i>          |              |              |
|--|----------------------|--------------|--------------|
| <b>Any other long standing physical or mental health problem</b> | <b>Diabetes type</b> |              | <b>Total</b> |
|  | Type 1<br>%          | Type 2<br>%  |              |
| Physical   | 29                   | 44           | 42           |
| Mental   | 4                    | 2            | 2            |
| Both physical and mental   | 4                    | 4            | 4            |
| No   | 60                   | 47           | 48           |
| Don't know   | 3                    | 3            | 3            |
| <i>Bases weighted</i>  | <i>7339</i>          | <i>51027</i> | <i>64976</i> |
| <i>Bases unweighted</i>  | <i>7013</i>          | <i>51402</i> | <i>65094</i> |



**Table 3.7****Whether other longstanding health problem affects day-to-day life, by diabetes type***Those with other longstanding health problem*

2006

| Does long standing health problem affect day-to-day life? | Diabetes type |             |            |
|---|---------------|-------------|------------|
|   | Type 1<br>%   | Type 2<br>% | Total<br>% |
| Yes, definitely   | 50            | 46          | 46         |
| Yes, to some extent                                       | 39            | 41          | 41         |
| No  | 11            | 13          | 12         |
| <i>Base weighted</i>                                      | 2692          | 25325       | 31176      |
| <i>Base unweighted</i>                                    | 2643          | 25756       | 31571      |

**Table 3.8****Any other longstanding health problems, by age group***All*

2006

|  | Age        |            |            |                 | Total<br>% |
|--|------------|------------|------------|-----------------|------------|
|  | 16-35<br>% | 36-50<br>% | 51-65<br>% | 66 or over<br>% |            |
| <b>Other long standing physical or mental health problem</b> |            |            |            |                 |            |
| Physical   | 14         | 28         | 41         | 50              | 42         |
| Mental   | 5          | 5          | 3          | 2               | 4          |
| Both physical and mental                                     | 4          | 6          | 5          | 2               | 4          |
| No   | 74         | 57         | 48         | 44              | 48         |
| Don't know   | 4          | 4          | 3          | 3               | 3          |
| <i>Base weighted</i>   | 2484       | 9532       | 21682      | 31276           | 64976      |
| <i>Base unweighted</i>                                       | 2192       | 8137       | 22567      | 32196           | 65094      |

**Table 3.9****Whether longstanding health problem affects day-to-day life, by age group***Those with other longstanding health problem*

2006

| Does long standing health problem affect day-to-day life? | Age        |            |            |                 | Total<br>% |
|---|------------|------------|------------|-----------------|------------|
|   | 16-35<br>% | 36-50<br>% | 51-65<br>% | 66 or over<br>% |            |
| Yes, definitely   | 44         | 44         | 48         | 46              | 46         |
| Yes, to some extent                                       | 41         | 41         | 39         | 43              | 41         |
| No  | 15         | 15         | 13         | 11              | 12         |
| <i>Base weighted</i>                                      | 543        | 3596       | 10550      | 16485           | 31176      |
| <i>Base unweighted</i>                                    | 490        | 3081       | 10995      | 17003           | 31571      |

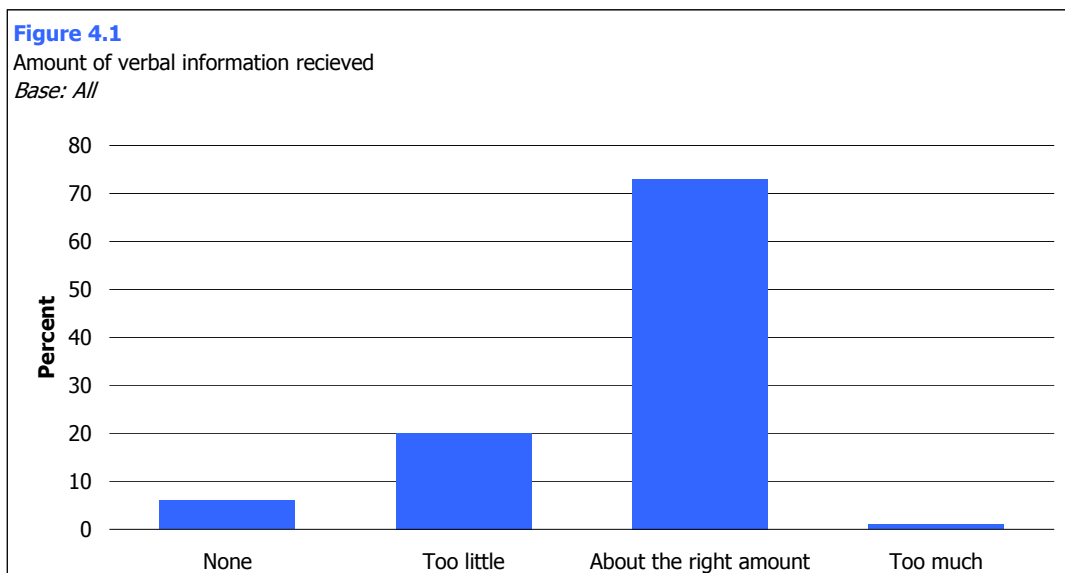
## 4 DIAGNOSIS AND INFORMATION

### 4.1 Introduction

The recent 'Good Practice Forum Report' (2007)<sup>15</sup> highlighted the importance of timely information for people with diabetes, and outlined the concept of the '*Information Prescription*' which would enable all people with diabetes to receive a 'prescription of relevant information'. The information received is particularly important at the time of diagnosis in order to help people with diabetes to 'achieve control of their condition'. Our findings suggest that the provision of verbal information at the time of diagnosis may be better than the provision of written information; and that those diagnosed in the last five years are more likely to receive the right amount of information. In addition, our findings suggest that more needs to be done to meet the information needs of those aged 36-50, and those with Type 1 diabetes.

### 4.2 Verbal information

Respondents were asked about the amount of verbal information they had received when they were first diagnosed as having diabetes. Overall, the majority of respondents said they received 'about the right amount of information' (73%). However, 20% said that they received 'too little' information, 1% said 'too much' verbal information, and 6% reported receiving 'no' information. Differences were found by age, diabetes type, and the number of years since diagnosis.

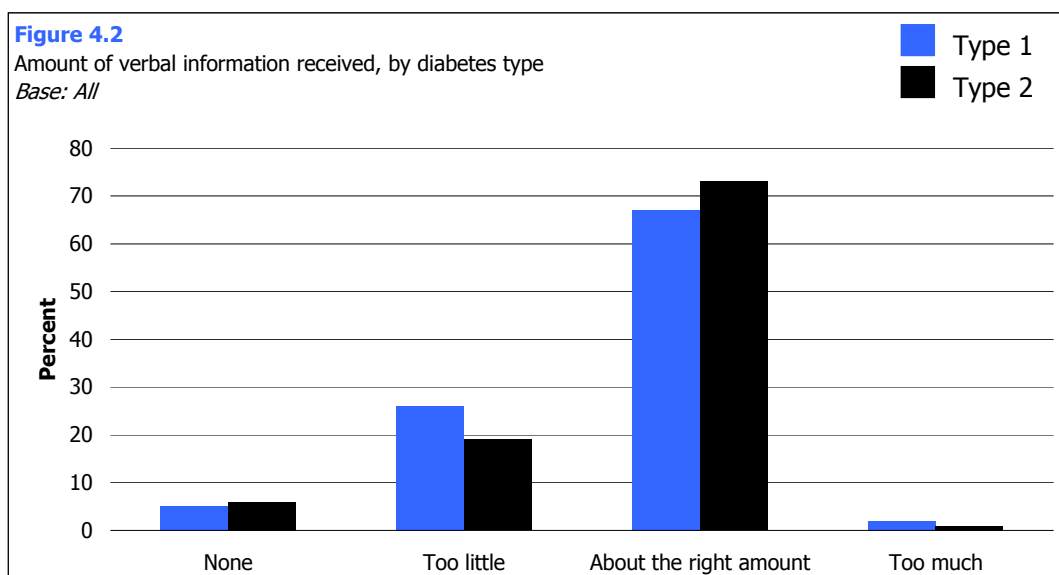


<sup>15</sup> January 2007 Information Provision in Diabetes 'Good Practice Forum Report'. The Association of the British Pharmaceutical Industry, Ask About Medicines, and Diabetes UK.

Service users aged 66 and over were the most likely to report that they received 'about the right amount' amount of verbal information (77%), but there was no clear pattern with age (71% for those aged 51-65, 65% for those aged 36-50 and 71% for those aged 16-35). The younger the respondent, the more likely they were to report having received 'too much' verbal information, 4% of those aged between 16 and 35, compared with 1% of respondents aged 66 and over.

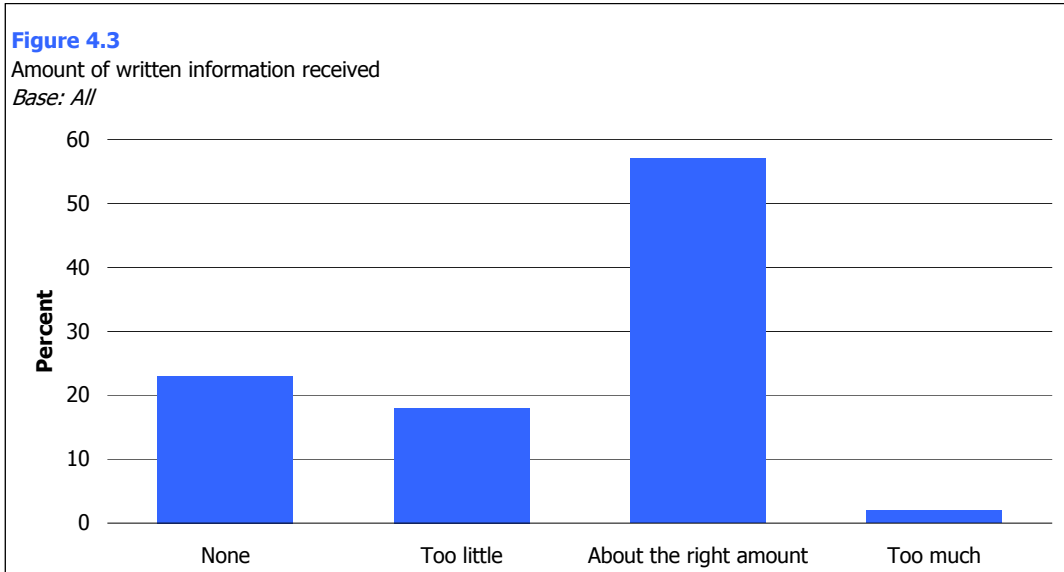
Respondents who had more recently been diagnosed with diabetes, that is within the last 5 years, were more likely to report that they had received 'about the right amount' of verbal information when they were first diagnosed: 77% compared with 73% of those diagnosed between 6 and 10 years ago, 69% of those diagnosed between 11 and 20 years ago and 60% of those diagnosed 21 or more years ago.

Respondents with Type 2 diabetes were more likely to report that they received 'about the right amount' of verbal information when they were first diagnosed: 73%, compared with 67% of respondents with Type 1. This might be, at least in part, to be due to the fact that Type 2 respondents were older, on average, than Type 1 (and those in the oldest age group were most likely to report receiving the right amount of information).



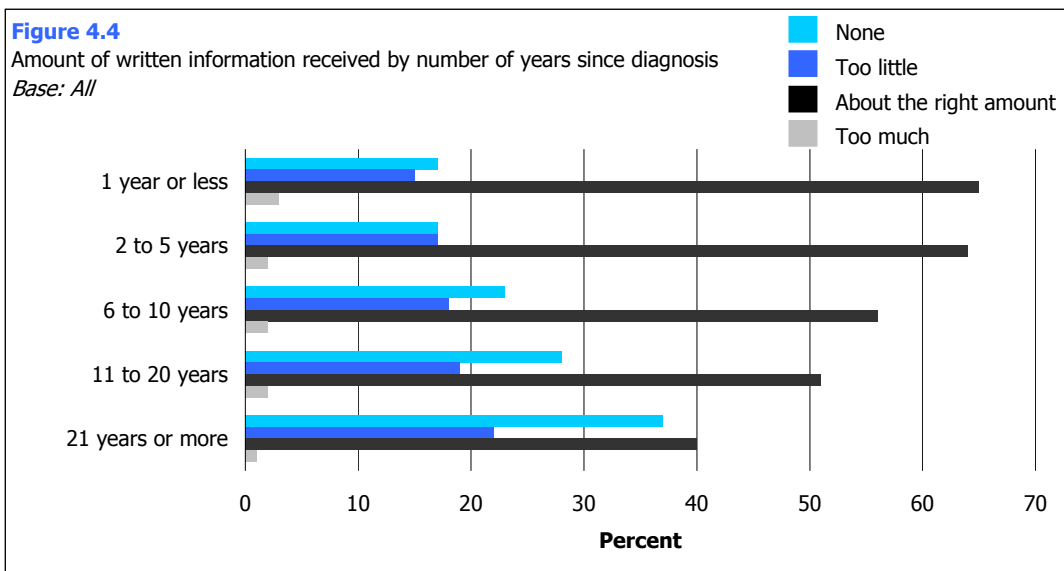
### 4.3 Written information

Respondents were also asked to describe the amount of written information they received when they were first diagnosed with diabetes. Over half of respondents (57%) had received 'about the right amount' of written information, whereas almost a quarter (23%) had received 'no' written information (23%). Eighteen percent said they received 'too little' information and only 2% said they received 'too much'. Differences were found by age, length of time since diagnosis, diabetes type and sex.



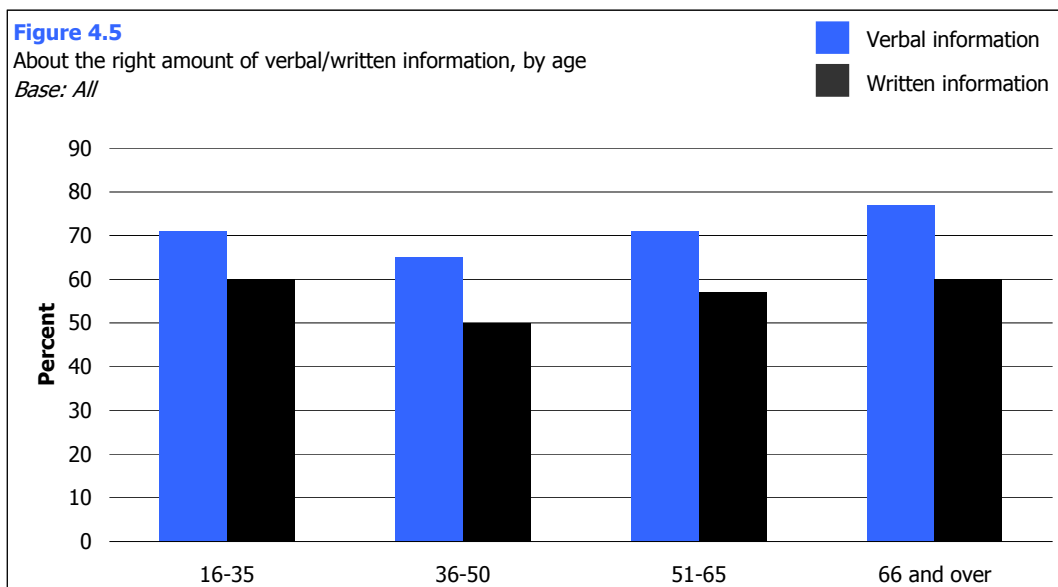
The oldest and youngest age group were the most likely to have received 'the right amount' (60% of both groups), and those aged 36-50 were the least likely (50%). Younger respondents were most likely to report having received 'too much' written information, 5% of those aged between 16 and 35 compared with 1% of those aged 66 and over.

As with verbal information, the findings suggest that the amount of written information given to people when they are first told they have diabetes has improved in recent years. Forty percent of those diagnosed 21 years or longer ago reported receiving 'about the right amount' of information, compared with 51% of those diagnosed between 11 and 20 years ago, 56% of those diagnosed between 6 and 10 years ago and 65% of those diagnosed up to a year ago.



Service users with Type 2 diabetes were more likely to report that they received 'about the right amount' (58% compared with 51% of Type 1). This replicates the findings for the amount of verbal information received at time of diagnosis.

A slightly higher proportion of men than women reported that they had received 'about the right amount' of written information (59% of men and 56% of women).



## 4.4 Diagnosis and information: tables

**Table 4.1**

**Amount of verbal information received, by age group**

*All* *2006*

| Amount of verbal information | Age group   |             |              |                  | Total<br>%   |
|------------------------------|-------------|-------------|--------------|------------------|--------------|
|                              | 16-35<br>%  | 36-50<br>%  | 51-65<br>%   | 66 and over<br>% |              |
| None                         | 3           | 6           | 6            | 7                | 6            |
| Too little                   | 22          | 27          | 22           | 16               | 20           |
| About the right amount       | 71          | 65          | 71           | 77               | 73           |
| Too much                     | 4           | 2           | 2            | 1                | 1            |
| <i>Weighted bases</i>        | <i>1960</i> | <i>8770</i> | <i>20932</i> | <i>30279</i>     | <i>61941</i> |
| <i>Unweighted bases</i>      | <i>1714</i> | <i>7453</i> | <i>21864</i> | <i>31233</i>     | <i>62265</i> |

**Table 4.2**

**Amount of verbal information received, by sex**

*All* *2006*

| Amount of verbal information | Sex          |              |              |
|------------------------------|--------------|--------------|--------------|
|                              | Male<br>%    | Female<br>%  | Total<br>%   |
| None                         | 6            | 7            | 6            |
| Too little                   | 19           | 20           | 20           |
| About the right amount       | 74           | 72           | 73           |
| Too much                     | 1            | 1            | 1            |
| <i>Weighted bases</i>        | <i>34149</i> | <i>27792</i> | <i>61941</i> |
| <i>Unweighted bases</i>      | <i>35010</i> | <i>27254</i> | <i>62265</i> |

**Table 4.3**

**Amount of verbal information received, by number of years since diagnosis**

*All* *2006*

| Amount of verbal information | Number of years since diagnosis |                      |                       |                        |                          | Total<br>%   |
|------------------------------|---------------------------------|----------------------|-----------------------|------------------------|--------------------------|--------------|
|                              | 1 year or<br>less<br>%          | 2 to 5<br>years<br>% | 6 to 10<br>years<br>% | 11 to 20<br>years<br>% | 21 years<br>or more<br>% |              |
| None                         | 4                               | 5                    | 6                     | 7                      | 10                       | 6            |
| Too little                   | 17                              | 17                   | 20                    | 22                     | 29                       | 20           |
| About the right amount       | 77                              | 77                   | 73                    | 69                     | 60                       | 73           |
| Too much                     | 1                               | 1                    | 1                     | 1                      | 1                        | 1            |
| <i>Weighted bases</i>        | <i>8827</i>                     | <i>20468</i>         | <i>13719</i>          | <i>11579</i>           | <i>6173</i>              | <i>61941</i> |
| <i>Unweighted bases</i>      | <i>8862</i>                     | <i>20766</i>         | <i>13756</i>          | <i>11612</i>           | <i>6115</i>              | <i>62265</i> |

**Table 4.4****Amount of verbal information received, by diabetes type**

| <i>All</i>                          |                      | <i>2006</i>  |              |          |
|-------------------------------------|----------------------|--------------|--------------|----------|
| <b>Amount of verbal information</b> | <b>Diabetes type</b> |              | <b>Total</b> | <b>%</b> |
|                                     | Type 1<br>%          | Type 2<br>%  |              |          |
| None                                | 5                    | 6            | 6            |          |
| Too little                          | 26                   | 19           | 20           |          |
| About the right amount              | 67                   | 73           | 73           |          |
| Too much                            | 2                    | 1            | 1            |          |
| <i>Weighted bases</i>               | <i>6141</i>          | <i>49284</i> | <i>61941</i> |          |
| <i>Unweighted bases</i>             | <i>5863</i>          | <i>49835</i> | <i>62265</i> |          |

**Table 4.5****Amount of written information received, by age group**

| <i>All</i>                           |                  | <i>2006</i> |              |                  |              |              |
|--------------------------------------|------------------|-------------|--------------|------------------|--------------|--------------|
| <b>Amount of written information</b> | <b>Age group</b> |             |              |                  |              | <b>Total</b> |
|                                      | 16-35<br>%       | 36-50<br>%  | 51-65<br>%   | 66 and over<br>% |              |              |
| None                                 | 11               | 19          | 20           | 26               | 23           |              |
| Too little                           | 24               | 27          | 20           | 13               | 18           |              |
| About the right amount               | 60               | 50          | 57           | 60               | 57           |              |
| Too much                             | 5                | 4           | 2            | 1                | 2            |              |
| <i>Weighted bases</i>                | <i>1969</i>      | <i>8752</i> | <i>20974</i> | <i>29894</i>     | <i>61589</i> |              |
| <i>Unweighted bases</i>              | <i>1703</i>      | <i>7434</i> | <i>21878</i> | <i>30876</i>     | <i>61892</i> |              |

**Table 4.6****Amount of written information received, by number of years since diagnosis**

*All* *2006*

| Amount of written information | Number of years since diagnosis |              |               |                |                  | Total<br>%   |
|-------------------------------|---------------------------------|--------------|---------------|----------------|------------------|--------------|
|                               | 1 year or less                  | 2 to 5 years | 6 to 10 years | 11 to 20 years | 21 years or more |              |
|                               | %                               | %            | %             | %              | %                |              |
| None                          | 17                              | 17           | 23            | 28             | 37               | 23           |
| Too little                    | 15                              | 17           | 18            | 19             | 22               | 18           |
| About the right amount        | 65                              | 64           | 56            | 51             | 40               | 57           |
| Too much                      | 3                               | 2            | 2             | 2              | 1                | 2            |
| <i>Weighted bases</i>         | <i>8820</i>                     | <i>20398</i> | <i>13645</i>  | <i>11522</i>   | <i>6008</i>      | <i>61589</i> |
| <i>Unweighted bases</i>       | <i>8873</i>                     | <i>20669</i> | <i>13689</i>  | <i>11500</i>   | <i>5973</i>      | <i>61892</i> |

**Table 4.7****Amount of written information received, by diabetes type**

*All* *2006*

| Amount of written information | Diabetes type |              | Total<br>%   |
|-------------------------------|---------------|--------------|--------------|
|                               | Type 1        | Type 2       |              |
|                               | %             | %            |              |
| None                          | 20            | 23           | 23           |
| Too little                    | 25            | 17           | 18           |
| About the right amount        | 51            | 58           | 57           |
| Too much                      | 3             | 2            | 2            |
| <i>Weighted bases</i>         | <i>6022</i>   | <i>49069</i> | <i>61589</i> |
| <i>Unweighted bases</i>       | <i>5752</i>   | <i>49587</i> | <i>61892</i> |

**Table 4.8****Amount of written information received, by sex**

*All* *2006*

| Amount of written information | Sex          |              | Total<br>%   |
|-------------------------------|--------------|--------------|--------------|
|                               | Male         | Female       |              |
|                               | %            | %            |              |
| None                          | 21           | 25           | 23           |
| Too little                    | 18           | 17           | 18           |
| About the right amount        | 59           | 56           | 57           |
| Too much                      | 3            | 2            | 2            |
| <i>Weighted bases</i>         | <i>33998</i> | <i>27590</i> | <i>61589</i> |
| <i>Unweighted bases</i>       | <i>34876</i> | <i>27015</i> | <i>61892</i> |



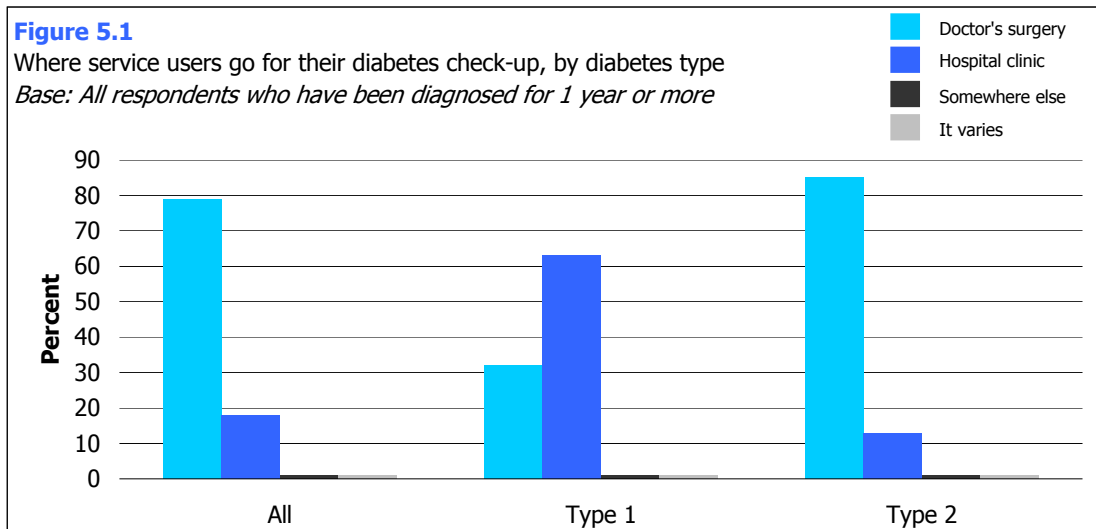
## 5 DIABETES CHECK-UPS

### 5.1 Introduction

In the last thirty years, increasing numbers of general practitioners have assumed responsibility for the routine review of their patients with diabetes<sup>16</sup>. The National Institute for Clinical and Health Excellence (NICE)<sup>17 18</sup> has recognised the importance of regular diabetes check-ups and annual reviews for people with diabetes, and that people with diabetes should be involved in their care; and have at least an annual review of their individual care plan. This section details the context in which service users' check-ups take place, and then goes on to describe their experiences of diabetes care.

### 5.2 Check-ups for people with diabetes

Service users were asked where they went for their diabetes check-up or annual review (i.e. an appointment at which their test results and treatment are reviewed). Overall, the majority of service users were seen at their doctor's surgery (79%, compared with 18% at a hospital clinic). There were differences according to type of diabetes. The majority (85%) of those with Type 2 diabetes said they had their check-up at their doctor's surgery with only 13% attending a hospital clinic; whereas the majority of those with Type 1 diabetes had their check-up at a hospital clinic (63%) and just under a third (32%) had their check-up at their GP's surgery.



<sup>16</sup> Griffin, S. Diabetes care in general practice: meta-analysis of randomised control trials. *British Medical Journal* 1998, 317:390-6.

<sup>17</sup> National Institute for Health and Clinical Excellence (2004). *Diagnosis and management of Type 1 diabetes in children, young people and adults*.

<sup>18</sup> National Institute for Health and Clinical Excellence (2004). *Type 2 diabetes: Prevention and management of foot problems*

Older service users tended to have their check-ups at their doctor's surgery: 85% of those aged 66 and over attended the doctor's surgery for their check-up, compared with 34% of those aged 16-35 (this may be because older respondents were more likely to have Type 2 diabetes).

Most people were positive about how convenient it was for them to get to their diabetes check-up. Nearly all (94%) respondents said they found the place where they went for their diabetes check-up either fairly or very convenient; only 7% described the location as not very or not at all convenient.

Respondents were asked how many times in the last 12 months they had a diabetes check-up. Forty-three percent said twice, 34% once, 20% three or more times and 3% had not had a check-up in the last 12 months (this includes people diagnosed for less than a year). Ninety-two percent of service users reported that, when they went for their diabetes check-up, the doctor or nurse always/almost always had their most up to date diabetes records to refer to.

Very few service users (less than 1%) said they had never had a diabetes check-up. Respondents who had never had a check-up were then asked why they had never had a diabetes check-up. Over half (51%) said it was because they had not been contacted to make an appointment, and almost a quarter (24%) said because they have no problems with their diabetes. However, when those who had been diagnosed less than 1 year ago were excluded from the analysis a higher proportion said that they had never had a check up because they were not contacted to make an appointment (57%), and just over a quarter (26%) said because they had no problems with their diabetes.

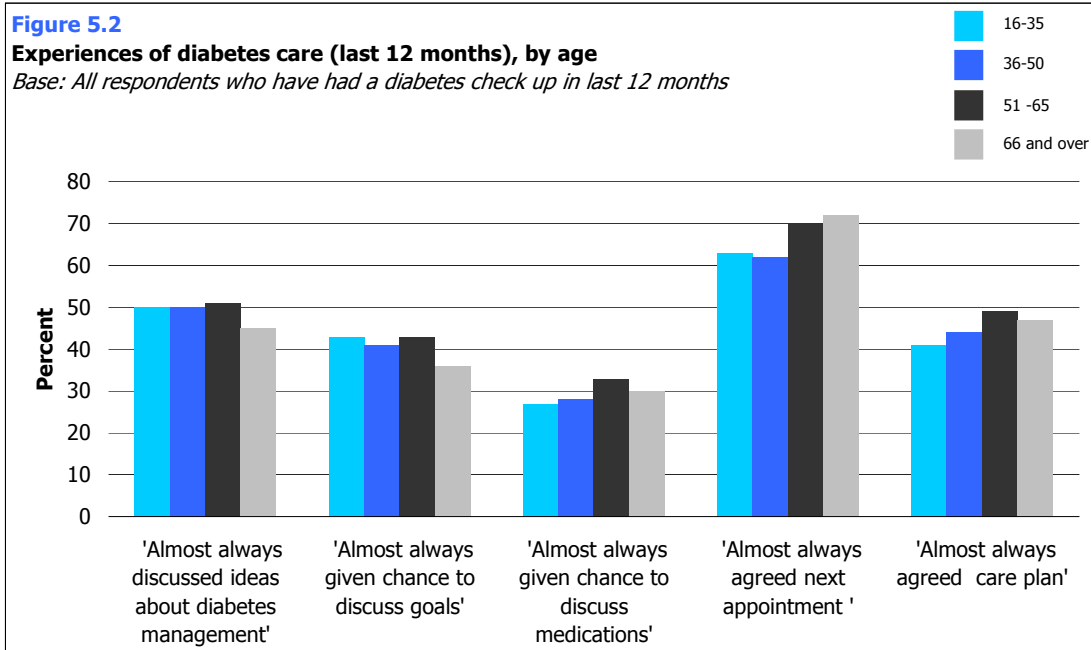
### **5.3 Involvement in decision making and care planning**

Irrespective of where a person with diabetes goes for their check-ups, Standard 3 of the NSF for diabetes states that they should *'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'*<sup>19</sup>. Service users who said they had check-ups were asked a series of questions relating specifically to their involvement in decision making and care planning, and being given advice on diet and physical activity when receiving care for diabetes in the last 12 months.

Overall, the findings suggest that older respondents tended to fare worse than younger respondents when it came to having the opportunity to discuss goals and ideas about the best way to manage their diabetes. However, they were more likely to be given a chance to discuss medications, and to agree appointments and care plans.

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<sup>19</sup> National Service Framework for Diabetes. Department of Health (2001)  
[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4002951](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4002951), accessed 29.08.07



Just under half (48%) of service users reported that they always/almost always discussed their ideas about the best way to manage their diabetes, whereas 18% reported that they did so rarely/not at all. Results differed somewhat by age group with those in the oldest group being least likely to discuss their ideas (45%).

Thirty-nine percent of respondents reported that they always/almost always discussed their goals in caring for diabetes, 34% said this happened sometimes, but just over a quarter (26%) reported that this happened rarely/not at all. Again the results differed by age: a higher proportion of those aged 16 to 35 (43%) than aged 66 and over (36%) said they were always/almost always given the opportunity to discuss their goals.

Respondents were asked whether they were given a chance to discuss different medications. Forty percent of respondents said rarely/not at all, and less than a third of respondents said either sometimes (29%) or always/almost always (31%). The results varied by age: 27% of 16-35 year olds were always/almost always given the chance to discuss different medications, and this increased slightly to 33% of those aged 51-65 and 30% of those aged 66 and over.

The majority of service users (70%) said they always/almost always agreed when their next appointment would be, but less than half (47%) said they always/almost always agreed a plan to manage their diabetes. Both of these findings varied by age. Seventy-two percent of those aged 66 and over always/almost always agreed when their next appointment would be, and this tended to decrease with age down to 62-63% of those aged 16-50. Similarly, 47% of those aged 66 and over always/almost always agreed a plan to manage their diabetes, compared with 41% of those in the youngest age group.

## 5.4 Personal lifestyle advice

The findings suggest that people with Type 1 diabetes were less likely to be provided with advice aimed at helping them to adopt a healthy lifestyle than those with Type 2 diabetes.

Respondents were asked whether they were given personal advice about the kinds of food to eat and levels of physical activity. Less than half (45%) reported always/almost always being given personal advice about the kinds of food to eat, but this varied by diabetes type and by age. Service users with Type 2 were more likely to always/almost always be given personal advice about food (47% compared with 29% of those with Type 1). Similarly a higher proportion of older people were always/almost always given advice about food (47% of those aged 66, compared with 33% aged 16-35). This could, in part, be explained by the fact that Type 2 respondents (who were more likely to be given advice) were also more likely to be older.

Just over a third (35%) of service users said they were always/almost always given personal advice about levels of physical activity. Over a third (36%) of those with Type 2 and less than a quarter with Type 1 (23%) said they were always/almost always given personal advice about physical activity levels. Again, this varied by age. Younger respondents (aged 16 to 35) were least likely (29%) and those aged 51-65 most likely to be always/almost always given personal advice (38%). In addition, a higher proportion of men (37%) than women (32%) said they were always/almost always given personal advice about physical activity levels.

## 5.5 Diabetes checkups: tables

**Table 5.1****Where service users go for diabetes check-up by diabetes type**

*All* *2006*

| Where service users go for diabetes check-up | Diabetes type |              | Total %      |
|--|---------------|--------------|--------------|
|  | Type 1 %      | Type 2 %     |              |
| Doctor's surgery                             | 32            | 85           | 79           |
| Hospital clinic                              | 63            | 13           | 18           |
| Somewhere else                               | 2             | 1            | 1            |
| It varies                                    | 3             | 1            | 1            |
| Never had a check-up                         | .5            | .9           | .8           |
| <i>Weighted bases</i>                        | <i>6901</i>   | <i>49867</i> | <i>63430</i> |
| <i>Unweighted bases</i>                      | <i>6570</i>   | <i>50131</i> | <i>63373</i> |

**Table 5.2****Where service users go for diabetes check-up, by age**

*All* *2006*

| Where service users go for diabetes check-up | Age group   |             |              |               |              | Total % |
|--|-------------|-------------|--------------|---------------|--------------|---------|
|  | 16-35 %     | 36-50 %     | 51-65 %      | 66 and over % |              |         |
| Doctor's surgery                             | 34          | 69          | 81           | 85            | 79           |         |
| Hospital clinic                              | 60          | 27          | 16           | 13            | 18           |         |
| Somewhere else                               | 2           | 1           | 1            | 2             | 1            |         |
| It varies                                    | 4           | 2           | 1            | 1             | 1            |         |
| <i>Weighted bases</i>                        | <i>2366</i> | <i>9184</i> | <i>21011</i> | <i>30867</i>  | <i>63430</i> |         |
| <i>Unweighted bases</i>                      | <i>2083</i> | <i>7798</i> | <i>21811</i> | <i>31679</i>  | <i>63373</i> |         |

**Table 5.3****Number of times in last 12 months had diabetes check-ups, by diabetes type**

*All* *2006*

| Number of diabetes check-ups in the last 12 months | Diabetes type |              | Total %      |
|--|---------------|--------------|--------------|
|  | Type 1 %      | Type 2 %     |              |
| None   | 4             | 3            | 3            |
| Once   | 36            | 34           | 34           |
| Twice  | 42            | 43           | 43           |
| Three or more time                                 | 18            | 21           | 20           |
| <i>Weighted bases</i>                              | <i>6822</i>   | <i>48738</i> | <i>61904</i> |
| <i>Unweighted bases</i>                            | <i>6478</i>   | <i>49037</i> | <i>61902</i> |

**Table 5.4****How often the doctor/nurse has most up-to-date records at diabetes check-up, by diabetes type**

*All* *2006*

| How often does the doctor/nurse have most up-to-date records | Diabetes type |              | Total %      |
|--|---------------|--------------|--------------|
|  | Type 1 %      | Type 2 %     |              |
| Always or almost always                                      | 90            | 93           | 92           |
| Sometimes  | 8             | 6            | 6            |
| Rarely or never  | 2             | 1            | 1            |
| <i>Weighted bases</i>  | <i>6580</i>   | <i>46171</i> | <i>58684</i> |
| <i>Unweighted bases</i>                                      | <i>6271</i>   | <i>46540</i> | <i>58783</i> |

**Table 5.5****Convenience to get to diabetes check-up, by diabetes type**

*All* *2006*

| Convenience             | Diabetes type |              | Total %      |
|-------------------------|---------------|--------------|--------------|
|                         | Type 1 %      | Type 2 %     |              |
| Very convenient         | 42            | 62           | 61           |
| Fairly convenient       | 45            | 31           | 33           |
| Not very convenient     | 10            | 5            | 5            |
| Not at all convenient   | 2             | 1            | 2            |
| <i>Weighted bases</i>   | <i>6777</i>   | <i>48410</i> | <i>61507</i> |
| <i>Unweighted bases</i> | <i>6461</i>   | <i>48826</i> | <i>61663</i> |

**Table 5.6****Why service users have never had diabetes check-up, by diabetes type**

All service users who have never had a diabetes check-up *2006*

| Reasons why never had a diabetes check-up    | Diabetes type |            | Total %    |
|--|---------------|------------|------------|
|  | Type 1 %      | Type 2 %   |            |
| I have no problems with my diabetes          | 16            | 23         | 24         |
| The check-up was at an inconvenient time     | 8             | 2          | 2          |
| The location was inconvenient                | 0             | 1          | 1          |
| I was not contacted to make an appointment   | 47            | 52         | 51         |
| It was cancelled by the practice or hospital | 0             | 1          | 1          |
| There was no interpreter available           | 4             | 0          | 0          |
| Other reason                                 | 15            | 11         | 10         |
| <i>Weighted bases</i>                        | <i>37</i>     | <i>449</i> | <i>536</i> |
| <i>Unweighted bases</i>                      | <i>32</i>     | <i>450</i> | <i>537</i> |

**Table 5.7****Why service users have never had diabetes check-up, by diabetes type**All service users who have never had a diabetes check-up and have been diagnosed for at least 1 year 2006

| Reasons why never had a diabetes check-up    | Diabetes type |            | Total %    |
|--|---------------|------------|------------|
|  | Type 1 %      | Type 2 %   |            |
| I have no problems with my diabetes          | 18            | 26         | 26         |
| The check-up was at an inconvenient time     | 7             | 2          | 2          |
| The location was inconvenient                | 0             | 1          | 1          |
| I was not contacted to make an appointment   | 50            | 59         | 57         |
| It was cancelled by the practice or hospital | 0             | 1          | 1          |
| There was no interpreter available           | 5             | 0          | 0          |
| Other reason                                 | 16            | 6          | 6          |
| <i>Weighted bases</i>                        | <i>33</i>     | <i>331</i> | <i>395</i> |
| <i>Unweighted bases</i>                      | <i>27</i>     | <i>334</i> | <i>393</i> |

**Table 5.8****Discussed ideas about best way to manage diabetes, by age***All* 2006

| Whether discussed ideas about the best way to manage diabetes | Age group   |             |              |               | Total %      |
|---|-------------|-------------|--------------|---------------|--------------|
|   | 16-35 %     | 36-50 %     | 51-65 %      | 66 and over % |              |
| Rarely or never   | 13          | 15          | 15           | 21            | 18           |
| Sometimes   | 36          | 35          | 34           | 34            | 34           |
| Always or almost always                                       | 50          | 50          | 51           | 45            | 48           |
| <i>Weighted bases</i>   | <i>2353</i> | <i>9081</i> | <i>20660</i> | <i>29648</i>  | <i>61742</i> |
| <i>Unweighted bases</i>                                       | <i>2071</i> | <i>7705</i> | <i>21453</i> | <i>30495</i>  | <i>61726</i> |

**Table 5.9****Discussed goals in caring for diabetes, by age***All* 2006

| Whether discussed goals in caring for diabetes | Age group   |             |              |               | Total %      |
|--|-------------|-------------|--------------|---------------|--------------|
|  | 16-35 %     | 36-50 %     | 51-65 %      | 66 and over % |              |
| Rarely or never                                | 21          | 23          | 23           | 31            | 26           |
| Sometimes                                      | 35          | 36          | 34           | 33            | 34           |
| Always or almost always                        | 43          | 41          | 43           | 36            | 39           |
| <i>Weighted bases</i>                          | <i>2339</i> | <i>9026</i> | <i>20486</i> | <i>28822</i>  | <i>60673</i> |
| <i>Unweighted bases</i>                        | <i>2063</i> | <i>7670</i> | <i>21281</i> | <i>29699</i>  | <i>60715</i> |

**Table 5.10****Whether given the opportunity to discuss medications, by age**

*All* *2006*

| Whether given the chance to discuss different medications | Age group  |            |            |                  | Total |
|---|------------|------------|------------|------------------|-------|
|   | 16-35<br>% | 36-50<br>% | 51-65<br>% | 66 and over<br>% |       |
| Rarely or never   | 36         | 40         | 37         | 42               | 40    |
| Sometimes   | 38         | 32         | 30         | 27               | 29    |
| Always or almost always                                   | 27         | 28         | 33         | 30               | 31    |
| <i>Weighted bases</i>                                     | 2329       | 8909       | 20019      | 28244            | 59502 |
| <i>Unweighted bases</i>                                   | 2046       | 7570       | 20775      | 29019            | 59412 |

**Table 5.11****Agreed when next appointment would be, by age**

*All* *2006*

| Whether agreed when next appointment would be | Age group  |            |            |                  | Total |
|---|------------|------------|------------|------------------|-------|
|   | 16-35<br>% | 36-50<br>% | 51-65<br>% | 66 and over<br>% |       |
| Rarely or never                               | 17         | 18         | 15         | 16               | 16    |
| Sometimes                                     | 20         | 20         | 15         | 12               | 14    |
| Always or almost always                       | 63         | 62         | 70         | 72               | 70    |
| <i>Weighted bases</i>                         | 2329       | 9003       | 20399      | 28991            | 60723 |
| <i>Unweighted bases</i>                       | 2055       | 7640       | 21192      | 29812            | 60701 |

**Table 5.12****Agreed a plan to manage diabetes over the next 12 months, by age**

*All* *2006*

| Whether agreed a plan to manage diabetes over the next 12 months | Age group  |            |            |                  | Total |
|--|------------|------------|------------|------------------|-------|
|  | 16-35<br>% | 36-50<br>% | 51-65<br>% | 66 and over<br>% |       |
| Rarely or never  | 29         | 29         | 28         | 33               | 30    |
| Sometimes  | 30         | 27         | 23         | 20               | 23    |
| Always or almost always  | 41         | 44         | 49         | 47               | 47    |
| <i>Weighted bases</i>  | 2305       | 8898       | 20234      | 28169            | 59607 |
| <i>Unweighted bases</i>  | 2034       | 7557       | 20984      | 28983            | 59560 |



**Table 5.13****Given personal advice about food, by diabetes type**

| <i>All</i>  |               | <i>2006</i>  |              |  |
|---|---------------|--------------|--------------|--|
| Whether were given personal advice about the kinds of food to eat | Diabetes type |              | Total        |  |
|   | Type 1        | Type 2       |              |  |
|   | %             | %            | %            |  |
| Rarely or never   | 31            | 17           | 18           |  |
| Sometimes   | 41            | 37           | 37           |  |
| Always or almost always   | 29            | 47           | 45           |  |
| <i>Weighted bases</i>   | <i>6788</i>   | <i>48856</i> | <i>61964</i> |  |
| <i>Unweighted bases</i>   | <i>6451</i>   | <i>49098</i> | <i>61915</i> |  |

**Table 5.14****Given personal advice about food, by age**

| <i>All</i>   |             | <i>2006</i> |              |              |              |       |
|--|-------------|-------------|--------------|--------------|--------------|-------|
| Whether given personal advice about the kinds of food to eat | Age group   |             |              |              |              | Total |
|  | 16-35       | 36-50       | 51-65        | 66 and over  |              |       |
|  | %           | %           | %            | %            | %            | %     |
| Rarely or never  | 25          | 22          | 17           | 17           | 18           |       |
| Sometimes  | 41          | 38          | 37           | 36           | 37           |       |
| Always or almost always                                      | 33          | 40          | 46           | 47           | 45           |       |
| <i>Weighted bases</i>  | <i>2338</i> | <i>9075</i> | <i>20635</i> | <i>29915</i> | <i>61964</i> |       |
| <i>Unweighted bases</i>                                      | <i>2060</i> | <i>7699</i> | <i>21420</i> | <i>30734</i> | <i>61915</i> |       |

**Table 5.15****Given personal advice about physical activity, by diabetes type**

| <i>All</i>  |               | <i>2006</i>  |              |  |
|---|---------------|--------------|--------------|--|
| Whether given personal advice about levels of physical activity | Diabetes type |              | Total        |  |
|   | Type 1        | Type 2       |              |  |
|   | %             | %            | %            |  |
| Rarely or never   | 36            | 26           | 28           |  |
| Sometimes   | 40            | 38           | 38           |  |
| Always or almost always   | 23            | 36           | 35           |  |
| <i>Weighted bases</i>   | <i>6732</i>   | <i>47954</i> | <i>60656</i> |  |
| <i>Unweighted bases</i>   | <i>6392</i>   | <i>48170</i> | <i>60594</i> |  |

**Table 5.16****Given personal advice about physical activity, by sex**

| <i>All</i>  |              | <i>2006</i>  |              |  |
|---|--------------|--------------|--------------|--|
| Whether given personal advice about levels of physical activity | Sex          |              | Total        |  |
|   | Men          | Women        |              |  |
|   | %            | %            | %            |  |
| Rarely or never   | 25           | 31           | 28           |  |
| Sometimes   | 38           | 37           | 38           |  |
| Always or almost always   | 37           | 32           | 35           |  |
| <i>Weighted bases</i>   | <i>33403</i> | <i>27251</i> | <i>60656</i> |  |
| <i>Unweighted bases</i>   | <i>34008</i> | <i>26585</i> | <i>60594</i> |  |

**Table 5.17****Given personal advice about physical activity, by age**

| <i>All</i>  |             | <i>2006</i> |              |              |   |              |
|---|-------------|-------------|--------------|--------------|---|--------------|
| Whether given personal advice about levels of physical activity | Age group   |             |              |              |   | Total        |
|   | 16-35       | 36-50       | 51-65        | 66 and over  |   |              |
|   | %           | %           | %            | %            | % | %            |
| Rarely or never   | 32          | 25          | 23           | 32           |   | 28           |
| Sometimes   | 39          | 40          | 39           | 36           |   | 38           |
| Always or almost always   | 29          | 35          | 38           | 32           |   | 35           |
| <i>Weighted bases</i>   | <i>2319</i> | <i>9003</i> | <i>20432</i> | <i>28901</i> |   | <i>60656</i> |
| <i>Unweighted bases</i>   | <i>2044</i> | <i>7638</i> | <i>21211</i> | <i>29699</i> |   | <i>60594</i> |

## 6 DIABETES TESTS AND EXAMINATIONS

### 6.1 Introduction

This section details the kinds of tests and examinations people with diabetes are recommended to have at least once a year<sup>20</sup>, and explores whether these were actually conducted. The eight different tests or examinations covered in this chapter are:

1. **Blood pressure** (whether blood pressure was taken by a doctor or nurse);
2. **HbA1c** (whether a doctor or nurse conducted the haemoglobin test which looks at long-term or 'average' blood glucose level);
3. **Weight** (whether weighed by a doctor or nurse);
4. **Cholesterol** (whether a doctor or nurse carried out a cholesterol test);
5. **Urine test for protein** (whether a doctor or nurse conducted a urine test to check for the presence of protein, to test kidney function);
6. **Bare feet** (whether bare feet were examined);
7. **Retinography** (where an eye test was conducted that included a photograph of the back of the eyes); and
8. **Dietitian** (whether seen a dietitian).

A brief overview of the purpose and role of these tests/examination is provided in figure 6.1.

**Figure 6.1**

#### **Diabetes tests and examinations: an overview**

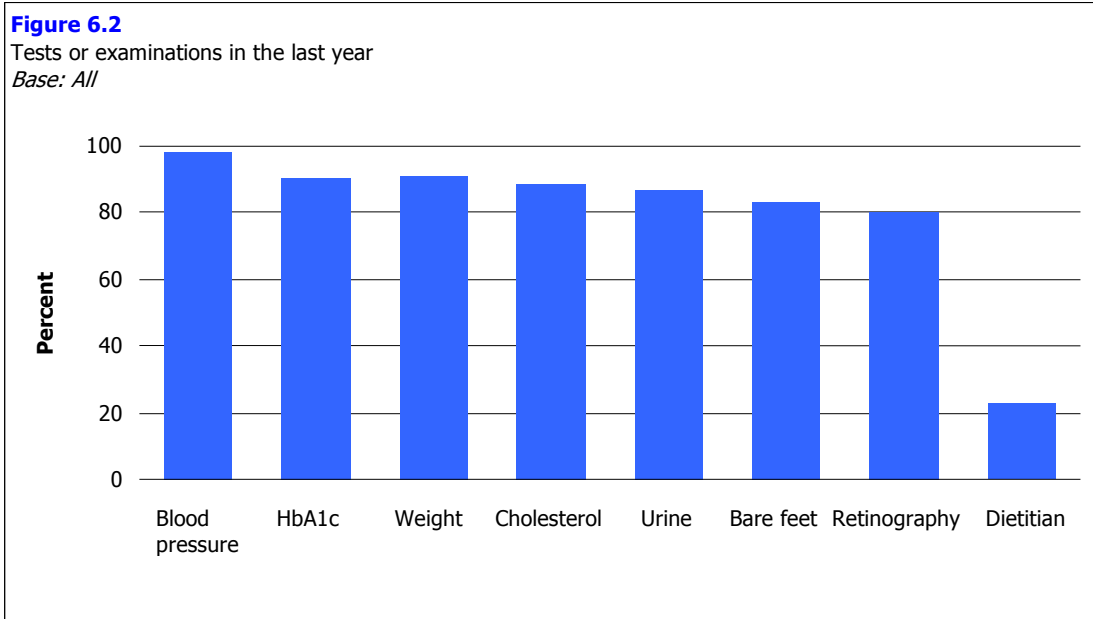
- **Blood pressure-** High blood pressure and diabetes are linked to heart disease and strokes
- **HbA1c test-** Measures long-term or 'average' blood glucose level. This is one of the best ways to see if a person's diabetes is well managed
- **Weight-** Being overweight/obese is a risk factor for developing Type 2 diabetes, can lead to complications for those with diabetes and is a risk factor for other conditions such as heart disease and stroke
- **Cholesterol-** High cholesterol and diabetes are linked to heart disease
- **Urine test for protein-** Checks for the presence of protein, to test kidney function. Diabetes is the most common cause of kidney failure
- **Bare feet-** Foot complications can be a major concern for people with diabetes, particularly when glucose is poorly controlled
- **Retinography-** This test is vital for detecting diabetic retinopathy. Diabetic retinopathy can cause severe vision loss and in some cases blindness
- **Dietitian-** Dietitians can provide important information to people with diabetes about their specific dietary needs.

<sup>20</sup> National Institute for Health and Clinical Excellence  
(<http://www.nice.org.uk/guidelines.aspx?o=guidelines.completed>, accessed 08.06.07)

## 6.2 Tests and examinations in the last year

### 6.2.1 Overview

Figure 6.2 illustrates that for seven of the eight tests or examinations listed above, at least four fifths (80%) of respondents had that test conducted in the last year. Ninety eight percent of people with diabetes had their blood pressure measured, 91% had the HbA1c test, and the same proportion had been weighed. Eighty nine percent and 87% had cholesterol and urine test for protein respectively, and 83% had their bare feet examined. Four fifths (80%) of people with diabetes had an eye examination during which a photograph had been taken of the back of the eyes. Only 23% of respondents reported having seen a dietitian within the last 12 months.

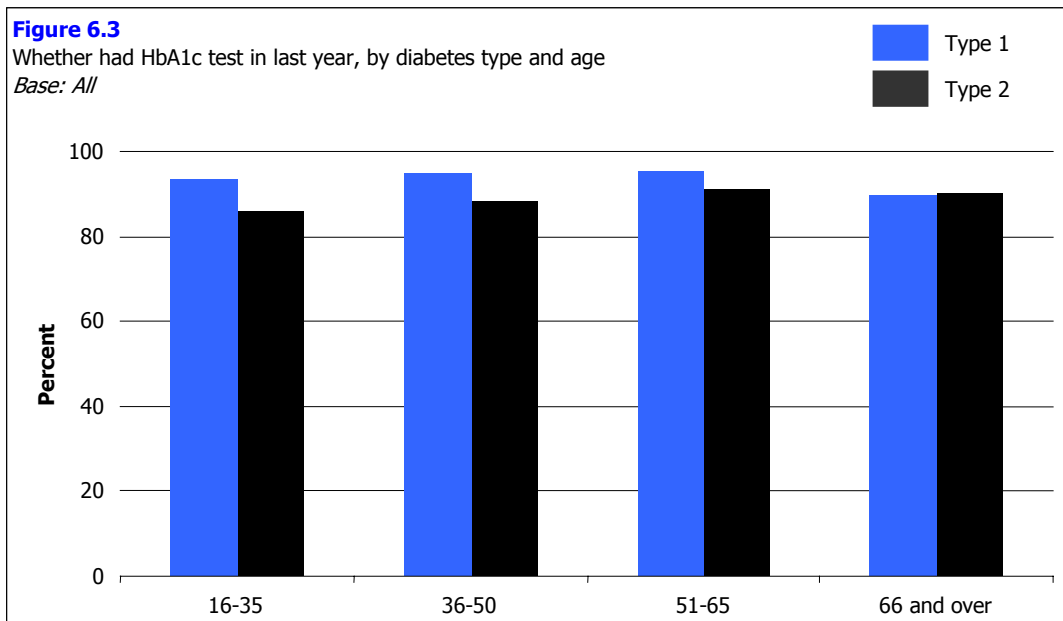


### 6.2.2 Blood pressure

Almost all respondents had their blood pressure taken in the last year (98%). Older respondents were more likely to have had their blood pressure measured (99% of those aged 66 and over, compared with 94% of the youngest age group). There were no differences by sex or diabetes type in terms of whether respondents had their blood pressure taken. Respondents were also asked whether they had received their blood pressure results in writing: a tenth (10%) said they had.

### 6.2.3 HbA1c test

Just over nine tenths (91%) of respondents reported having had the HbA1c test in the last year. Respondents with Type 1 diabetes were more likely to have had the HbA1c test than Type 2 respondents (94% and 90% respectively). There was no difference by sex.



Those aged 16-35, with Type 1 diabetes, were more likely to report having had an HbA1c test than their counterparts with Type 2 diabetes (93% and 86% respectively). This pattern was repeated across each age group except among the oldest respondents (66 and over).

A similar proportion of men and women reported having had the HbA1c test. In addition to being asked whether they had this test, respondents were asked whether they actually knew their HbA1c value, whether they had received their results in writing and whether they would have liked their results to be sent directly. Fewer than half of respondents (47%) said they knew their HbA1c value, 13% reported having received their results in writing and 60% said they would have liked their results sent directly to them.

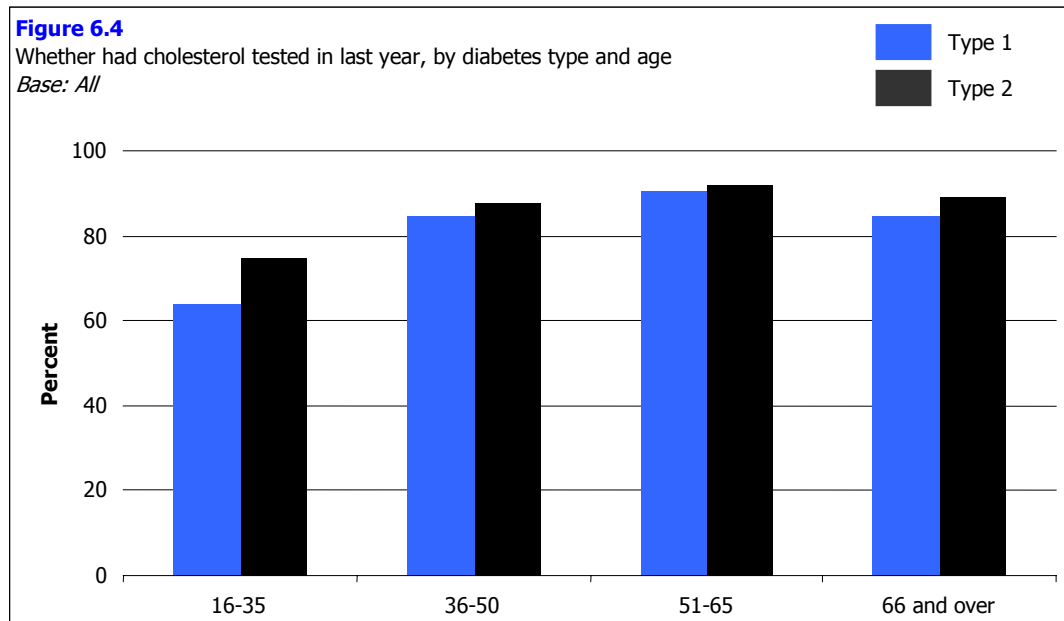
### 6.2.4 Weight

Ninety one percent of respondents had been weighed by a doctor or nurse within the last 12 months. People with Type 1 diabetes were slightly more likely to have been

weighed (93% compared with 91% of people with Type 2 diabetes). The proportions of respondents who were weighed in the last year were broadly similar when looking at age and sex.

### 6.2.5 Cholesterol

Respondents with Type 2 diabetes were more likely to have had a cholesterol test in the last 12 months than those with Type 1 diabetes (90% and 81% respectively).



A pattern was also observed within age: a greater proportion of older respondents had had their cholesterol tested (89% of those aged 66 and over compared with 67% of 16-35 year olds). Eleven percent of respondents were given their cholesterol results in writing.

### 6.2.6 Urine test for protein

Respondents were asked what they considered to be the purpose of the urine test, for protein or glucose or both. The test should be conducted to test for the presence of protein, to check kidney function. Just under a third of respondents (32%) said they did not know what the test was for.

Thirty seven percent of respondents thought that the urine test was carried out to check for the presence of protein. Fifty five percent of those with Type 1 and 36% of those with Type 2 said the urine test was to test for protein had Type 1 diabetes and 36% had Type 2. Younger respondents were more likely to know that the urine test was to check for protein (half of respondents (50%) aged between 16-35 compared with a third (33%) of respondents aged 66 and over). No differences were found between men and women.

### 6.2.7 Retinography test

Four fifths of respondents had a photograph taken of the back of their eyes (retinography) within the last 12 months. Those with Type 2 diabetes were more likely to have had this test than Type 1 respondents (81% and 75% respectively). A pattern also existed when looking at respondents' age; as with some of the other tests reported on in this chapter. Older respondents were more likely to have had a retina test than younger respondents (83% of respondents aged 66 and over, compared with 72% of respondents between 16-35).

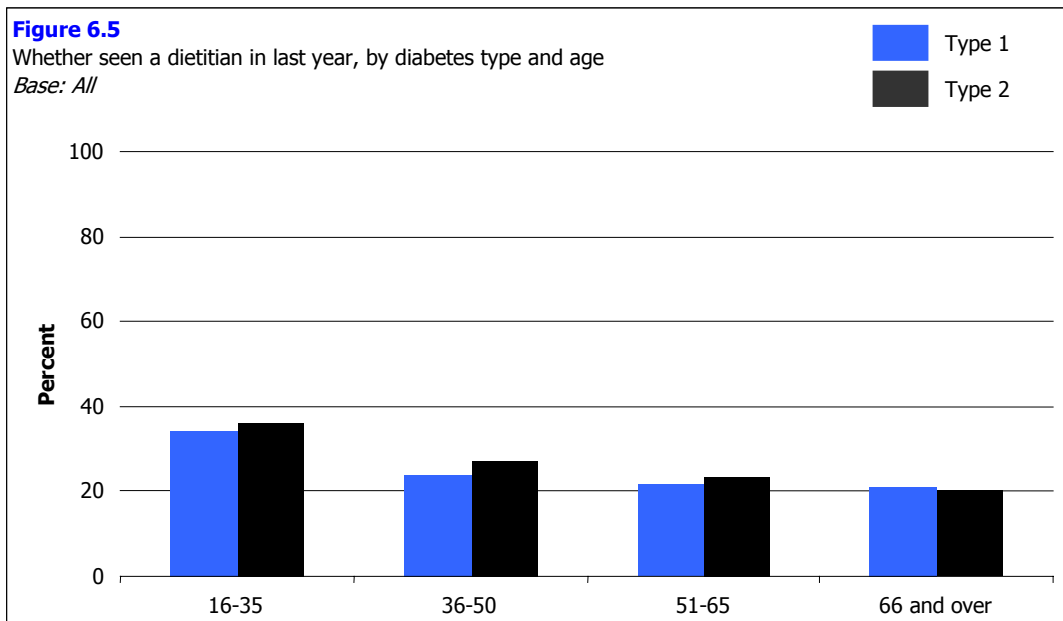
### 6.2.8 Bare feet examination

Eighty three percent of respondents had their bare feet examined within the last year. This proportion increased with age from 66% of 16-35 year olds to 87% of respondents aged 66 and over. Respondents with Type 2 diabetes were more likely to have had their bare feet examined than those with Type 1 (84% and 77% respectively).

### 6.2.9 Dietitian

Less than a quarter of all respondents had seen a dietitian in the last year. Younger respondents were more likely to have seen a dietitian than older respondents; the opposite pattern to that found in other tests and examinations reported on in this chapter. Over a third (34%) of those aged 16-35 had seen a dietitian in the last year compared with a fifth (20%) of respondents aged 66 and over.

Type 1 respondents were more likely than Type 2 respondents to have seen a dietitian in the last year (25% compared with 22%). However, when examining the age within diabetes type, it emerged that the opposite was true for respondents younger than 66 years. Type 2 respondents in the first three age groups were more likely to have seen a dietitian than their Type 1 counterparts.



### 6.3 Diabetes tests and examinations: tables

**Table 6.1**

**Tests and examinations in the last year, by diabetes type**

| <i>All</i>                          |               | <i>2006</i>  |       |              |
|-------------------------------------|---------------|--------------|-------|--------------|
| Tests and examinations              | Diabetes type |              | Total | %            |
|                                     | Type 1        | Type 2       |       |              |
|                                     | %             | %            |       |              |
| Blood pressure                      | 97            | 98           |       | 98           |
| HbA1c                               | 94            | 90           |       | 91           |
| Weight                              | 93            | 91           |       | 91           |
| Cholesterol                         | 81            | 90           |       | 89           |
| Urine                               | 86            | 87           |       | 87           |
| Bare feet examined                  | 77            | 84           |       | 83           |
| Retina (photograph of back of eyes) | 75            | 81           |       | 80           |
| Seen a dietitian                    | 25            | 22           |       | 23           |
| <i>Weighted bases</i>               | <i>7502</i>   | <i>52535</i> |       | <i>67262</i> |
| <i>Unweighted bases</i>             | <i>7162</i>   | <i>52839</i> |       | <i>67267</i> |

**Table 6.2**

**Tests and examinations in the last year, by age**

| <i>All</i>                          |             | <i>2006</i> |              |              |       |              |
|-------------------------------------|-------------|-------------|--------------|--------------|-------|--------------|
| Tests and examinations              | Age group   |             |              |              | Total | %            |
|                                     | 16-35       | 36-50       | 51-65        | 66 and over  |       |              |
|                                     | %           | %           | %            | %            |       |              |
| Blood pressure                      | 94          | 97          | 98           | 99           |       | 98           |
| HbA1c                               | 91          | 90          | 91           | 90           |       | 91           |
| Weight                              | 91          | 91          | 92           | 91           |       | 91           |
| Urine                               | 84          | 82          | 86           | 90           |       | 87           |
| Cholesterol                         | 67          | 87          | 92           | 89           |       | 89           |
| Bare feet examined                  | 66          | 75          | 83           | 87           |       | 83           |
| Retina (photograph of back of eyes) | 72          | 75          | 79           | 83           |       | 80           |
| Seen a dietitian                    | 34          | 26          | 23           | 20           |       | 23           |
| <i>Weighted bases</i>               | <i>2503</i> | <i>9714</i> | <i>22260</i> | <i>32784</i> |       | <i>67262</i> |
| <i>Unweighted bases</i>             | <i>2201</i> | <i>8275</i> | <i>23139</i> | <i>33650</i> |       | <i>67267</i> |

**Table 6.3**

**Tests and examinations in the last year, by sex**

| <i>All</i>                          |              | <i>2006</i>  |       |              |
|-------------------------------------|--------------|--------------|-------|--------------|
| Tests and examinations              | Sex          |              | Total | %            |
|                                     | Male         | Female       |       |              |
|                                     | %            | %            |       |              |
| Blood pressure                      | 98           | 98           |       | 98           |
| HbA1c                               | 91           | 90           |       | 91           |
| Weight                              | 92           | 90           |       | 91           |
| Urine                               | 87           | 87           |       | 87           |
| Cholesterol                         | 89           | 88           |       | 89           |
| Bare feet examined                  | 84           | 82           |       | 83           |
| Retina (photograph of back of eyes) | 79           | 82           |       | 80           |
| Seen a dietitian                    | 23           | 22           |       | 23           |
| <i>Weighted bases</i>               | <i>36581</i> | <i>30677</i> |       | <i>67262</i> |
| <i>Unweighted bases</i>             | <i>37340</i> | <i>29925</i> |       | <i>67267</i> |



**Table 6.4****Tests and examinations in the last year, by diabetes type and age**

| <i>All</i>                          |            |            |            |                  |       | <i>2006</i> |
|-------------------------------------|------------|------------|------------|------------------|-------|-------------|
| Tests and examinations              | Age group  |            |            |                  | Total |             |
|                                     | 16-35<br>% | 36-50<br>% | 51-65<br>% | 66 and over<br>% |       |             |
| <b>Type 1</b>                       |            |            |            |                  |       |             |
| Blood pressure                      | 95         | 96         | 98         | 98               | 97    |             |
| HbA1c                               | 93         | 95         | 95         | 90               | 94    |             |
| Weight                              | 93         | 93         | 94         | 90               | 93    |             |
| Cholesterol                         | 64         | 84         | 90         | 85               | 81    |             |
| Urine                               | 85         | 84         | 87         | 90               | 86    |             |
| Bare feet examined                  | 66         | 76         | 82         | 87               | 77    |             |
| Retina (photograph of back of eyes) | 73         | 73         | 74         | 81               | 75    |             |
| Seen a dietitian                    | 34         | 24         | 21         | 21               | 25    |             |
| <b>Type 2</b>                       |            |            |            |                  |       |             |
| Blood pressure                      | 92         | 97         | 98         | 99               | 98    |             |
| HbA1c                               | 86         | 88         | 91         | 90               | 90    |             |
| Weight                              | 87         | 90         | 92         | 91               | 91    |             |
| Cholesterol                         | 75         | 88         | 92         | 89               | 90    |             |
| Urine                               | 81         | 81         | 86         | 90               | 87    |             |
| Bare feet examined                  | 66         | 75         | 83         | 87               | 84    |             |
| Retina (photograph of back of eyes) | 69         | 75         | 80         | 83               | 81    |             |
| Seen a dietitian                    | 36         | 27         | 24         | 20               | 22    |             |
| <b>Bases</b>                        |            |            |            |                  |       |             |
| <i>Weighted bases</i>               |            |            |            |                  |       |             |
| Type 1                              | 1792       | 2661       | 1819       | 1230             | 7502  |             |
| Type 2                              | 648        | 6684       | 18610      | 26592            | 52535 |             |
| Total                               | 2503       | 9714       | 22260      | 32784            | 67262 |             |
| <i>Unweighted bases</i>             |            |            |            |                  |       |             |
| Type 1                              | 1617       | 2380       | 1891       | 1274             | 7162  |             |
| Type 2                              | 533        | 5578       | 19339      | 27387            | 52839 |             |
| Total                               | 2201       | 8275       | 23139      | 33650            | 67267 |             |

## 7 SELF-MANAGEMENT AND KNOWLEDGE

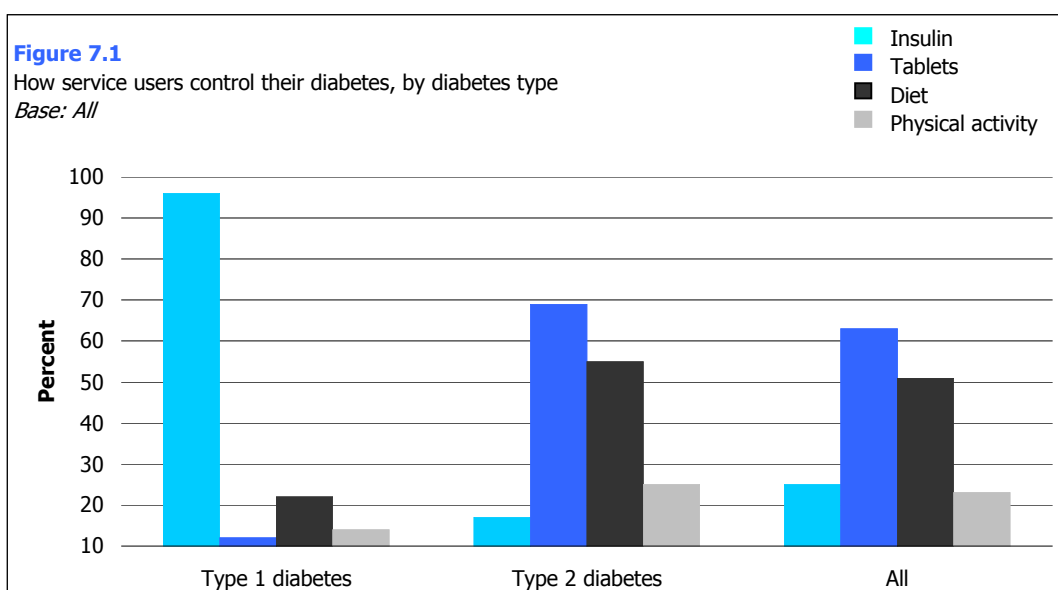
### 7.1 Introduction

The provision of information for people with diabetes is a key aspect of diabetes care (see Chapter 3; 'Diagnosis and Information'). Having good knowledge about diabetes, the role of medication, self-monitoring and healthy lifestyles is vital for people to make informed decisions in order that they can self-manage and take control of their diabetes. The survey asked a series of questions about methods of self-management, related health behaviours and knowledge, including gaps in knowledge. The key findings are outlined in this section.

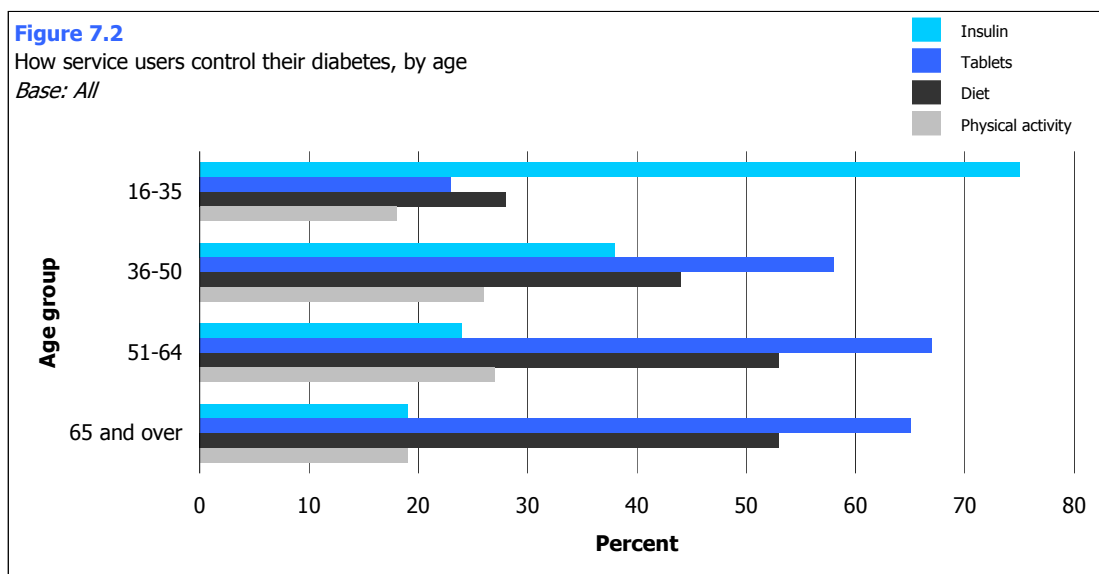
### 7.2 Methods of controlling diabetes

Respondents were asked 'How do you control your diabetes nowadays?' Overall, 63% said with tablets, 51% diet, 23% physical activity and 25% insulin (multiple responses were allowed, so percentages add up to over 100). Clear differences could be seen by diabetes type, age and, to a lesser extent, sex.

As would be expected, respondents with Type 1 diabetes were more likely to control their diabetes with insulin (96% compared with 17%), whereas those with Type 2 diabetes were more likely to say they used tablets (69% compared with 12%). The National Institute for Health and Clinical Excellence (NICE) highlights the importance of a healthy diet and lifestyle for people with Type 1 diabetes. However, our findings show that people with Type 1 diabetes were less likely than people with Type 2 diabetes to use these methods to manage their diabetes. Twenty two percent of service users with Type 1 diabetes said that they used diet to control their diabetes, compared with 55% with Type 2 diabetes; and for physical activity the figures were 14% and 25% respectively.



As would be expected, since people with Type 1 tended to be younger, and Type 2 respondents tended to be older, we found that younger respondents were more likely to use insulin to manage their diabetes (75% aged 16-35, compared with 19% aged 66 and over). In contrast, older respondents were more likely to use tablets to manage their diabetes (65% aged 66 and over, compared with 23% aged 16-35). Respondents in older age groups were more likely to say they used diet to manage their diabetes (53% of those aged 66 and over compared with 28% aged 16-35). However, using physical activity to control diabetes varied by age with those in the middle age groups being more likely than the youngest, and oldest, to use physical activity to help control their diabetes. Over a quarter of respondents aged 36 to 65 used physical activity to control their diabetes, compared with less than a fifth of those in the oldest and youngest age groups.



No sex differences were found in controlling diabetes with insulin or tablets. However, men were slightly more likely than women to say they used diet (52% compared with 49%), and that they used physical activity (27% compared with 18%) to control their diabetes.

## 7.3 Self-management, medication and knowledge

### 7.3.1 Medication use

Eighty six percent of service users said that they took medication for a condition other than diabetes, and this varied by age and sex. As would be expected, older respondents were more likely to take medication for other conditions, 91% of those aged 66 and over compared with 44% aged 16-35. In addition, a slightly higher proportion of women (89%) than men (83%) took medication for other conditions.

Respondents who took medication were asked about what type of medication(s) this was. Seventy one percent took tablets for 'high blood pressure', 68% for 'high cholesterol', 26% for 'heart disease', and 22% were classified as 'other' (not listed)

conditions (multiple responses were allowed, so percentages add up to over 100). As would be expected, this varied considerably by age, with older respondents being more likely to take medications for high blood pressure, high cholesterol and heart disease. However, a higher proportion of younger than older respondents said they took medication for an 'other' condition. Seventy six percent of those aged 66 and over were on medication for high blood pressure, compared with 35% aged 16-35. Similarly, 66% of those aged 66 and over, compared with 38% aged 16-35 were taking medication for high cholesterol, and for tablets for heart disease the figure were 33% and 2% respectively. Almost half (48%) of youngest age group said they took medication for an 'other' condition, compared with 18% of the oldest age group.

### **7.3.2 Knowledge about medication**

Respondents who were taking medication (for either diabetes or another condition) were asked whether they knew enough about *when* to take their medication. Nearly all (93%) said that they knew enough, 6% said 'no, I would like to know a bit more', and 2% said 'no, I would like to know a lot more'. In addition, the same respondents were asked whether they knew enough about *how much* medication to take. The findings were similar with 94% saying they knew enough, 5% saying 'no, I would like to know a bit more', and 1% saying 'no, I would like to know a lot more'.

These findings varied somewhat by age, but interestingly for both questions it was those in the oldest age group who seemed to fare better. Those aged 36-50 were least likely to say they knew enough about when to take their medication (89%) whereas those aged 66 and over were the most likely (95%). Respondents in the youngest age group (16-35) were least likely to say they knew enough about how much medication to take, and again those aged 66 and over were most likely (87% and 95% respectively).

### **7.3.3 Monitoring blood glucose**

Overall, 27% of respondents said that they 'never' monitored their blood glucose, 34% said 'less than once a day', 18% said 'once a day', 16% said '2 or 3 times a day' and 6% said '4 or more times a day'. As would be expected, this varied considerably by diabetes type with those with Type 1 testing their blood glucose more frequently. Thirty one percent with Type 1 said they checked their blood glucose 4 or more times a day, compared with just 3% with Type 2. Similarly, younger respondents tended to test their blood glucose more frequently, 24% of those aged 16-35 tested 4 or more times a day compared with 3% aged 66 and over. This is likely to be related to diabetes type, with younger respondents being more likely to have Type 1 diabetes. Similarly just 4% with Type 1 said that they never monitored their blood glucose, compared with 29% with Type 2 diabetes. Again, this varied by age with younger respondents being less likely to say they never monitored their blood glucose (10% aged 16 to 35 compared with 33% aged 66 and over).

Respondents were asked how they use the results of their blood glucose test. Forty-nine percent said 'to help me decide what to eat', 42% 'to write them down', 25% 'to tell me if I'm hypo', 21% 'to alter the amount of insulin I take', 17% 'to help me decide how much physical activity I do', 9% 'to contact my doctor or nurse', and 7%

'to check or alter my tablets' (multiple responses were allowed, so percentages add up to over 100).

#### **7.4 Knowledge about lifestyles and health behaviours**

Three-quarters of respondents said they knew enough about what they should eat to manage their diabetes, 18% said they would like to know a bit more and 7% said they would like to know a lot more. This varied by diabetes type, with those with Type 1 being somewhat more likely to say they knew enough (80%, compared with 74% with Type 2).

Respondents were asked about how good they are at eating the right foods to manage their diabetes. Overall, 22% said they were very good, 61% said they were fairly good, 14% said they were not very good and 2% said they were not at all good. Older respondents were more likely to say they were very good at eating the right foods, 27% of those aged 66 years and over compared with 15% aged 36-50, 16% aged 16-35 and 19% aged 51-65.

Sixty eight percent of service users said that they knew enough about the role of physical activity in managing their diabetes, 25% said they would like to know a bit more and 7% said they would like to know a lot more. Respondents with Type 1 diabetes were more likely to say that they knew enough (73% compared with 67% of those with Type 2). This varied by age but it was respondents aged 36-50 who were least likely to say they knew enough (63%, compared with 66% aged 51-65, 69% aged 66 and over and 70% aged 16-35).

Respondents were asked about how good they are at being physically active to help manage diabetes. Fifteen percent said they were 'very good', 46% said 'fairly good', 29% said 'not very good' and 10% said 'not at all good'. This varied somewhat by type of diabetes: those with Type 1 were more likely to say that they were very good at being physically active to manage their diabetes (19% compared with 14% with Type 2). Younger respondents were more likely to say that they were very good at being physically active to manage their diabetes (20%). However, interestingly it was those in the middle age groups, aged 35-50 or 51-65 (13% for both age groups) who were least likely to say they were very good at being physically active. In addition, men were slightly more likely to say that they were very good at being physically active (17% compared with 13% of women).

Just under a fifth (14%) of respondents said that they smoked cigarettes, cigars or a pipe, a lower estimate than that found in the general population in England (around a quarter of all adults for Health Survey for England, 2005<sup>21</sup>). However, the prevalence of smoking varied by diabetes type, age and sex. Service users with Type 1 were more likely to smoke than those with Type 2 diabetes (21% and 13%, respectively). This might be related to age because, as with the general population<sup>22</sup>, younger respondents were more likely to smoke than older respondents: 24% of

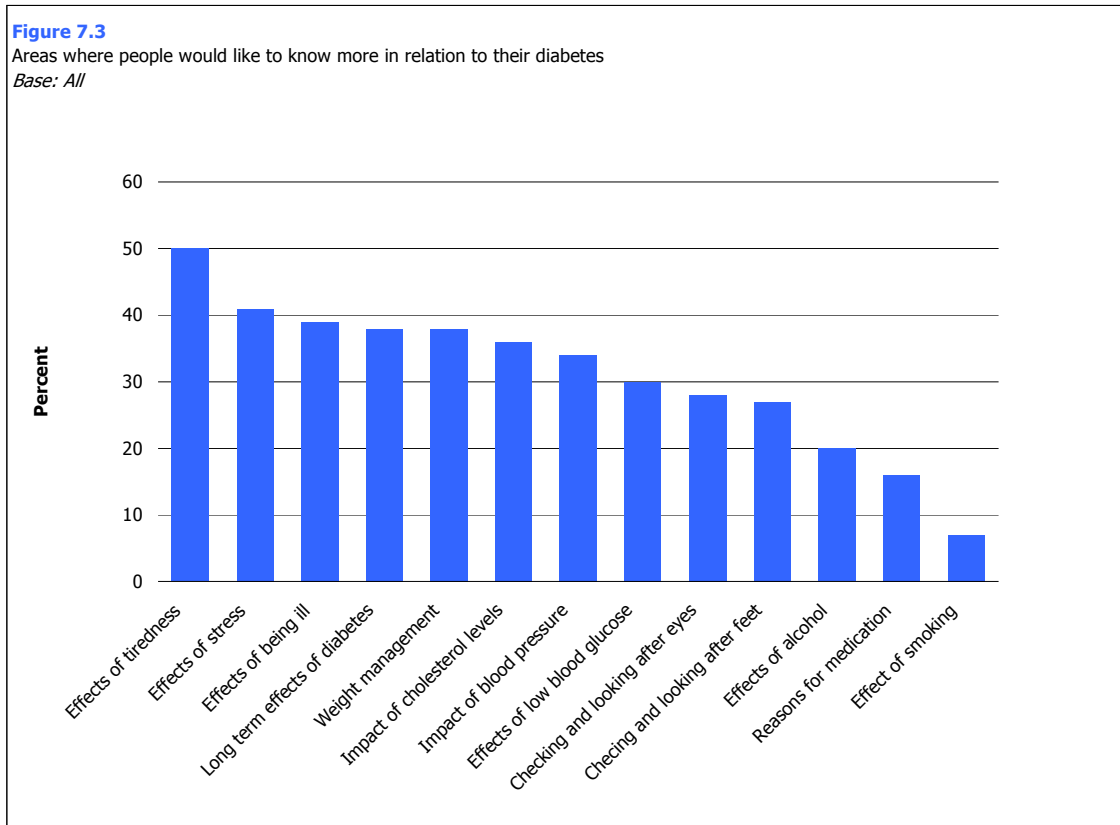
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<sup>21</sup> Health Survey for England 2005: trend tables (2006). <http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/health-survey-for-england/health-survey-for-england--updating-of-trend-tables-to-include-2005-data>, accessed 29.08.07

<sup>22</sup> Health Survey for England 2005: trend tables (2006). <http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/health-survey-for-england/health-survey-for-england--updating-of-trend-tables-to-include-2005-data>, accessed 29.08.07

those aged 16-35 smoked, compared with 8% aged 66 and over. In addition, men were slightly more likely to smoke than women (15% and 12% respectively).

We asked service users if there were any topics that they would like to know more about in relation to their diabetes. Figure 7.3 provides an overview of the areas identified by respondents. Half of respondents wanted to know more about the effects of tiredness on their diabetes, 41% wanted to know about the effects of stress, and 39% about the effects of being ill. Thirty eight percent of service users wanted to know more about both the long-term health effects of diabetes, and getting to and keeping to a certain weight. Over a third of respondents also wanted to know more about the impact of cholesterol levels, and blood pressure on their diabetes. Just under a third wanted to know more about what to expect if their blood glucose drops too low (30%), and checking and looking after their eyes (28%) and feet (27%).



## 7.5 Self-management and knowledge: tables

**Table 7.1**

### How people control their diabetes, by diabetes type

*All* *2006*

| How do you control your diabetes now? | Diabetes type |              | Total        |
|---------------------------------------|---------------|--------------|--------------|
|                                       | Type 1        | Type 2       |              |
|                                       | %             | %            | %            |
| Insulin                               | 96            | 17           | 25           |
| Tablets                               | 12            | 69           | 63           |
| Diet                                  | 22            | 55           | 51           |
| Physical activity                     | 14            | 25           | 23           |
| Other                                 | 1             | 1            | 1            |
| <i>Weighted bases</i>                 | <i>7615</i>   | <i>53347</i> | <i>68475</i> |
| <i>Unweighted bases</i>               | <i>7275</i>   | <i>53661</i> | <i>68477</i> |

**Table 7.2**

### How people control their diabetes, by age

*All* *2006*

| How do you control your diabetes now? | Age group   |             |              |              | Total        |
|---------------------------------------|-------------|-------------|--------------|--------------|--------------|
|                                       | 16-35       | 36-50       | 51-65        | 66 and over  |              |
|                                       | %           | %           | %            | %            | %            |
| Insulin                               | 75          | 38          | 24           | 19           | 25           |
| Tablets                               | 23          | 58          | 67           | 65           | 63           |
| Diet                                  | 28          | 44          | 53           | 53           | 51           |
| Physical activity                     | 18          | 26          | 27           | 19           | 23           |
| Other                                 | 1           | 1           | 1            | 1            | 1            |
| <i>Weighted bases</i>                 | <i>2553</i> | <i>9850</i> | <i>22561</i> | <i>33510</i> | <i>68475</i> |
| <i>Unweighted bases</i>               | <i>2251</i> | <i>8395</i> | <i>23447</i> | <i>34382</i> | <i>68477</i> |

**Table 7.3**

### How people control their diabetes, by sex

*All* *2006*

| How do you control your diabetes now? | Sex          |              | Total        |
|---------------------------------------|--------------|--------------|--------------|
|                                       | Male         | Female       |              |
|                                       | %            | %            | %            |
| Insulin                               | 25           | 25           | 25           |
| Tablets                               | 63           | 63           | 63           |
| Diet                                  | 52           | 49           | 51           |
| Physical activity                     | 27           | 18           | 23           |
| Other                                 | 1            | 1            | 1            |
| <i>Weighted bases</i>                 | <i>37176</i> | <i>31295</i> | <i>68475</i> |
| <i>Unweighted bases</i>               | <i>37963</i> | <i>30512</i> | <i>68477</i> |

**Table 7.4****Whether take medication for another condition, by age**

*All* *2006*

| Do you take any medication for any other condition? | Age group   |             |              |                     |              | Total |
|---|-------------|-------------|--------------|---------------------|--------------|-------|
|   | 16-35<br>%  | 36-50<br>%  | 51-65<br>%   | 66 and<br>over<br>% |              |       |
| Yes   | 44          | 75          | 87           | 91                  | 86           |       |
| No  | 56          | 25          | 13           | 9                   | 14           |       |
| <i>Weighted bases</i>                               | <i>2525</i> | <i>9689</i> | <i>22104</i> | <i>32158</i>        | <i>66477</i> |       |
| <i>Unweighted bases</i>                             | <i>2216</i> | <i>8256</i> | <i>22992</i> | <i>33070</i>        | <i>66536</i> |       |

**Table 7.5****Whether take medication for another condition, by sex**

*All* *2006*

| Do you take any medication for any other condition? | Sex          |              |              |
|---|--------------|--------------|--------------|
|   | Male<br>%    | Female<br>%  | Total<br>%   |
| Yes   | 83           | 89           | 86           |
| No  | 17           | 11           | 14           |
| <i>Weighted bases</i>                               | <i>36181</i> | <i>30292</i> | <i>66477</i> |
| <i>Unweighted bases</i>                             | <i>36974</i> | <i>29560</i> | <i>66536</i> |

**Table 7.6****Other types of medication taken, by age**

*All those who take medication for any other condition* *2006*

| What type of medication do you take? | Age group   |             |              |                     |              |
|--------------------------------------|-------------|-------------|--------------|---------------------|--------------|
|                                      | 16-35<br>%  | 36-50<br>%  | 51-65<br>%   | 66 and<br>over<br>% | Total<br>%   |
| Tablets for high blood pressure      | 35          | 56          | 72           | 76                  | 71           |
| Tablets for high cholesterol         | 38          | 65          | 73           | 66                  | 68           |
| Tablets for heart disease            | 2           | 10          | 21           | 33                  | 26           |
| Other                                | 48          | 27          | 23           | 18                  | 22           |
| <i>Weighted bases</i>                | <i>1102</i> | <i>7220</i> | <i>19283</i> | <i>29308</i>        | <i>56914</i> |
| <i>Unweighted bases</i>              | <i>956</i>  | <i>6142</i> | <i>20147</i> | <i>30139</i>        | <i>57385</i> |



**Table 7.7****Whether know enough about when to take medication, by age***All those who take medication*

2006

| Do you know enough about when to take your medication? | Age group   |             |              |                  | Total        |
|--|-------------|-------------|--------------|------------------|--------------|
|  | 16-35<br>%  | 36-50<br>%  | 51-65<br>%   | 66 and over<br>% |              |
| Yes  | 91          | 89          | 91           | 95               | 93           |
| No, I would like to know a bit more                    | 7           | 9           | 6            | 4                | 6            |
| No I would like to know a lot more                     | 2           | 3           | 2            | 1                | 2            |
| <i>Weighted bases</i>                                  | <i>2422</i> | <i>9366</i> | <i>21769</i> | <i>32201</i>     | <i>65759</i> |
| <i>Unweighted bases</i>                                | <i>2142</i> | <i>7981</i> | <i>22656</i> | <i>33033</i>     | <i>65814</i> |

**Table 7.8****Whether know enough about how much medication to take, by age***All those who take medication*

2006

| Do you know enough about how much medication to take? | Age group   |             |              |                  | Total        |
|---|-------------|-------------|--------------|------------------|--------------|
|   | 16-35<br>%  | 36-50<br>%  | 51-65<br>%   | 66 and over<br>% |              |
| Yes   | 87          | 91          | 93           | 95               | 94           |
| No, I would like to know a bit more                   | 10          | 7           | 5            | 4                | 5            |
| No I would like to know a lot more                    | 3           | 2           | 2            | 1                | 1            |
| <i>Weighted bases</i>                                 | <i>2403</i> | <i>9308</i> | <i>21623</i> | <i>31848</i>     | <i>65183</i> |
| <i>Unweighted bases</i>                               | <i>2126</i> | <i>7927</i> | <i>22499</i> | <i>32679</i>     | <i>65233</i> |

**Table 7.9****How often people test own blood glucose, by diabetes type***All*

2006

| How often do you test your own blood glucose levels? | Diabetes type |              | Total        |
|--|---------------|--------------|--------------|
|  | Type 1<br>%   | Type 2<br>%  |              |
| 4 or more times a day                                | 31            | 3            | 6            |
| 2 or 3 times a day                                   | 35            | 14           | 16           |
| Once a day   | 15            | 18           | 18           |
| Less than once                                       | 16            | 36           | 34           |
| Never  | 4             | 29           | 27           |
| <i>Weighted bases</i>                                | <i>7515</i>   | <i>52064</i> | <i>66599</i> |
| <i>Unweighted bases</i>                              | <i>7167</i>   | <i>52373</i> | <i>66606</i> |

**Table 7.10****How often people test own blood glucose, by age***All those who take medication*

2006

| How often do you test your own blood glucose levels? | Age group   |             |              |               | Total %      |
|--|-------------|-------------|--------------|---------------|--------------|
|  | 16-35 %     | 36-50 %     | 51-65 %      | 66 and over % |              |
| 4 or more times a day                                | 24          | 11          | 5            | 3             | 6            |
| 2 or 3 times a day                                   | 27          | 20          | 17           | 13            | 16           |
| Once a day   | 14          | 18          | 18           | 18            | 18           |
| Less than once                                       | 24          | 33          | 36           | 33            | 34           |
| Never  | 10          | 19          | 24           | 33            | 27           |
| <i>Weighted bases</i>                                | <i>2522</i> | <i>9685</i> | <i>22112</i> | <i>32279</i>  | <i>66599</i> |
| <i>Unweighted bases</i>                              | <i>2221</i> | <i>8250</i> | <i>22987</i> | <i>33146</i>  | <i>66606</i> |

**Table 7.11****How do you use the results of your glucose tests, by diabetes type***All*

2006

| How do you use the results of your glucose tests? | Total %      |
|---|--------------|
| To check or alter the amount of insulin I take    | 21           |
| To check or alter my tablets                      | 7            |
| To help me decide what I eat                      | 49           |
| To help me decide how much physical activity I do | 17           |
| To tell me if I'm hypo                            | 25           |
| To contact my diabetes doctor or nurse            | 9            |
| To write down                                     | 42           |
| Other   | 3            |
| <i>Weighted bases</i>                             | <i>48524</i> |
| <i>Unweighted bases</i>                           | <i>48412</i> |

**Table 7.12****Whether know enough about what to eat to help manage diabetes, by diabetes type***All*

2006

| Do you know enough about what you should eat to help you manage your diabetes? | Diabetes type |              |              |
|--|---------------|--------------|--------------|
|  | Type 1 %      | Type 2 %     | Total %      |
| Yes  | 80            | 74           | 75           |
| No, I would like to know a bit more  | 16            | 18           | 18           |
| No, I would like to know a lot more  | 4             | 7            | 7            |
| <i>Weighted bases</i>  | <i>7490</i>   | <i>52497</i> | <i>67175</i> |
| <i>Unweighted bases</i>  | <i>7165</i>   | <i>52822</i> | <i>67218</i> |

**Table 7.13****Whether know enough about what to eat to help manage diabetes, by age**

*All* *2006*

| Do you know enough about what you should eat to help you manage your diabetes? | Age group   |             |              |                  | Total        |
|--|-------------|-------------|--------------|------------------|--------------|
|  | 16-35<br>%  | 36-50<br>%  | 51-65<br>%   | 66 and over<br>% |              |
| Yes  | 73          | 68          | 73           | 79               | 75           |
| No, I would like to know a bit more  | 20          | 23          | 19           | 16               | 18           |
| No, I would like to know a lot more  | 7           | 10          | 8            | 5                | 7            |
| <i>Weighted bases</i>  | <i>2504</i> | <i>9713</i> | <i>22230</i> | <i>32726</i>     | <i>67175</i> |
| <i>Unweighted bases</i>  | <i>2205</i> | <i>8287</i> | <i>23128</i> | <i>33596</i>     | <i>67218</i> |

**Table 7.14****How good people are at eating the right foods to manage diabetes, by diabetes type**

*All* *2006*

| How good are you at eating the right foods to help manage your diabetes? | Diabetes type |              | Total        |
|--|---------------|--------------|--------------|
|  | Type 1<br>%   | Type 2<br>%  |              |
| Very good  | 25            | 22           | 22           |
| Fairly good  | 60            | 61           | 61           |
| Not very good  | 12            | 15           | 14           |
| Not at all good  | 3             | 2            | 2            |
| <i>Weighted bases</i>  | <i>7521</i>   | <i>52623</i> | <i>67404</i> |
| <i>Unweighted bases</i>  | <i>7192</i>   | <i>52966</i> | <i>67467</i> |

**Table 7.15****How good people are at eating the right foods to manage diabetes, by age**

*All* *2006*

| How good are you at eating the right foods to help manage your diabetes? | Age group   |             |              |                  | Total        |
|--|-------------|-------------|--------------|------------------|--------------|
|  | 16-35<br>%  | 36-50<br>%  | 51-65<br>%   | 66 and over<br>% |              |
| Very good  | 16          | 15          | 19           | 27               | 22           |
| Fairly good  | 60          | 58          | 61           | 61               | 61           |
| Not very good  | 19          | 23          | 17           | 10               | 14           |
| Not at all good  | 6           | 4           | 3            | 1                | 2            |
| <i>Weighted bases</i>  | <i>2519</i> | <i>9714</i> | <i>22254</i> | <i>32916</i>     | <i>67404</i> |
| <i>Unweighted bases</i>  | <i>2218</i> | <i>8283</i> | <i>23165</i> | <i>33799</i>     | <i>67467</i> |

**Table 7.16****Whether know enough about the role of physical activity in managing diabetes, by diabetes type**

*All* *2006*

| Do you know enough about the role of physical activity in managing your diabetes? | Diabetes type |              |   | Total        |
|---|---------------|--------------|---|--------------|
|   | Type 1        | Type 2       |   |              |
|   | %             | %            | % |              |
| Yes   | 73            | 67           |   | 68           |
| No, I would like to know a bit more   | 22            | 25           |   | 25           |
| No, I would like to know a lot more   | 5             | 8            |   | 7            |
| <i>Weighted bases</i>   | <i>7440</i>   | <i>51914</i> |   | <i>66225</i> |
| <i>Unweighted bases</i>   | <i>7124</i>   | <i>52230</i> |   | <i>66317</i> |

**Table 7.17****Whether know enough about the role of physical activity in managing diabetes, by age**

*All those who take medication* *2006*

| Do you know enough about the role of physical activity in managing your diabetes? | Age group   |             |              |              | Total        |
|---|-------------|-------------|--------------|--------------|--------------|
|   | 16-35       | 36-50       | 51-65        | 66 and over  |              |
|   | %           | %           | %            | %            |              |
| Yes   | 70          | 63          | 66           | 69           | 68           |
| No, I would like to know a bit more   | 23          | 27          | 25           | 25           | 25           |
| No, I would like to know a lot more   | 7           | 10          | 8            | 6            | 7            |
| <i>Weighted bases</i>   | <i>2508</i> | <i>9691</i> | <i>22111</i> | <i>31914</i> | <i>66225</i> |
| <i>Unweighted bases</i>   | <i>2211</i> | <i>8266</i> | <i>23017</i> | <i>32821</i> | <i>66317</i> |

**Table 7.18****How good people are at being physically active to help manage their diabetes, by diabetes type**

*All* *2006*

| How good are you at being physically active to help manage your diabetes? | Diabetes type |              |   | Total        |
|---|---------------|--------------|---|--------------|
|   | Type 1        | Type 2       |   |              |
|   | %             | %            | % |              |
| Very good   | 19            | 14           |   | 15           |
| Fairly good   | 47            | 46           |   | 46           |
| Not very good   | 26            | 30           |   | 29           |
| Not at all good   | 8             | 10           |   | 10           |
| <i>Weighted bases</i>   | <i>7484</i>   | <i>52217</i> |   | <i>66810</i> |
| <i>Unweighted bases</i>   | <i>7157</i>   | <i>52584</i> |   | <i>66894</i> |

**Table 7.19****How good people are at being physically active to help manage their diabetes, by age**

All those who take medication

2006

| How good are you at being physically active to help manage your diabetes? | Age group   |             |              |               | Total %      |
|---|-------------|-------------|--------------|---------------|--------------|
|   | 16-35 %     | 36-50 %     | 51-65 %      | 66 and over % |              |
| Very good   | 20          | 13          | 13           | 17            | 15           |
| Fairly good   | 45          | 45          | 47           | 47            | 46           |
| Not very good   | 28          | 33          | 31           | 26            | 29           |
| Not at all good   | 7           | 9           | 9            | 11            | 10           |
| <i>Weighted bases</i>   | <i>2515</i> | <i>9696</i> | <i>22156</i> | <i>32441</i>  | <i>66810</i> |
| <i>Unweighted bases</i>   | <i>2218</i> | <i>8276</i> | <i>23064</i> | <i>33334</i>  | <i>66894</i> |

**Table 7.20****How good people are at being physically active to help manage their diabetes, by sex**

All

2006

| How good are you at being physically active to help manage your diabetes? | Sex          |              | Total %      |
|---|--------------|--------------|--------------|
|   | Male %       | Female %     |              |
| Very good   | 17           | 13           | 15           |
| Fairly good   | 48           | 44           | 46           |
| Not very good   | 27           | 31           | 29           |
| Not at all good   | 8            | 12           | 10           |
| <i>Weighted bases</i>   | <i>36520</i> | <i>30286</i> | <i>66810</i> |
| <i>Unweighted bases</i>   | <i>37318</i> | <i>29574</i> | <i>66894</i> |

**Table 7.21****Smoking status, by diabetes type**

All

2006

| Do you smoke cigarettes, cigars or a pipe at all nowadays? | Diabetes type |              | Total %      |
|--|---------------|--------------|--------------|
|  | Type 1 %      | Type 2 %     |              |
| Yes  | 21            | 13           | 14           |
| No   | 79            | 87           | 86           |
| <i>Weighted bases</i>                                      | <i>7514</i>   | <i>52669</i> | <i>67426</i> |
| <i>Unweighted bases</i>                                    | <i>7184</i>   | <i>53000</i> | <i>67479</i> |

**Table 7.22****Smoking status, by age**

| <i>All</i>  |                  | <i>2006</i> |             |                     |              |              |
|---|------------------|-------------|-------------|---------------------|--------------|--------------|
| <b>Do you smoke cigarettes, cigars or a pipe at all nowadays?</b> | <b>Age group</b> |             |             |                     |              |              |
|   | 16-35<br>%       | 36-50<br>%  | 51-65<br>%  | 66 and<br>over<br>% | Total<br>%   |              |
| Yes   | 24               | 23          | 18          | 8                   | 14           |              |
| No  | 76               | 77          | 82          | 92                  | 86           |              |
| <i>Weighted bases</i>   |                  | <i>2511</i> | <i>9731</i> | <i>22273</i>        | <i>32910</i> | <i>67426</i> |
| <i>Unweighted bases</i>   |                  | <i>2216</i> | <i>8296</i> | <i>23169</i>        | <i>33796</i> | <i>67479</i> |

**Table 7.23****Smoking status, by sex**

| <i>All</i>  |            | <i>2006</i>  |              |              |
|---|------------|--------------|--------------|--------------|
| <b>Do you smoke cigarettes, cigars or a pipe at all nowadays?</b> | <b>Sex</b> |              |              | Total<br>%   |
|   | Male<br>%  | Female<br>%  |              |              |
| Yes   | 15         | 12           |              | 14           |
| No  | 85         | 88           |              | 86           |
| <i>Weighted bases</i>   |            | <i>36719</i> | <i>30704</i> | <i>67426</i> |
| <i>Unweighted bases</i>   |            | <i>37508</i> | <i>29969</i> | <i>67479</i> |

**Table 7.24****What people would like to know more about**

| <i>All</i>   | <i>2006</i>    |
|--|----------------|
| <b>In relation to your diabetes, would you like to know more about any of the following?</b> | <b>Total %</b> |
| How smoking can affect diabetes  | 7              |
| The reasons for taking prescribed medicines to manage diabetes                               | 16             |
| How drinking alcohol can affect diabetes   | 20             |
| Checking and looking after feet  | 27             |
| Checking and looking after eyes  | 28             |
| What to expect if blood glucose drops too low  | 30             |
| The impact of blood pressure levels on diabetes  | 34             |
| The impact of cholesterol levels on diabetes   | 36             |
| Getting to and keeping to a certain weight   | 38             |
| The long term health effects of diabetes   | 38             |
| The effects of being ill on managing diabetes  | 39             |
| The effects of stress on diabetes  | 41             |
| The effects of tiredness on diabetes   | 50             |
| <i>Weighted bases</i>  | <i>68048</i>   |
| <i>Unweighted bases</i>  | <i>68180</i>   |

## 8 EDUCATION AND TRAINING

### 8.1 Introduction

The National Institute for Clinical Excellence (NICE) guidelines highlight the importance of diabetes education for the successful management of diabetes, and state that patient education should be offered to people with diabetes on an on-going basis. In 2003, NICE recommended that *"all people with diabetes should be offered structured education, provided by a trained specialist team of health professionals"*<sup>23</sup>. This education should begin when first diagnosed with diabetes.

The National Service Framework for Diabetes<sup>24</sup> sets out 12 Standards to be met by 2013. Standard 3 of the delivery strategy is about 'empowering people with diabetes'. It states that:

*"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".*

Respondents were asked a series of questions on whether they had attended an education or training course on how to help them manage their diabetes. Those who had not attended a course were asked to give reasons why they had not.

### 8.2 Participation in education or training courses

Overall, just 10% of respondents had participated in an education or training course on ways to manage their diabetes. Participation was highest in the youngest age group (12%) and lowest in the oldest group (9%).

Overall, more recently diagnosed respondents were more likely to have participated in an education or training course: 13% of those diagnosed 1 year ago, compared with 11% diagnosed between 2 and 5 years, 10% diagnosed 21 years or more, and 9% of those diagnosed 6 to 10 years and 11 to 20 years ago.

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<sup>23</sup> April 2003; Patient-education models for diabetes: Understanding NICE guidance – information for people with diabetes, and the public.  
<http://guidance.nice.org.uk/TA60/publicinfo/pdf/English>, accessed 29.08.07

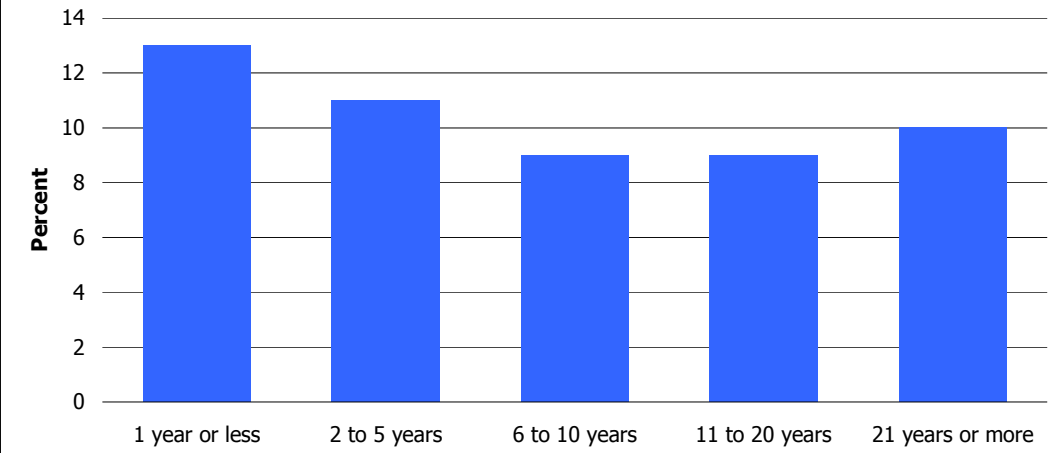
<sup>24</sup> 9th January 2003; National Service Framework for Diabetes: Delivery Strategy.  
[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4003246](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4003246), accessed 29.08.07



**Figure 8.1**

Participated in an education or training course, by length of time since diagnosis

Base: All



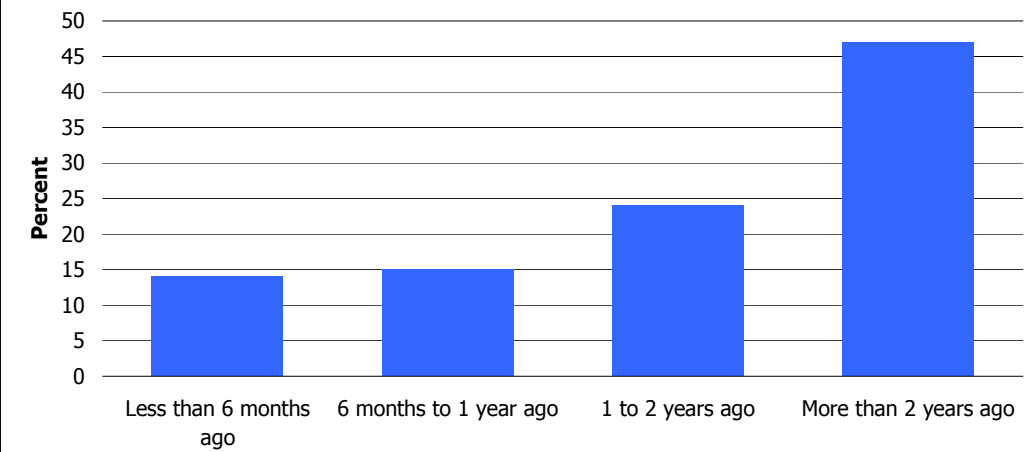
### 8.3 Most recent attendance at an education or training course

Respondents who had taken part in an education or training course on how to help manage their diabetes were asked when they attended their most recent course. Fewer than 30% of respondents reported their most recent attendance on an education or training course was up to a year ago (14% 'less than 6 months ago', and 15% '6 months to one year ago'). Twenty four percent attended a course between '1 to 2 years ago'. Almost half of respondents (47%) reported that the last training course they had attended was 'more than 2 years ago'.

**Figure 8.2**

When last went on an education or training course

Base: All respondents who have participated in an education or training course

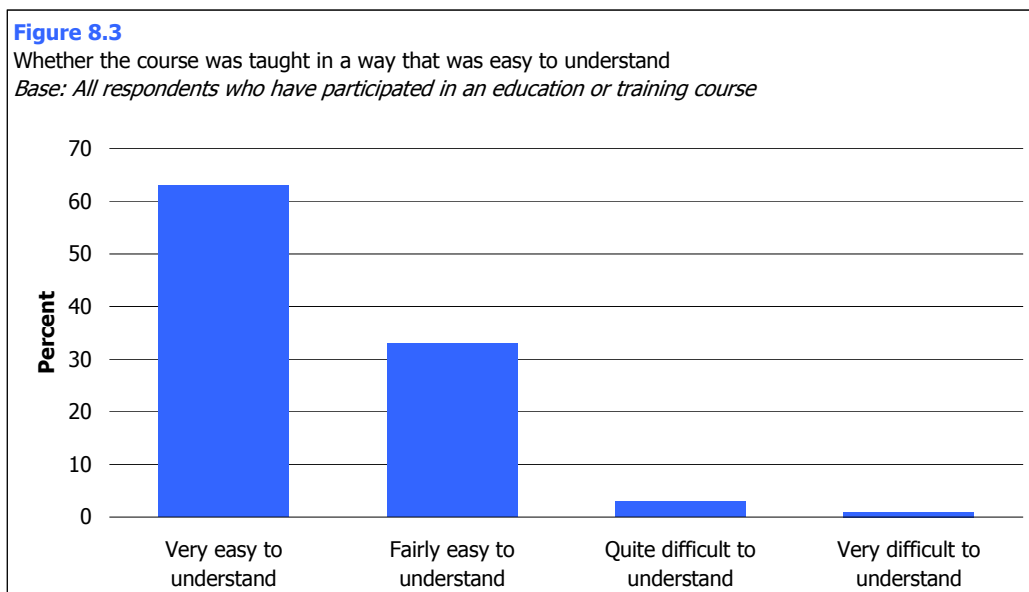


Unsurprisingly, more recently diagnosed respondents (1 year or less ago) were the most likely to have attended an education or training course in the last year: 38% less than 6 months ago, and 37% 1 year ago. The majority of respondents diagnosed between 6 and 10 years ago, and 11 to 20 years ago, were most likely to have last attended a course 2 or more years ago (both 65%). Fifty six percent of

those diagnosed 21 years or more last attended a course 2 or more years ago, while 13% of this group attended a course more recently (6 months ago).

#### 8.4 Understanding the course

The majority of respondents (63%) who had attended an education or training course on how to help manage their diabetes found that the course was taught in a way that was 'very easy to understand', 33% found it 'fairly easy to understand'. Three percent found it 'quite difficult to understand', while only 1% found it 'very difficult to understand'.



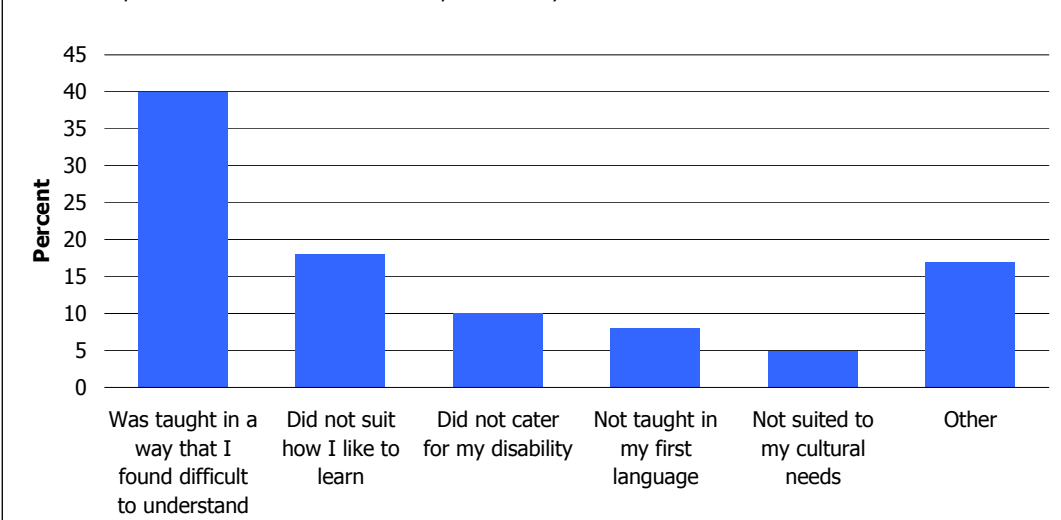
#### 8.5 Difficulties with the course

Respondents who had reported finding the course either 'quite difficult' or 'very difficult' to understand were asked what it was about the course that they found difficult. Respondents were able to select more than one cause. The most prevalent reason for finding the course difficult was that it was 'taught in a way that I found difficult to understand' (40%), while 18% reported that it 'didn't suit how I like to learn'. Ten percent reported that the course did not cater for their disability, while 8% reported that the course was not taught in their first language, and 5% felt that it did not suit their cultural needs.

**Figure 8.4**

What was found difficult about the course

Base: All respondents who found the course 'quite' or 'very' difficult to understand



## 8.6 Wanting to take part in an education or training course

Those who had not taken part in an education or training course were asked whether they had ever wanted to take part in one. Almost three quarters said they did not want to take part (74%).

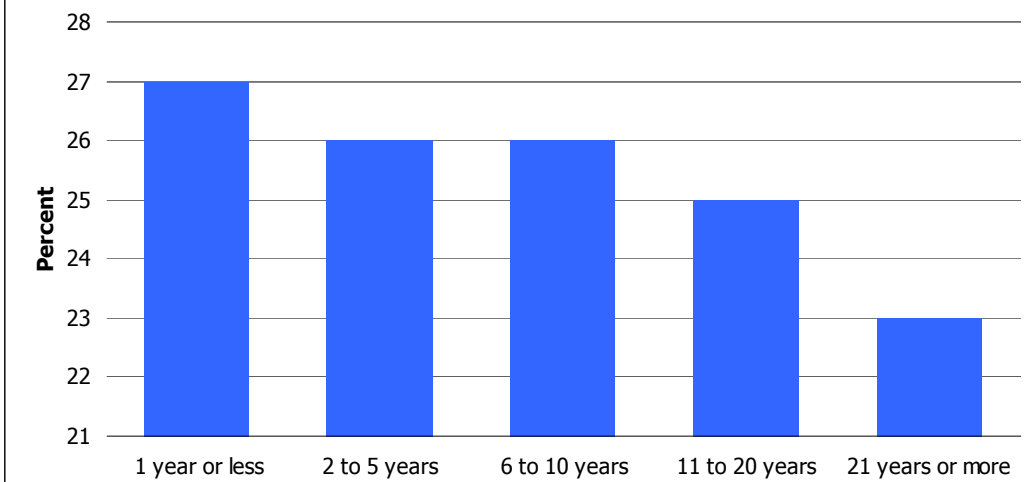
Older respondents, those aged 66 and over, were least likely to report wanting to attend an education or training course on how to manage their diabetes: 15% compared with 32% aged between 51 and 65, 42% of respondents aged between 36 and 50, and 38% aged between 16 and 35.

Those with Type 1 diabetes were more likely to want to attend an education or training course than those with Type 2 (33% compared to 25%).

As length of time since diagnosis increased, the proportion who wanted to attend an education or training course decreased. More recently diagnosed respondents (1 year or less), were more likely to want to attend an education or training course than those diagnosed longer ago (21 years or more ago), 27% compared with 23%.

**Figure 8.5**

Wanted to attend an education or training course, by length of time since diagnosis  
*Base: All respondents who had not attended an education or training course*

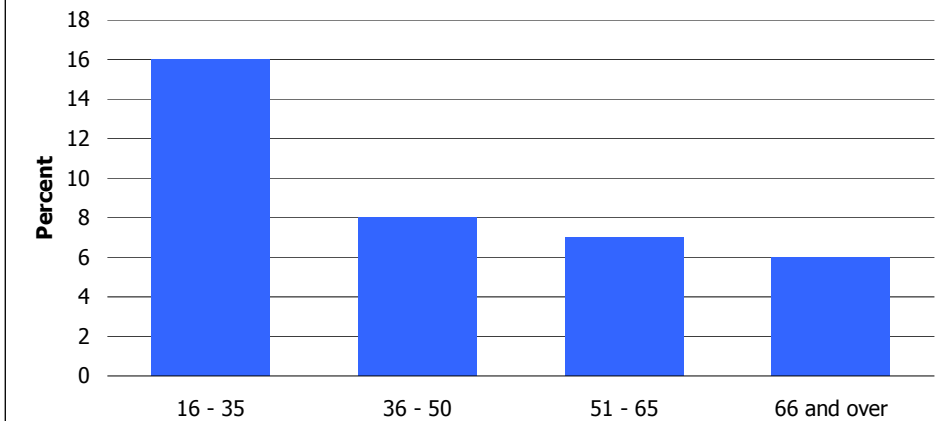


Of those who had not taken part in an education or training course, 7% reported that they had been offered the opportunity to take part in a course but did not attend.

Among those who had not taken part in a course, younger respondents were more likely than older respondents to have been offered the chance to attend, with 16% of those aged between 16 and 35, dropping to half that amount (8%) for those aged between 36 and 50. Seven percent of respondents aged 51 to 65, and 6% of respondents aged 66 and over, had been offered the opportunity.

**Figure 8.6**

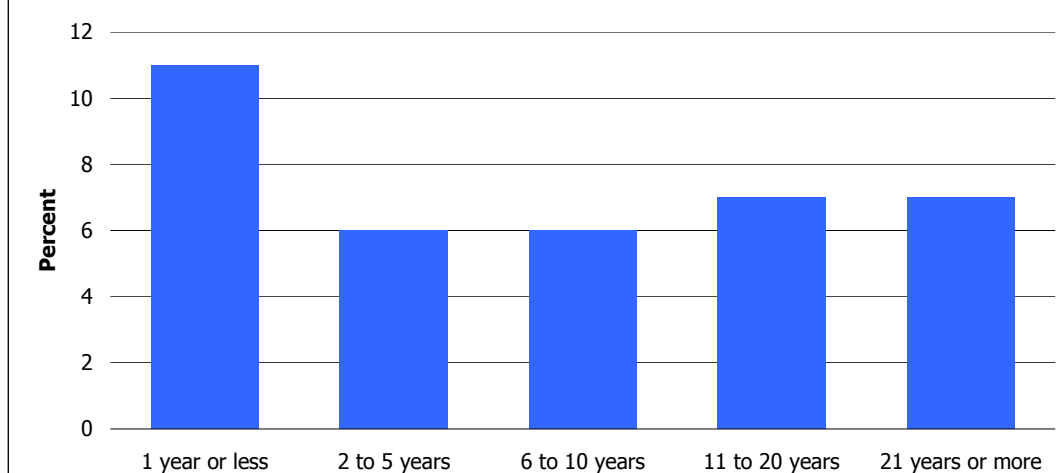
Been offered the opportunity to attend an education or training course, by age  
*Base: All respondents who had not attended an education or training course*



The findings suggest that those more recently diagnosed, 1 year or less, were more likely (11%) than those diagnosed 11 or more years ago (7%) to have been offered the opportunity to attend an education or training course.

**Figure 8.7**

Offered the opportunity to attend an education or training course, by length of time since diagnosis  
*Base: All respondents who had not attended an education or training course*



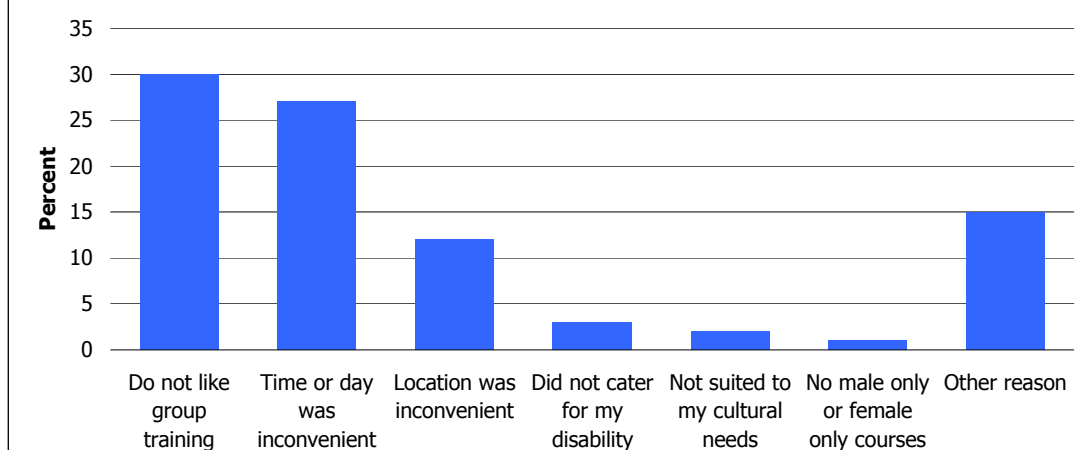
Respondents with Type 2 diabetes were less likely (6%) than those with Type 1 (11%) to have been offered the opportunity to take part in an education or training course.

Respondents who reported having been offered the opportunity to take part in an education or training course, but did not attend, were asked to give their reasons for not taking part. Respondents could select more than one of the options given. Overall, 30% said that they did not take part because they did not like group training. Twenty seven percent reported that the time or day was inconvenient, while 12% said that the location was inconvenient.

**Figure 8.8**

Reason why was unable to participate in course

*Base: All respondents who have been offered the chance to attend a course but did not attend*



Twelve percent of older respondents (those aged 66 and over), reported that the time or day of the course was inconvenient, while 31% of those aged between 51 and 65 and 44% of those aged between 16 and 50 reported this. The findings suggest that time or day of education and training provision do not meet the needs of those of working age. Five percent of those aged 66 and over reported that the

course did not cater for their disability, compared with 2% of those aged 51-65 and 1% of those aged 16-50.

Older respondents (those aged 66 and over), were the most likely to report that they did not attend the training or education course because they do not like group training (34%), while 22% of those aged 16 to 50 reported this.

## 8.7 Education and training: tables

**Table 8.1**

**Whether ever participated in an education or training course on managing diabetes, by age**

| <i>All</i>   |  | <i>2006</i>  |
|--|--|--------------|
| <b>Participated in an education or training course</b> |  | Total<br>%   |
| Yes  |  | 10           |
| No   |  | 90           |
| <i>Weighted base</i>                                   |  | <i>66688</i> |
| <i>Unweighted base</i>                                 |  | <i>66777</i> |

**Table 8.2**

**Whether ever participated in an education or training course on managing diabetes, by length of time since diagnosis**

| <i>All</i>   |                              |                   |                    |                     |                       |              | <i>2006</i> |
|--|------------------------------|-------------------|--------------------|---------------------|-----------------------|--------------|-------------|
| <b>Participated in an education or training course</b> | <b>Years since diagnosis</b> |                   |                    |                     |                       | Total<br>%   |             |
|  | 1 year or less<br>%          | 2 to 5 years<br>% | 6 to 10 years<br>% | 11 to 20 years<br>% | 21 years or more<br>% |              |             |
| Yes  | 13                           | 11                | 9                  | 9                   | 10                    | 10           |             |
| No   | 87                           | 89                | 91                 | 91                  | 90                    | 90           |             |
| <i>Weighted base</i>                                   | <i>9000</i>                  | <i>21183</i>      | <i>14663</i>       | <i>12828</i>        | <i>7539</i>           | <i>66688</i> |             |
| <i>Unweighted base</i>                                 | <i>9029</i>                  | <i>21419</i>      | <i>14622</i>       | <i>12799</i>        | <i>7424</i>           | <i>66777</i> |             |

**Table 8.3**

**When attended most recent course, by length of time since diagnosis**

| <i>All respondents who have participated in an education or training course</i> |                                       |                   |                    |                     |                       |             | <i>2006</i> |
|---|---------------------------------------|-------------------|--------------------|---------------------|-----------------------|-------------|-------------|
| <b>When attended most recent course</b>   | <b>Length of time since diagnosis</b> |                   |                    |                     |                       | Total<br>%  |             |
|   | 1 year or less<br>%                   | 2 to 5 years<br>% | 6 to 10 years<br>% | 11 to 20 years<br>% | 21 years or more<br>% |             |             |
| Less than 6 months ago  | 38                                    | 7                 | 10                 | 9                   | 13                    | 14          |             |
| 6 months to 1 year ago  | 37                                    | 10                | 9                  | 9                   | 12                    | 15          |             |
| 1 to 2 years ago  | 21                                    | 34                | 16                 | 18                  | 18                    | 24          |             |
| More than 2 years ago   | 4                                     | 48                | 65                 | 64                  | 56                    | 47          |             |
| <i>Weighted base</i>  | <i>1173</i>                           | <i>2289</i>       | <i>1281</i>        | <i>1103</i>         | <i>717</i>            | <i>6666</i> |             |
| <i>Unweighted base</i>  | <i>1238</i>                           | <i>2556</i>       | <i>1348</i>        | <i>1172</i>         | <i>708</i>            | <i>7130</i> |             |

**Table 8.4****Whether found course was taught in a way that was easy to understand***All respondents who have participated in an education or training course 2006*

| <b>How easy course was to understand</b> | Total %     |
|--|-------------|
| Very easy to understand                  | 63          |
| Fairly easy to understand                | 33          |
| Quite difficult to understand            | 3           |
| Very difficult to understand             | 1           |
| <i>Weighted base</i>                     | <i>6780</i> |
| <i>Unweighted base</i>                   | <i>7226</i> |

**Table 8.5****What found difficult to understand about the course***All respondents who found the course 'quite' or 'very' difficult to understand 2006***Reason why course was difficult to understand**

|   | Total %    |
|---|------------|
| The course was not taught in my first language                      | 8          |
| The course was not suited to my cultural needs                      | 5          |
| The course did not cater for my disability                          | 10         |
| The course did not suit how I like to learn                         | 18         |
| The course was taught in a way that I found difficult to understand | 40         |
| Other   | 17         |
| None  | 19         |
| <i>Weighted bases</i>   | <i>276</i> |
| <i>Unweighted bases</i>   | <i>263</i> |

**Table 8.6****Whether ever wanted to attend an education or training course on managing diabetes, by sex***All respondents who had not attended an education or training course 2006*

| <b>Wanted to attend education or training course</b> | <b>Sex</b>   |              | Total %      |
|--|--------------|--------------|--------------|
|  | Male %       | Female %     |              |
| Yes  | 26           | 25           | 26           |
| No   | 74           | 75           | 74           |
| <i>Weighted bases</i>                                | <i>31297</i> | <i>25523</i> | <i>56823</i> |
| <i>Unweighted bases</i>                              | <i>31679</i> | <i>24784</i> | <i>56464</i> |



**Table 8.7****Whether ever wanted to attend an education or training course on managing diabetes, by age***All respondents who had not attended an education or training course*

2006

| Wanted to attend education or training course | Age group   |             |              |               | Total %      |
|---|-------------|-------------|--------------|---------------|--------------|
|   | 16-35 %     | 36-50 %     | 51-65 %      | 66 and over % |              |
| Yes   | 38          | 42          | 32           | 15            | 26           |
| No  | 62          | 58          | 68           | 85            | 74           |
| <i>Weighted bases</i>                         | <i>2153</i> | <i>8355</i> | <i>18865</i> | <i>27449</i>  | <i>56823</i> |
| <i>Unweighted bases</i>                       | <i>1885</i> | <i>7080</i> | <i>19524</i> | <i>27973</i>  | <i>56464</i> |

**Table 8.8****Whether ever wanted to attend an education or training course on managing diabetes, by diabetes type***All respondents who had not attended an education or training course*

2006

| Wanted to attend education or training course | Diabetes type |              | Total %      |
|---|---------------|--------------|--------------|
|   | Type 1 %      | Type 2 %     |              |
| Yes   | 33            | 25           | 26           |
| No  | 67            | 75           | 74           |
| <i>Weighted bases</i>                         | <i>6309</i>   | <i>44807</i> | <i>56823</i> |
| <i>Unweighted bases</i>                       | <i>6036</i>   | <i>44694</i> | <i>56464</i> |

**Table 8.9****Whether ever wanted to attend an education or training course on managing diabetes, by length of time since diagnosis***All respondents who had not attended an education or training course*

2006

| Wanted to attend education or training course | Years since diagnosis |                |                 |                  |                    | Total %      |
|---|-----------------------|----------------|-----------------|------------------|--------------------|--------------|
|   | 1 year or less %      | 2 to 5 years % | 6 to 10 years % | 11 to 20 years % | 21 years or more % |              |
| Yes   | 27                    | 26             | 26              | 25               | 23                 | 26           |
| No  | 73                    | 74             | 74              | 75               | 77                 | 74           |
| <i>Weighted base</i>                          | <i>7401</i>           | <i>18015</i>   | <i>12733</i>    | <i>11069</i>     | <i>6397</i>        | <i>56823</i> |
| <i>Unweighted base</i>                        | <i>7363</i>           | <i>17941</i>   | <i>12638</i>    | <i>10980</i>     | <i>6324</i>        | <i>56464</i> |

**Table 8.10****Whether ever been offered the opportunity to attend an education or training course on managing diabetes, by age***All respondents who had not attended an education or training course*

2006

| Whether offered the opportunity to attend an education or training course | Age group   |             |              |               | Total %      |
|---|-------------|-------------|--------------|---------------|--------------|
|   | 16-35 %     | 36-50 %     | 51-65 %      | 66 and over % |              |
| Yes   | 16          | 8           | 7            | 6             | 7            |
| No  | 84          | 92          | 93           | 94            | 93           |
| <i>Weighted bases</i>   | <i>2174</i> | <i>8478</i> | <i>19044</i> | <i>27513</i>  | <i>57209</i> |
| <i>Unweighted bases</i>   | <i>1908</i> | <i>7182</i> | <i>19746</i> | <i>28062</i>  | <i>56900</i> |

**Table 8.11****Whether ever been offered the opportunity to attend an education or training course on managing diabetes, by diabetes type***All respondents who had not attended an education or training course*

2006

| Whether offered the opportunity to attend an education or training course | Diabetes type |              | Total %      |
|---|---------------|--------------|--------------|
|   | Type 1 %      | Type 2 %     |              |
| Yes   | 11            | 6            | 7            |
| No  | 89            | 94           | 93           |
| <i>Weighted bases</i>   | <i>6375</i>   | <i>45151</i> | <i>57209</i> |
| <i>Unweighted bases</i>   | <i>6097</i>   | <i>45077</i> | <i>56900</i> |

**Table 8.12****Whether ever been offered the opportunity to attend an education or training course on managing diabetes, by length of time since diagnosis***All respondents who had not attended an education or training course*

2006

| Whether offered the opportunity to attend an education or training course | Years since diagnosis |                |                 |                  |                    | Total %      |
|---|-----------------------|----------------|-----------------|------------------|--------------------|--------------|
|   | 1 year or less %      | 2 to 5 years % | 6 to 10 years % | 11 to 20 years % | 21 years or more % |              |
| Yes   | 11                    | 6              | 6               | 7                | 7                  | 7            |
| No  | 89                    | 94             | 94              | 93               | 93                 | 93           |
| <i>Weighted base</i>  | <i>7463</i>           | <i>18126</i>   | <i>12814</i>    | <i>11130</i>     | <i>6471</i>        | <i>57209</i> |
| <i>Unweighted base</i>  | <i>7430</i>           | <i>18085</i>   | <i>12729</i>    | <i>11056</i>     | <i>6384</i>        | <i>56900</i> |

**Table 8.13****Why wasn't able to participate in the course by age***All respondents who have been offered the chance to attend a course but did not attend**2006*

| Reason for being unable to participate in education or training course | Age group   |             |               | Total %     |
|--|-------------|-------------|---------------|-------------|
|  | 16-50 %     | 51-65 %     | 66 and over % |             |
| The location was inconvenient  | 12          | 10          | 13            | 12          |
| The time or day was inconvenient                                       | 44          | 31          | 12            | 27          |
| The course was not suited to my cultural needs                         | 2           | 3           | 2             | 2           |
| The course did not cater for my disability                             | 1           | 2           | 5             | 3           |
| There were no male only or female only courses                         | 1           | 1           | 0             | 1           |
| I do not like group training   | 22          | 31          | 34            | 30          |
| Other reason   | 22          | 15          | 10            | 15          |
| None   | 16          | 21          | 34            | 25          |
| <i>Weighted bases</i>  | <i>1063</i> | <i>1314</i> | <i>1620</i>   | <i>3997</i> |
| <i>Unweighted bases</i>  | <i>879</i>  | <i>1376</i> | <i>1682</i>   | <i>3937</i> |

## 9 PSYCHOLOGICAL AND EMOTIONAL SUPPORT

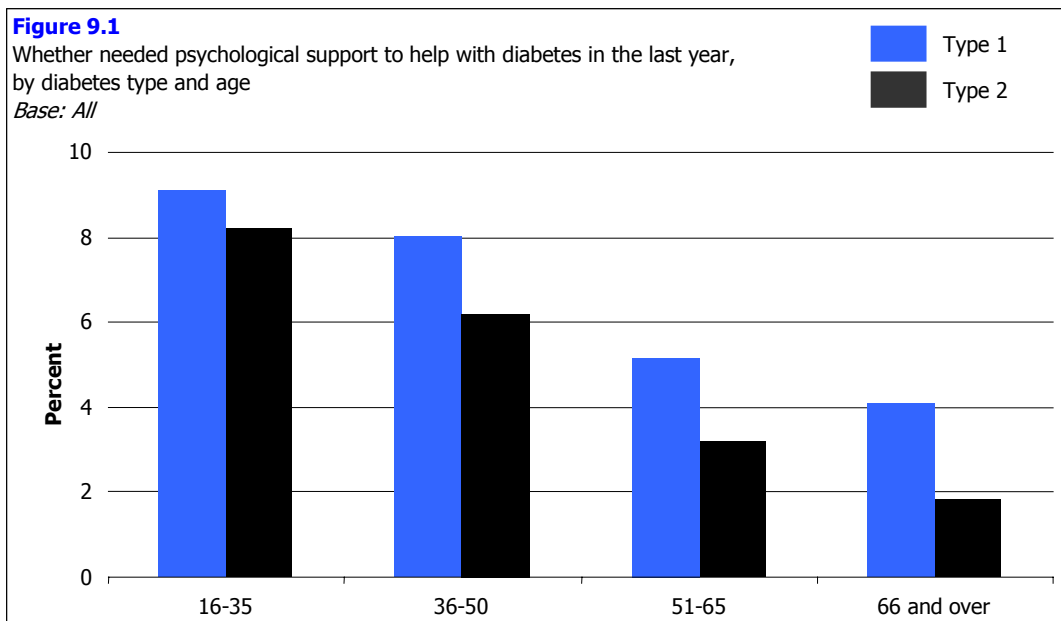
### 9.1 Introduction

This chapter outlines the need for psychological and emotional support, and examines whether those needs were met. Respondents were asked whether they had needed to see a specialist for psychological support to help cope with their diabetes within the last year, and those who said yes were asked whether they were able to see a specialist. All respondents were asked about the type of emotional support they had received in the last year.

### 9.2 Whether needed psychological support

Just 3% of respondents said they had needed to see a specialist for psychological support to help cope with their diabetes within the last year. Respondents with Type 1 diabetes were more likely to have needed support (7%, compared with 3% of respondents with Type 2 diabetes) and this was true across the age groups.

Younger respondents were more likely to have needed psychological support than older respondents (8% of respondents aged 16-35 years, compared with only 2% of those aged 66 and over).



There were no differences overall between men and women in terms of needing psychological support (3% of both men and women). However, there was a relationship when differences within sex and type of diabetes were examined. Although there were no differences for respondents with Type 2 diabetes, when looking at those with Type 1 diabetes, women were more likely than their male counterparts to say they needed psychological support (9% and 6% respectively).

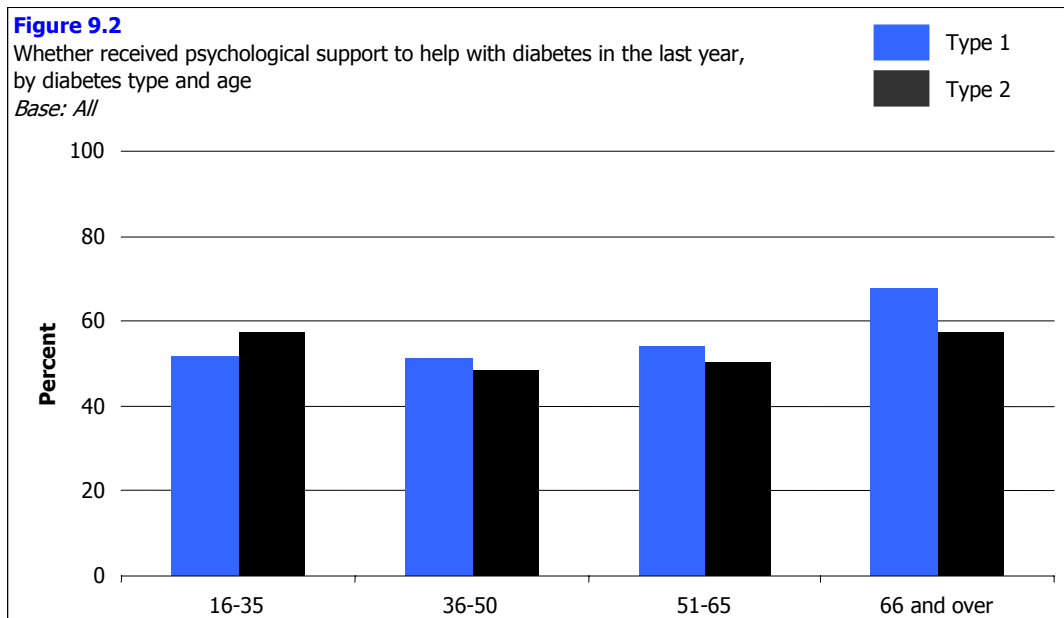
### 9.3 Whether received psychological support

Respondents who said they had needed specialist psychological support in the last year to help cope with their diabetes were asked whether they had received any support. Just over half (53%) of respondents said they had actually received the support they needed. There were no differences by type of diabetes, age or sex.

### 9.4 Whether received emotional support

All respondents were asked whether they had received any emotional support over the last year, and a list of 13 possible support providers listed. These included: the doctor, practice nurse and diabetes specialist nurse (DSN) at the local GP surgery, and the consultant doctor and DSN at the hospital. Also included were a counsellor or social worker, community link worker, telephone helplines and patient support groups. More informal support sources were also offered including family and friends and other people with diabetes. An option was available for those who had not needed emotional support, and there was a space to record any other type of support that was not covered in the answer categories provided.

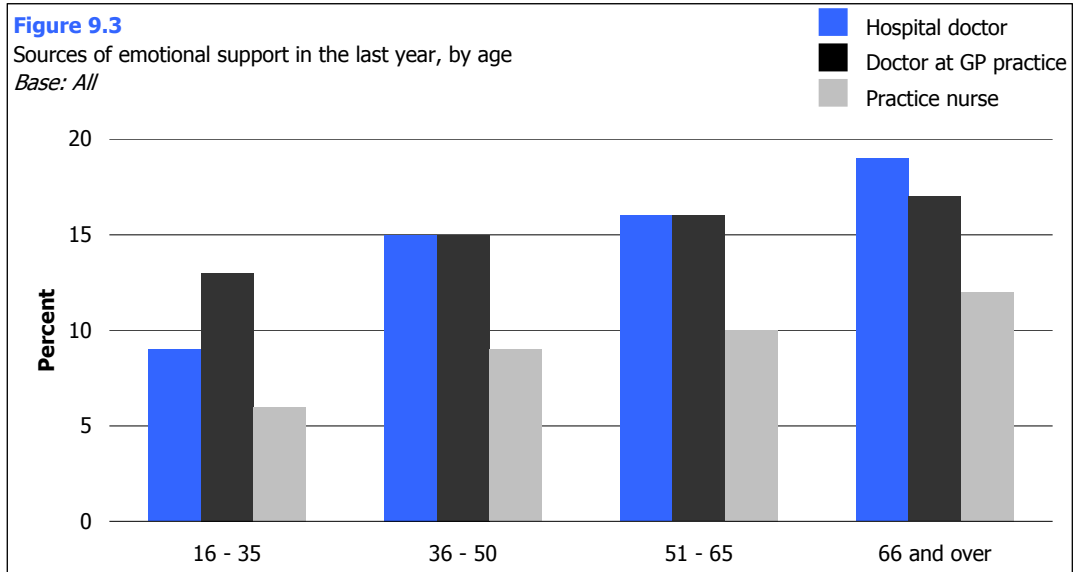
Respondents were most likely to report having received support from a doctor, either at hospital or at their local GP surgery (17% and 16% respectively). Eleven percent of respondents had received emotional support from the practice nurse at their GP surgery and a tenth (10%) had been supported by a family member or friend. Four percent of respondents had received emotional support from a diabetes specialist nurse, either at the hospital or their local GP surgery and 3% had been supported by a patient support group. Just one percent of respondents had received support from a counsellor or telephone helpline.



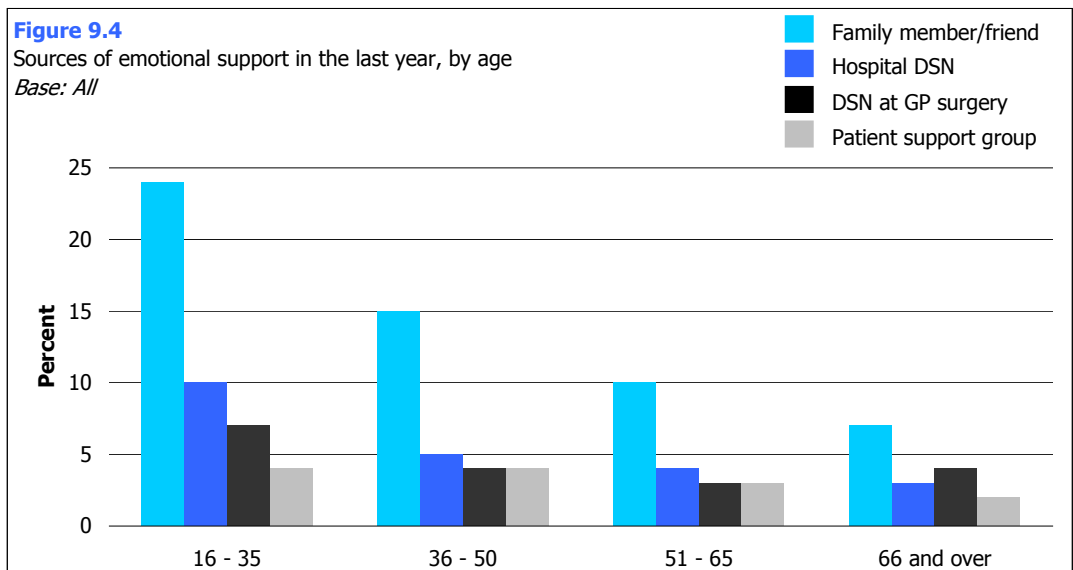
Differences existed in terms of emotional support received by type of diabetes. Respondents with Type 2 diabetes were more likely to report receiving emotional support from a doctor, either at hospital or the local GP surgery than Type 1 respondents. Eighteen percent of Type 2 respondents had been supported by a

hospital doctor, compared with 9% of those with Type 1. Similarly, 17% of respondents with Type 2 diabetes had received support from a doctor at the GP surgery, compared with 12% of Type 1 respondents. Respondents with Type 1 diabetes were also more likely to have received emotional support from a family member or friend (15%, compared with 10% of Type 2 respondents) or a DSN either at the hospital or local GP surgery.

Patterns also emerged when examining types of emotional support by age. Older respondents were more likely to receive support from doctors (either at hospital or the local GP surgery) and the local practice nurse than younger respondents.



Younger respondents were far more likely to report receiving emotional support from a friend or family member (24% compared with 7% of respondents aged 66 and over). Younger respondents were also more likely to have received emotional support from a specialist diabetes nurse (at hospital or at the local GP surgery) or from patient support groups.



## 9.5 Psychological support: tables

Table 9.1

**Whether needed to see a specialist for psychological support in the last year, by diabetes type and age**

| <i>All</i>              |                  |             |              |              |              | <i>2006</i> |
|-------------------------|------------------|-------------|--------------|--------------|--------------|-------------|
| <b>Diabetes type</b>    | <b>Age group</b> |             |              |              | <b>Total</b> |             |
|                         | 16-35            | 36-50       | 51-65        | 66 and over  |              |             |
|                         | %                | %           | %            | %            | %            |             |
| Type 1                  | 9                | 8           | 5            | 4            | 7            |             |
| Type 2                  | 8                | 6           | 3            | 2            | 3            |             |
| <b>Total</b>            | <b>8</b>         | <b>6</b>    | <b>3</b>     | <b>2</b>     | <b>3</b>     |             |
| <i>Bases</i>            |                  |             |              |              |              |             |
| <i>Weighted bases</i>   |                  |             |              |              |              |             |
| Type 1                  | 1800             | 2636        | 1808         | 1180         | 7424         |             |
| Type 2                  | 653              | 6651        | 18459        | 26061        | 51824        |             |
| <b>Total</b>            | <b>2517</b>      | <b>9650</b> | <b>22004</b> | <b>31861</b> | <b>66033</b> |             |
| <i>Unweighted bases</i> |                  |             |              |              |              |             |
| Type 1                  | 1631             | 2365        | 1874         | 1236         | 7106         |             |
| Type 2                  | 535              | 5558        | 19216        | 26914        | 52225        |             |
| <b>Total</b>            | <b>2219</b>      | <b>8241</b> | <b>22916</b> | <b>32769</b> | <b>66147</b> |             |

Table 9.2

**Whether needed to see a specialist for psychological support in the last year, by diabetes type and sex**

| <i>All</i>              |              |              |              | <i>2006</i> |
|-------------------------|--------------|--------------|--------------|-------------|
| <b>Diabetes type</b>    | <b>Sex</b>   |              | <b>Total</b> |             |
|                         | Male         | Female       |              |             |
|                         | %            | %            | %            |             |
| Type 1                  | 6            | 9            | 7            |             |
| Type 2                  | 3            | 3            | 3            |             |
| <b>Total</b>            | <b>3</b>     | <b>3</b>     | <b>3</b>     |             |
| <i>Bases</i>            |              |              |              |             |
| <i>Weighted bases</i>   |              |              |              |             |
| Type 1                  | 4157         | 3241         | 7424         |             |
| Type 2                  | 28859        | 22799        | 51824        |             |
| <b>Total</b>            | <b>36081</b> | <b>29725</b> | <b>66033</b> |             |
| <i>Unweighted bases</i> |              |              |              |             |
| Type 1                  | 3826         | 3268         | 7106         |             |
| Type 2                  | 29866        | 22270        | 52225        |             |
| <b>Total</b>            | <b>36944</b> | <b>29087</b> | <b>66147</b> |             |

**Table 9.3****Whether needed to see a specialist for psychological support in the last year, by sex and age**

*All* *2006*

| <b>Sex</b>              | <b>Age group</b> |             |              |                  | <b>Total</b> |
|-------------------------|------------------|-------------|--------------|------------------|--------------|
|                         | 16-35<br>%       | 36-50<br>%  | 51-65<br>%   | 66 and over<br>% |              |
| Men                     | 7                | 6           | 3            | 2                | 3            |
| Women                   | 10               | 7           | 4            | 2                | 3            |
| <b>Total</b>            | <b>8</b>         | <b>6</b>    | <b>3</b>     | <b>2</b>         | <b>3</b>     |
| <i>Bases</i>            |                  |             |              |                  |              |
| <i>Weighted bases</i>   |                  |             |              |                  |              |
| Men                     | 1293             | 5579        | 13011        | 16198            | 36081        |
| Women                   | 1221             | 4040        | 8919         | 15545            | 29725        |
| <b>Total</b>            | <b>2517</b>      | <b>9650</b> | <b>22004</b> | <b>31861</b>     | <b>66033</b> |
| <i>Unweighted bases</i> |                  |             |              |                  |              |
| Men                     | 1059             | 4493        | 13515        | 17876            | 36944        |
| Women                   | 1159             | 3736        | 9359         | 14833            | 29087        |
| <b>Total</b>            | <b>2219</b>      | <b>8241</b> | <b>22916</b> | <b>32769</b>     | <b>66147</b> |

**Table 9.4****Whether able to see a specialist for psychological support in the last year, by diabetes type and age**

*All who needed to see a specialist for psychological support* *2006*

| <b>Diabetes type</b>    | <b>Age group</b> |            |            |                  | <b>Total</b> |
|-------------------------|------------------|------------|------------|------------------|--------------|
|                         | 16-35<br>%       | 36-50<br>% | 51-65<br>% | 66 and over<br>% |              |
| Type 1                  | 52               | 51         | 54         | 67               | 53           |
| Type 2                  | 57               | 48         | 50         | 57               | 52           |
| <b>Total</b>            | <b>53</b>        | <b>50</b>  | <b>50</b>  | <b>59</b>        | <b>53</b>    |
| <i>Bases</i>            |                  |            |            |                  |              |
| <i>Weighted bases</i>   |                  |            |            |                  |              |
| Type 1                  | 155              | 210        | 90         | 43               | 498          |
| Type 2                  | 31               | 348        | 534        | 413              | 1325         |
| <b>Total</b>            | <b>192</b>       | <b>585</b> | <b>658</b> | <b>525</b>       | <b>1960</b>  |
| <i>Unweighted bases</i> |                  |            |            |                  |              |
| Type 1                  | 142              | 182        | 88         | 39               | 451          |
| Type 2                  | 36               | 268        | 512        | 395              | 1211         |
| <b>Total</b>            | <b>183</b>       | <b>469</b> | <b>636</b> | <b>496</b>       | <b>1784</b>  |



**Table 9.5****Whether able to see a specialist for psychological support in the last year, by diabetes type and sex***All who needed to see a specialist for psychological support* 2006

|                         | <b>Sex</b> |             | Total<br>% |
|-------------------------|------------|-------------|------------|
|                         | Male<br>%  | Female<br>% |            |
| Type 1                  | 53         | 53          | 53         |
| Type 2                  | 54         | 50          | 52         |
| Total                   | 54         | 51          | 53         |
| <i>Bases</i>            |            |             |            |
| <i>Weighted bases</i>   |            |             |            |
| Type 1                  | 218        | 280         | 498        |
| Type 2                  | 724        | 601         | 1325       |
| Total                   | 999        | 961         | 1960       |
| <i>Unweighted bases</i> |            |             |            |
| Type 1                  | 191        | 260         | 451        |
| Type 2                  | 640        | 571         | 1211       |
| Total                   | 887        | 897         | 1784       |

**Table 9.6****Who respondents received emotional support from in the last year, by diabetes type\****All* 2006

| In the last 12 months, have you received any emotional support from any of the following, to help you cope with your diabetes? | <b>Diabetes type</b> |             |            | Total<br>% |
|--|----------------------|-------------|------------|------------|
|  | Type 1<br>%          | Type 2<br>% | Total<br>% |            |
| Specialist consultant doctor at hospital   | 9                    | 18          | 17         |            |
| Doctor at local GP surgery   | 12                   | 17          | 16         |            |
| Nurse at local GP surgery  | 6                    | 11          | 11         |            |
| Family member or friend  | 15                   | 10          | 10         |            |
| Specialist diabetes nurse at hospital  | 10                   | 4           | 4          |            |
| Specialist diabetes nurse at local GP surgery  | 6                    | 3           | 4          |            |
| Patient support group  | 2                    | 3           | 3          |            |
| Counsellor or social worker  | 2                    | 1           | 1          |            |
| Telephone helpline   | 1                    | 1           | 1          |            |
| Community link worker  | 0                    | 0           | 0          |            |
| Other people with diabetes (other than support group)  | 0                    | 0           | 0          |            |
| Other  | 2                    | 1           | 1          |            |
| None of these  | 19                   | 20          | 19         |            |
| Have not needed emotional support  | 43                   | 46          | 45         |            |
| <i>Weighted bases</i>  | 7589                 | 53215       | 68285      |            |
| <i>Unweighted bases</i>  | 7255                 | 53561       | 68337      |            |

\*Respondents were asked to tick all sources of emotional support and thus percentages will total more than 100.

**Table 9.7****Whether received emotional support in the last year, by age\****All**2006*

|   | Age group   |             |              |                     | Total<br>%   |
|---|-------------|-------------|--------------|---------------------|--------------|
|   | 16-35<br>%  | 36-50<br>%  | 51-65<br>%   | 66 and<br>over<br>% |              |
| Specialist consultant doctor at hospital              | 9           | 15          | 16           | 19                  | 17           |
| Doctor at local GP surgery                            | 13          | 15          | 16           | 17                  | 16           |
| Nurse at local GP surgery                             | 6           | 9           | 10           | 12                  | 11           |
| Family member or friend                               | 24          | 15          | 10           | 7                   | 10           |
| Specialist diabetes nurse at hospital                 | 10          | 5           | 4            | 3                   | 4            |
| Specialist diabetes nurse at local GP surgery         | 7           | 4           | 3            | 4                   | 4            |
| Patient support group                                 | 4           | 4           | 3            | 2                   | 3            |
| Counsellor or social worker                           | 2           | 1           | 1            | 1                   | 1            |
| Telephone helpline                                    | 0           | 1           | 1            | 1                   | 1            |
| Community link worker                                 | 1           | 0           | 0            | 0                   | 0            |
| Other people with diabetes (other than support group) | 0           | 0           | 0            | 0                   | 0            |
| Other   | 2           | 1           | 1            | 1                   | 1            |
| None of these   | 18          | 22          | 20           | 18                  | 19           |
| Have not needed emotional support                     | 39          | 39          | 44           | 48                  | 45           |
| Weighted bases  | 2543        | 9829        | 22507        | 33406               | 68285        |
| <i>Unweighted bases</i>                               | <i>2244</i> | <i>8381</i> | <i>23404</i> | <i>34306</i>        | <i>68337</i> |

\*Respondents were asked to tick all sources of emotional support and thus percentages will total more than 100.

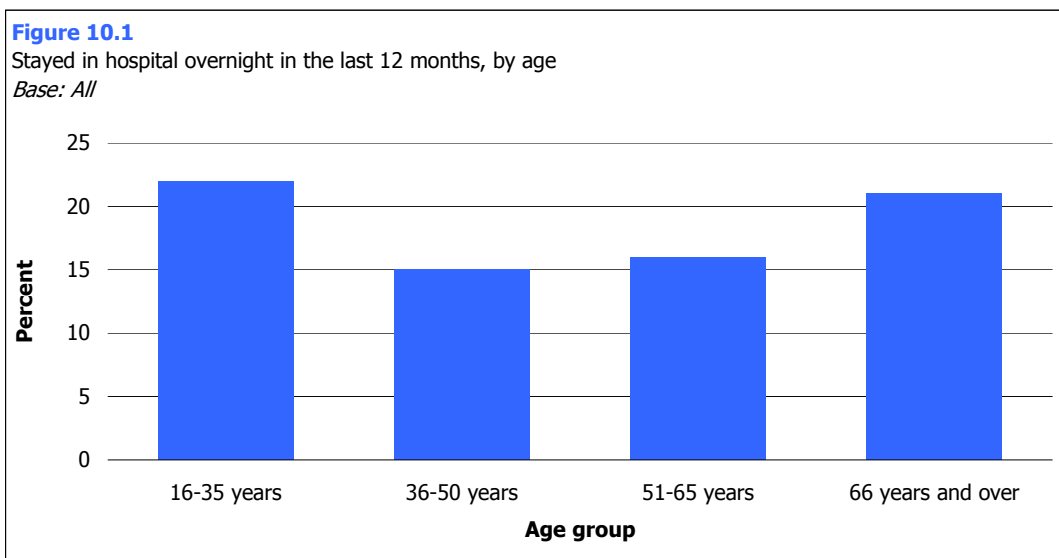
## 10 STAYS IN HOSPITAL

### 10.1 Introduction

The National Service Framework (NSF)<sup>25</sup> for diabetes highlights that people with diabetes are admitted to hospital twice as often and stay twice as long as those without diabetes, and that up to 16% of hospital beds are occupied by people with diabetes at any one time. Standard 8 of the NSF for diabetes states that '*...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.*' The survey asked a series of questions aimed at assessing the extent to which this standard was met. In line with a previous qualitative study, commissioned by the Department of Health<sup>26</sup>, we found that people with diabetes admitted to hospital reported few problems with the care they received. However, there were key differences in the experiences of service users by diabetes type, age and sex, and areas where improvement is required.

### 10.2 Stays in hospital

Service users were asked 'Have you stayed in hospital overnight in the last 12 months for any reason?' Less than a fifth (19%) had stayed in hospital overnight, but this varied with age. A higher proportion of those in the youngest (22% aged 16-35) and oldest (21% aged 66 and over) age groups said they had stayed in hospital in the last 12 months (compared with 15% aged 36-50 and 16% aged 51-65). In addition, a slightly higher proportion of women (20%) than men (18%) had stayed in hospital overnight. Those respondents who had stayed in hospital overnight were then asked a series of questions about their stay in hospital.

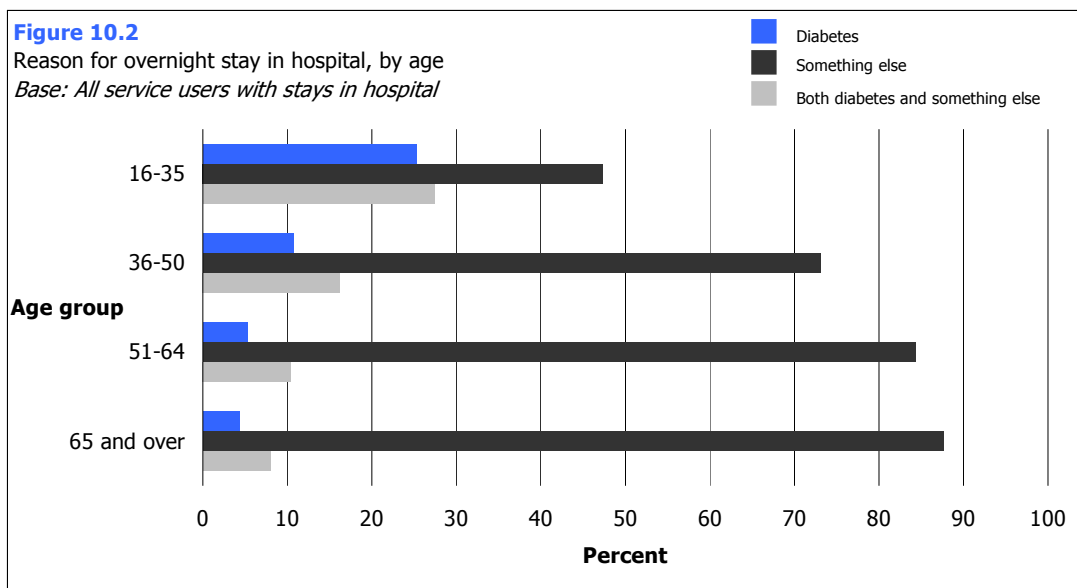


<sup>25</sup> National Service Framework for Diabetes. Department of Health (2001)

<sup>26</sup> Listening to Diabetes Service Users: Qualitative findings for the Diabetes National Service Framework. Hiscock J, Legard R, Snape, D. London: National Centre for Social Research (2001).

### 10.3 Reason for admission and length of stay

Respondents were asked why they had stayed in hospital overnight. Most overnight hospital stays were not related to diabetes. Only 6% said that their stay was related to 'diabetes', 11% said it was related to 'both diabetes and something else' and 83% said it was related to 'something else'. Younger respondents were more likely than older respondents to be admitted for something related to their diabetes. Twenty five percent of those age 16-35, compared with 4% aged 66 and over, were admitted for diabetes only; and 27% of those aged 16-35, compared with 8% of those aged 66 years and over, were admitted for something related to both diabetes and something else.



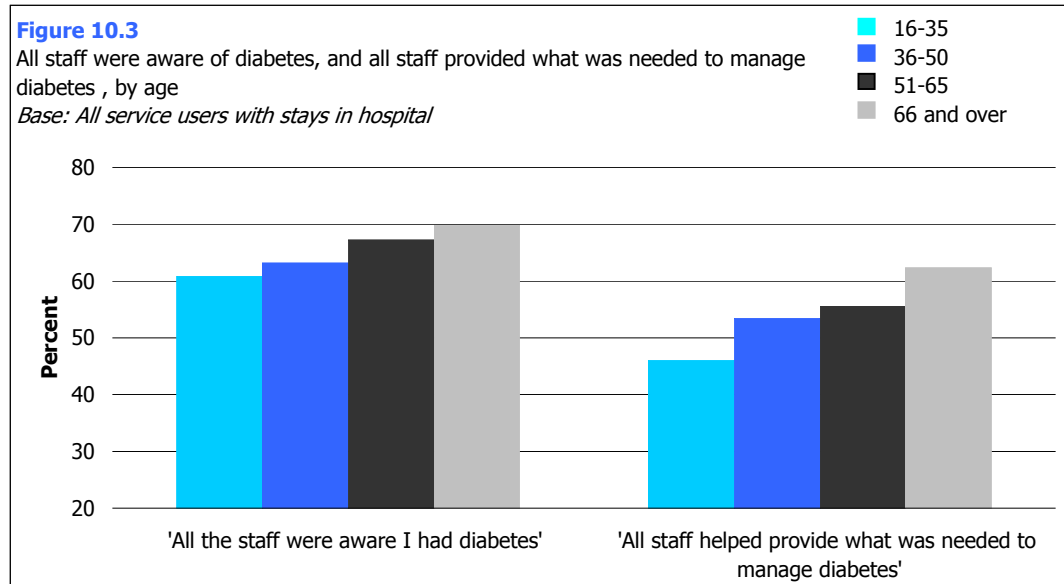
The questionnaire also asked about length of stay in hospital. Thirty eight percent had stayed more than 5 nights, 16% had stayed 4 to 5 nights, 21% had stayed 2 to 3 nights and 25% had stayed just 1 night. Older service users tended to stay for longer (45% aged 66 and over reported staying 5 nights or longer, compared with 23% of those aged 16-35). In addition, a higher proportion of women than men had stayed in hospital for 5 nights or longer (40% and 36% respectively).

### 10.4 Hospital staff

Service users were asked whether, during their most recent stay in hospital, the staff who cared for them were aware that they had diabetes. Sixty eight percent said all of the staff were aware, 19% said most staff were aware, 10% said some were aware, and 3% said none were aware. Differences were found by age, a higher proportion of older respondents said 'all of the staff were aware' (70% among those aged 66 years or older, compared with 61% of those aged 16-35). Men were slightly more likely than women to say that 'all the staff were aware', 69% of men compared with 66% of women.

Service users were asked about whether the staff who cared for them during their stay provided what they needed to manage their diabetes. Fifty eight percent said

that 'all of the staff helped provide what I needed', 19% said 'most of the staff', 13% said 'some', and 9% said 'none of the staff provided what I needed'. Again, this varied by age, with older respondents being more likely to say that 'all of the staff provided what I needed' (62% of those aged 66 and over, compared with 46% aged 16-35). Men were also slightly more likely than women to say that 'all the staff provided what I needed' (figures were 60% and 57% respectively).



The NSF for diabetes recognises that liaison with a specialist diabetes team during admission is important to 'prevent prolonged hospital admissions, complications and delayed discharge.' Over three quarters (76%) of service users who had stayed in hospital said that a diabetes specialist did not visit them during their stay, but this varied by diabetes type, age and sex. Service users with Type 1 diabetes were more likely to be visited by a member of the diabetes specialist team than those with Type 2 diabetes (42% and 21% respectively). Similarly, a higher proportion of younger (47% of those aged 16-35) than older service users (22% of those aged 66 and over) said that a diabetes specialist had visited them (although this finding is likely to be related to diabetes type, as those with Type 1 diabetes tend to be younger). Men were also slightly more likely than women to say that they were visited by a specialist during their stay in hospital (25% men compared with 22% of women).

Service users who were visited by someone from the hospital diabetes specialist team were more likely to say that all of the staff helped provide what they needed to help them manage their own diabetes (67%, compared with 55% who were not seen by a specialist).

## 10.5 Diabetes management in hospital

As already highlighted it is important that during hospital stays, wherever possible, service users should be involved in managing their diabetes. Respondents were asked 'During your most recent stay in hospital overnight, how often were you able to take your medication in the way you wanted to?' Eighty percent said always/almost always, 11% said sometimes, and 9% said rarely/never. Older

respondents were more likely to say that they were able to take their medication in the way they wanted to always/almost always (84% aged 66 or over compared with 64% aged 16-35). Similarly, those with Type 2 diabetes were more likely to say that they were always/almost always able to take their diabetes medication the way they wanted to (81%, compared with 74% of those with Type 1).

Overall, 66% of service users said that the choice of food was always/almost always suitable for their diabetes, 23% said it was suitable sometimes and 11% said rarely/never. Again, there were clear differences by age, with older respondents being more likely to say the food choices were always/almost always suitable for their diabetes (71% aged 66 and over, compared with 49% aged 16-35). Sixty nine percent of respondents said that the timing of the meals were suitable for their diabetes always/almost always, 22% said sometimes, and 9% said rarely/never. Older respondents also tended to say that the timing of the meals was always/almost always suitable for their diabetes, 74% of those aged 66 years and over compared with 53% of those aged 16-35.

## 10.6 Stays in hospital: tables

### Table 10.1

#### Stayed in hospital overnight for any reason, by age

*All* *2006*

| Whether stayed in hospital overnight | Age group   |             |              |                     | Total        |
|--------------------------------------|-------------|-------------|--------------|---------------------|--------------|
|                                      | 16-35<br>%  | 36-50<br>%  | 51-65<br>%   | 66 and<br>over<br>% |              |
| Yes                                  | 22          | 15          | 16           | 21                  | 19           |
| No                                   | 78          | 85          | 84           | 79                  | 81           |
| <i>Weighted bases</i>                | <i>2516</i> | <i>9646</i> | <i>22081</i> | <i>31977</i>        | <i>66222</i> |
| <i>Unweighted bases</i>              | <i>2218</i> | <i>8244</i> | <i>22981</i> | <i>32860</i>        | <i>66305</i> |

### Table 10.2

#### Stayed in hospital overnight for any reason, by sex

*All* *2006*

| Whether stayed in hospital overnight | Sex          |              | Total        |
|--------------------------------------|--------------|--------------|--------------|
|                                      | Male<br>%    | Female<br>%  |              |
| Yes                                  | 18           | 20           | 19           |
| No                                   | 82           | 80           | 81           |
| <i>Weighted bases</i>                | <i>36293</i> | <i>29926</i> | <i>66222</i> |
| <i>Unweighted bases</i>              | <i>37071</i> | <i>29232</i> | <i>66305</i> |

### Table 10.3

#### Reason for most recent hospital stay, by age

*All those with an overnight stay in hospital* *2006*

| Reason for most recent stay in hospital | Age group  |             |             |                     | Total        |
|---|------------|-------------|-------------|---------------------|--------------|
|   | 16-35<br>% | 36-50<br>%  | 51-65<br>%  | 66 and<br>over<br>% |              |
| Diabetes                                | 25         | 11          | 5           | 4                   | 6            |
| Something else                          | 47         | 73          | 84          | 88                  | 83           |
| Both diabetes and something else        | 27         | 16          | 10          | 8                   | 11           |
| <i>Weighted bases</i>                   | <i>545</i> | <i>1445</i> | <i>3443</i> | <i>6493</i>         | <i>11926</i> |
| <i>Unweighted bases</i>                 | <i>487</i> | <i>1262</i> | <i>3551</i> | <i>6688</i>         | <i>11989</i> |

**Table 10.4****Reason for most recent hospital stay, by sex***All those with an overnight stay in hospital*

2006

| Reason for most recent stay in hospital | Sex         |             | Total %      |
|---|-------------|-------------|--------------|
|   | Male %      | Female %    |              |
| Diabetes                                | 6           | 6           | 6            |
| Something else                          | 83          | 83          | 83           |
| Both diabetes and something else        | 10          | 11          | 11           |
| <i>Weighted bases</i>                   | <i>6274</i> | <i>5652</i> | <i>11926</i> |
| <i>Unweighted bases</i>                 | <i>6481</i> | <i>5507</i> | <i>11989</i> |

**Table 10.5****Number of nights stayed in hospital for most recent admission, by age***All those with an overnight stay in hospital*

2006

| Number of nights        | Age group  |             |             |               | Total %      |
|-------------------------|------------|-------------|-------------|---------------|--------------|
|                         | 16-35 %    | 36-50 %     | 51-65 %     | 66 and over % |              |
| One night               | 26         | 32          | 28          | 21            | 25           |
| 2 to 3 nights           | 30         | 27          | 23          | 19            | 21           |
| 4 to 5 nights           | 21         | 15          | 17          | 16            | 16           |
| More than 5 nights      | 23         | 25          | 32          | 45            | 38           |
| <i>Weighted bases</i>   | <i>553</i> | <i>1449</i> | <i>3473</i> | <i>6538</i>   | <i>12014</i> |
| <i>Unweighted bases</i> | <i>494</i> | <i>1262</i> | <i>3582</i> | <i>6769</i>   | <i>12108</i> |

**Table 10.6****Number of nights stayed in hospital for most recent admission, by sex***All those with an overnight stay in hospital*

2006

| Number of nights        | Sex         |             | Total %      |
|-------------------------|-------------|-------------|--------------|
|                         | Male %      | Female %    |              |
| One night               | 26          | 23          | 25           |
| 2 to 3 nights           | 22          | 21          | 21           |
| 4 to 5 nights           | 16          | 16          | 16           |
| More than 5 nights      | 36          | 40          | 38           |
| <i>Weighted bases</i>   | <i>6328</i> | <i>5685</i> | <i>12014</i> |
| <i>Unweighted bases</i> | <i>6559</i> | <i>5548</i> | <i>12108</i> |



**Table 10.7****Whether staff in hospital were aware of diabetes, by age***All those with an overnight stay in hospital*

2006

| Whether hospital staff were aware of diabetes | Age group  |             |             |               | Total %      |
|---|------------|-------------|-------------|---------------|--------------|
|   | 16-35 %    | 36-50 %     | 51-65 %     | 66 and over % |              |
| All of the staff were aware                   | 61         | 63          | 67          | 70            | 68           |
| Most of the staff were aware                  | 24         | 21          | 19          | 18            | 19           |
| Some of the staff were aware                  | 13         | 13          | 11          | 9             | 10           |
| None of the staff were aware                  | 2          | 3           | 3           | 2             | 3            |
| <i>Weighted bases</i>                         | <i>547</i> | <i>1382</i> | <i>3300</i> | <i>6221</i>   | <i>11450</i> |
| <i>Unweighted bases</i>                       | <i>489</i> | <i>1214</i> | <i>3421</i> | <i>6448</i>   | <i>11573</i> |

**Table 10.8****Whether staff in hospital were aware of diabetes, by sex***All those with an overnight stay in hospital*

2006

| Whether hospital staff were aware of diabetes | Sex         |             | Total %      |
|---|-------------|-------------|--------------|
|   | Male %      | Female %    |              |
| All of the staff were aware                   | 69          | 66          | 68           |
| Most of the staff were aware                  | 18          | 20          | 19           |
| Some of the staff were aware                  | 10          | 11          | 10           |
| None of the staff were aware                  | 3           | 3           | 3            |
| <i>Weighted bases</i>                         | <i>6006</i> | <i>5444</i> | <i>11450</i> |
| <i>Unweighted bases</i>                       | <i>6247</i> | <i>5326</i> | <i>11573</i> |

**Table 10.9****Whether staff in hospital provided what was needed to manage diabetes, by age***All those with an overnight stay in hospital*

2006

| Whether hospital staff helped provide what was needed to manage diabetes | Age group  |             |             |               | Total %      |
|--|------------|-------------|-------------|---------------|--------------|
|  | 16-35 %    | 36-50 %     | 51-65 %     | 66 and over % |              |
| All of the staff helped provide what I needed                            | 46         | 53          | 56          | 62            | 58           |
| Most of the staff helped provide what I needed                           | 24         | 18          | 19          | 19            | 19           |
| Some of the staff helped provide what I needed                           | 20         | 16          | 14          | 11            | 13           |
| None of the staff helped provide what I needed                           | 11         | 13          | 11          | 8             | 9            |
| <i>Weighted bases</i>  | <i>517</i> | <i>1319</i> | <i>3018</i> | <i>5409</i>   | <i>10265</i> |
| <i>Unweighted bases</i>  | <i>463</i> | <i>1149</i> | <i>3136</i> | <i>5571</i>   | <i>10320</i> |

**Table 10.10****Whether staff in hospital provided what was needed to manage diabetes, by sex***All those with an overnight stay in hospital* 2006

| Whether hospital staff helped provided what was needed to manage diabetes | Sex         |             | Total %      |
|---|-------------|-------------|--------------|
|   | Male %      | Female %    |              |
| All of the staff helped provide what I needed                             | 60          | 57          | 58           |
| Most of the staff helped provide what I needed                            | 19          | 19          | 19           |
| Some of the staff helped provide what I needed                            | 12          | 14          | 13           |
| None of the staff helped provide what I needed                            | 9           | 10          | 9            |
| <i>Weighted bases</i>   | <i>5450</i> | <i>4814</i> | <i>10265</i> |
| <i>Unweighted bases</i>   | <i>5612</i> | <i>4707</i> | <i>10320</i> |

**Table 10.11****Visited by hospital diabetes specialist team, by diabetes type***All those with an overnight stay in hospital* 2006

| Visited by hospital diabetes specialist team | Diabetes type |             | Total %      |
|--|---------------|-------------|--------------|
|  | Type 1 %      | Type 2 %    |              |
| Yes  | 42            | 21          | 24           |
| No   | 58            | 79          | 76           |
| <i>Weighted bases</i>                        | <i>1583</i>   | <i>8511</i> | <i>11146</i> |
| <i>Unweighted bases</i>                      | <i>1538</i>   | <i>8623</i> | <i>11235</i> |

**Table 10.12****Visited by hospital diabetes specialist team, by age***All those with an overnight stay in hospital* 2006

| Visited by hospital diabetes specialist team | Age group  |             |             |               | Total %      |
|--|------------|-------------|-------------|---------------|--------------|
|  | 16-35 %    | 36-50 %     | 51-65 %     | 66 and over % |              |
| Yes  | 47         | 27          | 22          | 22            | 24           |
| No   | 53         | 73          | 78          | 78            | 76           |
| <i>Weighted bases</i>                        | <i>545</i> | <i>1384</i> | <i>3289</i> | <i>5926</i>   | <i>11146</i> |
| <i>Unweighted bases</i>                      | <i>488</i> | <i>1223</i> | <i>3383</i> | <i>6140</i>   | <i>11235</i> |

**Table 10.13****Visited by hospital diabetes specialist team, by sex**

*All those with an overnight stay in hospital* 2006

| Visited by hospital diabetes specialist team | Sex         |             | Total %      |
|--|-------------|-------------|--------------|
|  | Men %       | Women %     |              |
| Yes  | 25          | 22          | 24           |
| No   | 75          | 78          | 76           |
| <i>Weighted bases</i>                        | <i>5878</i> | <i>5267</i> | <i>11146</i> |
| <i>Unweighted bases</i>                      | <i>6074</i> | <i>5160</i> | <i>11235</i> |

**Table 10.14****Staff provided what needed to manage diabetes , by visited by hospital diabetes specialist team**

*All those with an overnight stay in hospital* 2006

| Whether hospital staff helped provided what was needed to manage your diabetes | Visited by hospital diabetes specialist team |             | Total %      |
|--|--|-------------|--------------|
|  | Yes %  | No %        |              |
| All of the staff helped provide what I needed                                  | 67   | 55          | 58           |
| Most of the staff helped provide what I needed                                 | 19   | 19          | 19           |
| Some of the staff helped provide what I needed                                 | 11   | 14          | 13           |
| None of the staff helped provide what I needed                                 | 2  | 12          | 9            |
| <i>Weighted bases</i>  | <i>2407</i>                                  | <i>7208</i> | <i>10265</i> |
| <i>Unweighted bases</i>  | <i>2464</i>                                  | <i>7224</i> | <i>10320</i> |

**Table 10.15****How often service users were able to take medication way wanted to in hospital, by age**

*All those with an overnight stay in hospital* 2006

| How often were able to take medication in the way wanted to | Age group  |             |             |               | Total %     |
|---|------------|-------------|-------------|---------------|-------------|
|   | 16-35 %    | 36-50 %     | 51-65 %     | 66 and over % |             |
| Always or almost always                                     | 64         | 72          | 79          | 84            | 80          |
| Sometimes   | 24         | 16          | 11          | 9             | 11          |
| Rarely or never   | 12         | 13          | 9           | 7             | 9           |
| <i>Weighted bases</i>                                       | <i>482</i> | <i>1243</i> | <i>2808</i> | <i>5141</i>   | <i>9673</i> |
| <i>Unweighted bases</i>                                     | <i>429</i> | <i>1056</i> | <i>2898</i> | <i>5258</i>   | <i>9641</i> |

**Table 10.16****How often service users were able to take medication way wanted to in hospital, by diabetes type***All those with an overnight stay in hospital* 2006

| How often were able to take medication in the way wanted to | Diabetes type |             |  | Total %     |
|---|---------------|-------------|--|-------------|
|   | Type 1        | Type 2      |  |             |
|   | %             | %           |  |             |
| Always or almost always                                     | 74            | 81          |  | 80          |
| Sometimes   | 17            | 10          |  | 11          |
| Rarely or never   | 9             | 9           |  | 9           |
| <i>Weighted bases</i>                                       | <i>1506</i>   | <i>7309</i> |  | <i>9673</i> |
| <i>Unweighted bases</i>                                     | <i>1451</i>   | <i>7317</i> |  | <i>9641</i> |

**Table 10.17****How often there was a suitable choice of food in hospital, by age***All those with an overnight stay in hospital* 2006

| How often was choice of food suitable for diabetes | Age group  |             |             |             | Total %      |
|--|------------|-------------|-------------|-------------|--------------|
|  | 16-35      | 36-50       | 51-65       | 66 and over |              |
|  | %          | %           | %           | %           |              |
| Always or almost always                            | 49         | 58          | 64          | 71          | 66           |
| Sometimes  | 34         | 26          | 24          | 21          | 23           |
| Rarely or never                                    | 17         | 16          | 12          | 9           | 11           |
| <i>Weighted bases</i>                              | <i>512</i> | <i>1294</i> | <i>3060</i> | <i>5796</i> | <i>10662</i> |
| <i>Unweighted bases</i>                            | <i>453</i> | <i>1130</i> | <i>3178</i> | <i>5982</i> | <i>10744</i> |

**Table 10.18****How often the timing of meals in hospital were suitable, by age***All those with an overnight stay in hospital* 2006

| How often was timing of meals suitable for diabetes | Age group  |             |             |             | Total %      |
|---|------------|-------------|-------------|-------------|--------------|
|   | 16-35      | 36-50       | 51-65       | 66 and over |              |
|   | %          | %           | %           | %           |              |
| Always or almost always                             | 53         | 59          | 65          | 74          | 69           |
| Sometimes   | 34         | 28          | 24          | 20          | 22           |
| Rarely or never                                     | 13         | 13          | 11          | 6           | 9            |
| <i>Weighted bases</i>                               | <i>511</i> | <i>1262</i> | <i>3016</i> | <i>5635</i> | <i>10425</i> |
| <i>Unweighted bases</i>                             | <i>453</i> | <i>1105</i> | <i>3118</i> | <i>5821</i> | <i>10498</i> |

## 11 ASSOCIATIONS WITH EDUCATION AND DEPRIVATION

### 11.1 Introduction

The National Survey of People with Diabetes provides a unique data source to explore the experiences of the health services of people from different backgrounds. In this chapter we describe some of the differing experiences of people with diabetes according to socioeconomic variables, and then ethnicity.

Irrespective of the method of classification used for socioeconomic status, a strong evidence base has established that the incidence of diabetes is associated with socioeconomic factors, with those who are more deprived being at greatest risk<sup>27 28</sup>. However, it has been noted that the evidence regarding the relationship between socioeconomic status and health outcomes for those with diabetes is conflicting<sup>29</sup>, with the more socially disadvantaged not always experiencing worse outcomes or provision of services. Our survey provided two estimates of socioeconomic circumstances: the age at which respondents left full-time education, and general practice level Index of Multiple Deprivation (IMD).

This chapter presents the profile of the sample in terms of these two indicators, and then goes on to look at their association with the survey results.

We analysed a number of key survey questions (agreed upon through consultation with experts and colleagues) and their association with the age at which left full-time education and QIMD (see appendix E for full list of questions and section 11.7 for the result tables).

The findings suggest that there were differences in the experiences of service users according to age at which they left education and QIMD, but, as with previous research, the direction of the relationship was not always clear, and sometimes results were conflicting. This may in part be because the two measures in our survey provided only a broad estimate of respondents' socioeconomic circumstances, and because these measures are associated differently with other factors such as age, sex and ethnic background (which are themselves associated with health outcomes).

The purpose of this report is to provide a descriptive overview; unravelling the complex role of socioeconomic factors would require multivariate analysis. Nevertheless, our two indicators of socioeconomic circumstance do offer some useful insights into the differing experience of diabetes service users.

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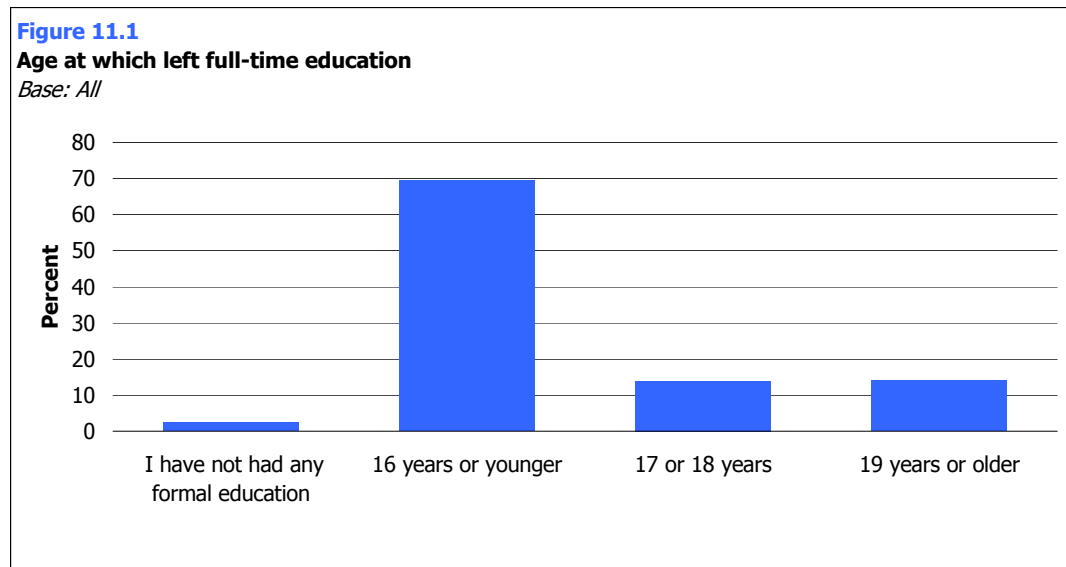
<sup>27</sup> Sproston K and Primatesta P (eds). Health Survey for England 2003. Summary of key findings. (2004). Department of Health. The Stationery Office: London.

<sup>28</sup> Key health statistics from General practice, ONS (2000)

<sup>29</sup> Chaturvedi N (2004). Commentary: Socioeconomic status and diabetes outcomes; what might we expect and why don't we find it? . *International Journal of Epidemiology*, 33: 871-873.

## 11.2 Age respondents left full-time education

There is a clear link between the age at which an individual leaves formal education and socioeconomic disadvantage<sup>30</sup>. Our survey asked respondents 'How old were you when you left full-time education?' Ninety four percent answered this question (less than 1% were still in full time education and so are excluded from this analysis). Seventy percent of service users had left full-time education aged 16 or younger, 14% aged 17 or 18, 14% aged 19 or over and 2% did not have any formal education.



Of those who stayed in education until at least the age of 19, a higher proportion were men (63%) than women (37%), and of those who said they did not have any formal education 60% were women. Older respondents tended to have left education at a younger age. The mean age of respondents who left at 16 or younger was 66, and the mean age for those with no formal education was 63, whereas the mean age for those who left school at 19 or older was 57.

A higher proportion of those with Type 2 diabetes had left school aged 16 or younger (71% compared with 56% of those with Type 1) but this is likely to be related to age (those with Type 2 tended to be older than those with Type 1).

Respondents from a minority ethnic group were more likely than white respondents to have received no formal education; but they were also more likely to have stayed on at school until at least 19 years of age. The percentages with no formal education were 21% of the Asian/Asian British group, 13% of the Chinese/other ethnic group, 7% of the those of Mixed ethnicity, and 6% of those who described themselves as Black/Black British. This compared with only 1% of the White group.

In contrast, White respondents were the least likely to have stayed on in education until the age of 19 (11%). This compared with 43% of those of Chinese/other origin,

<sup>30</sup> Machin S (2001). Social disadvantage and educational experiences. OECD Social, Employment and Migration Working Papers.

39% of the Asian/Asian British group, 35% of the Mixed ethnic group and 33% who were Black/Black British.

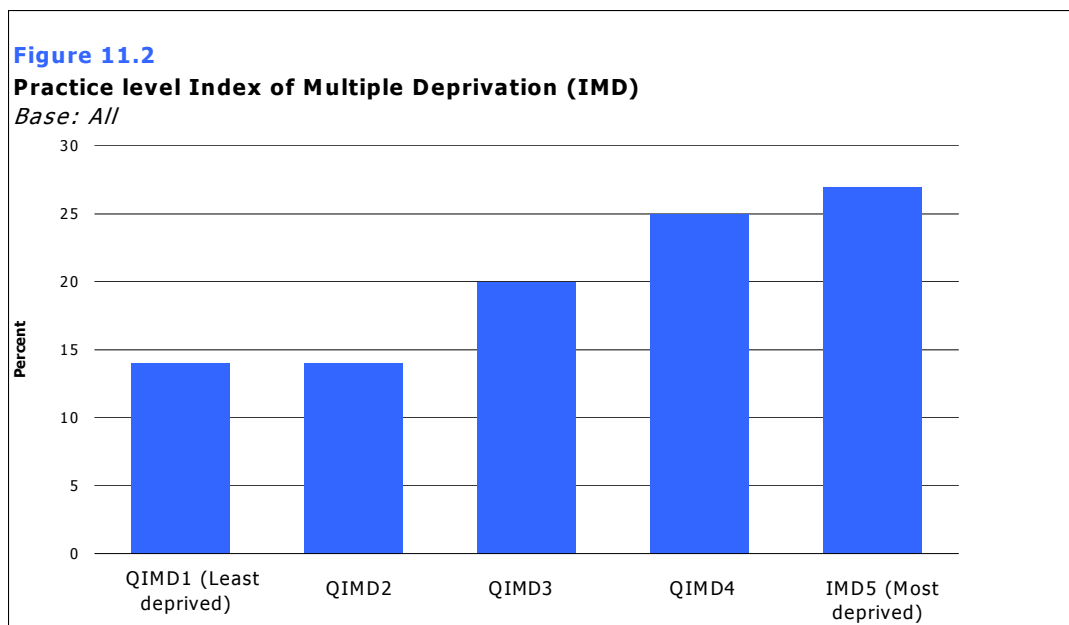
### 11.3 Index of Multiple Deprivation

The index of multiple deprivation (IMD) is produced by the Office for National Statistics (ONS) and provides an estimate of local deprivation of postcode sectors. The six deprivation domain indices used by the IMD are: income; employment; health deprivation and disability; education, skills and training; housing; and geographical access to services. Whilst the ideal measure would be to link IMD to individual respondents' postcodes, due to data protection regulations this information was not available to the diabetes survey Coordination Centre at NatCen (though it was available to PCTs and approved contractors who implemented the survey locally). The details of the GP postcode, from which the patient sample was drawn, was available to the Coordination Centre, and this is used for analysis in this chapter.

For ease of interpretation, in this report we use the quintile index of multiple deprivation (QIMD), as summarised below:

- QIMD1 (0.59>8.35): least deprived
- QIMD2 (8.35>13.72)
- QIMD3 (13.72>21.16)
- QIMD4 (21.16>34.21)
- QIMD5 (34.21>86.36): most deprived

According to the QIMD classification, 14% of respondents were in QIMD1 (least deprived), 14% were in QIMD2, 20% were in QIMD3, 25% were in QIMD4, and 27% were in QIMD5.



Men were slightly more likely to be in QIMD1 (least deprived) than in QIMD5 (most deprived) (55% and 53% respectively), though this profile was only marginally different from the sample profile of men (54% of total sample). There were no clear differences in the QIMD profiles of respondents by type of diabetes.

Black/Black British respondents were the most likely to be in the most deprived group (QIMD5): 54%, compared with 49% of Asian/Asian British, 35% of Mixed ethnicity, 31% Chinese/other ethnic group and 25% White. Correspondingly, Black/Black British respondents were the least likely to be in QIMD1 (least deprived) (3% of Black/Black British respondents, compared with 6% of Asian/Asian British, 7% of those of Mixed ethnicity, 12% Chinese/other ethnic group, and 14% White).

Whereas less educated respondents tended to be older (see table 11.1), more deprived respondents (according to QIMD) tended to be slightly younger. The mean age for QIMD 5 (most deprived) was 62, compared with a mean age of 65 for those in QIMD 1 (least deprived). This differential relationship with age is likely to be the reason why the associations between the two indicators and the survey results are sometimes conflicting.

Nevertheless, there was an association between the two socioeconomic indicators, in the direction that would be expected. Less educated respondents were more likely to be in the most deprived quintile: 56% of those with no formal education and 28% of those who left school aged 16 or younger were in QIMD 5 (most deprived) compared with 21% who left aged 17 or 18, and 23% who left aged 19 or older (see table 11.5).

#### **11.4 Check-ups**

As already mentioned, 79% of service users had their check-ups at their doctor's surgery. Service users who had left education at an earlier age tended to be most likely to have their diabetes check-up at their doctors' surgery: 82% of those who left at 16 or younger compared with 72% of those who left aged 19 or older (although this is likely to be related to respondents' age at the time of the survey). The pattern for QIMD was not as clear but suggested the opposite. Eight one percent of those in QIMD2 or QIMD3 went to their doctor's surgery, and 77% of those in QIMD5 (most deprived) did so.

According to QIMD, service users in more deprived areas tended to report having more check-ups in the last 12 months than those who were less deprived: 26% in QIMD5 (most deprived), compared with 16% in QIMD1 (least deprived), had three or more check-ups in the last year. However, the relationship was not as clear for age at which left education. Thirty-eight per cent of those who had no formal education, 20% of those who left school aged 16 or under, 18% who left aged 17 or 18, and 19% who left aged 19 or over said that they had three or more check-ups in the last year.

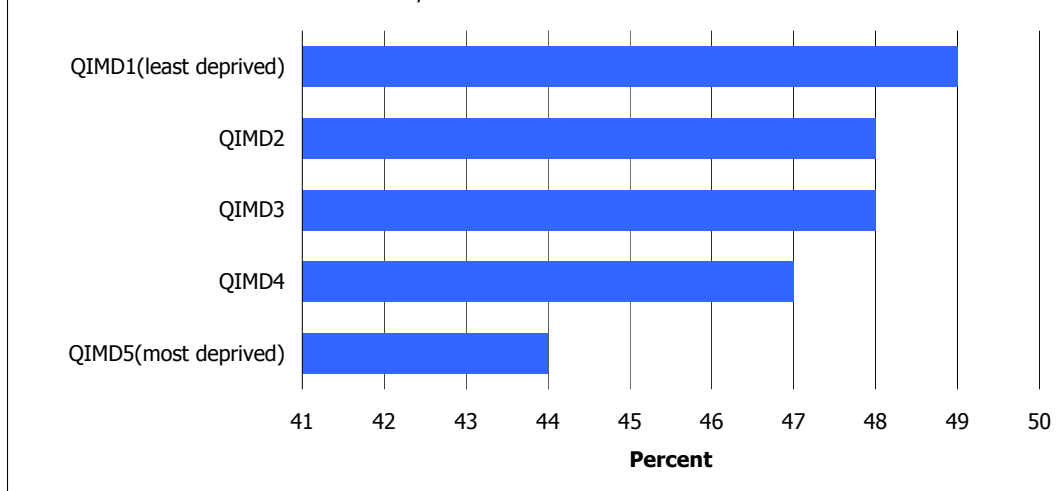
A higher proportion of service users in QIMD1 (least deprived) said that they 'almost always' agreed a plan to manage their diabetes (49% compared to 44% in QIMD5 (most deprived)). Similarly, respondents with no formal education were the least likely to agree a care plan (37%, compared with 47% who left education aged 16 or younger, and 48% who left education aged 19 years or older).



**Figure 11.3**

Always/ almost always agreed a care plan, by QIMD

Base: All who have had a diabetes check-up



## 11.5 Tests

Receiving appropriate tests is vital for monitoring the management of diabetes and for the early detection of some of the adverse consequences of diabetes. Previous research has suggested that patients from more affluent areas generally receive more frequent clinical monitoring and preventative treatments<sup>31</sup>. Our findings appeared to support this for the HbA1c test, but the opposite was found for retinography, and results were somewhat ambiguous for foot examinations.

The HbA1c test is one of the best ways to see if a person's diabetes is being well managed (see Chapter 6). Ninety one percent of the overall sample said they had this test in the last 12 months, including a higher proportion of those in the least deprived category (93%, compared with 88% of those in the most deprived). Similarly, more educated respondents were more likely to say they had a HbA1c test (93% who left education aged 19 or over, compared with 90% who left aged 16 or under, and 80% with no formal education).

Retinography is vital for detecting diabetic retinopathy (see Chapter 6). Overall, 80% of respondents reported having had retinography in the last 12 months. Respondents who left full-time education at an earlier age more likely to report this (81% of those who left aged 16 or younger, compared with 77% who left aged 19 or over). This is likely to be, at least in part, because respondents who left education early tend to be older, and older people are more likely to have retinography. No relationship was found between having retinography and QIMD.

Foot ulcers and complications can be a major concern for some people with diabetes particularly if their glucose levels are inadequately controlled. In rare cases, foot complications can result in the need for amputation, so regular examination of bare

<sup>31</sup> Edwards R, Burns JA, McElduff P, Young RJ, & New JP (2003). Variations in process and outcomes of diabetes care by socio-economic status in Salford, UK. *Diabetologia*, 46 (6): 750-759.

feet by a doctor or nurse is important. Overall, 83% said they had their bare feet examined in the last 12 months. Differences were found by both socioeconomic factors, but the findings were somewhat conflicting.

Respondents who left education at a younger age were more likely to report having their bare feet examined (85% of those who left education aged 16 or younger, compared with 79% who left education aged 19 or older). This finding is likely to be related to age - those who left education at a younger age tended to be older and older respondents were more likely to have a foot examination (see Chapter 6). However, according to QIMD, more deprived respondents were less likely to have their bare feet examined (80% of those in QIMD5 (most deprived) compared with 85% in QIMD1 (least deprived)), but again this could be related to age because the least deprived respondents tended to be slightly older.

### **11.6 Knowledge about how to manage diabetes**

Having sufficient knowledge and understanding about how food choices and physical activity can be used to manage diabetes are important for effective self-management. Our findings suggest that those who are more socially disadvantaged tended to report less knowledge about these issues.

A slightly higher proportion of those in QIMD1 (least deprived) (76%) than in QIMD5 (most deprived) (73%) said they knew enough about what they should eat to help them manage their diabetes. The pattern was less clear for age at which left education. Those who said they had no formal education were the least likely to say they knew enough (70%), but the difference was only 1 percentage point between those who left education aged 16 or younger (75%) and those who left aged 19 years or older (76%).

Similar associations emerged for knowledge about physical activity. Seventy one per cent of those in the least deprived category said they knew enough about the role of physical activity in managing their diabetes, compared with 64% of the most deprived quintile. Likewise, those who had stayed in education longer were more likely to report that they knew enough about the role of physical activity in managing their diabetes (71% of those who left aged 19 or older, compared with 67% who left aged 16 or younger and 57% with no formal education).

## 11.7 Associations with socioeconomic variables: tables

Table 11.1

## Sex, age, and probable diabetes type, by age left education

All

2006

| Sex, age and probable diabetes type | Age left education                       |                          |                     |                        | Total<br>% |
|-------------------------------------|--|--------------------------|---------------------|------------------------|------------|
|                                     | I have not had any formal education<br>% | 16 years or younger<br>% | 17 or 18 years<br>% | 19 years or older<br>% |            |
| <b>Sex</b>                          |  |                          |                     |                        |            |
| Male                                | 40                                       | 54                       | 54                  | 63                     | 54         |
| Female                              | 60                                       | 46                       | 46                  | 37                     | 46         |
| <i>Weighted bases</i>               | 1541                                     | 44563                    | 8961                | 9000                   | 68498      |
| <i>Unweighted bases</i>             | 1183                                     | 45325                    | 8980                | 8761                   | 68499      |
| <b>Age group</b>                    |  |                          |                     |                        |            |
| 16-35 years                         | 2  | 2                        | 6                   | 10                     | 4          |
| 36-50 years                         | 17                                       | 11                       | 24                  | 23                     | 14         |
| 51-65 years                         | 36                                       | 33                       | 36                  | 38                     | 33         |
| 66 years and over                   | 44                                       | 54                       | 34                  | 30                     | 49         |
| <b>Mean age</b>                     | 63                                       | 66                       | 58                  | 57                     | 63         |
| <i>Weighted bases</i>               | 1541                                     | 44563                    | 8961                | 9000                   | 68500      |
| <i>Unweighted bases</i>             | 1183                                     | 45325                    | 8980                | 8761                   | 68499      |
| <b>Probable diabetes type</b>       |  |                          |                     |                        |            |
| Type 1                              | 8  | 10                       | 18                  | 20                     | 12         |
| Type 2                              | 92                                       | 90                       | 82                  | 80                     | 88         |
| <i>Weighted bases</i>               | 1396                                     | 39365                    | 8408                | 8494                   | 60978      |
| <i>Unweighted bases</i>             | 1055                                     | 40039                    | 8388                | 8262                   | 60951      |

Table 11.2

## Age left education, by ethnic group

All

2006

| Age at which left full-time education | Ethnic group |            |                                   |                                   |   | Total<br>% |
|---------------------------------------|--------------|------------|-----------------------------------|-----------------------------------|---|------------|
|                                       | White<br>%   | Mixed<br>% | Asian or<br>Asian<br>British<br>% | Black or<br>Black<br>British<br>% | Chinese or<br>other<br>ethnic<br>group<br>% |            |
| I have not had any formal education   | 1            | 7          | 21                                | 6                                 | 13  | 2          |
| 16 years or younger                   | 75           | 35         | 24                                | 42                                | 30  | 70         |
| 17 or 18 years                        | 14           | 23         | 16                                | 19                                | 15  | 14         |
| 19 years or older                     | 11           | 35         | 39                                | 33                                | 43  | 14         |
| <i>Weighted bases</i>                 | 55697        | 427        | 3914                              | 1691                              | 285   | 64065      |
| <i>Unweighted bases</i>               | 57260        | 371        | 2906                              | 1384                              | 270   | 64250      |

**Table 11.3****Sex, age and probable diabetes type, by IMD**

| <i>All</i>                          |                                   |            |            |            |                                  |            | <i>2006</i> |
|-------------------------------------|-----------------------------------|------------|------------|------------|----------------------------------|------------|-------------|
| Sex, age and probable diabetes type | IMD group                         |            |            |            |                                  | Total<br>% |             |
|                                     | QIMD1<br>(least<br>deprived)<br>% | QIMD2<br>% | QIMD3<br>% | QIMD4<br>% | QIMD5<br>(most<br>deprived)<br>% |            |             |
| <b>Sex</b>                          |                                   |            |            |            |                                  |            |             |
| Male                                | 55                                | 56         | 54         | 54         | 53                               | 54         |             |
| Female                              | 45                                | 44         | 46         | 46         | 47                               | 46         |             |
| <i>Weighted bases</i>               | 9268                              | 9809       | 13854      | 16887      | 18680                            | 68498      |             |
| <i>Unweighted bases</i>             | 10039                             | 10950      | 13612      | 15904      | 17994                            | 68499      |             |
| <b>Age group</b>                    |                                   |            |            |            |                                  |            |             |
| 16-35 years                         | 4                                 | 3          | 3          | 4          | 4                                | 4          |             |
| 36-50 years                         | 12                                | 13         | 14         | 14         | 17                               | 14         |             |
| 51-65 years                         | 32                                | 32         | 32         | 33         | 34                               | 33         |             |
| 66 years and over                   | 52                                | 52         | 51         | 48         | 45                               | 49         |             |
| <b>Mean age</b>                     | 65                                | 65         | 64         | 63         | 62                               | 63         |             |
| <i>Weighted bases</i>               | 9268                              | 9811       | 13854      | 16887      | 18679                            | 68500      |             |
| <i>Unweighted bases</i>             | 10039                             | 10951      | 13612      | 15904      | 17993                            | 68499      |             |
| <b>Probable diabetes type</b>       |                                   |            |            |            |                                  |            |             |
| Type 1                              | 13                                | 13         | 13         | 12         | 12                               | 12         |             |
| Type 2                              | 87                                | 87         | 87         | 88         | 88                               | 88         |             |
| <i>Weighted bases</i>               | 8346                              | 8703       | 12345      | 15009      | 16574                            | 60978      |             |
| <i>Unweighted bases</i>             | 9022                              | 9766       | 12132      | 14077      | 15954                            | 60951      |             |

**Table 11.4****IMD, by ethnic group**

| <i>All</i>                  |   |            |                                   |                                   |   |            | <i>2006</i> |
|-----------------------------|---|------------|-----------------------------------|-----------------------------------|---|------------|-------------|
| IMD group                   | Where do you go for your diabetes check-up, where your test results and treatment are reviewed? |            |                                   |                                   |   | Total<br>% |             |
|                             | White<br>%  | Mixed<br>% | Asian or<br>Asian<br>British<br>% | Black or<br>Black<br>British<br>% | Chinese or<br>other<br>ethnic<br>group<br>% |            |             |
| QIMD1 (least deprived)      | 14  | 7          | 6                                 | 3                                 | 12  | 14         |             |
| ETC                         | 15  | 14         | 7                                 | 6                                 | 10  | 14         |             |
| 13.72>21.16                 | 21  | 14         | 14                                | 12                                | 19  | 20         |             |
| 21.16>34.21                 | 25  | 30         | 24                                | 26                                | 28  | 25         |             |
| 34.21>86.36 (most deprived) | 25  | 35         | 49                                | 54                                | 31  | 27         |             |
| <i>Weighted bases</i>       | 58975   | 461        | 4286                              | 2012                              | 303   | 68501      |             |
| <i>Unweighted bases</i>     | 60528   | 398        | 3178                              | 1645                              | 289   | 68501      |             |

**Table 11.5****QIMD, by age left education**

*All* 2006

| QIMD                    | Age left education                                |                             |                        |                           | Total<br>% |
|-------------------------|---|-----------------------------|------------------------|---------------------------|------------|
|                         | I have not<br>had any<br>formal<br>education<br>% | 16 years or<br>younger<br>% | 17 or 18<br>years<br>% | 19 years or<br>older<br>% |            |
| QIMD 1 (least deprived) | 4   | 13                          | 18                     | 17                        | 14         |
| QIMD2                   | 5   | 14                          | 17                     | 15                        | 14         |
| QIMD3                   | 12  | 20                          | 22                     | 21                        | 20         |
| QIMD4                   | 23  | 25                          | 22                     | 24                        | 25         |
| QIMD5 (most deprived)   | 56  | 28                          | 21                     | 23                        | 27         |
| <i>Weighted bases</i>   | 1541  | 44564                       | 8961                   | 9000                      | 68501      |
| <i>Unweighted bases</i> | 1183  | 45326                       | 8980                   | 8761                      | 68501      |

**Table 11.6****Where go for diabetes check up, by IMD**

*All* 2006

| Venue of diabetes check-up | IMD group                         |            |            |            |                                  | Total<br>% |
|----------------------------|-----------------------------------|------------|------------|------------|----------------------------------|------------|
|                            | QIMD1<br>(least<br>deprived)<br>% | QIMD2<br>% | QIMD3<br>% | QIMD4<br>% | QIMD5<br>(most<br>deprived)<br>% |            |
| Doctor's surgery           | 80                                | 81         | 81         | 79         | 77                               | 79         |
| The hospital clinic        | 17                                | 17         | 16         | 18         | 20                               | 18         |
| Somewhere else             | 2                                 | 1          | 1          | 1          | 2                                | 1          |
| It varies                  | 1                                 | 1          | 1          | 1          | 1                                | 1          |
| <i>Weighted bases</i>      | 8663                              | 9157       | 12841      | 15605      | 17163                            | 63430      |
| <i>Unweighted bases</i>    | 9374                              | 10186      | 12637      | 14647      | 16529                            | 63373      |

**Table 11.7****Where go for diabetes check up, by age left education**

*All* 2006

| Where do you go for your diabetes<br>check-up, where your test results<br>and treatment are reviewed? | Age left education                                |                             |                        |                           | Total<br>% |
|---|---|-----------------------------|------------------------|---------------------------|------------|
|   | I have not<br>had any<br>formal<br>education<br>% | 16 years or<br>younger<br>% | 17 or 18<br>years<br>% | 19 years or<br>older<br>% |            |
| Doctor's surgery  | 77  | 82                          | 75                     | 72                        | 79         |
| The hospital clinic   | 20  | 16                          | 22                     | 24                        | 18         |
| Somewhere else  | 2   | 1                           | 1                      | 2                         | 1          |
| It varies   | 2   | 1                           | 2                      | 2                         | 1          |
| <i>Weighted bases</i>   | 1365  | 41482                       | 8423                   | 8377                      | 63430      |
| <i>Unweighted bases</i>   | 1038  | 42148                       | 8436                   | 8156                      | 63373      |

**Table 11.8****Frequency of diabetes check up in last 12 months, by IMD**

*All* *2006*

| Number of diabetes check-ups in last 12 months | IMD group                |             |              |              |                         | Total %      |
|--|--------------------------|-------------|--------------|--------------|-------------------------|--------------|
|  | QIMD1 (least deprived) % | QIMD2 %     | QIMD3 %      | QIMD4 %      | QIMD5 (most deprived) % |              |
| None   | 2                        | 3           | 3            | 3            | 4                       | 3            |
| Once   | 36                       | 37          | 35           | 34           | 31                      | 34           |
| Twice  | 46                       | 45          | 43           | 43           | 40                      | 43           |
| Three or more times                            | 16                       | 15          | 19           | 20           | 26                      | 20           |
| <i>Weighted bases</i>                          | <i>8500</i>              | <i>8955</i> | <i>12555</i> | <i>15246</i> | <i>16648</i>            | <i>61904</i> |
| <i>Unweighted bases</i>                        | <i>9194</i>              | <i>9979</i> | <i>12370</i> | <i>14296</i> | <i>16063</i>            | <i>61902</i> |

**Table 11.9****Frequency of diabetes check up in the last 12 months, by age left education**

*All* *2006*

| In the last 12 months, how many times have you had a diabetes check-up? | Age left education                    |                       |                  |                     | Total %      |
|---|---------------------------------------|-----------------------|------------------|---------------------|--------------|
|   | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |              |
| None  | 4                                     | 3                     | 3                | 3                   | 3            |
| Once  | 23                                    | 34                    | 35               | 35                  | 34           |
| Twice   | 35                                    | 43                    | 44               | 43                  | 43           |
| Three or more times   | 38                                    | 20                    | 18               | 19                  | 20           |
| <i>Weighted bases</i>   | <i>1235</i>                           | <i>40617</i>          | <i>8302</i>      | <i>8220</i>         | <i>61904</i> |
| <i>Unweighted bases</i>   | <i>949</i>                            | <i>41270</i>          | <i>8306</i>      | <i>8019</i>         | <i>61902</i> |

**Table 11.10****Agreed a plan to manage diabetes in last 12 months, by IMD**

*All* *2006*

| Agreed a plan           | IMD group                |             |              |              |                         | Total %      |
|-------------------------|--------------------------|-------------|--------------|--------------|-------------------------|--------------|
|                         | QIMD1 (least deprived) % | QIMD2 %     | QIMD3 %      | QIMD4 %      | QIMD5 (most deprived) % |              |
| Rarely or not at all    | 29                       | 30          | 29           | 30           | 32                      | 30           |
| Some of the time        | 22                       | 22          | 22           | 23           | 24                      | 23           |
| Almost always           | 49                       | 48          | 48           | 47           | 44                      | 47           |
| <i>Weighted bases</i>   | <i>8185</i>              | <i>8513</i> | <i>12081</i> | <i>14689</i> | <i>16140</i>            | <i>59607</i> |
| <i>Unweighted bases</i> | <i>8851</i>              | <i>9505</i> | <i>11892</i> | <i>13739</i> | <i>15573</i>            | <i>59560</i> |

**Table 11.11****Agreed a plan to manage diabetes, by age left education**

*All* *2006*

| Thinking about the last 12 months, when you received care for your diabetes did you agree a plan to manage your diabetes over the next 12 months? | Age left education                    |                       |                  |                     | Total %      |
|---|---------------------------------------|-----------------------|------------------|---------------------|--------------|
|   | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |              |
| Rarely or not at all  | 32                                    | 31                    | 30               | 28                  | 30           |
| Some of the time  | 31                                    | 22                    | 23               | 24                  | 23           |
| Almost always   | 37                                    | 47                    | 47               | 48                  | 47           |
| <i>Weighted bases</i>   | <i>1294</i>                           | <i>39108</i>          | <i>8039</i>      | <i>7999</i>         | <i>59607</i> |
| <i>Unweighted bases</i>   | <i>984</i>                            | <i>39747</i>          | <i>8026</i>      | <i>7783</i>         | <i>59560</i> |

**Table 11.12****Blood pressure taken, by IMD**

*All* *2006*

| Has a doctor taken your blood pressure? | IMD group                |              |              |              |                         | Total %      |
|---|--------------------------|--------------|--------------|--------------|-------------------------|--------------|
|   | QIMD1 (least deprived) % | QIMD2 %      | QIMD3 %      | QIMD4 %      | QIMD5 (most deprived) % |              |
| Yes                                     | 99                       | 98           | 98           | 98           | 98                      | 98           |
| No                                      | 1                        | 2            | 2            | 2            | 2                       | 2            |
| <i>Weighted bases</i>                   | <i>9121</i>              | <i>9600</i>  | <i>13598</i> | <i>16616</i> | <i>18327</i>            | <i>67262</i> |
| <i>Unweighted bases</i>                 | <i>9881</i>              | <i>10715</i> | <i>13364</i> | <i>15634</i> | <i>17673</i>            | <i>67267</i> |

**Table 11.13****Blood pressure, by age left education**

*All* *2006*

| Has a doctor taken your blood pressure? | Age left education                    |                       |                  |                     | Total %      |
|---|---------------------------------------|-----------------------|------------------|---------------------|--------------|
|   | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |              |
| Yes                                     | 78                                    | 90                    | 89               | 89                  | 89           |
| No                                      | 22                                    | 10                    | 11               | 11                  | 11           |
| <i>Weighted bases</i>                   | <i>1268</i>                           | <i>40619</i>          | <i>8325</i>      | <i>8396</i>         | <i>62325</i> |
| <i>Unweighted bases</i>                 | <i>980</i>                            | <i>41470</i>          | <i>8356</i>      | <i>8168</i>         | <i>62562</i> |

**Table 11.14****HbA1c test in last 12 months, by IMD**

*All* 2006

| In the last 12 months have you had a special blood test to look at your long-term or 'average' blood glucose level? | IMD group                |         |         |         |                         | Total % |
|---|--------------------------|---------|---------|---------|-------------------------|---------|
|   | QIMD1 (least deprived) % | QIMD2 % | QIMD3 % | QIMD4 % | QIMD5 (most deprived) % |         |
| Yes   | 93                       | 91      | 91      | 91      | 88                      | 91      |
| No  | 7                        | 9       | 9       | 9       | 12                      | 9       |
| <i>Weighted bases</i>   | 8247                     | 8636    | 12205   | 14619   | 15950                   | 59657   |
| <i>Unweighted bases</i>   | 8959                     | 9693    | 11969   | 13785   | 15444                   | 59850   |

**Table 11.15****HbA1c test, by age left education**

*All* 2006

| In the last 12 months have you had a special blood test to look at your long-term or 'average' blood glucose level? | Age left education                    |                       |                  |                     | Total % |
|---|---------------------------------------|-----------------------|------------------|---------------------|---------|
|   | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |         |
| Yes   | 80                                    | 90                    | 91               | 93                  | 91      |
| No  | 20                                    | 10                    | 9                | 7                   | 9       |
| <i>Weighted bases</i>   | 1163                                  | 38602                 | 8109             | 8158                | 59657   |
| <i>Unweighted bases</i>   | 907                                   | 39383                 | 8113             | 7972                | 59850   |

**Table 11.16****Retinography in last 12 months, by IMD**

*All* 2006

| Did you have an eye test where a photograph of the back of your eyes was taken? | IMD group                |         |         |         |                         | Total % |
|---|--------------------------|---------|---------|---------|-------------------------|---------|
|   | QIMD1 (least deprived) % | QIMD2 % | QIMD3 % | QIMD4 % | QIMD5 (most deprived) % |         |
| Yes   | 80                       | 81      | 80      | 80      | 80                      | 80      |
| No  | 20                       | 19      | 20      | 20      | 20                      | 20      |
| <i>Weighted bases</i>   | 8813                     | 9317    | 13106   | 15991   | 17642                   | 64868   |
| <i>Unweighted bases</i>   | 9538                     | 10370   | 12885   | 15071   | 17076                   | 64940   |



**Table 11.17****Retinography, by age left education**

*All* *2006*

| Did you have an eye test where a photograph of the back of your eyes was taken? | Age left education                    |                       |                  |                     | Total %      |
|---|---------------------------------------|-----------------------|------------------|---------------------|--------------|
|   | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |              |
| Yes   | 73                                    | 81                    | 78               | 77                  | 80           |
| No  | 27                                    | 19                    | 22               | 23                  | 20           |
| <i>Weighted bases</i>   | <i>1410</i>                           | <i>42320</i>          | <i>8542</i>      | <i>8589</i>         | <i>64868</i> |
| <i>Unweighted bases</i>   | <i>1082</i>                           | <i>43085</i>          | <i>8560</i>      | <i>8361</i>         | <i>64940</i> |

**Table 11.18****Bare feet examined in last 12 months, by IMD**

*All* *2006*

| Have you had your bare feet examined? | IMD group                |              |              |              |                         | Total %      |
|---------------------------------------|--------------------------|--------------|--------------|--------------|-------------------------|--------------|
|                                       | QIMD1 (least deprived) % | QIMD2 %      | QIMD3 %      | QIMD4 %      | QIMD5 (most deprived) % |              |
| Yes                                   | 85                       | 85           | 84           | 83           | 80                      | 83           |
| No                                    | 15                       | 15           | 16           | 17           | 20                      | 17           |
| <i>Weighted bases</i>                 | <i>9078</i>              | <i>9565</i>  | <i>13560</i> | <i>16528</i> | <i>18113</i>            | <i>66843</i> |
| <i>Unweighted bases</i>               | <i>9846</i>              | <i>10678</i> | <i>13328</i> | <i>15569</i> | <i>17514</i>            | <i>66935</i> |

**Table 11.19****Bare feet examined, by age left education**

*All* *2006*

| Have you had your bare feet examined? | Age left education                    |                       |                  |                     | Total %      |
|---------------------------------------|---------------------------------------|-----------------------|------------------|---------------------|--------------|
|                                       | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |              |
| Yes                                   | 62                                    | 85                    | 84               | 79                  | 83           |
| No                                    | 38                                    | 15                    | 16               | 21                  | 17           |
| <i>Weighted bases</i>                 | <i>1456</i>                           | <i>43685</i>          | <i>8794</i>      | <i>8789</i>         | <i>66843</i> |
| <i>Unweighted bases</i>               | <i>1121</i>                           | <i>44464</i>          | <i>8822</i>      | <i>8567</i>         | <i>66935</i> |

**Table 11.20****Been weighed by doctor or nurse, by IMD**

*All* 2006

| Have you been weighed by a doctor or nurse? | IMD group                   |              |              |              |                            | Total %      |
|---|-----------------------------|--------------|--------------|--------------|----------------------------|--------------|
|   | QIMD1 (least deprived)<br>% | QIMD2<br>%   | QIMD3<br>%   | QIMD4<br>%   | QIMD5 (most deprived)<br>% |              |
| Yes   | 92                          | 91           | 92           | 92           | 90                         | 91           |
| No  | 8                           | 9            | 8            | 8            | 10                         | 9            |
| <i>Weighted bases</i>                       | <i>9078</i>                 | <i>9578</i>  | <i>13580</i> | <i>16561</i> | <i>18214</i>               | <i>67011</i> |
| <i>Unweighted bases</i>                     | <i>9843</i>                 | <i>10707</i> | <i>13335</i> | <i>15591</i> | <i>17597</i>               | <i>67073</i> |

**Table 11.21****Been weighed by doctor or nurse, by age left education**

*All* 2006

| Have you been weighed by a doctor or nurse? | Age left education                       |                          |                     |                        |              | Total % |
|---|--|--------------------------|---------------------|------------------------|--------------|---------|
|   | I have not had any formal education<br>% | 16 years or younger<br>% | 17 or 18 years<br>% | 19 years or older<br>% |              |         |
| Yes   | 83                                       | 91                       | 92                  | 91                     | 91           |         |
| No  | 17                                       | 9                        | 8                   | 9                      | 9            |         |
| <i>Weighted bases</i>                       | <i>1475</i>                              | <i>43754</i>             | <i>8811</i>         | <i>8825</i>            | <i>67011</i> |         |
| <i>Unweighted bases</i>                     | <i>1129</i>                              | <i>44541</i>             | <i>8830</i>         | <i>8582</i>            | <i>67073</i> |         |

**Table 11.22****Urine test, by IMD**

*All* 2006

| In the last 12 months has a doctor or nurse carried out a urine test? | IMD group                   |              |              |              |                            | Total %      |
|---|-----------------------------|--------------|--------------|--------------|----------------------------|--------------|
|   | QIMD1 (least deprived)<br>% | QIMD2<br>%   | QIMD3<br>%   | QIMD4<br>%   | QIMD5 (most deprived)<br>% |              |
| Yes   | 87                          | 88           | 87           | 88           | 86                         | 87           |
| No  | 13                          | 12           | 13           | 12           | 14                         | 13           |
| <i>Weighted bases</i>   | <i>8997</i>                 | <i>9480</i>  | <i>13413</i> | <i>16400</i> | <i>18019</i>               | <i>66308</i> |
| <i>Unweighted bases</i>   | <i>9768</i>                 | <i>10594</i> | <i>13185</i> | <i>15427</i> | <i>17394</i>               | <i>66368</i> |

**Table 11.23****Urine test, by age left education**

*All* *2006*

| In the last 12 months has a doctor or nurse carried out a urine test? | Age left education                    |                       |                  |                     | Total % |
|---|---------------------------------------|-----------------------|------------------|---------------------|---------|
|   | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |         |
| Yes   | 84                                    | 88                    | 85               | 85                  | 87      |
| No  | 16                                    | 12                    | 15               | 15                  | 13      |
| Weighted bases  | 1423                                  | 43333                 | 8769             | 8723                | 66308   |
| Unweighted bases  | 1093                                  | 44110                 | 8786             | 8483                | 66368   |

**Table 11.24****Cholesterol test, by IMD**

*All* *2006*

| In the last 12 months has a doctor or nurse carried out a cholesterol test? | IMD group                |         |         |         |                         | Total % |
|---|--------------------------|---------|---------|---------|-------------------------|---------|
|   | QIMD1 (least deprived) % | QIMD2 % | QIMD3 % | QIMD4 % | QIMD5 (most deprived) % |         |
| Yes   | 90                       | 90      | 90      | 89      | 86                      | 89      |
| No  | 10                       | 10      | 10      | 11      | 14                      | 11      |
| Weighted bases  | 8513                     | 8957    | 12732   | 15373   | 16749                   | 62325   |
| Unweighted bases  | 9273                     | 10042   | 12505   | 14474   | 16268                   | 62562   |

**Table 11.25****Cholesterol test, by age left education**

*All* *2006*

| In the last 12 months has a doctor or nurse carried out a cholesterol test? | Age left education                    |                       |                  |                     | Total % |
|---|---------------------------------------|-----------------------|------------------|---------------------|---------|
|   | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |         |
| Yes   | 78                                    | 90                    | 89               | 89                  | 89      |
| No  | 22                                    | 10                    | 11               | 11                  | 11      |
| Weighted bases  | 1268                                  | 40619                 | 8325             | 8396                | 62325   |
| Unweighted bases  | 980                                   | 41470                 | 8356             | 8168                | 62562   |

**Table 11.26****Know enough about food choices, by IMD**

*All* *2006*

| Do you know enough about what you should eat to help you manage your diabetes? | IMD group                |         |         |         |                         | Total % |
|--|--------------------------|---------|---------|---------|-------------------------|---------|
|  | QIMD1 (least deprived) % | QIMD2 % | QIMD3 % | QIMD4 % | QIMD5 (most deprived) % |         |
| Yes  | 76                       | 78      | 76      | 75      | 73                      | 75      |
| No, I would like to know a bit more  | 18                       | 16      | 18      | 18      | 19                      | 18      |
| No, I would like to know a lot more  | 5                        | 6       | 6       | 7       | 8                       | 7       |
| Weighted bases   | 9101                     | 9630    | 13570   | 16622   | 18251                   | 67175   |
| Unweighted bases   | 9874                     | 10751   | 13337   | 15626   | 17630                   | 67218   |

**Table 11.27****Know enough about food choices, by age left education**

*All* *2006*

| Do you know enough about what you should eat to help manage your diabetes? | Age left education                    |                       |                  |                     | Total % |
|--|---------------------------------------|-----------------------|------------------|---------------------|---------|
|  | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |         |
| Yes  | 70                                    | 75                    | 75               | 76                  | 75      |
| No, I would like to know a bit more  | 19                                    | 18                    | 18               | 18                  | 18      |
| No, I would like to know a lot more  | 10                                    | 7                     | 7                | 6                   | 7       |
| Weighted bases   | 1488                                  | 43925                 | 8813             | 8843                | 67175   |
| Unweighted bases   | 1143                                  | 44651                 | 8850             | 8616                | 67218   |

**Table 11.28****Know enough about the role of physical activity, by IMD**

*All* *2006*

| Do you know enough about the role of physical activity in managing your diabetes? | IMD group                |         |         |         |                         | Total % |
|---|--------------------------|---------|---------|---------|-------------------------|---------|
|   | QIMD1 (least deprived) % | QIMD2 % | QIMD3 % | QIMD4 % | QIMD5 (most deprived) % |         |
| Yes   | 71                       | 70      | 69      | 67      | 64                      | 68      |
| No, I would like to know a bit more   | 23                       | 24      | 24      | 26      | 27                      | 25      |
| No, I would like to know a lot more   | 5                        | 6       | 7       | 8       | 9                       | 7       |
| Weighted bases  | 8990                     | 9461    | 13409   | 16350   | 18015                   | 66225   |
| Unweighted bases  | 9767                     | 10598   | 13174   | 15387   | 17391                   | 66317   |

**Table 11.29****Know enough about the role of physical activity, by age left education***All*

2006

| Do you know enough about the role of physical activity in managing your diabetes? | Age left education                    |                       |                  |                     | Total % |
|---|---------------------------------------|-----------------------|------------------|---------------------|---------|
|   | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |         |
| Yes   | 57                                    | 67                    | 69               | 71                  | 68      |
| No, I would like to know a bit more   | 30                                    | 26                    | 24               | 23                  | 25      |
| No, I would like to know a lot more   | 13                                    | 7                     | 7                | 7                   | 7       |
| Weighted bases  | 1460                                  | 43242                 | 8774             | 8816                | 66225   |
| Unweighted bases  | 1126                                  | 44006                 | 8807             | 8588                | 66317   |

**Table 11.30****Ever participated in education or training, by IMD***All*

2006

| Have you ever participated in an education or training course on how to manage your diabetes? | IMD group                |         |         |         |                         | Total % |
|---|--------------------------|---------|---------|---------|-------------------------|---------|
|   | QIMD1 (least deprived) % | QIMD2 % | QIMD3 % | QIMD4 % | QIMD5 (most deprived) % |         |
| Yes   | 10                       | 12      | 11      | 10      | 10                      | 10      |
| No  | 90                       | 88      | 89      | 90      | 90                      | 90      |
| Weighted bases  | 9055                     | 9531    | 13485   | 16486   | 18131                   | 66688   |
| Unweighted bases  | 9831                     | 10665   | 13269   | 15495   | 17517                   | 66777   |

**Table 11.31****Ever participated in education or training, by age left education***All*

2006

| Have you ever participated in an education or training course on how to manage your diabetes? | Age left education                    |                       |                  |                     | Total % |
|---|---------------------------------------|-----------------------|------------------|---------------------|---------|
|   | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |         |
| Yes   | 5                                     | 10                    | 12               | 14                  | 10      |
| No  | 95                                    | 90                    | 88               | 86                  | 90      |
| Weighted bases  | 1481                                  | 43635                 | 8817             | 8845                | 66688   |
| Unweighted bases  | 1137                                  | 44401                 | 8849             | 8611                | 66777   |

**Table 11.32****Whether needed to see a specialist for psychological support to cope with diabetes support, by IMD**

*All* 2006

| In the last 12 months, have you needed to see a specialist for psychological support to cope with your diabetes? | IMD group                |         |         |         |                         | Total % |
|--|--------------------------|---------|---------|---------|-------------------------|---------|
|  | QIMD1 (least deprived) % | QIMD2 % | QIMD3 % | QIMD4 % | QIMD5 (most deprived) % |         |
| Yes  | 2                        | 3       | 3       | 3       | 4                       | 3       |
| No   | 98                       | 97      | 97      | 97      | 96                      | 97      |
| Weighted bases   | 9002                     | 9480    | 13349   | 16315   | 17887                   | 66033   |
| Unweighted bases   | 9767                     | 10589   | 13131   | 15362   | 17298                   | 66147   |

**Table 11.33****Whether needed to see a specialist for psychological support to cope with diabetes, by age left education**

*All* 2006

| In the last 12 months, have you needed to see a specialist for psychological support to cope with your diabetes? | Age left education                    |                       |                  |                     | Total % |
|--|---------------------------------------|-----------------------|------------------|---------------------|---------|
|  | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |         |
| Yes  | 9                                     | 2                     | 3                | 5                   | 3       |
| No   | 91                                    | 98                    | 97               | 95                  | 97      |
| Weighted bases   | 1454                                  | 43269                 | 8758             | 8808                | 66033   |
| Unweighted bases   | 1118                                  | 44035                 | 8800             | 8588                | 66147   |

**Table 11.34****Whether able to see a specialist for psychological support, by IMD**

*All those who needed psychological support in last 12 months* 2006

| Were you able to see a specialist for psychological support? | IMD group                |         |         |         |                         | Total % |
|--|--------------------------|---------|---------|---------|-------------------------|---------|
|  | QIMD1 (least deprived) % | QIMD2 % | QIMD3 % | QIMD4 % | QIMD5 (most deprived) % |         |
| Yes  | 51                       | 53      | 53      | 51      | 55                      | 53      |
| No   | 49                       | 47      | 47      | 49      | 45                      | 47      |
| Weighted bases   | 173                      | 243     | 351     | 519     | 675                     | 1960    |
| Unweighted bases   | 190                      | 258     | 319     | 452     | 565                     | 1784    |

**Table 11.35****Whether able to see a specialist for psychological support, by age left education***All* *2006*

| Were you able to see a specialist for psychological support? | Age left education                    |                       |                  |                     | Total % |
|--|---------------------------------------|-----------------------|------------------|---------------------|---------|
|  | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |         |
| Yes  | 66                                    | 53                    | 50               | 52                  | 53      |
| No   | 34                                    | 47                    | 50               | 48                  | 47      |
| Weighted bases   | 124                                   | 949                   | 261              | 436                 | 1960    |
| Unweighted bases   | 86                                    | 909                   | 243              | 376                 | 1784    |

**Table 11.36****Stayed in hospital overnight, by IMD***All those who needed psychological support in last 12 months* *2006*

| Have you stayed in hospital overnight in the last 12 months for any reason? | IMD group                |         |         |         |                         | Total % |
|---|--------------------------|---------|---------|---------|-------------------------|---------|
|   | QIMD1 (least deprived) % | QIMD2 % | QIMD3 % | QIMD4 % | QIMD5 (most deprived) % |         |
| Yes   | 17                       | 18      | 18      | 19      | 19                      | 19      |
| No  | 83                       | 82      | 82      | 81      | 81                      | 81      |
| Weighted bases  | 8999                     | 9503    | 13392   | 16356   | 17972                   | 66222   |
| Unweighted bases  | 9770                     | 10617   | 13161   | 15404   | 17353                   | 66305   |

**Table 11.37****Stayed in hospital overnight, by age left education***All* *2006*

| Have you stayed in hospital overnight in the last 12 months for any reason? | Age left education                    |                       |                  |                     | Total % |
|---|---------------------------------------|-----------------------|------------------|---------------------|---------|
|   | I have not had any formal education % | 16 years or younger % | 17 or 18 years % | 19 years or older % |         |
| Yes   | 19                                    | 19                    | 18               | 17                  | 19      |
| No  | 81                                    | 81                    | 82               | 83                  | 81      |
| Weighted bases  | 1477                                  | 43311                 | 8766             | 8811                | 66222   |
| Unweighted bases  | 1130                                  | 44085                 | 8806             | 8587                | 66305   |

## 12 ASSOCIATIONS WITH ETHNICITY

### 12.1 Introduction

It has long been recognised that diabetes incidence, prevalence, and disease progression varies by ethnic group<sup>1</sup>. In the UK people from South Asian (including Indian, Pakistani, and Bangladeshi background) groups have a higher prevalence of Type 2 diabetes than the general population<sup>32</sup>. The National Survey of People with Diabetes asked service users to classify themselves according to the Census ethnicity question. Their responses were grouped into five main categories; White, Mixed, Asian or Asian British, Black or Black British, Chinese or other ethnic group.

Over 67,000 respondents (96%) answered this question: 89% were White, 1% Mixed, 6% Asian/Asian British, 3% Black/Black British and less than 1% Chinese/other. There were differences in the ethnic profile of respondents according to type of diabetes, age and sex.

The distribution of diabetes type differed by ethnic group, with a higher proportion of Asian/Asian British respondents having Type 1, and a higher proportion of those of mixed ethnic background having Type 2, compared with other ethnic groups. Fourteen per cent of mixed ethnicity, 10% Black/Black British, 13% White, 7% Chinese/other and 6% Asian/Asian British had Type 1 diabetes.

Overall, the mean age of the sample was 63, but again this differed by ethnic group. White respondents tended to be older (mean age 64) compared to the other ethnic groups (Black/Black British mean age 60, Chinese/other ethnic group mean age 58, Asian/Asian British mean age 60, Mixed ethnic group mean age 56). In addition, there was a higher proportion of men in the Asian/Asian British group (59%, compared with 48% in the Black/Black British group, and 54% of White respondents).

As with the socioeconomic variables, ethnic group was analysed in relation to key questions from the survey. A full overview of the questions and results are available in appendix E, here we present some of the main findings.

### 12.2 Check ups

Overall, 79% of respondents went for their check-up at their doctor's surgery, and this varied by ethnic group. The Black/Black British group, and the Mixed ethnic group were least likely to go to their doctor's surgery for their diabetes check-up (68% for both, compared with 80% of respondents who were White, or Chinese/other).

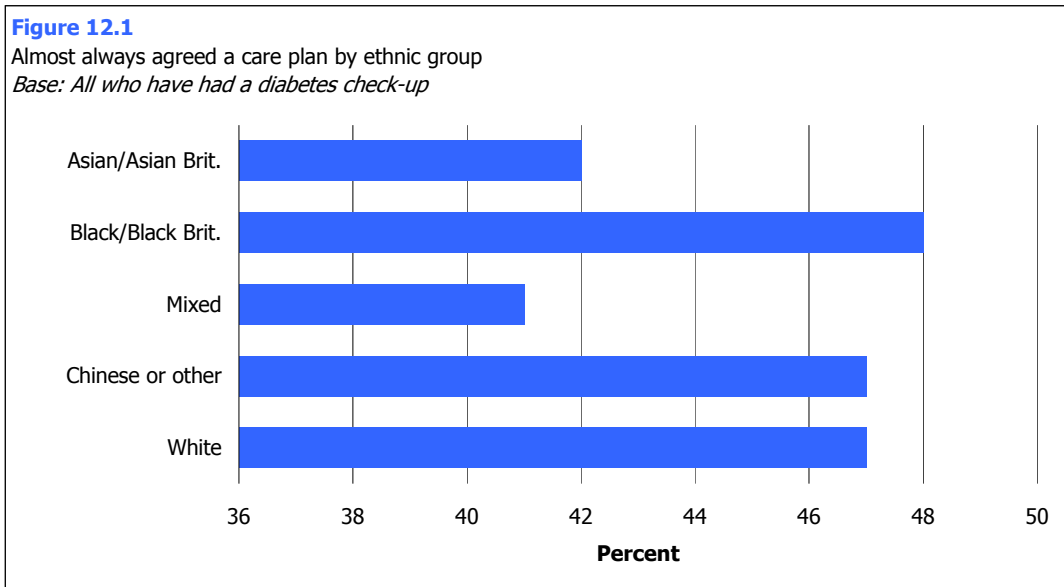
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<sup>32</sup> Olroy, J., Banerjee, M., Heald, A., & Cruikshank, K. (2005). Diabetes and ethnic minorities. *PMJ*; 81;486-490.



A fifth of respondents said they had three or more check ups in the last 12 months but again this varied by ethnic group. Asian/Asian British respondents were most likely to have had three or more diabetes check-ups in the last year (32%), compared with 29% for both those of mixed ethnicity and Black/Black British respondents, 24% Chinese/other ethnic groups and 19% White.

In total, just under half (47%) of respondents said they had agreed a care plan in to manage their diabetes in the next 12 months. However, when analysed by ethnic group Black/Black British, and White respondents were more likely to say that they almost always agreed a plan to manage their diabetes (48% and 47%), whereas service users from Mixed ethnic group were least likely (41%).



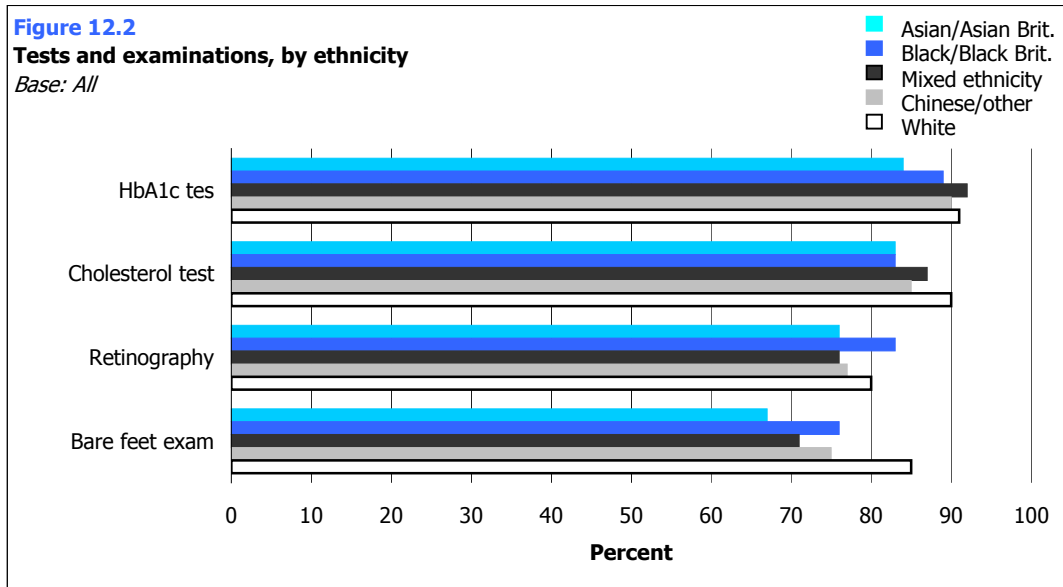
### 12.3 Tests and examinations

Service users were asked about whether they had received various tests and consultations that are recommended for people with diabetes. Although the overall findings suggested that a high proportion of service users had these tests, the results varied by ethnic group. For many of the tests (HbA1c, blood pressure, cholesterol, retinography, and bare feet examination) it was the Asian/Asian British group who fared worst.

Asian/Asian British respondents were the ethnic group who were least likely to have a HbA1c test in the last 12 month (84%, compared with 91% of White and 92% of respondents from a Mixed ethnic group). Asian/Asian British respondents were also less likely to say a doctor had taken their blood pressure in the last 12 months (96%), whereas White and Black/Black British respondents were the most likely (98% for both groups).

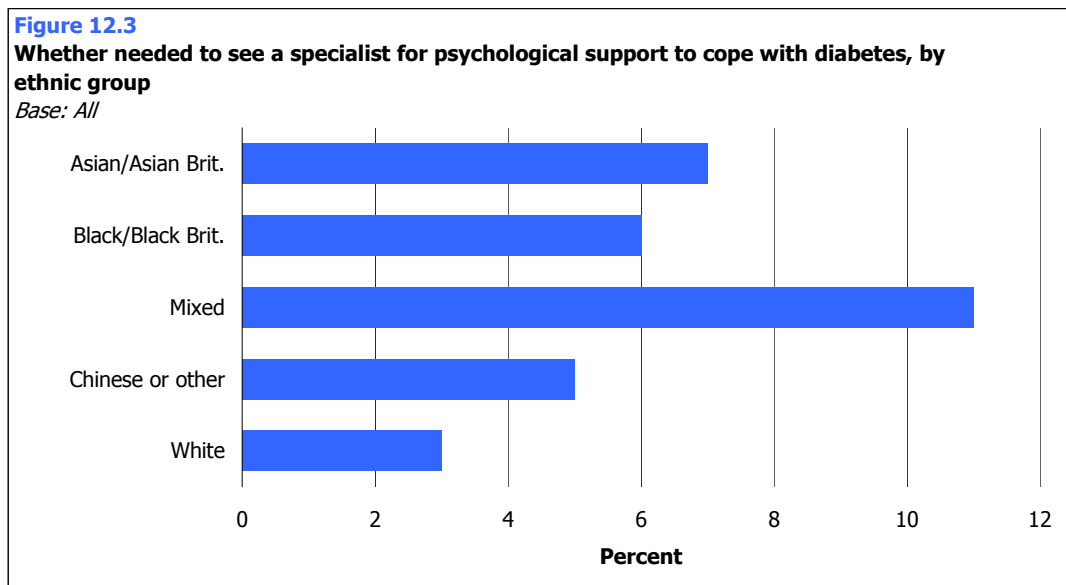
Similarly, a higher proportion of White respondents (90%) had a cholesterol test than Asian/Asian British or Black/Black British respondents (83%). Black/Black British respondents were most likely to have had retinography (83%) whereas the Asian/Asian British and Chinese/other or mixed ethnic group were least likely (76%).

White respondents were the most likely to have had their bare feet examined by a doctor or nurse: 85%, compared with just 67% of Asian/Asian British respondents. Asian/Asian British respondents were also the least likely to have been weighed by a doctor or nurse (88%), whereas those from Chinese/other ethnic groups were most likely (92%).



White respondents were least likely to have seen a dietitian: 22%, compared with 25% of Asian/Asian British, and 30% for Black/Black British, Mixed, and Chinese/other ethnic group.

White respondents were least likely to have needed to see a specialist for psychological support to cope with their diabetes (3%) whereas those of Mixed



ethnicity were most likely (11%). However, of respondents who did need psychological support, those of mixed ethnicity were more likely to be able to see a specialist than white respondents (68% and 51%, respectively).

Respondents who were White or of Mixed ethnicity were more likely to have stayed in hospital overnight for some reason (19%), whereas those from Chinese/other ethnic groups were least likely (13%).

#### **12.4 Knowledge about how to manage diabetes**

White respondents were most likely to say they knew enough about what they should eat to help manage their diabetes, (76%) whereas respondents from a Mixed ethnic group were least likely (66%).

White respondents were most likely to say they knew enough about the role of physical activity in managing their diabetes (69%) whereas Black/Black British were least likely (54%).

Black/Black British and those in the Mixed ethnic group were most likely to have participated in an education or training course on how to manage their diabetes (16%), whereas Asian/Asian British were least likely (8%).

## 12.5 Associations with ethnicity: tables

### Table 12.1

#### Age group, by ethnic group

*All* *2006*

| Age group               | Ethnic group |         |                          |                          |                                 | Total % |
|-------------------------|--------------|---------|--------------------------|--------------------------|---------------------------------|---------|
|                         | White %      | Mixed % | Asian or Asian British % | Black or black British % | Chinese or other ethnic group % |         |
| 16-35 years             | 4            | 7       | 5                        | 4                        | 5                               | 4       |
| 36-50 years             | 13           | 31      | 27                       | 22                       | 22                              | 14      |
| 51-65 years             | 32           | 33      | 41                       | 36                       | 46                              | 33      |
| 66 years and over       | 51           | 29      | 27                       | 38                       | 27                              | 49      |
| Mean age                | 64           | 56      | 57                       | 60                       | 58                              | 63      |
| <i>Weighted bases</i>   | 58975        | 461     | 4286                     | 2012                     | 303                             | 68500   |
| <i>Unweighted bases</i> | 60527        | 398     | 3178                     | 1645                     | 289                             | 68499   |

### Table 12.2

#### Sex, by ethnic group

*All* *2006*

| Sex                     | Ethnic group |         |                          |                          |                                 | Total % |
|-------------------------|--------------|---------|--------------------------|--------------------------|---------------------------------|---------|
|                         | White %      | Mixed % | Asian or Asian British % | Black or black British % | Chinese or other ethnic group % |         |
| Male                    | 54           | 55      | 59                       | 48                       | 52                              | 54      |
| Female                  | 46           | 45      | 41                       | 52                       | 48                              | 46      |
| <i>Weighted bases</i>   | 58972        | 461     | 4286                     | 2012                     | 303                             | 68498   |
| <i>Unweighted bases</i> | 60526        | 398     | 3178                     | 1645                     | 289                             | 68499   |

### Table 12.3

#### Probable diabetes type, by ethnic group

*All* *2006*

| Probable diabetes type  | Ethnic group |         |                          |                          |                                 | Total % |
|-------------------------|--------------|---------|--------------------------|--------------------------|---------------------------------|---------|
|                         | White %      | Mixed % | Asian or Asian British % | Black or black British % | Chinese or other ethnic group % |         |
| Probable type 1         | 13           | 14      | 6                        | 10                       | 7                               | 12      |
| Probable type 2         | 87           | 86      | 94                       | 90                       | 93                              | 88      |
| <i>Weighted bases</i>   | 52420        | 414     | 4036                     | 1764                     | 281                             | 60978   |
| <i>Unweighted bases</i> | 53845        | 364     | 2990                     | 1426                     | 272                             | 60951   |

**Table 12.4****Where go for diabetes check-up, by ethnic group***All*

2006

| Where go for diabetes check-up, where test results and treatment are reviewed | Ethnic group |         |                          |                          |                                 | Total % |
|---|--------------|---------|--------------------------|--------------------------|---------------------------------|---------|
|   | White %      | Mixed % | Asian or Asian British % | Black or black British % | Chinese or other ethnic group % |         |
| Doctor's surgery  | 80           | 68      | 76                       | 68                       | 80                              | 79      |
| Hospital clinic   | 17           | 27      | 20                       | 30                       | 17                              | 18      |
| Somewhere else  | 1            | 3       | 2                        | 1                        | 1                               | 1       |
| It varies   | 1            | 3       | 2                        | 2                        | 2                               | 1       |
| <i>Weighted bases</i>   | 54922        | 426     | 3893                     | 1774                     | 288                             | 63430   |
| <i>Unweighted bases</i>   | 56332        | 360     | 2868                     | 1431                     | 273                             | 63373   |

**Table 12.5****Frequency of diabetes check-up, by ethnic group***All who have had a diabetes check-up*

2006

| Number of times in the last 12 months had a diabetes check-up | Ethnic group |         |                          |                          |                                 | Total % |
|---|--------------|---------|--------------------------|--------------------------|---------------------------------|---------|
|   | White %      | Mixed % | Asian or Asian British % | Black or black British % | Chinese or other ethnic group % |         |
| None  | 3            | 2       | 3                        | 3                        | 3                               | 3       |
| Once  | 35           | 30      | 27                       | 28                       | 36                              | 34      |
| Twice   | 43           | 39      | 37                       | 40                       | 36                              | 43      |
| Three or more times   | 19           | 29      | 32                       | 29                       | 24                              | 20      |
| <i>Weighted bases</i>   | 53827        | 396     | 3684                     | 1704                     | 284                             | 61904   |
| <i>Unweighted bases</i>                                       | 55209        | 338     | 2714                     | 1372                     | 270                             | 61902   |

**Table 12.6****Agreed a care plan to manage diabetes, by ethnic group***All who have had a diabetes check-up*

2006

| Thinking about the last 12 months, did you agree a care plan to manage your diabetes? | Ethnic group |         |                          |                          |                                 | Total % |
|---|--------------|---------|--------------------------|--------------------------|---------------------------------|---------|
|   | White %      | Mixed % | Asian or Asian British % | Black or black British % | Chinese or other ethnic group % |         |
| Rarely or not at all  | 31           | 33      | 28                       | 29                       | 24                              | 30      |
| Some of the time  | 22           | 26      | 30                       | 23                       | 29                              | 23      |
| Almost always   | 47           | 41      | 42                       | 48                       | 47                              | 47      |
| <i>Weighted bases</i>   | 51764        | 395     | 3687                     | 1600                     | 268                             | 59607   |
| <i>Unweighted bases</i>   | 53090        | 329     | 2707                     | 1297                     | 261                             | 59560   |

**Table 12.7****Blood pressure, by ethnic group***All*

2006

| In the last 12 months,<br>has a doctor or nurse<br>taken your blood<br>pressure? | Ethnic group |            |                                |                                |  | Total<br>% |
|--|--------------|------------|--------------------------------|--------------------------------|--|------------|
|  | White<br>%   | Mixed<br>% | Asian or<br>Asian British<br>% | Black or<br>black British<br>% | Chinese or<br>other ethnic<br>group<br>% |            |
| Yes  | 98           | 97         | 96                             | 98                             | 97                                       | 98         |
| No   | 2            | 3          | 4                              | 2                              | 3  | 2          |
| <i>Weighted bases</i>  | 57999        | 450        | 4207                           | 1967                           | 302                                      | 67262      |
| <i>Unweighted bases</i>  | 59530        | 389        | 3116                           | 1603                           | 287                                      | 67267      |

**Table 12.8****HbA1c test, by ethnic group***All*

2006

| In the last 12 months<br>have you had a special<br>blood test to look at<br>your long-term blood<br>glucose? | Ethnic group |            |                                |                                |  | Total<br>% |
|--|--------------|------------|--------------------------------|--------------------------------|--|------------|
|  | White<br>%   | Mixed<br>% | Asian or<br>Asian British<br>% | Black or<br>black British<br>% | Chinese or<br>other ethnic<br>group<br>% |            |
| Yes  | 91           | 92         | 84                             | 89                             | 90                                       | 91         |
| No   | 9            | 8          | 16                             | 11                             | 10                                       | 9          |
| <i>Weighted bases</i>  | 51687        | 405        | 3480                           | 1795                           | 259                                      | 59657      |
| <i>Unweighted bases</i>  | 53153        | 348        | 2600                           | 1452                           | 249                                      | 59850      |

**Table 12.9****Urine test, by ethnic group***All*

2006

| In the last 12 months,<br>did a doctor or nurse<br>carry out a urine test? | Ethnic group |            |                                |                                |  | Total<br>% |
|--|--------------|------------|--------------------------------|--------------------------------|--|------------|
|  | White<br>%   | Mixed<br>% | Asian or<br>Asian British<br>% | Black or<br>black British<br>% | Chinese or<br>other ethnic<br>group<br>% |            |
| Yes  | 87           | 83         | 82                             | 88                             | 86                                       | 87         |
| No   | 13           | 17         | 18                             | 12                             | 14                                       | 13         |
| <i>Weighted bases</i>  | 57311        | 438        | 4053                           | 1931                           | 295                                      | 66308      |
| <i>Unweighted bases</i>  | 58848        | 377        | 2993                           | 1579                           | 280                                      | 66368      |

**Table 12.10****Cholesterol test, by ethnic group***All*

2006

| In the last 12 months,<br>has a doctor or nurse<br>carried out a<br>cholesterol test? | Ethnic group |            |                                |                                |  | Total<br>% |
|---|--------------|------------|--------------------------------|--------------------------------|--|------------|
|   | White<br>%   | Mixed<br>% | Asian or<br>Asian British<br>% | Black or<br>black British<br>% | Chinese or<br>other ethnic<br>group<br>% |            |
| Yes   | 90           | 87         | 83                             | 83                             | 85                                       | 89         |
| No  | 10           | 13         | 17                             | 17                             | 15                                       | 11         |
| <i>Weighted bases</i>   | 53885        | 413        | 3803                           | 1780                           | 280                                      | 62325      |
| <i>Unweighted bases</i>   | 55482        | 359        | 2828                           | 1463                           | 264                                      | 62562      |

**Table 12.11****Retinography, by ethnic group***All*

2006

| In the last 12 months<br>did you have an eye<br>test where a picture of<br>the back of your eyes<br>was taken? | Ethnic group |            |                                |                                |  | Total<br>% |
|--|--------------|------------|--------------------------------|--------------------------------|--|------------|
|  | White<br>%   | Mixed<br>% | Asian or<br>Asian British<br>% | Black or<br>black British<br>% | Chinese or<br>other ethnic<br>group<br>% |            |
| Yes  | 80           | 76         | 76                             | 83                             | 77                                       | 80         |
| No   | 20           | 24         | 24                             | 17                             | 23                                       | 20         |
| <i>Weighted bases</i>  | 55975        | 439        | 3996                           | 1917                           | 291                                      | 64868      |
| <i>Unweighted bases</i>  | 57490        | 377        | 2970                           | 1563                           | 278                                      | 64940      |

**Table 12.12****Bare feet examined, by ethnic group***All*

2006

| In the last 12 months<br>have you had your<br>bare feet examined? | Ethnic group |            |                                |                                |  | Total<br>% |
|---|--------------|------------|--------------------------------|--------------------------------|--|------------|
|   | White<br>%   | Mixed<br>% | Asian or<br>Asian British<br>% | Black or<br>black British<br>% | Chinese or<br>other ethnic<br>group<br>% |            |
| Yes   | 85           | 71         | 67                             | 76                             | 75                                       | 83         |
| No  | 15           | 29         | 33                             | 24                             | 25                                       | 17         |
| <i>Weighted bases</i>   | 57774        | 436        | 4095                           | 1933                           | 299                                      | 66843      |
| <i>Unweighted bases</i>   | 59338        | 377        | 3041                           | 1579                           | 283                                      | 66935      |

**Table 12.13****Whether seen a dietitian, by ethnic group**

*All* *2006*

| In the last 12 months,<br>have you seen a<br>dietitian? | Ethnic group |            |                                |                                |  | Total<br>%   |
|---|--------------|------------|--------------------------------|--------------------------------|--|--------------|
|   | White<br>%   | Mixed<br>% | Asian or<br>Asian British<br>% | Black or<br>black British<br>% | Chinese or<br>other ethnic<br>group<br>% |              |
| Yes   | 22           | 30         | 25                             | 30                             | 30                                       | 23           |
| No  | 78           | 70         | 75                             | 70                             | 70                                       | 77           |
| <i>Weighted bases</i>                                   | <i>57584</i> | <i>433</i> | <i>4087</i>                    | <i>1909</i>                    | <i>292</i>                               | <i>66607</i> |
| <i>Unweighted bases</i>                                 | <i>59117</i> | <i>376</i> | <i>3035</i>                    | <i>1566</i>                    | <i>282</i>                               | <i>66682</i> |

**Table 12.14****Weighed by a doctor or nurse, by ethnic group**

*All* *2006*

| In the last 12 months,<br>have you been<br>weighed by a doctor or<br>nurse? | Ethnic group |            |                                |                                |  | Total<br>%   |
|---|--------------|------------|--------------------------------|--------------------------------|--|--------------|
|   | White<br>%   | Mixed<br>% | Asian or<br>Asian British<br>% | Black or<br>black British<br>% | Chinese or<br>other ethnic<br>group<br>% |              |
| Yes   | 91           | 89         | 88                             | 90                             | 92                                       | 91           |
| No  | 9            | 11         | 12                             | 10                             | 8  | 9            |
| <i>Weighted bases</i>   | <i>57883</i> | <i>447</i> | <i>4128</i>                    | <i>1950</i>                    | <i>297</i>                               | <i>67011</i> |
| <i>Unweighted bases</i>   | <i>59433</i> | <i>386</i> | <i>3060</i>                    | <i>1591</i>                    | <i>282</i>                               | <i>67073</i> |

**Table 12.15****Know enough about food choices, by ethnic group**

*All* *2006*

| Do you know enough<br>about what you should<br>eat to help you<br>manage your diabetes? | Ethnic group |            |                                |                                |  | Total<br>%   |
|---|--------------|------------|--------------------------------|--------------------------------|--|--------------|
|   | White<br>%   | Mixed<br>% | Asian or<br>Asian British<br>% | Black or<br>black British<br>% | Chinese or<br>other ethnic<br>group<br>% |              |
| Yes   | 76           | 66         | 69                             | 68                             | 74                                       | 75           |
| No, I would like to know a<br>bit more  | 18           | 24         | 21                             | 21                             | 14                                       | 18           |
| No, I would like to know a<br>lot more  | 6            | 10         | 10                             | 11                             | 12                                       | 7            |
| <i>Weighted bases</i>   | <i>58044</i> | <i>450</i> | <i>4150</i>                    | <i>1924</i>                    | <i>302</i>                               | <i>67175</i> |
| <i>Unweighted bases</i>   | <i>59581</i> | <i>389</i> | <i>3077</i>                    | <i>1570</i>                    | <i>287</i>                               | <i>67218</i> |



**Table 12.16****Know enough about the role of physical activity, by ethnic group**

*All* *2006*

| Do you know enough about the role of physical activity in managing your diabetes? | Ethnic group |            |                          |                          |                                 | Total %      |
|---|--------------|------------|--------------------------|--------------------------|---------------------------------|--------------|
|   | White %      | Mixed %    | Asian or Asian British % | Black or black British % | Chinese or other ethnic group % |              |
| Yes   | 69           | 56         | 60                       | 54                       | 66                              | 68           |
| No, I would like to know a bit more   | 25           | 35         | 27                       | 32                       | 20                              | 25           |
| No, I would like to know a lot more   | 7            | 10         | 12                       | 14                       | 13                              | 7            |
| <i>Weighted bases</i>   | <i>57202</i> | <i>434</i> | <i>4128</i>              | <i>1921</i>              | <i>294</i>                      | <i>66225</i> |
| <i>Unweighted bases</i>   | <i>58767</i> | <i>376</i> | <i>3065</i>              | <i>1570</i>              | <i>285</i>                      | <i>66317</i> |

**Table 12.17****Ever participated in an education or training, by ethnic group**

*All* *2006*

| Ever participated in an education or training course on how to help you manage your diabetes? | Ethnic group |            |                          |                          |                                 | Total %      |
|---|--------------|------------|--------------------------|--------------------------|---------------------------------|--------------|
|   | White %      | Mixed %    | Asian or Asian British % | Black or black British % | Chinese or other ethnic group % |              |
| Yes   | 10           | 16         | 8                        | 16                       | 13                              | 10           |
| No  | 90           | 84         | 92                       | 84                       | 87                              | 90           |
| <i>Weighted bases</i>   | <i>57656</i> | <i>447</i> | <i>4143</i>              | <i>1921</i>              | <i>299</i>                      | <i>66688</i> |
| <i>Unweighted bases</i>   | <i>59215</i> | <i>386</i> | <i>3080</i>              | <i>1565</i>              | <i>285</i>                      | <i>66777</i> |

**Table 12.18****Whether needed to see a specialist for psychological support to cope with diabetes, by ethnic group**

*All* *2006*

| In the last 12 months have you needed to see a specialist for psychological support? | Ethnic group |            |                          |                          |                                 | Total %      |
|--|--------------|------------|--------------------------|--------------------------|---------------------------------|--------------|
|  | White %      | Mixed %    | Asian or Asian British % | Black or black British % | Chinese or other ethnic group % |              |
| Yes  | 3            | 11         | 7                        | 6                        | 5                               | 3            |
| No   | 97           | 89         | 93                       | 94                       | 95                              | 97           |
| <i>Weighted bases</i>  | <i>57148</i> | <i>438</i> | <i>4114</i>              | <i>1855</i>              | <i>288</i>                      | <i>66033</i> |
| <i>Unweighted bases</i>  | <i>58699</i> | <i>379</i> | <i>3058</i>              | <i>1525</i>              | <i>280</i>                      | <i>66147</i> |

**Table 12.19****Whether able to see a specialist for psychological support, by ethnic group***All who needed to see a specialist for psychological support*

2006

| Were you able to see a specialist for psychological support? | Ethnic group |         |                          |                          |                                 | Total % |
|--|--------------|---------|--------------------------|--------------------------|---------------------------------|---------|
|  | White %      | Mixed % | Asian or Asian British % | Black or black British % | Chinese or other ethnic group % |         |
| Yes  | 51           | 68      | 57                       | 59                       | 58                              | 53      |
| No   | 49           | 32      | 43                       | 41                       | 42                              | 47      |
| <i>Weighted bases</i>  | 1414         | 45      | 263                      | 112                      | 14                              | 1960    |
| <i>Unweighted bases</i>                                      | 1352         | 30      | 193                      | 92                       | 14                              | 1784    |

**Table 12.20****Stayed in hospital overnight, by ethnic group***All*

2006

| Have you stayed in hospital overnight in the last 12 months for any reason? | Ethnic group |         |                          |                          |                                 | Total % |
|---|--------------|---------|--------------------------|--------------------------|---------------------------------|---------|
|   | White %      | Mixed % | Asian or Asian British % | Black or black British % | Chinese or other ethnic group % |         |
| Yes   | 19           | 19      | 16                       | 15                       | 13                              | 19      |
| No  | 81           | 81      | 84                       | 85                       | 87                              | 81      |
| <i>Weighted bases</i>   | 57252        | 433     | 4145                     | 1875                     | 298                             | 66222   |
| <i>Unweighted bases</i>   | 58819        | 377     | 3076                     | 1528                     | 285                             | 66305   |

## **APPENDIX A TOPIC GUIDE FOR CONSULTATION WITH 'EXPERTS'**

### **A1. Objectives**

The key objectives are two-fold:

- a) to inform the development of the sampling strategy for the main survey,
- b) to inform the topics for the survey of people with diabetes (and ultimately the coverage of the questionnaire).

Clearly, the focus of a particular group/depth interview will depend on the experience and knowledge of the interviewees.

#### ***A1.2 Sampling***

- Diagnostic codes
- Systems
- Records – info kept
- Level of data required (practice level, PCT level?)

#### ***A1.3 Questionnaire coverage***

- To identify criteria by which professionals believe diabetes services should be judged
- To identify features of what professionals see as high quality care
- To explore particular services provided, approaches and procedures
- To identify professionals' information needs from the national survey

### **A2. Method**

Four groups, 15 individual interviews lasting around 2 hours each (but ratio of interviews to groups is flexible). With a range of stakeholders from different parts of the country.

Interviews/groups to be tape-recorded. Notes to be made subsequently, and findings to be summarised into an Excel Framework.

### **A3. Topic guide coverage**

#### ***A3.1 Background information about respondents***

- position
- experience

**A3.2 Sampling** (NB: this will only be asked of some respondents (not all will have appropriate knowledge of systems))

- What information can practices supply (name, address, telephone number, type of diabetes, NHS number (other patient id?))
- Are there registers of people with diabetes at the PCO level?
- Potential of making use of the PRIMIS and MIQUEST programmes. (Many PCOs will be extracting information on diabetes patients using MIQUEST as part of the diabetes clinical audit.)

**A3.3 Diagnosis of diabetes**

- diagnostic codes used
- difference between type 1 and type 2
- process/tests used to diagnose diabetes
- patient understanding of their diagnosis, eg, common language (Type 2 v 'late onset')
- important aspects of informing patients of diagnosis
- information needs and availability for GPs
- information needs and availability for patients
- comorbidity and implications of comorbidity

**A3.4 Access to primary care services (after diagnosis)**

- what services (nurse, chiropodist, ophthalmologist) should be available to patients and how often
- liaison/referral between different health professionals
- waiting times
- targets set in terms of access and standards
- obstacles to achieving standards
- positive and negative aspects of service provided
- patients' information needs and availability (copies of referral/discharge letters, access to test results and to own records)
- patients' involvement in decision-making

**A3.5 Diabetes Review (usually Annual)**

- When, how often, should reviews take place
- What is the purpose
- Where
- How, other means than face to face
- With whom
- What should be covered
- What information should be readily available
- What should be documented – get some examples

**A3.6 Care Planning**

- Should there be a care plan or care planning **process** for everyone?
- What is the purpose of the process?
- How are they developed, tailored, agreed?
- How are all options considered?

- How should they be documented?
- How are people supported to deliver their plans?

### ***A3.7 Self-management of diabetes***

- Description of issues for patients
- Patients' information needs and availability
- Type 1 versus type 2
- Implications for age of patient, and for where living, with whom
- Patients' involvement in decision-making
- Management of side-effects
- Consideration of psychological and emotional needs, pain management

### ***A3.8 The provision of psychological support***

- What type of support should be available?
- Who should provide it?
- Is it provided in primary care or somewhere else?
- When/how often should it be provided? How should it be provided?
- We also need to cover the other aspects for consultation outlined in the section covering access to primary care services

### ***A3.9 Educational support***

- What is structured educational support
- How should it be available, where, when
- What options should be available
- What are the standards

### ***A3.10 Access to hospital services***

- what services should be available to patients and how often
- under what circumstances would hospital care be required
- process of referral
- regularity of appointments
- continuity of care
- what should be available for self-care in hospital eg, care as a person with diabetes but inpatient for other condition/treatment/surgery
- how should discharge be supported

### ***A3.11 Conclusions***

- aspects of service that best meet patient needs, from patients perspective
- aspects of service which most need improvement, from patients perspective
- differences between views of patients and professionals in critical features of quality service
- criteria by which services should be judged, from patients perspective
- implications for survey coverage
- increasing response rates – how to encourage people with diabetes to complete a questionnaire
- GP logos, pros and cons in aiding response rate

## **APPENDIX B TOPIC GUIDE FOR INTERVIEWS WITH PEOPLE WITH DIABETES**

### **B1. Key research objectives**

- To explore the experiences and views of people with diabetes about their treatment and care
- To explore what type of support they have had and need to maximise self care / their independence
- To discuss areas of positive and negative experiences of NHS services related to their diabetes.
- To discuss ideas for service improvements, including how they are supported to self care
- To find out the terms used by people with diabetes

### **B2. Introduction**

- **The National Centre and Patient Dynamics** have been commissioned by the HCC to carry out a survey of people with diabetes and to talk to people with diabetes and professionals about their experiences of NHS treatment and care for people with diabetes.
- **Project aims** to improve services for people with diabetes, and in particular how they are supported to self care. These discussions will help to develop a questionnaire for a larger, national study of people with diabetes early next year.
- **Tape recording and confidentiality.** Would like to record our discussion, with your permission, because it makes sure that we take account of everything you have to say. What you say will be completely confidential and when we analyse the discussions and write up the findings, no names of people we talked to will ever be used, and people will not be identified by their comments.

### **B3. Background**

Begin with basic questions about person.

- Age
- Live alone or with someone
- Relationship to other people lived with
- Work status and work status of others lived with
- Ethnic group

#### **B4. Diagnosis**

- **Initial symptoms/concerns;** when and how discovered  
What action taken. (Check for GP route, hospital route or other route)

##### ***B4.1 Type of diabetes***

What type of diabetes, what terms used, check for understanding of difference between Type 1 and Type 2, are they using insulin

##### ***B4.2 Diagnosed by GP or hospital route (where diagnosed can affect information and education etc)***

##### ***B4.3 Time between first noticed symptoms and visited GP or hospital. Tests carried out, how/when were results delivered.***

##### ***B4.4 Diagnosed not by GP, secondary care or other route***

How, when, where, what happened?

#### **B5. All Routes**

How was diagnosis explained, language used, time spent explaining, any choices offered about treatment, written information provided, attitudes of GP/nurse/other and patient. Feelings at this stage

\*\*\* Check here good, bad experiences and improvements that could be made to care received.

##### ***B5.1 Treatment/Management of Diabetes and Understanding***

##### ***B5.2 What treatment is used***

#### **B6. Probe for any medication, what type, how administered**

- **Decision-making**  
Who decided what treatment should be used, to what extent did patient have input, extent to which they follow the advice given by health professionals
- **Understanding of treatment**  
Explanation given about treatment, any written information

### **B7. Side Effects**

If medication, any side effects. Were side effects explained.

### **B8. Self-management**

How do they and to what extent do they manage their own condition/diabetes. Probe for diet, lifestyle factors, having choice of insulin that best suits their lifestyle and needs etc

- **"Patient choice"**

Do they feel they have a choice in how to manage their condition, how much control do they themselves have or feel they have.

NB: Having a choice is an underlying theme to a lot of the issues throughout the guide

**\*\*\* Check here good, bad experiences and improvements that could be made to care received.**

### **B9. Primary Care Services**

- **GP**

Role of GP, frequency of consultations, is same GP seen each time

- **Practice nurse**

Role of practice nurse, frequency of consultations

- **Diabetes review**

Does this happen, how, with whom and how often. Probe for terms used.

Review recalls - whether they understand that practice staff will recall them to the diabetes review so they do not have to make recall appointments themselves.

Whether they have been asked by practice staff to make a recall appointment. What happens.

Contact with services between reviews, who, frequency, satisfaction with contact. Choice on location, frequency, mode (eg, telephone). Are results of tests available.

- **Care planning**

Is there a care plan, probe for terms used. How is the care plan developed and by whom. What does it include (named contact, communication means and frequency, education and personal goals, record of information/results, medications). Is it documented. Negotiating and agreeing it. Do they keep a copy, do they refer to it.

- Has the person had their feet checked (who by), eyes checked (where)
- Any other complications, how managed etc

**\*\*\* Check here regarding good, bad experiences and improvements that could be made to care received.**



## **B10. Hospital Services**

- **Hospital referral.**  
Has this happened, and if so at what stage, outpatient or inpatient. Waiting list? If pre-admission clinic, how diabetes addressed
- **Health professionals seen at hospital**  
Doctor, specialist nurse. Who, why and how often. Are same people seen each time. Waiting list? May have experiences as inpatient and outpatient, and as inpatient with diabetes-related complication, or not, need to differentiate between their views of staff etc in both settings
- **Attitudes of staff** and overall care, staff understanding, is there respect towards the needs of people with diabetes, even if not in hospital specifically in relation to their diabetes. Do staff seem trained in diabetes care
- **Hospital facilities;**  
privacy, cleanliness, waking up times, noise, telephone access, visiting, mixed wards, complementary therapies available, self management of diabetes while in hospital and facilitates provided e.g. keep own insulin, diet – were they offered food appropriate for their diabetes, culture and religious beliefs; have they been given clear information about management of their diabetes during their stay and after discharge
- **Route back into primary care** and experiences  
What happened, when and how. Which kind of care is preferred (primary or secondary) Link with social care.

\*\*\* Check here good, bad experiences and improvements that could be made to care received.

## **B11. Other Health Professionals**

- **Other professionals involved and their roles**  
Probe for dietitian, podiatrist, ophthalmologist, pharmacist. What happens, how often, same person each time, waiting list Nurse prescribing
- **Coordination of care – how managed**  
Who organises appointments, how is patient informed, how do the different health professionals communicate about their condition, how well and are they satisfied with this process.  
Are there any issues with different health professionals knowing what other health professional have done e.g. having up to date results and info

\*\*\* Check here good, bad experiences and improvements that could be made to care received.

## **B12. Education and Support**

- **Psychological support**

What type of support is available; who provides it, where. What should be available? Who should provide it?

Have diabetes staff helped them identify emotional and behavioural barriers to managing their diabetes effectively

- **Educational support**

What type of support is available, who provides it, where. Have they been referred to and have they had, structured education (DAFNE/DESMOND/other)

What should be available. Who should provide it, where and in what form. Probe for any written information.

Education at diagnosis, education thereafter

Choice of location, of type of support (e.g., know about other local/national support groups), is delivery relevant to their style of learning (e.g., group, or one to one, written, role play etc)

Does education meet ethnic cultural needs?

What other sources of education are available (e.g. Internet)

\*\*\* Check here good, bad experiences and improvements that could be made to care received.

## **B13. Conclusions**

- aspects of service that best meet patient needs, from patients perspective
- aspects of service which most need improvement, from patients perspective
- criteria by which services should be judged, from patients perspective

## APPENDIX C PROBE SHEET FOR SECOND ROUND OF COGNITIVE INTERVIEWS

### C1. Diabetes questionnaire

#### *Initial Diagnosis*

**Q1** How old were you when you were first diagnosed with diabetes?

I was  Years old

**Q2** How would you describe the **verbal information** you received about diabetes when you were first diagnosed?

I received **too little** information

I received about the **right amount** of information

I received **too much** information

Don't know; a carer was given information for me

I can't remember

**Q3** How would you describe the **written information** you received about diabetes when you were first diagnosed?

I received **too little** information

I received about the **right amount** of information

I received **too much** information

Don't know; a carer was given information for me

I can't remember

**Q4** Were you put on insulin fairly soon after you were first diagnosed with diabetes?

Yes  → Q5

No  → Q6

**Q5** How many months after you were first diagnosed with diabetes were you put on insulin?

Please write in number of months

Don't know

The main purpose of these questions is to collect enough information to derive type 1 or 2 diabetes, thru a combination of age at diagnosis and whether insulin was prescribed within the first 3-6 months of diagnosis (depending on age). Age at diagnosis, in tandem with current age (derived from records) will also indicate approximate year when diagnosed.

**Q1:**

- How did you decide on that answer? How confident are you in the answer?
- [if missing] Why did you decide not to write anything in? [Did you notice the 'best estimate' instruction?]

**Q2 & Q3**

- What were you thinking about when you read these question? How did you remember?
- When you were thinking about the information you received back when you were first diagnosed, who came to mind as the people giving you information? [probe for doctors, nurses, other patients, family members, etc.]
- What does the phrase 'verbal information' mean to you?
- How did you judge whether it was too much or too little or the right amount of information?

**Q4**

- How did you decide on that answer? How did you remember?
- How confident are you in that answer?
- What does the term 'first diagnosed' mean to you?
- What does the term 'fairly soon' mean to you?

**Q5**

- How did you decide on that answer? How did you remember?
- How confident are you in that answer?
- What do the terms 'Type 1' and 'Type 2 Diabetes' mean to you? Do you know if you are Type 1 or Type 2?

**C2. Check-ups and tests**

**Check-ups**

**Q6** Where do you go for your diabetes check-up, where a doctor or nurse conducts a full set of tests and makes any adjustments to your treatment? This check-up is sometimes known as an 'annual review' though some people have more or less than one per year. (Please tick one box only)

|   |         |                          |      |
|---|---------|--------------------------|------|
|   | 1030-31 |                          |      |
|   |         | <input type="checkbox"/> | → Q8 |
| My doctor's surgery                     |         | 1                        |      |
|   |         | <input type="checkbox"/> | → Q8 |
| The hospital clinic                     |         | 2                        |      |
| Somewhere else <b>(please write in)</b> |         | <input type="checkbox"/> | → Q8 |
|   |         | 3                        |      |
| <hr/>                                   |         |                          |      |
|   |         | <input type="checkbox"/> | → Q8 |
| It varies                               |         | 4                        |      |
|   |         | <input type="checkbox"/> | → Q7 |
| Have never had a diabetes check-up      |         | 5                        |      |
|   |         | <input type="checkbox"/> | → Q8 |
| Don't know                              |         | 6                        |      |

**Q7** Why have you not had a diabetes check-up?

|  |                          |       |
|--|--------------------------|-------|
| I have no problems with my diabetes so not necessary | <input type="checkbox"/> | → Q11 |
|  | 1                        |       |
| The check-up was at an inconvenient time             | <input type="checkbox"/> | → Q11 |
|  | 2                        |       |
| I was not contacted to make an appointment           | <input type="checkbox"/> | → Q11 |
|  | 3                        |       |
| It was cancelled by the practice or hospital         | <input type="checkbox"/> | → Q11 |
|  | 4                        |       |
| Other reason (please write in)                       | <input type="checkbox"/> | → Q11 |
|  | 5                        |       |

---

**Q8** In the last 12 months – that is, from September 2004 up until today – how many times have you had a diabetes check-up?

None

Once

Twice

Three or more times

Don't know

**Q9** How often do staff there have your most up-to-date diabetes-related medical records to refer to?

Always or almost always

Sometimes

Rarely or never

Don't know

**Q10** How often do you see the same person when you go for your diabetes check-up?

1060-91

I always see the same person

I usually see the same person

I see a different person each time

Don't know

**Q11** Do you have the phone number of a doctor or nurse who you can contact about your diabetes during the evenings, nights and weekends? (Please tick all that apply)

|               |                          |   |
|---------------|--------------------------|---|
| Yes, evenings | <input type="checkbox"/> | 1 |
| Yes, nights   | <input type="checkbox"/> | 1 |
| Yes, weekends | <input type="checkbox"/> | 1 |
| No            | <input type="checkbox"/> | 2 |
| Don't know    | <input type="checkbox"/> | 3 |

The main purpose is to capture information on the 'annual review'. During this review the health staff performs a comprehensive set of tests to determine whether the diabetes condition is causing any complications that require further testing and/or modified treatment. The issue gets complicated, however, because not all patients have an annual review, and many do not use that term. Furthermore, some patients may have the set of tests that comprise the annual review but they may not have those tests all in one visit; they may be more spread out across the year if certain symptoms required it. For these reasons we use the term 'annual review' only in a qualified way and then ask about specific tests within the last 12 months.

**Q6**

- Can you tell me in your own words what you think this question is asking?
- Can you describe what happens during a typical 'diabetes check-up' for you?
- Do you make a distinction between a full check-up and a routine monitoring visit?

**Q8**

- How did you decide on that number?
- How did you remember and count up the number of visits?
- What time period did you have in mind - what months?

**Q9**

- What did you think of when you read the term 'medical records'? [if necessary: Do you think of an actual paper printout or chart, or do you think of information stored on the computer, both, or something else?]
- Were you thinking of records just about your diabetes, or general care as well?
- How did you judge whether staff had your records or not?

**Q10**

- How did you decide on your answer?
- [if Always or Usually] What person or people were you thinking of?

**Q11**

- How did you decide on your answer?

**C3. Tests**

**Q12** In the last 12 months have you have a special blood test to look at your long-term or 'average' blood glucose level? This test is called a glycosylated haemoglobin, or **HbA1c**, and is taken by a doctor or nurse.

|            |                          |              |
|------------|--------------------------|--------------|
| Yes        | <input type="checkbox"/> | → <b>Q13</b> |
| No         | <input type="checkbox"/> | → <b>Q16</b> |
| Don't know | <input type="checkbox"/> | → <b>Q16</b> |

**Q13** Thinking about the **most recent** HbA1c test, were you given your test results in writing?

|            |                          |
|------------|--------------------------|
| Yes        | <input type="checkbox"/> |
| No         | <input type="checkbox"/> |
| Don't know | <input type="checkbox"/> |

**Q14** Were you told that the result was:

|                     |                          |
|---------------------|--------------------------|
| Too high            | <input type="checkbox"/> |
| About right         | <input type="checkbox"/> |
| Too low             | <input type="checkbox"/> |
| Wasn't told results | <input type="checkbox"/> |
| Don't know          | <input type="checkbox"/> |

**Q15** Please write in your latest HbA1c result if you remember it

\_\_\_\_\_



**Q16** In the last 12 months has a doctor or nurse carried out any of the following **tests**? (Please tick one box on each line)

|                | Yes<br>1497                           | No                            | Don't<br>know                 |
|----------------|---------------------------------------|-------------------------------|-------------------------------|
| Urine test     | <input type="checkbox"/><br>1         | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |
| Blood pressure | <input type="checkbox"/><br>1498<br>1 | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |
| Cholesterol    | <input type="checkbox"/><br>1499<br>1 | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |

**Q12**

- What does the term 'blood glucose' mean to you?
- What about 'HbA1c'? Does 'the 3 month test' or 'fasting test' mean anything to you?

**Q13**

- How did you decide on your answer?
- How did you remember when your 'most recent' test was?

**Q14**

- What do you think of as 'too high' or 'about right'? Why?

**Q15**

- How confident are you in that answer?
- [If DK] Can you give a range?

**Q16**

- What is your understanding of the purpose of the urine test [if necessary: Is it testing for protein or sugar?]
- How did you remember whether you'd had those tests in the last 12 months?

**Q17** If you did have any of these tests, were you **given test results in writing**? (Please tick one box on each line)

|                | Yes<br>1497                           | No                            | Don't<br>know                 |
|----------------|---------------------------------------|-------------------------------|-------------------------------|
| Urine test     | <input type="checkbox"/><br>1         | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |
| Blood pressure | <input type="checkbox"/><br>1498<br>1 | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |
| Cholesterol    | <input type="checkbox"/><br>1499<br>1 | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |

**Q18** In the last 12 months did you have an eye test where a **photograph of the back of your eyes** was taken? (This is also known as retinopathy screening).

1450

Yes  1

No  2

Don't know  3

**Q19** In the last 12 months have you had your bare feet examined?

1450

Yes  1

No  2

Don't know  3

**Q20** In the last 12 months have you seen a dietician?

1450

Yes  1

No  2

Don't know  3

**Q21** In the last 12 months, have you been weighed by a doctor or nurse?

1450

Yes  1

No  2

Don't know  3

**Q22** In the last 12 months, have you had enough contact with the following health professionals in relation to your diabetes? (Please tick one box on each line)

|  | <b>Enough</b><br>326       | <b>Almost enough</b>       | <b>Not enough</b>          | <b>Don't want or need contact</b> |
|--|----------------------------|----------------------------|----------------------------|-----------------------------------|
| Doctor at local GP surgery                 | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4        |
|  | 326                        |                            |                            |                                   |
| Nurse at local GP surgery                  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4        |
|  | 326                        |                            |                            |                                   |
| Specialist consultant doctor at hospital   | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4        |
|  | 326                        |                            |                            |                                   |
| Specialist diabetes nurse at hospital      | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4        |
|  | 326                        |                            |                            |                                   |
| Chiropodist, podiatrist or foot specialist | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4        |
|  | 326                        |                            |                            |                                   |
| Eye specialist                             | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4        |
|  | 326                        |                            |                            |                                   |
| Dietician                                  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4        |
|  | 326                        |                            |                            |                                   |
| Other (please write in)                    | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4        |

**Q18**

- What does the term 'retinopathy screening' mean to you? Does that help explain the question, or does it make it more confusing?

**Q22**

- How did you decide on your answers?
- How did you judge what is 'enough contact' with these health professionals?
- Is there any health professional important to your diabetes care that is not on the list?

**C4. Care Planning**

**Q23** Thinking about the last 12 months, when you received care for your diabetes, how often were you...(Please tick one box on each line)

|  | <b>Rarely or<br/>Never</b>    | <b>Some of<br/>the time</b>   | <b>Almost<br/>Always</b>      |
|--|-------------------------------|-------------------------------|-------------------------------|
| 1505<br>Asked for your ideas for making a treatment plan                       | <input type="checkbox"/><br>1 | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |
| 1505<br>Given choices about treatment to think about                           | <input type="checkbox"/><br>1 | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |
| 1505<br>Asked to talk about any problems with your medicines or their effects  | <input type="checkbox"/><br>1 | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |
| 1506<br>Given a written list of things you should do to improve your health    | <input type="checkbox"/><br>1 | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |
| 1507<br>Shown how what you did to take care of yourself influenced your health | <input type="checkbox"/><br>1 | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |
| 1508<br>Asked to talk about my goals in caring for your diabetes               | <input type="checkbox"/><br>1 | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |
| 1508<br>Helped to set specific goals to improve your eating or exercise        | <input type="checkbox"/><br>1 | <input type="checkbox"/><br>2 | <input type="checkbox"/><br>3 |

**Q24** In the last 12 months were you given a copy of your treatment plan?

|             |                               |              |
|-------------|-------------------------------|--------------|
| 1450<br>Yes | <input type="checkbox"/><br>1 | → <b>Q25</b> |
| No          | <input type="checkbox"/><br>2 | → <b>Q26</b> |
| Don't know  | <input type="checkbox"/><br>3 | → <b>Q26</b> |

**Q25** Which of the following did this plan include? (Please tick all that apply)

|  |                               |
|--|-------------------------------|
| 1031<br>Your next appointment time and place                             | <input type="checkbox"/><br>1 |
| Name of someone to contact if you need to                                | <input type="checkbox"/><br>2 |
| Personal advice about managing your diabetes until your next appointment | <input type="checkbox"/><br>3 |
| Personal goals about your diabetes                                       | <input type="checkbox"/><br>4 |
| Personal advice about the kinds of food to eat                           | <input type="checkbox"/><br>5 |
| Personal advice about your exercise                                      | <input type="checkbox"/><br>6 |

**Q23**

- What were you thinking about when answering these questions?
- What health professionals did you have in mind?

**Q25**

- What does the term 'personal' mean to you?

**C5. Stays in Hospital**

**Q26** Have you stayed in hospital overnight in the past 12 months **for any reason?**

|            |      |   |   |            |
|------------|------|---|---|------------|
| Yes        | 1450 | 1 | → | <b>Q27</b> |
| No         |      | 2 | → | <b>Q34</b> |
| Don't know |      | 3 | → | <b>Q34</b> |

**Q27** What was the reason for your **most recent** stay in hospital overnight?  
Was it related to...

|                                  |      |   |
|----------------------------------|------|---|
| Diabetes                         | 1450 | 1 |
| Something else                   |      | 2 |
| Both diabetes and something else |      | 3 |
| Don't know                       |      | 4 |

**Q26**

- How did you remember the 'most recent' stay? How confident are you that it was within last 12 months?

**Q27**

- How did you decide on your answer? Any trouble choosing which box?

**Q28** Thinking about your **most recent** stay in hospital overnight, were the staff who cared for you aware that you had diabetes?

|  |         |   |
|--|---------|---|
| <b>All</b> of the staff were aware       | 1060-91 | 1 |
| <b>Most</b> of the staff were aware      |         | 2 |
| <b>Only some</b> of the staff were aware |         | 3 |
| <b>None</b> of the staff were aware      |         | 4 |
| Don't know                               |         | 5 |

**Q29** During your **most recent** stay in hospital overnight, did someone from the hospital diabetes specialist team visit you?

1060-91

|            |  |
|------------|--|
| Yes        | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="1"/> |
| No         | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="2"/> |
| Don't know | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="3"/> |

**Q30** During your **most recent** stay in hospital overnight, did staff who cared for you help provide what you needed to manage your own diabetes?

1060-91

|  |  |
|--|--|
| <b>All</b> of the staff helped provide what I needed       | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="1"/> |
| <b>Most</b> of the staff helped provide what I needed      | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="2"/> |
| <b>Only some</b> of the staff helped provide what I needed | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="3"/> |
| <b>None</b> of the staff helped provide what I needed      | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="4"/> |
| I was too ill or didn't want to manage my own diabetes     | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="5"/> |
| Don't know   | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="6"/> |

**Q31** During your **most recent** stay in hospital overnight, how often were you able to take your diabetes medication in the way you wanted to?

1450

|  |  |
|--|--|
| Always or almost always                                | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="1"/> |
| Sometimes  | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="2"/> |
| Rarely or never  | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="3"/> |
| I was too ill or didn't want to manage my own diabetes | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="4"/> |
| Don't know   | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="5"/> |

**Q32** During your **most recent** stay in hospital overnight, how often was the **type of food** suitable for your diabetes?

|                           |      |
|---------------------------|------|
|                           | 1450 |
| Always or almost always   | 1    |
| Sometimes                 | 2    |
| Rarely or never           | 3    |
| Did not eat hospital food | 4    |

**Q33** During your **most recent** stay in hospital overnight, how often was the **timing of your meals** suitable for your diabetes?

|                           |      |
|---------------------------|------|
|                           | 1450 |
| Always or almost always   | 1    |
| Sometimes                 | 2    |
| Rarely or never           | 3    |
| Did not eat hospital food | 4    |

The purpose of this series is to measure how well hospital staff accommodated diabetes while patients were in hospital - whether patients were there specifically for diabetes or some other unrelated condition. Q28-Q29, and Q32-Q33 aim to determine whether hospital staff were aware of the patient's diabetes and took appropriate steps. While some patients may have been too ill to manage their own care, some may want to tend to their own diabetes needs and Q30-Q31 assess how well hospital staff enabled patients to care for their own diabetes while in hospital.

**Q28**

- How did you decide on your answer?
- Who were you thinking of as 'staff'?
- How did you judge whether staff were aware you had diabetes?

**Q29**

- What does the term 'hospital diabetes specialist team' mean to you?
- [Whether or not they were part of a 'team'] Were you visited by a diabetes specialist nurse, or any type of diabetes specialist?

**Q30**

- Can you tell me in your own words what you think that question is asking?
- What does the phrase 'manage your own diabetes' mean to you?
- How did you decide on your answer?
- What did you need from hospital staff regarding your diabetes?

**Q31**

- Can you tell me in your own words what you think that question is asking?
- What does it mean to you to 'take medication in the way you wanted'? [if necessary: does this mean having certain equipment such as syringes and a refrigerator, or something else?]

**Q32 & Q33**

- How did you decide on your answers?
- What does the phrase 'timing of your meals' mean to you?



- Is there anything else about the food you received in hospital (other than the type and timing) that was important with regard to your diabetes?

**C6. Psychological and emotional support**

**Q34** In the last 12 months have you needed to see a specialist for psychological support to cope with your diabetes?

Yes  <sup>1031</sup><sub>1</sub> → **Q35**  
 No  <sub>2</sub> → **Q36**

**Q35** Were you able to see a specialist for psychological support?

Yes  <sup>1031</sup><sub>1</sub>  
 No  <sub>2</sub>

**Q36** In the last 12 months, have you received emotional support from any of the following, specifically in relation to your diabetes? (Please tick all that apply)

1122-39

Doctor at local GP surgery  <sub>1</sub>

Nurse at local GP surgery  <sub>1</sub>

Specialist consultant doctor at hospital  <sub>1</sub>

Specialist diabetes nurse at hospital  <sub>1</sub>

Counsellor or social worker  <sub>3</sub>

Telephone helpline  <sub>4</sub>

Support group  <sub>5</sub>

Other people with diabetes (other than a support group)  <sub>6</sub>

Family member or friend  <sub>7</sub>

None of these  <sub>8</sub>

The purpose of this series is to measure whether patients needed formal psychological or psychiatric care in relation to their diabetes, and if so, whether they received that care. Another goal is to identify the other sources of informal emotional support patients receive.

**Q34**

- Can you tell me what you were thinking about when you answered this question?
- What does the phrase 'specialist for psychological support' mean to you?

- What does the phrase 'cope with your diabetes' mean to you?

**Q35 [if no]**

- Why were you unable to get this care?

**Q36**

- Is psychological support any different from emotional support to you?
- Is there anything missing from this list - any important source of support?

**C7. Self-management, knowledge and information**

**Q37** How important do you think it is to manage your diabetes?

1043

- Very important  1
- Fairly important  2
- Not very important  3
- Not at all important  4

**Q38** How much do you think you know about managing your diabetes?

1122-39

- Everything I need to know  1
- Most of what I need to know  2
- Some of what I need to know  3
- A little of what I need to know  4
- Almost none of what I need to know  5

**Q37 & Q38**

- How did you decide on your answers?
- Where do you get most of your information on managing your own diabetes?

**Q39** Do you take any medication to control your diabetes or **for any other condition?**

- Yes  1 → **Q40**
- No  2 → **Q45**

**Q40** What type of medication(s) do you take? (Please tick all that apply)

|                                 |   |
|---------------------------------|---|
| Insulin                         | 1 |
| Tablets to control diabetes     | 2 |
| Tablets for high blood pressure | 3 |
| Tablets for high cholesterol    | 4 |
| Tablets for heart disease       | 5 |
| Other (please write in)         | 6 |

---

**Q41** How important do you believe it is to take your medication as recommended by your doctors and nurses?

1043

|                      |   |
|----------------------|---|
| Very important       | 1 |
| Fairly important     | 2 |
| Not very important   | 3 |
| Not at all important | 4 |

**Q42** Do you have enough information about **how** to take your medication?

1252

|   |   |
|---|---|
| Yes                                     | 1 |
| No, I would like a bit more information | 2 |
| No, I would like a lot more information | 3 |

**Q43** Do you have enough information about **when** to take your medication?

|   |  |
|---|--|
|   | 1252   |
| Yes                                     | <input style="width: 50px; height: 25px; border: 1px solid black;" type="text" value="1"/> |
| No, I would like a bit more information | <input style="width: 50px; height: 25px; border: 1px solid black;" type="text" value="2"/> |
| No, I would like a lot more information | <input style="width: 50px; height: 25px; border: 1px solid black;" type="text" value="3"/> |

**Q44** Do you have enough information about **how much** medication to take?

|   |  |
|---|--|
|   | 1252   |
| Yes                                     | <input style="width: 50px; height: 25px; border: 1px solid black;" type="text" value="1"/> |
| No, I would like a bit more information | <input style="width: 50px; height: 25px; border: 1px solid black;" type="text" value="2"/> |
| No, I would like a lot more information | <input style="width: 50px; height: 25px; border: 1px solid black;" type="text" value="3"/> |

**Q39**

- What came to mind when you read this question?
- Were you thinking of any condition, or only diabetes?
- What does it mean to you to 'take medication'? Do you think of short-term prescriptions or only of long-term prescriptions?
- What does it mean to you to take medication to 'control your diabetes'?

**Q40**

- Did you have any doubts about which boxes to choose?
- Does the medication you take vary over time for you?
- If so, how much does it vary and how did you decide to choose the answers you did?

**Q41**

- Which medications are you thinking of?
- Is it easy or hard to think about answering this question about all your medications at once?
- What does the phrase 'as recommended by your doctors' mean to you?
- How did you decide on your answer?

**Q42-Q44**

- Do the answers to these questions vary depending on which medication you're thinking of?
- Are the differences (how, when, and how much medication to take) clear to you, or do they seem like they are all asking about the same thing?
- What do the terms 'a bit more information' and 'a lot more information' mean to you? How did you decide between the two?

### C.8 Measuring blood glucose levels

**Q45** Do you test your own blood glucose levels?

|     |                          |              |
|-----|--------------------------|--------------|
| Yes | <input type="checkbox"/> | → <b>Q46</b> |
| No  | <input type="checkbox"/> | → <b>Q47</b> |

**Q46** How do you use the results of your blood glucose tests? (Please tick all that apply)

|  |                          |
|--|--------------------------|
|  | 1252                     |
| To check or alter insulin                                      | <input type="checkbox"/> |
| To check or alter tablets                                      | <input type="checkbox"/> |
| To inform what I eat   | <input type="checkbox"/> |
| To inform how much exercise I do                               | <input type="checkbox"/> |
| To tell me if I am 'hypo'                                      | <input type="checkbox"/> |
| To contact diabetes care team to alter treatment or medication | <input type="checkbox"/> |
| To write it down   | <input type="checkbox"/> |
| Other (please write in)  | <input type="checkbox"/> |

---

**Q45**

- Can you tell me in your own words what that question is asking?

**Q46**

- Did you find these answer categories fairly clear, or were they confusing?
- Is anything missing from the list?

**C9. Diet**

**Q47** How important do you believe **what you eat** is for managing your diabetes?

1043

- Very important  1
- Fairly important  2
- Not very important  3
- Not at all important  4

**Q48** Do you have enough information about **what you should eat** to help manage your diabetes?

1252

- Yes  1
- No, I would like a bit more information  2
- No, I would like a lot more information  3

**Q49** How good are you at eating the right foods to help manage your diabetes?

1043

- Very good  1
- Fairly good  2
- Not very good  3
- Not at all good  4



**C10. Exercise**

**Q50** How important do you believe exercise is for managing your diabetes?

|                      |  |
|----------------------|--|
|                      | 1043   |
| Very important       | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="1"/> |
| Fairly important     | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="2"/> |
| Not very important   | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="3"/> |
| Not at all important | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="4"/> |

**Q51** Do you have enough information about the role **of exercise** in managing your diabetes?

|   |  |
|---|--|
|   | 1252   |
| Yes                                     | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="1"/> |
| No, I would like a bit more information | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="2"/> |
| No, I would like a lot more information | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="3"/> |

**Q52** How good are you at exercising to help manage your diabetes?

|                 |  |
|-----------------|--|
|                 | 1043   |
| Very good       | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="1"/> |
| Fairly good     | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="2"/> |
| Not very good   | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="3"/> |
| Not at all good | <input style="width: 50px; height: 20px; border: 1px solid black;" type="text" value="4"/> |

**DIET**

**Q47**

- What does the term 'what you eat' mean to you [if necessary: does it mean types of food, amount of food, both, something else?]
- How did you decide on how important diet is?

**Q48**

- How did you decide on your answer?
- Where do you get your information on what you should eat to help manage your diabetes?

**Q49**

- What were you thinking about when you answered this question?
- Did you find this to be a threatening question?

**EXERCISE**

**Q50**

- How did you decide how important exercise is?

**Q51**

- How did you decide on your answers?
- Where do you get your information on the role of exercise in managing your diabetes?

**Q52**

- What were you thinking about when you answered this question?
- Did you find this to be a threatening question?

**Q53** In relation to your diabetes, how much do you understand about: (Please tick one box on each line)

|  | Nothing or very little     | Some                       | Enough                     | A lot                      |
|--|----------------------------|----------------------------|----------------------------|----------------------------|
| 326<br>The effects of being ill, for example having flu, on managing your diabetes | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| 326<br>Keeping to a certain weight   | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| 326<br>What to expect if your blood glucose drops too low                          | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| 326<br>Having regular check ups with the doctor or nurse                           | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| 326<br>Cholesterol   | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| 326<br>Blood pressure  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| 326<br>Checking and looking after your eyes  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| 326<br>Checking and looking after your feet  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| 326<br>How drinking alcohol can affect your diabetes                               | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| 326<br>How smoking can affect your diabetes  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| 326<br>The effects of stress on your diabetes                                      | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |
| 326<br>The effects of tiredness on your diabetes                                   | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 |

**Q53**

- What were you thinking about when you read through this question?
- How did you decide on your answers?
- Were you able to think about each question or was it hard to pay attention toward the end of the list?
- Were the questions ordered in a way that made it easy to think about, or was the sequence confusing?
- Is anything missing from the list?

**C11. Education**

**Q54** Have you ever participated in a training course on how to manage your diabetes?

Yes  <sup>1167</sup><sub>1</sub> → **Q55**  
No  <sub>2</sub> → **Q59**

**Q55** When did you go on your **most recent** course?

<sup>1252</sup>  
Less than 6 months ago  <sub>1</sub>  
6 months to one year ago  <sub>2</sub>  
1-2 years ago  <sub>3</sub>  
2 or more years ago  <sub>4</sub>  
Don't know  <sub>5</sub>

**Q56** Where did the training course take place?

<sup>1313</sup>  
In a local hospital  <sub>1</sub>  
At a GP practice  <sub>2</sub>  
At a community clinic  <sub>3</sub>  
At a local diabetes centre  <sub>4</sub>  
Other (please write in)  <sub>5</sub>

---

**Q57** How convenient was it for you to get to the place where the course was held?

1313

|                 |                      |
|-----------------|----------------------|
| Very easy       | <input type="text"/> |
| Fairly easy     | <input type="text"/> |
| Not very easy   | <input type="text"/> |
| Not at all easy | <input type="text"/> |

**Q54**

- What does the term 'training course' mean to you?
- How did you decide on your answer?
- Can you describe any types of training courses you've been on?
- How did you decide if those courses did or didn't 'count' for this question?

**Q55**

- How did you decide on your answer?
- Did you have any trouble remembering when the course was?

**Q56**

- How did you decide on your answer?
- Did you have any trouble deciding on which answer matched the place you went on your course?

**Q57**

- What were you thinking about when you answered that?
- Can you describe how you got to the course [did you drive your own car, take public transit, etc.??]

**Q58** Did you find that the course was taught in a way that was easy to understand?

- Yes, very easy to understand  <sub>1</sub> → Q62
- Yes, fairly easy to understand  <sub>2</sub> → Q62
- No, quite difficult to understand  <sub>3</sub> → Q62
- No, very difficult to understand  <sub>4</sub> → Q62

**Q59** Have you ever wanted to attend a training course about how to help manage your diabetes?

- 1252
- Yes  <sub>1</sub> → Q60
  - No  <sub>2</sub> → Q62

**Q60** Have you ever been offered the opportunity to attend a training course about how to manage your diabetes?

- 1252
- Yes  <sub>1</sub> → Q61
  - No  <sub>2</sub> → Q62

**Q61** Why weren't you able to participate in a course? (Please tick all that apply)

- 1252
- The location was inconvenient  <sub>2</sub>
  - I don't like group trainings  <sub>3</sub>
  - The course wasn't suited to my cultural needs  <sub>4</sub>
  - The time or day was inconvenient  <sub>5</sub>
  - Other reason (please write in)  <sub>6</sub>
-

**Q62** Are you aware of any local or national diabetes support/patient groups?

|                                   |                                |
|-----------------------------------|--------------------------------|
|                                   | 1252                           |
| Yes, and I have contacted them    | <input type="text" value="1"/> |
| Yes, but I haven't contacted them | <input type="text" value="2"/> |
| No                                | <input type="text" value="3"/> |

**Q63** Have you wanted to talk to other people with diabetes?

|     |                                |
|-----|--------------------------------|
|     | 1252                           |
| Yes | <input type="text" value="1"/> |
| No  | <input type="text" value="2"/> |

**Q64** Have you been able to meet and talk to other people with diabetes?

|     |                                |
|-----|--------------------------------|
|     | 1252                           |
| Yes | <input type="text" value="1"/> |
| No  | <input type="text" value="2"/> |

**Q58**

- What were you thinking about?
- How did you decide on your answer?

**Q59**

- What were you thinking about?
- Was it hard to remember if you EVER wanted to go on a course?

**Q60**

- What were you thinking about?
- Was it hard to remember if you were EVER offered the opportunity to go on a course?

**Q61**

- What were you thinking about?
- What does the phrase 'suited to my cultural needs' mean to you?

**Q62-Q64**

- What were you thinking about when answering these questions?
- What does 'support group' mean to you? Can you give examples?
- Are there any important aspects of talking to other people with diabetes that have not been covered here?

**C.11 Any other comments**

**Q65** Is there anything particularly good about the support you get to care and treat your diabetes?

**Q66** Is there anything that could be improved?

**Q67** Do you have any other comments?



**C.11 Access to GP Services**

**Q68** The next few questions are about appointments at your GP surgery **for any reason at all** – not just diabetes. The last time you saw any doctor from your GP surgery how long did you have to wait for an appointment?

I was seen without an appointment  → **Q70**

I was seen on the same working day  → **Q70**

I had to wait 1 or 2 working days  → **Q70**

I had to wait more than 2 working days  → **Q69**

It was a pre-planned appointment  → **Q70**

Can't remember  → **Q70**

**Q69** What was the main reason you had to wait?

I wanted to see my own choice of doctor

I could not get an earlier appointment

It was not convenient for me to have an appointment at any earlier time

Another reason

**Q70** The last time you saw any other health professional from your GP surgery how long did you have to wait for an appointment?

I was seen without an appointment  → **Q72**

I was seen on the same working day  → **Q72**

I had to wait 1 working day  → **Q72**

I had to wait more than 1 working day  → **Q71**

It was a pre-planned appointment  → **Q72**

Can't remember  → **Q72**

**Q71** What was the main reason you had to wait?

- |   |                                |
|---|--------------------------------|
| I wanted to see my own choice of other health professional              | <input type="text" value="1"/> |
| I could not get an earlier appointment                                  | <input type="text" value="2"/> |
| It was not convenient for me to have an appointment at any earlier time | <input type="text" value="3"/> |
| Another reason  | <input type="text" value="4"/> |

**Q72** If you want to make a doctor's appointment 3 or more working days in advance does your GP surgery allow you to do that?

- |            |                                 |
|------------|---------------------------------|
| Yes        | <input type="text" value="01"/> |
| No         | <input type="text" value="02"/> |
| Don't know | <input type="text" value="03"/> |

**Q73** Overall, have you been involved as much as you wanted to be in decisions about your care and treatment?

- |     |                                   |
|-----|-----------------------------------|
| Yes | <input type="text" value="1031"/> |
| No  | <input type="text" value="2"/>    |

**Q68-Q73**

- What types of visits were you thinking about - visits for any reason, or only for your diabetes?

**Q68, Q70**

- What does the term 'pre-planned appointment' mean to you?

**Q69, Q71**

- Was anything missing from the list of reasons why you had to wait?

**Q70-Q71**

- What does the term 'other health professional' mean to you? Can you give some examples of what comes to mind?

**Q73**

- When you thought about care and treatment, for what types of health problems were you thinking of - just diabetes, or other health problems as well?
- What aspects of care and treatment were you thinking of?

**C.12 Background Information**

**Q74** Are you male or female?

1020

Male

Female

**Q75** How old are you now?

1034-35

I am  years old

**Q76** How old were you when you left full-time education?

1022-23

16 years or younger

17 or 18 years

19 years or older

Still in full time education

**Q77** Overall, how would you rate your health during the past 4 weeks?

1022-23

Excellent

Very good

Good

Fair

Poor

**Q78** Do you have a long-standing physical or mental health problem or disability?

Yes  → **Q79**

No  → **Q80**

Don't know or not sure  → **Q80**

**Q79** Does this problem or disability affect your day-to-day activities?

Yes, definitely

Yes, to some extent

No

**Q80** To which of these ethnic groups would you say you belong? (Please tick one box only)

**White**

British

Irish

Any other White background **(please write in)**

**Mixed**

White and Black Caribbean

White and Black African

White and Asian

Any other Mixed background **(please write in)**

**Asian or Asian British**

Indian

Pakistani

Bangladeshi

Any other Asian background **(please write in)**

**Black or Black British**

Caribbean

African

Any other Black background **(please write in)**

**Chinese or other ethnic group**

Chinese

Any other ethnic group **(please write in)**

**Q81** Are you...

1022-23

|  |                      |
|--|----------------------|
| Married or living with partner?                    | <input type="text"/> |
| Divorced or separated?                             | <input type="text"/> |
| Widowed?   | <input type="text"/> |
| Single (never married and not living with partner) | <input type="text"/> |

**Q82** Including yourself, how many people live in your household who are aged 18 or over?

---

**Q83** Which one of these best describes your current situation?

1022-23

|  |                      |
|--|----------------------|
| In paid work   | <input type="text"/> |
| Temporarily off sick from my job   | <input type="text"/> |
| Unemployed   | <input type="text"/> |
| Retired from paid work   | <input type="text"/> |
| Unable to work because of long-term disability or ill health                 | <input type="text"/> |
| Looking after the family, home or dependents                                 | <input type="text"/> |
| In full-time education or training (including government training programme) | <input type="text"/> |
| Other (please write in)  | <input type="text"/> |

---

**Thank you for completing this questionnaire**

## **APPENDIX D SAMPLING AND WEIGHTING STRATEGY**

### **D1. Sampling**

All 152 PCTs in England took part in the survey. Twelve of these took part under their old PCT configurations (comprising 35 old configurations); the other 140 took part under their new PCT configurations. This resulted in a total of 175 configurations.

Approximately 850 patients<sup>33</sup> from each configuration were chosen. The selection method involved first selecting 10 GP practices from each configuration and then sampling from each of the 10 practices to ensure that 850 patients were selected at each configuration.

### **D2. Selection of practices at each configuration**

Practices were chosen by listing them in order of their size (as measured by their patient lists). Each practice was then assigned to one of ten strata based on its size, and a random sample of 10 practices – one from each stratum – was chosen. This guaranteed that a wide range of practices, both large and small, were chosen from each configuration.

Altogether 1750 practices were chosen to take part in the survey, with ten practices chosen from each of the 175 configurations. This was always possible as every configuration contained at least 10 practices. Participation was not compulsory and some declined to take part. When this happened they were replaced by a practice of a similar size from the same PCT.

### **D3. Patient selection**

The patients selected at each configuration were chosen with the size of the sample proportional to the practice's list size, so that larger practices had more selected patients. It should be noted that practice's list size, rather than the number of diabetes patients, was used as the size measure. Because of this, patients' selection probabilities varied slightly between practices<sup>34</sup>.

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<sup>33</sup>The actual number chosen in each configuration varied slightly from 850. The intention was to select a fixed proportion of patients from each of 10 practices, but where this gave a fractional number of patients in a practice the actual number chosen was rounded up. Due to this rounding the actual sample size was usually about 855 patients in each configuration, but as much as 859 in some. Furthermore, two practices that had relatively few diabetes patients, were unable to fulfil their allocation, so these two sampled fewer than 850 patients. The smallest sample size was 840 patients.

<sup>34</sup> It would have been preferable to use the number of diabetes patients as the size measure had this information been available. This would have resulted in patients in different practices within the same trust having the same selection probabilities (though patients in different trusts would have had different selection probabilities because the sample size in each trust was fixed).

Within each practice a method of random systematic sampling was used to select the patients. The practice's patient list was ordered by the sex and age of the patients. A patient was chosen using a random start and every  $n^{\text{th}}$  patient after that was selected. This method ensured that the sample chosen was representative of the practice (and ultimately approximately represented the population) in terms of the age and sex of the patients.

#### **D4. Weighting**

The data were weighted for analysis. The purpose of weighting data is to compensate for the fact that the respondents do not form an exactly representative sample of the population; the weighted sample is a better representation. Weighting is needed in order to account for disproportionate sampling, as some individuals in the survey were more likely to be chosen than others (see section 1.1.2 above) and to adjust for survey non-response. (Some subgroups are less likely to return their questionnaire).

The weighting variable was calculated by combining three components: selection weights, post-stratification weights for age and sex, and grossing weights.

#### **D5. Selection weights**

Patients' probabilities of selection differed between trusts, with patients from smaller trusts having a higher selection probability. They also differed between practices within the same trust as a patient was more likely to be selected if their practice had a low proportion of patients with diabetes<sup>35</sup>. The data were weighted to take into account these differing probabilities of selection by setting the selection weight as the reciprocal of their selection probability. These selection weights were trimmed where necessary. Trimming ensured that no individual had a disproportionately high influence on the survey estimates<sup>36</sup>.

#### **D6. Post-stratification weights for age and sex**

The selection weights were then adjusted by applying post-stratification weights to each trust. This ensured that the weighted sample in each trust reflected the trust's age-sex profile – hence reducing any bias due to the tendency of patients from certain age-sex groups to have a higher or lower response rate than average.

#### **D7. Grossing weights**

The third stage of the weighting process was to apply grossing weights. Grossing weights are calculated to ensure that the weighted sample size in each PCT is proportional to the number of diabetes patients in the PCT. The exact number of diabetes patients was not available, so the weights were grossed up to an estimate

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<sup>35</sup> The number of patients chosen was proportional to the practice's size so the selection probability did not differ according to the size of the practice. However, as noted above, the measure of a practice's size was the list size rather than the number of diabetes patients. This meant that a patient was more likely to be selected if their practice had a low proportion of diabetes patients.

<sup>36</sup> The purpose of weighting is to eliminate bias in the estimates of population quantities. However, when the calculated weights are very variable the weighting process will increase the random error in the estimates, thus reducing their precision. Because of this it is common to "trim" weights. This involves truncating very large or small weights. Trimming can reduce the amount of random error in population estimates, though it results in a small amount of bias.



based on the observed number of diabetes patients in the 10 practices sampled, and list sizes of all practices in the PCT. Once more, these grossing weights were trimmed to make sure that individual patients did not have too high an influence on the survey estimates.

The three weights were combined to produce the final analysis weight and, as a final step, this was scaled so that the weighted sample size was equal to the unweighted sample size.

## **APPENDIX E OVERVIEW OF THE QUESTIONS USED IN CHAPTER 11 & 12 ANALYSIS**

After consultations with experts/ survey colleagues, the following questions were analysed by ethnicity, IMD of GP, and age left full-time education:

- Q7 where go for check-up  
(Where do you go for your diabetes check-up where your test results and treatment are reviewed?)
- Q10 how many check-ups in past 12 months  
(In the last 12 months how many times have you had a diabetes check-up?)
- Q12g agreed a plan for next 12 months  
(Thinking about the last 12 months, when you received care for your diabetes did you agree a plan to manage your diabetes over the next 12 months?)
- Q14 HbA1c test  
(In the last 12 months have you had a special blood test to look at your long-term or 'average' blood glucose level? This is called a HbA1c test, and is taken by a doctor or nurse.)
- Q18 urine test  
(In the last 12 months has a doctor or nurse carried out a urine test?)
- Q21 blood pressure test  
(In the last 12 months, has a doctor or nurse taken your blood pressure?)
- Q23 cholesterol test  
(In the last 12 months has a doctor or nurse carried out a cholesterol test?)
- Q25 retina test  
(In the last 12 months did you have an eye test where the back of your eyes was taken?)
- Q26 bare feet examined  
(In the last 12 months have you had your bare feet examined?)
- Q27 dietician  
(In the last 12 months have you seen a dietician?)
- Q28 weighed  
(In the last 12 months, have you been weighed by a doctor or nurse?)

- Q36 know enough about what to eat  
(Do you know enough about what you should eat to help manage your diabetes?)
- Q38 know enough about activity  
(Do you know enough about the role of physical activity in managing your diabetes?)
- Q42 been on educational course  
(Have you ever participated in an education of training course on how to help you manage your diabetes?)
- Q49 need specialist psychological support  
(In the last 12 months have you needed to see a specialist for psychological support?)
- Q50 got specialist psychological support  
(Were you able to see a specialist for psychological support?)
- Q52 stayed in hospital  
(Have you stayed in hospital overnight for any reason?)

# National Survey of People with Diabetes

## What is the survey about?

This survey is about your experiences as a person with diabetes.

## Who should complete the questionnaire?

The questions should be answered by the person named on the front of the envelope. If that person needs help to complete the questionnaire, the answers should be given from his/her point of view – not the point of view of the person who is helping.

## Completing the questionnaire

For each question please tick clearly inside one box using a black or blue pen.

Sometimes you will find the box you have ticked has an instruction to go to another question. By following the instructions carefully you will miss out questions that do not apply to you.

Don't worry if you make a mistake; simply cross out the mistake and put a tick in the correct box.

Please do not write your name or address anywhere on the questionnaire.

## Questions or help?

If you have any queries about the questionnaire, please call the helpline number given in the letter enclosed with this questionnaire.

**Your participation in this survey is voluntary.**

If you choose to take part, your answers will be treated **in confidence**.

## A. Diagnosis

**Q1.** How old were you when you were first diagnosed with diabetes? (Your best estimate is fine)

I was  years old

**Q2.** How would you describe the amount of **verbal** information you received about your diabetes when you were first diagnosed? (Please tick one box only)

- 1  I didn't receive any verbal information
- 2  I received **too little** verbal information
- 3  I received about the **right amount** of verbal information
- 4  I received **too much** verbal information
- 5  I didn't want any verbal information
- 6  I don't know, a carer was given verbal information for me
- 7  I can't remember

**Q3.** How would you describe the amount of **written** information you received about your diabetes when you were first diagnosed? (Please tick one box only)

- 1  I didn't receive any written information
- 2  I received **too little** written information
- 3  I received about the **right amount** of written information
- 4  I received **too much** written information
- 5  I didn't want any written information
- 6  I don't know, a carer was given written information for me
- 7  I can't remember

**Q4.** Did you begin injecting insulin within the first three months of being diagnosed with diabetes?

- 1  Yes → Go to Q5
- 2  No → Go to Q6

**Q5.** Did you continue injecting insulin for more than one year after you first began injecting insulin?

- 1  Yes
- 2  No

**Q6.** Do you have Type 1 or Type 2 diabetes?

- 1  Type 1
- 2  Type 2
- 3  Don't know

## B. Check-ups

**Q7.** Where do you go for your diabetes check-up, where your test results and treatment are reviewed? This check-up is sometimes known as an 'annual review' though some people have more or less than one every year (Please tick one box only)

- 1  My doctor's surgery → Go to Q9
- 2  The hospital clinic → Go to Q9
- 3  Somewhere else → Go to Q9  
(please write in)

- 4  It varies → Go to Q9
- 5  I have never had a diabetes check-up → Go to Q8
- 6  Don't know → Go to Q9

**Q8.** Why have you never had a diabetes check-up? (Please tick all that apply)

- 1  I have no problems with my diabetes so not necessary → Go to Q13
- 2  The check-up was at an inconvenient time → Go to Q13
- 3  The location was inconvenient → Go to Q13
- 4  I was not contacted to make an appointment → Go to Q13
- 5  It was cancelled by the practice or hospital → Go to Q13
- 6  There was no interpreter available → Go to Q13
- 7  Other reason (please write in) → Go to Q13

**Q9.** How convenient is it for you to get to your diabetes check-up (where your test results and treatment are reviewed)?

- 1  Very convenient
- 2  Fairly convenient
- 3  Not very convenient
- 4  Not at all convenient
- 5  I have my diabetes check-up at home

**Q10.** In the last 12 months how many times have you had a diabetes check-up (where your test results and treatment are reviewed)?

- 1  None
- 2  Once
- 3  Twice
- 4  Three or more times
- 5  Don't know

**Q11.** When you go for your diabetes check-up (where your test results and treatment are reviewed) how often does the doctor or nurse have your most up-to-date diabetes records to refer to?

- 1  Always or almost always
- 2  Sometimes
- 3  Rarely or never
- 4  Don't know

**Q12.** Thinking about **the last 12 months**, when you received care for your diabetes...

a)...did you discuss your ideas about the best way to manage your diabetes?

- 1  Rarely or not at all
- 2  Some of the time
- 3  Almost always

b) ...were you given the chance to discuss different medications?

- 1  Rarely or not at all
- 2  Some of the time
- 3  Almost always

c) ... did you discuss your goals in caring for your diabetes?

- 1  Rarely or not at all
- 2  Some of the time
- 3  Almost always

d) ... were you given personal advice about the kinds of food to eat?

- 1  Rarely or not at all
- 2  Some of the time
- 3  Almost always

e) ... were you given personal advice about your levels of physical activity?

- 1  Rarely or not at all
- 2  Some of the time
- 3  Almost always

f) ... did you agree when your next appointment would be?

- 1  Rarely or not at all
- 2  Some of the time
- 3  Almost always

g) ... did you agree a plan to manage your diabetes over the next 12 months?

- 1  Rarely or not at all
- 2  Some of the time
- 3  Almost always

**Q13.** Have you been given the phone number of a doctor or nurse who you can contact about your diabetes after hours (that is, on weekends and after 6pm on weeknights)? (Please tick all that apply)

- 1  Yes, evenings
- 2  Yes, nights
- 3  Yes, weekends
- 4  No
- 5  Don't know

### C. Tests

**Q14.** In the last 12 months have you had a special blood test to look at your long-term or 'average' blood glucose level? This test is called **HbA1c**, and is taken by a doctor or nurse.

- 1  Yes → Go to Q15
- 2  No → Go to Q18
- 3  Don't know → Go to Q18

**Q15.** Do you know your HbA1c value?

- 1  Yes
- 2  No

**Q16.** Thinking about your **most recent** HbA1c test, were you given your test results in writing?

- 1  Yes
- 2  No
- 3  Did not want results in writing
- 4  Don't know

**Q17.** Would you like your HbA1c results to be sent to you directly (e.g. by post or email)?

- 1  Yes
- 2  Do not want results sent to me directly
- 3  Don't know

**Q18.** In the last 12 months has a doctor or nurse carried out a urine test?

- 1  Yes → Go to Q19
- 2  No → Go to Q21
- 3  Don't know → Go to Q21

**Q19.** What was the purpose of the urine test? (Please tick all that apply)

- 1  To test for protein
- 2  To test for glucose
- 3  Don't know

**Q20.** Were you given your urine test results in writing?

- 1  Yes
- 2  No
- 3  Don't know
- 4  Did not want results in writing

**Q21.** In the last 12 months, has a doctor or nurse taken your blood pressure?

- 1  Yes → Go to Q22
- 2  No → Go to Q23
- 3  Don't know → Go to Q23

**Q22.** Were you given your blood pressure results in writing?

- 1  Yes
- 2  No
- 3  Don't know
- 4  Did not want results in writing

**Q23.** In the last 12 months has a doctor or nurse carried out a cholesterol test?

- 1  Yes → Go to Q24
- 2  No → Go to Q25
- 3  Don't know → Go to Q25

**Q24.** Were you given your cholesterol test results in writing?

- 1  Yes
- 2  No
- 3  Don't know
- 4  Did not want results in writing

**Q25.** In the last 12 months did you have an eye test where a **photograph of the back of your eyes** was taken?

- 1  Yes
- 2  No
- 3  Don't know

**Q26.** In the last 12 months have you had your bare feet examined?

- 1  Yes
- 2  No
- 3  Don't know

**Q27.** In the last 12 months have you seen a dietician?

- 1  Yes
- 2  No
- 3  Don't know

**Q28.** In the last 12 months, have you been weighed by a doctor or nurse?

- 1  Yes
- 2  No
- 3  Don't know

## **D. Management of your diabetes**

**Q29.** How do you control your diabetes now?  
(Please tick all that apply)

- 1  Insulin
- 2  Tablets
- 3  Diet
- 4  Physical activity
- 5  Other (please write in)

**Q30.** Do you take any medication for **any other condition**?

- 1  Yes → Go to Q31
- 2  No → Go to Q32



**Q31.** What type of medication(s) do you take?  
(Please tick all that apply)

- 1  Tablets for high blood pressure
- 2  Tablets for high cholesterol
- 3  Tablets for heart disease
- 4  Other (please write in)

**Q32.** Do you know enough about **when** to take your medication?

- 1  Yes → Go to Q33
- 2  No, I would like to know a **bit** more → Go to Q33
- 3  No, I would like to know a **lot** more → Go to Q33
- 4  I don't take any medication → Go to Q34

**Q33.** Do you know enough about **how much** medication to take?

- 1  Yes
- 2  No, I would like to know a **bit** more
- 3  No, I would like to know a **lot** more

**Q34.** How often do you test your own blood glucose levels? (Please tick one box only)

- 1  4 or more times a day → Go to Q35
- 2  2 or 3 times a day → Go to Q35
- 3  Once a day → Go to Q35
- 4  Less than once a day → Go to Q35
- 5  Never → Go to Q36

**Q35.** How do you use the results of your blood glucose tests? (Please tick all that apply)

- 1  To check or alter the amount of insulin I take
- 2  To check or alter my tablets
- 3  To help me decide what I eat
- 4  To help me decide how much physical activity I do
- 5  To tell me if I am 'hypo'
- 6  To contact my diabetes doctor or nurse
- 7  To write them down
- 8  Other (please write in)

**Q36.** Do you know enough about **what you should eat** to help you manage your diabetes?

- 1  Yes
- 2  No, I would like to know a **bit** more
- 3  No, I would like to know a **lot** more

**Q37.** How good are you at eating the right foods to help you manage your diabetes?

- 1  Very good
- 2  Fairly good
- 3  Not very good
- 4  Not at all good

**Q38.** Do you know enough about the role of **physical activity** in managing your diabetes?

- 1  Yes
- 2  No, I would like to know a **bit** more
- 3  No, I would like to know a **lot** more

**Q39.** How good are you at being physically active to help manage your diabetes?

- 1  Very good
- 2  Fairly good
- 3  Not very good
- 4  Not at all good

**Q40.** Do you smoke cigarettes, cigars or a pipe at all nowadays?

- 1  Yes
- 2  No

**Q41.** In relation to your diabetes, would you like to know more about any of the following?  
(Please tick all that apply)

- 1  The effects of being ill, for example having flu, on managing your diabetes
- 2  Getting to and keeping to a certain weight
- 3  What to expect if your blood glucose drops too low
- 4  The reasons for taking prescribed medicines to manage your diabetes
- 5  The long term health effects of your diabetes
- 6  The impact of cholesterol levels on your diabetes
- 7  The impact of blood pressure levels on your diabetes
- 8  Checking and looking after your eyes
- 9  Checking and looking after your feet
- 10  How drinking alcohol can affect your diabetes
- 11  How smoking can affect your diabetes
- 12  The effects of stress on your diabetes
- 13  The effects of tiredness on your diabetes

## **E. Education and training**

**Q42.** Have you ever participated in an education or training course on how to help you manage your diabetes?

- 1  Yes → Go to Q43
- 2  No → Go to Q46

**Q43.** When did you go on your **most recent** course?

- 1  Less than 6 months ago
- 2  6 months to one year ago
- 3  1 to 2 years ago
- 4  More than 2 years ago
- 5  Don't know

**Q44.** Did you find that the course was taught in a way that was easy for you to understand?

- 1  Yes, very easy to understand  
→ Go to Q49
- 2  Yes, fairly easy to understand  
→ Go to Q49
- 3  No, quite difficult to understand  
→ Go to Q45
- 4  No, very difficult to understand  
→ Go to Q45

**Q45.** What did you find difficult to understand about the course? (Please tick all that apply)

- 1  The course wasn't taught in my first language → Go to Q49
- 2  The course wasn't suited to my cultural needs → Go to Q49
- 3  The course didn't cater for my disability → Go to Q49
- 4  The course didn't suit how I like to learn → Go to Q49
- 5  The course was taught in a way that I found difficult to understand → Go to Q49
- 6  Other (please write in) → Go to Q49

**Q46.** Have you ever wanted to attend an education or training course about how to help you manage your diabetes?

- 1  Yes
- 2  No

**Q47.** Have you ever been offered the opportunity to attend an education or training course about how to help you manage your diabetes?

- 1  Yes → Go to Q48
- 2  No → Go to Q49

**Q48.** Why weren't you able to participate in the course? (Please tick all that apply)

- 1  The location was inconvenient
- 2  The time or day was inconvenient
- 3  The course wasn't suited to my cultural needs
- 4  The course didn't cater for my disability
- 5  There were no male only or female only courses
- 6  I don't like group training
- 7  Other reason (please write in)

## **F. Psychological and emotional support**

**Q49.** In the last 12 months have you needed to see a specialist for psychological support to cope with your diabetes?

- 1  Yes → Go to Q50
- 2  No → Go to Q51

**Q50.** Were you able to see a specialist for psychological support?

- 1  Yes
- 2  No

**Q51.** In the last 12 months, have you **received emotional support** from any of the following, to help you cope with your diabetes? (Please tick all that apply)

- 1  Doctor at local GP surgery
- 2  Nurse at local GP surgery
- 3  Specialist diabetes nurse at local GP surgery
- 4  Specialist consultant doctor at hospital
- 5  Specialist diabetes nurse at hospital
- 6  Counsellor or social worker
- 7  Community link worker
- 8  Family member or friend
- 9  Telephone helpline
- 10  Patient support group
- 11  Other people with diabetes (other than a support group)
- 12  None of these
- 13  Haven't needed emotional support
- 14  Other (please write in)

### G. Stays in Hospital

**Q52.** Have you stayed in hospital overnight in the last 12 months **for any reason**?

- 1  Yes → Go to Q53
- 2  No → Go to Q62
- 3  Don't know → Go to Q62

**Q53.** What was the reason for your **most recent stay** in hospital overnight? Was it related to...

- 1  Diabetes
- 2  Something else
- 3  Both diabetes and something else
- 4  Don't know

**Q54.** During your **most recent** stay in hospital overnight, what kind of ward did you stay in? (Please tick all that apply)

- 1  A ward for people with diabetes
- 2  A general medical ward
- 3  A surgical ward
- 4  Another ward (please write in)

**Q55.** Thinking about your **most recent** stay in hospital overnight, how many nights did you stay?

- 1  One night
- 2  2 to 3 nights
- 3  4 to 5 nights
- 4  More than 5 nights
- 5  Can't remember

**Q56.** Thinking about your **most recent stay** in hospital overnight, were the **staff who cared for you** aware that you had diabetes?

- 1  **All** of the staff were aware
- 2  **Most** of the staff were aware
- 3  **Some** of the staff were aware
- 4  **None** of the staff were aware
- 5  Don't know

**Q57.** During your **most recent** stay in hospital overnight, were you visited by someone from the **hospital diabetes specialist team** (the diabetes specialist nurse, diabetic consultant or dietician)?

- 1  Yes
- 2  No
- 3  Don't know

**Q58.** During your **most recent** stay in hospital overnight, did staff who cared for you help provide what you needed to manage your own diabetes?

- 1  **All** of the staff helped provide what I needed
- 2  **Most** of the staff helped provide what I needed
- 3  **Some** of the staff helped provide what I needed
- 4  **None** of the staff helped provide what I needed
- 5  I was too ill or didn't want to manage my own diabetes
- 6  Don't know

**Q59.** During your **most recent stay** in hospital overnight, how often were you able to take your diabetes medication in the way you wanted to?

- 1  Always or almost always
- 2  Sometimes
- 3  Rarely or never
- 4  I was too ill or didn't want to take my own diabetes medication
- 5  Don't know

**Q60.** During your **most recent** stay in hospital overnight, how often was the choice of **food** suitable for your diabetes?

- 1  Always or almost always
- 2  Sometimes
- 3  Rarely or never
- 4  Did not eat hospital food
- 5  Don't know

**Q61.** During your **most recent** stay in hospital overnight, how often was the **timing of your meals** suitable for your diabetes?

- 1  Always or almost always
- 2  Sometimes
- 3  Rarely or never
- 4  Did not eat hospital food
- 5  Don't know

## H. Access to GP Services

**Q62.** The last time you made an appointment to see a **doctor** from your GP surgery, **for any reason**, how long was it until you were seen?

- 1  I was seen on the same working day  
→ Go to Q64
- 2  I was seen within 2 working days  
→ Go to Q64
- 3  I was seen after 2 working days  
→ Go to Q63
- 4  It was a pre-planned appointment  
→ Go to Q64
- 5  Can't remember → Go to Q64

**Q63.** What was the main reason that you were not seen earlier?

- 1  I wanted to see my own choice of doctor
- 2  I could not get an earlier appointment
- 3  It was not convenient for me to have an appointment at any earlier time
- 4  Another reason

**Q64.** The last time you made an appointment to see the **practice nurse** from your GP surgery, **for any reason**, how long was it until you were seen?

- 1  I was seen on the same working day  
→ Go to Q66
- 2  I was seen within 1 working day  
→ Go to Q66
- 3  I was seen after 1 working day  
→ Go to Q65
- 4  It was a pre-planned appointment  
→ Go to Q66
- 5  Can't remember  
→ Go to Q66
- 6  I have not seen a practice nurse  
→ Go to Q66

**Q65.** What was the main reason that you were not seen earlier?

- 1  I wanted to see my own choice of practice nurse
- 2  I could not get an earlier appointment
- 3  It was not convenient for me to have an appointment at any earlier time
- 4  Another reason

**Q66.** If you want to make a doctor's appointment 3 or more working days in advance does your GP surgery allow you to do that?

- 1  Yes
- 2  No
- 3  Don't know

**Q67.** Thinking about **all** of the care you have received from your **GP surgery, not just for diabetes**, have you been involved as much as you wanted in decisions about your care and treatment?

- 1  I was involved as much as I wanted to be
- 2  I wanted to be a **bit** more involved
- 3  I wanted to be a **lot** more involved
- 4  Don't know

## I. Background

**Q68.** Are you male or female?

- 1  Male
- 2  Female

**Q69.** How old are you?

I am  years old

**Q70.** How old were you when you left full-time education?

- 1  16 years or younger
- 2  17 or 18 years
- 3  19 years or older
- 4  I am still in full time education
- 5  I have not had any formal education

**Q71.** Overall, how would you rate your health during the past 4 weeks?

- 1  Excellent
- 2  Very good
- 3  Good
- 4  Fair
- 5  Poor

**Q72.** Does your diabetes affect your day-to-day activities?

- 1  Yes
- 2  No

**Q73.** Apart from your diabetes, do you have a long-standing physical or mental health problem?

- 1  Yes, **physical** health problem → Go to Q74
- 2  Yes, **mental** health problem → Go to Q74
- 3  Yes, **both physical and mental** health problems → Go to Q74
- 4  No → Go to Q75
- 5  Don't know or not sure → Go to Q75

**Q74.** Does this problem affect your day-to-day activities?

- 1  Yes, definitely
- 2  Yes, to some extent
- 3  No

**Q75.** To which of these ethnic groups would you say you belong? (Please tick one box only)

**a. WHITE**

- 1  British
- 2  Irish
- 3  Any other White background  
(Please write in)

**b. MIXED**

- 4  White and Black Caribbean
- 5  White and Black African
- 6  White and Asian
- 7  Any other Mixed background  
(Please write in)

**c. ASIAN OR ASIAN BRITISH**

- 8  Indian
- 9  Pakistani
- 10  Bangladeshi
- 11  Any other Asian background  
(Please write in)

**d. BLACK OR BLACK BRITISH**

- 12  Caribbean
- 13  African
- 14  Any other Black background  
(Please write in)

**e. CHINESE OR OTHER ETHNIC GROUP**

- 15  Chinese
- 16  Any other ethnic group  
(Please write in)