



ABCD and Diabetes UK
Survey of diabetes specialist services
2006

Consultant survey

Summary of results

January 2008

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Executive summary

The past five years, since the introduction of the National Service Frameworks for diabetes, have seen substantial changes in the commissioning and design of specialist services. In that time, the prevalence of diabetes has increased creating a growing demand on both primary and specialist services.

In 2000, the ABCD study of secondary care services for diabetes in the UK revealed significant variation in resources and service provision. Since 2000, changes in the NHS and the reconfiguration of services have shifted the emphasis of providing care from specialist services to primary care. Diabetes UK and ABCD support care that is integrated and planned in collaboration with people with diabetes and all healthcare professionals involved in their care.

This survey, which was sent to consultants, is the first in a series of surveys to assess the current provision of specialist services. The second concerns screening services for diabetic retinopathy, a third covers the role of diabetes specialist nurses, nurse consultants and community DSNs and a further survey of paediatric services is planned for 2008.

Key results

Response to survey

The response to the survey was 48.8% of which 80% were male. Replies were received from each of the nations surveyed; the response rate was approximately 50% with the lowest response rate being from Wales. Non respondents were similar to respondents in terms of geographical region and gender.

Staffing levels

Since 2000 there are more specialist staff, however, this progress is under threat from lack of funding and cuts. 10% of diabetes and endocrine services are still being provided by single-handed consultants.

Specific diabetes services

Since 2000, some services have improved; for example, the measurement of lipids and HDL (high density lipoprotein). In contrast, however, some services have declined, eg, access to a psychologist, and there has been no improvement for other services, eg services for erectile dysfunction. The survey also showed that consultants believe that some specialist diabetes services are poorly supported in terms of education, retinal screening and the provision of pumps.

Well Resourced Score

The average service scored a 'C' (mean =17.27 out of a total 25). The mean score has declined from 2000 when the score was 18. Services in England and Scotland were better resourced than in Northern Ireland and Wales. In England, trusts in the North scored higher when compared to the rest of the nation.

Contribution to general medicine

Most consultants contribute to general medicine and this contribution has increased partly as a result of other specialities opting-out. The increasing workload of general medicine has reduced the time available to develop the specialist service and has led to the cancellation of diabetes clinics.

Recommendations

The Department of Health needs to take action to ensure that the skills of diabetes specialist teams are retained and ensure there are adequate staffing levels to support the population of people with diabetes and to meet their complex health needs.

Investment in diabetes care is required to ensure that people with diabetes receive the standards of care that they should expect as defined within the NSF for diabetes and by the National Institute for Health and Clinical Excellence.

Specific diabetes services such as education, dietetics and psychological support are in urgent need of greater investment; reductions in these critical areas will negatively impact the long term health of people with diabetes.

Commissioners must recognise, support and value the skills of specialist diabetes teams and utilise these skills appropriately. They are vital to tackle the unmet need of poor quality management of diabetes in hospitals and to provide integrated care for all people with diabetes.

Commissioners must recognise the shortfall in provision of acute medicine posts and plan accordingly. Careful planning for staffing is needed to meet the demands of acute and general medicine work as well as specialist services within the hospital. If consultants involved in diabetes care are to be expected to backfill for specialities opting out of acute medicine then more diabetes consultant posts will be needed.

More flexibility around the involvement in acute and general medicine by consultant diabetologists is needed to ensure that a balance is achieved between time used in general and acute medicine and to allow consultants to develop specialist diabetes services and provide leadership working in the community with primary care and public health colleagues.

There is a need to increase the exposure and involvement of junior doctors in training to diabetes to ensure continuity of care and investment in future expertise. Training programmes that provide adequate clinical experience of working with primary care are required to reflect changing models of delivery of diabetes services.

- Training programmes for junior doctors must be revised in line with changes in service delivery. A core component of the training curriculum needs to comprise of time spent in community settings to gain the knowledge, skills and experience of diabetes care, at all levels of complexity, and how it can be delivered in different places.

Primary, community and specialist services need to have effective networks to encourage collaboration in the design and delivery of diabetes services, recognising and utilising the skills of all, to plan, organise and deliver high quality integrated diabetes care for all people with diabetes.

Specialist teams need to have dedicated time to be able to work with primary care to provide the education, training and support so that people with diabetes receive high quality care by trained and expert healthcare professionals across the board.

All people with diabetes need to be confident that the care they are receiving is being delivered by staff trained in the delivery of diabetes care.

Introduction

The past five years, since the introduction of the National Service Frameworks for diabetes, have seen substantial changes in the commissioning and design of specialist services. In that time, the prevalence of diabetes has increased creating a growing demand on both primary and specialist services.

To achieve high quality care for people with diabetes, healthcare professionals need to work in partnership across primary, community and specialist care services to deliver integrated diabetes care. Many people with diabetes have complex care needs which must not be jeopardised. Diabetes specialists have an essential role both in caring for those with complex health needs and providing training, expertise and support to those who are not diabetes specialists within primary, community and hospital services. Where partnerships between primary and specialist services are not robust, there are concerns that the redesign of services will lead to the fragmentation of services, loss of jobs and of essential expertise and specialist knowledge that is needed in order to provide the best care for people with diabetes who have complex health needs.

In 2000, the ABCD study of secondary care services for diabetes in the UK revealed significant variation in resources and service provision. It found that most consultants provided services in other specialities such as endocrinology and general medicine and that geographically services varied in staffing numbers and in the quality of services they provided.

Since the survey in 2000, changes in the NHS and reconfiguration of services have shifted the emphasis of providing care from specialist services to primary care. Diabetes UK and ABCD support care that is integrated and planned in collaboration with people with diabetes and all healthcare professionals involved in their care.

This survey examined the provision of specialist diabetes services in 2006 to 2007. It identified gaps in current provision, provided comparison of the quality of services to 2000 and assessed the impact of acute medicine on the ability of consultants to carry out their specialist duties, develop the service and train future generations of diabetologists.

This survey, which was sent to consultants, was the first in a series of surveys. The second concerns screening services for diabetic retinopathy, a third covers the role of diabetes specialist nurses, nurse consultants and community DSNs and a further survey of paediatric services is planned for 2008.

Methodology and analysis

Diabetes UK and ABCD collaborated to develop an online survey using opinion taker (survey website) which was piloted and then emailed to consultant diabetologists between May 2006 and February 2007. Consultants were identified by ABCD membership, Diabetes UK records and Royal College of Physicians Diabetes Manpower survey. Non-respondents were followed up by both an email and then a telephone reminder to invite them to take part.

The results were analysed using Excel and SPSS (Statistical Package for Social Sciences) using both parametric and non-parametric tests depending on the distribution of the data. Association and correlation between variables were measured using Pearson's r or Spearman's ρ and chi-square tests. ANOVA measured variance between means and an online statistical calculator (<http://survey.pearsonmcs.com/significant-calc.htm>) tested significant differences between survey results in 2000 and 2006. A p value of <0.05 was considered to be significant.

Open questions were systematically coded by the researcher (non-clinician) using an approach based on the framework method. Each response was read and assigned a code and grouped into themes as they emerged from the data. To validate the interpretation, two consultant physicians re-read the data and the interpretations and a consensus reached. Codes and themes were counted and ranked in order of frequency to represent the strength of the views of the respondents.

We also identified hospitals that responded to both the 2000 and 2006 surveys to examine whether there were any differences in how this sub-group responded compared to the overall findings and these have been reported.

Results

Background information and details about the consultant respondents

Key findings:

- Response rate = 48.8%
- Approximately 50% of consultants from each nation responded, the lowest response was from Wales
- 80% male
- Approximately 50% of Trusts, SHAs and hospitals surveyed responded
- Respondents and non-respondents were similar in terms of locality, gender, date when responded to the survey and response to key questions (level of resource, number of consultants, psychological support and provision of guidelines)

Response rate to the survey

The response rate to the survey was 48.8%. 289 consultants took part in the survey out of 592 consultants. The original number surveyed was 693 but 101 consultants were excluded from the base because they practised endocrinology only, had retired, were no longer involved in diabetes care, were not a consultant, were involved in paediatric services only, or had died.

Where did the respondents come from?

82.2% of respondents were from England, 8.4% Scotland, 5.2% Wales and 4.2% from Northern Ireland.

The table below shows how many consultants responded from the total for each nation:

	Number of respondents	Total number surveyed by nation	% of respondents
England	236	465	50.7%
Wales	15	46	32.6%
Northern Ireland	12	24	50.0%
Scotland	24	55	43.6%
Total	289	592	

195 Trusts were surveyed of which 48% responded. 272 hospitals were surveyed of which 48% responded. In England, within SHAs there was a range from 33% to 100% of Trusts responding.

Gender and age of consultants

Most consultants were male (79.5%) and 55.1% were aged over 46 years. The average respondent had been in a consultant post for 11.4 years (mean; range=0.6-35yrs) and 25% had been in a consultant job in a different Trust.

Table to show the age range of consultants

Age of consultants	Percentage of respondents
31-35	7 (2.5%)
36-40	59 (20.8%)
41-45	61 (21.5%)
46-50	44 (15.5%)
51-55	56 (19.7%)
56-60	46 (16.2%)
Greater than 60	11 (3.9%)

Non responders

Approximately half of consultants surveyed did not respond. Therefore, in order to provide further validation of the survey, it was important to examine for differences between responders and those who did not respond.

Nation

	Non responders	Respondents
England	229 (75.6%)	236 (82.2%)
Wales	31 (10.2%)	15 (5.2%)
NI	12 (4%)	12 (4.2%)

Scotland	31 (10.2%)	24 (8.4%)
Isle of Man		1 (0.35%)
Guernsey		1 (0.35%)
Total	302	289

SHA

	Non respondents	Respondents
East Midlands	16 (7.2%)	17 (7.2%)
East of England	22 (9.9%)	25 (10.6%)
London	54 (24.3%)	29 (12.3%)
North East	7 (3.2%)	19 (8.1%)
North West	30 (13.5%)	38 (16.1%)
South Central	15 (6.8%)	21 (8.9%)
South East Coast	16 (7.2%)	17 (7.2%)
South West	17 (7.7%)	27 (11.4%)
West Midlands	24 (10.8%)	19 (8.1%)
Yorkshire and the Humber	21 (9.5%)	24 (10.2%)
Total	222	236

Gender

	Non-respondents	Respondents
Male	249 (83%)	221 (79.5%)
Female	51 (17%)	57 (20.5%)

Date of response

Responses were analysed to see if the answers to key questions differed according to the timing of submission of the survey. This provides an indication of the extent and direction of any non-response bias. If there is no trend with time in respect to the answer then there was unlikely to be non-response bias at least in that important variable.

There is no evidence of non-response bias:

- Most respondents answered either when the survey was first sent out or in response to the reminder in November.
- There was no difference in the provision of guidelines depending on when the respondent answered, which indicates no non-response bias for this variable
- There were a few more who responded that there was access to a psychologist for later submissions, however there was no significant difference
- Well Resourced Score did not vary by time either

Key questions

1. Provision of guidelines

Provision of Guidelines	Date of survey response		
	May, June, July 2006	August, Sept, Oct 2006	Nov, Dec, Jan, Feb 2006-7
Yes	82.1%	85.4%	81.3%
No	17.9%	14.6%	18.8%

2. Access to a psychologist

There were a few more who responded that there was access to a psychologist for later submissions however this difference was not significant.

	Month responded		
Access to a psychologist for patients	May, June, July 2006	Aug, Sept, Oct 2006	Nov, Dec 2006, Jan, Feb 2007
Yes	38.6%	35.7%	45.3%
No	61.4%	64.3%	54.7%

We looked at this to see if services which were well resourced were more likely to respond sooner than services which were not well resourced, but this was not proved. Most services scored BC.

	Month responded		
Well resourced score	May, June, July 2006	Aug, Sept, Oct 2006	Nov, Dec 2006, Jan, Feb 2007
A*A	50.8%	18.0%	31.1%
BC	50.0%	14.1%	35.9%
DE	52.6%	14.0%	33.3%

Status of diabetes service

One of the key objectives of the survey was to find out current staffing levels (amongst consultants, DSNs, dietitians and podiatrists), the provision of specific diabetes services and to see if any changes have occurred since 2000. From the provision of specific diabetes services, we constructed a well resourced score, comparable to 2000, to measure the quality of a specialist diabetes service.

Key findings:

- Staffing levels have increased since 2000 but are under threat
- Some specific diabetes services have improved, some declined and some remained the same
- The average well resourced score has declined since 2000 from 18 to 17

Staffing levels

The effectiveness and quality of a service requires an adequate number of specialist staff, not only in terms of the ratio of staff to patients but to help build and develop specific diabetes services and to provide training to junior doctors and primary care staff. Sufficient numbers of staff are also necessary to provide education to people with diabetes, to provide essential dietary advice and provide podiatry care.

Consultants

Number of consultants

On average consultants reported that 2.37 other consultants worked at their Acute site (mode = 2 and range = 0 to 10). However 9.9% reported working as single-handed consultants.

Across the nations

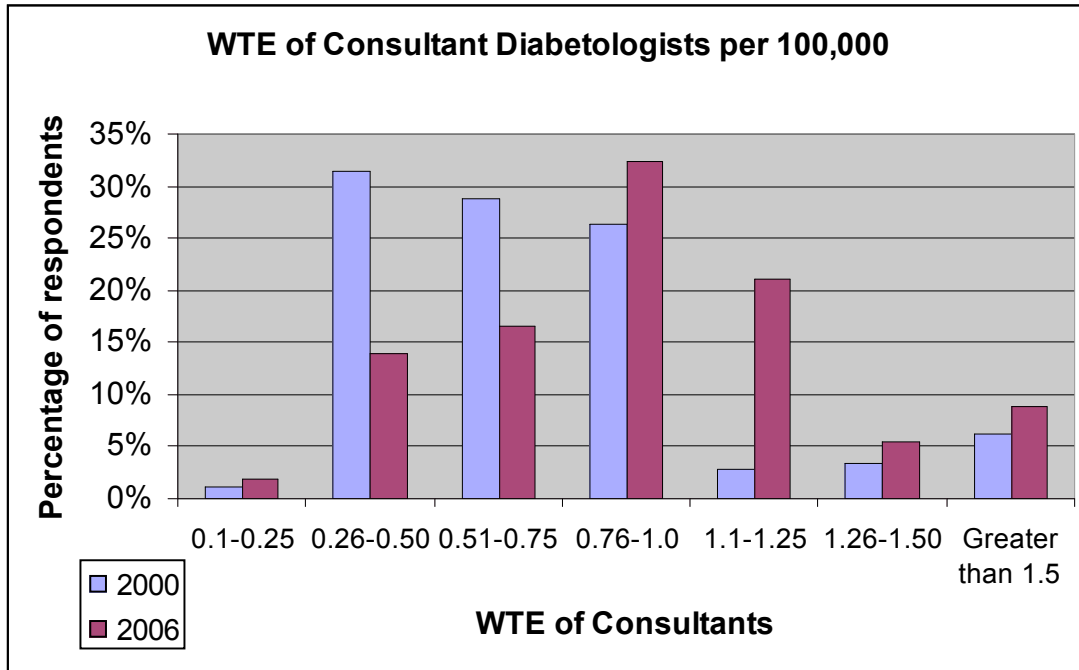
Numbers of consultants varied significantly across the nations and consultants in Northern Ireland (50%) more likely to be single consultant led services compared to the other nations (England = 7.7%, Wales = 14.3% and Scotland = 4.2%) (p<0.00).

Comparison to 2000

Whole time equivalent of consultants per 100,000 of the catchment population:

In 2000, the survey asked for the number of consultants per site, this was divided by 100,000 to be comparable to the question in 2006.

	All respondents	All respondents	Comparable hospitals	Comparable hospitals
	2000 (number and %)	2006	2000	2006
Greater than 1.5	11 (6.2%)	24 (8.8%)	9 (7.6%)	13 (11.1%)
1.26-1.50	6 (3.4%)	15 (5.5%)	5 (4.2%)	7 (6.0%)
1.1-1.25	5 (2.8%)	57 (21.0%)	3 (2.5%)	27 (23.1%)
0.76-1.0	47 (26.4%)	88 (32.4%)	34 (28.6%)	34 (29.1%)
0.51-0.75	51 (28.7%)	45 (16.5%)	33 (27.7%)	17 (14.5%)
0.26-0.50	56 (31.5%)	38 (14.0%)	33 (27.7%)	18 (15.4%)
0.1-0.25	2 (1.1%)	5 (1.8%)	2 (1.7%)	1 (0.9%)



In 2000, 1.67 (median) consultants provided diabetes services per 250,000 population and 36% of consultants were single-handed¹.

Comparable hospitals. Hospitals that responded both in 2000 and 2006 were compared and out of the 123 comparable hospitals, there were 31 single handed consultants in 2000 and in 2006 there were 9. Out of the 9 single handed in 2006, 6 of those were also single handed in 2000.

DSNs

24.1% of respondents are staffed with more than 1.5 WTE of Diabetes Specialist Nurses (DSNs) per 100,000 patients (1-1.5 = 36.1% and less than 1 = 39.8%). This did not vary significantly by nation. In 2000 there were 2.5 WTE providing services for 250,000 catchment population¹. It is not straightforward to compare 2000 to 2006 as the unit of measurement is different.

How many full-time DSNs do you have working in your unit	2000	What is the number of WTE hospital DSN nurses per	2006

per 250,000 effective population case-load		100,000 of the catchment population?	
5-5.9	4.9%	Greater than 1.5	21.1%
4-4.9	7.7%	1.26-1.5	16.2%
3-3.9	26.8%	1.1-1.25	19.9%
2-2.9	40.4%	0.76-1.0	21.8%
1-1.9	15.8%	0.51-0.75	12.0%

Dietitians

The average WTE dietitian availability was 1.18 per 100,000 population (median = 1.00 and range = 0 to 24).

This did not vary significantly by nation. In 2000, dedicated dietitians, spent 4.7 hours (median) per 100,000 population on diabetes care². In 2000, the recommendation was that it would require 1.5 WTE per 250,000 of the catchment population (equivalent to 22hr per 100,000 population).

	WTE Dietitian 2000	WTE Dietitan 2006
0	24.2%	3.0%
0.1-0.9	58%	38.9%
1.0-1.9	14.6%	42.7%
2 or more	3.2%	15.4%

Podiatrists

The median WTE availability was 1 for the specialist service (mean = 1.36 and range = 0 to 12).

This did not vary significantly by nation. In 2000 the median number of weekly podiatry sessions was three, in 2006³.

The WTE of podiatrists has increased from 2000. The unit of measurement used in 2000 was to ask the number of sessions. Each session lasts for 4 hours. To find out the WTE, the number of sessions was multiplied by 4 (hours) and then divided by 35 (hours).

WTE	WTE Podiatrist 2000	WTE Podiatrist 2006
0	1.7%	0.8%
0.1-0.9	89.1%	37.8%
1.0-1.9	6.9%	33.2%
2 or more WTE	2.3%	28.2%

Provision of specific diabetes services

In 2006, the survey repeated questions about the provision of specific diabetes services from 2000 to identify if and where improvements have been made.

Which services have improved since 2000?

The following services have improved since 2000: the provision of joint ante-natal diabetes services* (93%), lipids measured in the specialist diabetes service (100%), microalbuminuria testing is available* (99%), HDL is measured * (96%), structured education offered to people with diabetes (87%), joint paediatric and adult diabetes service* (75%) and if there a joint ophthalmology clinic in the specialist diabetes service (21%).

Which services have shown no improvement since 2000?

The provision of specific services for erectile dysfunction (61% in 2006) has not improved since 2000 (60%).

Which services have declined since 2000?

The following services have declined since 2000: provision of a diabetes register (66%), having a separate diabetes clinic for the elderly (9%), local vascular surgeon in the hospital (86%), guidelines to ensure comprehensive care in all settings (82%) and access to a psychologist* (41%).

	All respondents	All respondents	Comparable hospitals	Comparable hospitals
Characteristics of Specialist Service	2000	2006	2000	2006
Joint ante-natal diabetes service*	155 (84.7%)	265 (93.3%)	106 (86.2%)	111 (91.7%)
Lipids measured in diabetes service	180 (99.4%)	279 (100%)	120 (99.2%)	121 (100%)
HDL measured in diabetes service*	150 (85.2%)	270 (95.7%)	100 (84.7%)	118 (96.7%)
Microalbuminuria available*	167 (92.8%)	283 (99.3%)	109 (90.8%)	120 (98.4%)
Specific service for Erectile Dysfunction	108 (59.7%)	170 (60.5%)	76 (62.3%)	76 (62.8%)
Structured	141 (81%) of	247 (86.7%)	93 (75.6%)	104 (85.2%)

education for people with diabetes	staff have been trained to educate people with diabetes	offer structured education to people with diabetes		
Guidelines to ensure comprehensive care in all settings	147 (84.5%)	232 (82.0%)	96 (84.2%)	100 (82.0%)
Joint diabetes – ophthalmology clinic in the diabetes service	21 (15.4%)	60 (21.1%)	17 (17.2%)	22 (18.2%)
Register for service	134 (73.2%)	186 (65.5%)	98 (75.6%)	79 (64.8%)
Separate diabetes clinics for the elderly	23 (12.7%)	25 (8.9%)	19 (15.6%)	13 (10.8%)
Local vascular surgeon in the hospital	159 (88.3%)	245 (86.3%)	110 (90.9%)	101 (82.8%)
Access to a psychologist for the patient*	82 (45.3%)	115 (40.6%)	57 (46.7%)	44 (36.1%)
Joint paediatric and adult specialist diabetes service*	93 (59.6%)	210 (75.3%)	66 (63.5%)	88 (72.7%)
Education offered to medical staff	N/A	264 (93.6%)	N/A	N/A

* indicates where the difference is statistically significant when compared to 2000.

Comparable hospitals

We identified which hospitals from 2000 had also responded in 2006 and there were 123 hospitals which matched. In 2000, there was one response per hospital, however, in 2006, if more than one consultant responded from the same hospital, then we took the first listed respondent each time and used their response to gather the frequency for each indicator however we acknowledge that the duplicate respondents did not always respond in the same way.

Well resourced score

As in 2000, a score was devised based on responses to questions addressing specific diabetes services to assess the quality of the service, to compare Trusts and to see if there have been changes since 2000. The score is an aggregate of questions: 12-27 and 29 (see Appendix 1 for questionnaire). Weighting was assigned to the responses for each question (see Appendix 2) and a total score of 25 could be achieved. The scores were banded in grades from A* to E (see Appendix 3).

The average well resourced score was 17.3 (mean) or Grade C, which would indicate that services on average can provide a reasonably well resourced service. The scores ranged from 0 to 24, from very poorly resourced to very well resourced, indicating a wide variation in the quality of service provision.

Variation by nations and SHAs

Respondents in England and Scotland were better resourced compared to Northern Ireland and Wales ($p = 0.007$).

Nations	A*A	BC	DE
England	54 (22.9%)	136 (57.6%)	46 (19.5%)

Wales	1 (6.7%)	11 (73.3%)	3 (20.0%)
Scotland	5 (20.8%)	18 (75.0%)	1 (4.2%)
Northern Ireland	1 (8.3%)	4 (33.3%)	7 (58.3%)

Respondents in the North, when compared to the rest of England were more likely to have scored A*A (p = 0.029).

SHAs	A*A	BC	DE
North	26 (32.1%)	42 (51.9%)	13 (16.0%)
Midlands and South	28 (18.1%)	94 (60.6%)	33 (21.3%)

Variation in score by staffing levels

Respondents who reported higher levels of consultants, DSNs, dietitians and podiatrists, all scored higher when compared to those with lower levels (spearman correlation $p < 0.000$). For this, the variable for Consultants and DSN WTE were taken out of the WRS.

Table to show variation by consultant numbers

WTE of consultant	A*A	BC	DE
0.1-0.25	0 (0.0%)	2 (40.0%)	3 (60.0%)
0.26-0.50	1 (2.6%)	24 (63.25%)	13 (34.2%)
0.51-0.75	4 (8.9%)	25 (55.6%)	16 (35.6%)
0.76- >1.5	56 (30.4%)	115 (62.5%)	13 (7.1%)

Variation in score by type of hospital

Designated teaching hospitals tended to be better resourced when compared to district general hospitals however this was not a significant difference.

Type of hospital	A*A	BC	DE
Designated teaching	27 (50.9%)	57 (34.8%)	14 (26.9%)
Associated teaching	10 (18.9%)	33 (20.1%)	14 (26.9%)
District general	16 (30.2%)	74 (45.1%)	24 (46.2%)
Total	100%	100%	100%

Score compared to 2000

The average well resourced score has slightly decreased since 2000 compared to 2006:

	All respondents	All respondents	Comparable hospitals	Comparable hospitals
	2000 Score	2006 Score	2000 Score	2006 Score
Mean	18.1	17.27	18.5	17.4
Median	18	18	19	18
Range	10 to 25	0 to 24	12 to 25	0 to 23

Note: The results from 2000 were re-scored – taking out the variable for retinal screening (data gathered in a separate survey) and a variable for DSN (not used in

2006) and a variable for education for people with diabetes was included. The graph below demonstrates the spread of scores from A* to E, in 2000 compared to 2006 for all respondents and the comparable hospitals.

Graph: Comparison of WRS score – 2000 to 2006 for all respondents and the comparable group of hospitals

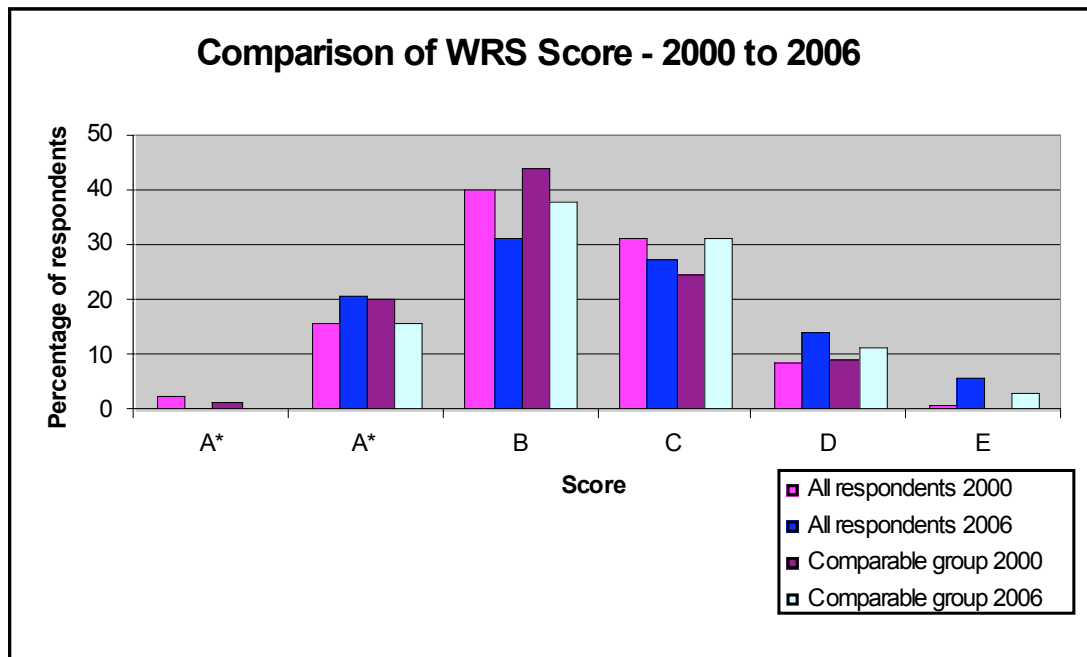


Table of scores comparing 2000 to 2006 for all respondents and the comparable hospitals:

	All respondents	All respondents	Comparable hospitals	Comparable hospitals
Score	2000 scores	2006 scores	2000 scores	2006 scores
A* (24-25)	5 (2.7%)	1 (0.3%)	2 (1.6%)	0 (0%)
A (21-23)	29 (15.8%)	60 (20.8%)	25 (20.5%)	19 (15.7%)
B (18-20)	74 (40.4%)	91 (31.5%)	54 (44.3%)	46 (38%)
C (15-17)	57 (31.1)	79 (27.3%)	30 (24.6%)	38 (31.4%)

D (12-14)	16 (8.7%)	41 (14.2%)	11 (9.0%)	14 (11.6%)
E (<12)	2 (1.1%)	17 (5.9%)	0 (0%)	4 (3.3%)

Table to show a regional comparison between the comparable hospitals from 2000 to 2006:

	Comparable hospitals			Comparable hospitals		
	2000			2006		
	A*A	BC	DE	A*A	BC	DE
North (n=32)	7 (21.9%)	25 (78.1%)	0 (0%)	6 (18.8%)	25 (78.1%)	2 (6.2%)
Midlands and South (n=70)	17 (24.2%)	43 (61.4%)	9 (12.9)	10 (14.3%)	45 (64.3%)	14 (20%)

The table above demonstrates a trend towards the Midlands and South having lower scores (DE) compared to the North in both 2000 and 2006.

Comparable hospitals. We also compared the scores to see what proportion had increased or decreased their score in the interim period. In 2006, 56% of the hospitals had a lower score compared to their score in 2000, 38% had increased their well resourced score and 6% had the same score in 2006 as in 2000.

Consultant perception of own service

After consultants completed questions on specific diabetes services (Q16-29), they were invited to rate their service based on their own perception of how well resourced they perceived their service to be:

- Well resourced = 8.4%

- Reasonably well resourced = 55.8%
- Not well resourced = 35.8%

When the consultants perception was correlated to actual scores, there was a significant relationship ($p=0.00$), those who felt their service was well resourced were more likely to have higher scores.

Perception of service	A*A	BC	DE
Well resourced	58.3%	37.5%	4.2%
Reasonably well resourced	25.8%	62.3%	11.9%
Not well resourced	5.9%	60.8%	33.3%

The table below shows that when compared to the responses given in 2000, consultants are now more likely to perceive their service as ‘not well resourced’ and less likely to say that their services are well resourced.

Consultant perception of their specialist diabetes service	2000	2006	Comparable hospitals 2000	Comparable hospitals 2006
Well resourced	23%	8%*	25%	7%
Reasonably well resourced	60%	56%*	59%	63%*
Not well resourced	18%	36%*	15%	37%*

* indicates if the difference between 2000 and 2006 is statistically different

Consultant comments

Consultants were invited to provide free text comments on the status of their diabetes service. The comments were coded and assigned themes that were either positive, negative or mixed and then counted as to how frequently a theme occurred in the data.

There were many more negative comments (232) compared to positive comments (23) and some were described as mixed (9).

Negative theme	Number of counts
Specific diabetes services are poorly supported	112
Job losses	66
Increased workload, increasing prevalence of diabetes and lack of resources to meet demand	27
Restructuring and move to primary care diminishing specialist services	15
Poor work environment, IT support and facilities for patients	9
Pressure from Acute and GIM reduces time for speciality	3

Positive theme	Number of counts
Excellent diabetes specific services	9
Good collaborative links and integrated service with primary care	6
Service reasonably well resourced	5

Excellent staff	2
Raised own funds	1

Mixed theme	Number of counts
Services are being developed therefore neither well resource nor poorly resourced	6
Some aspects of the service are better than others	2
Good service but under threat due to changes eg commissioning	1

Most negative comments concerned the lack of support for specific diabetes services and job losses. Positive comments reflected the respondents' views that the diabetes service provided excellent care and had good links with primary care. Consultants also expressed views that whilst services were improving they had now come under threat, these were categorised as mixed comments.

Working methods in your current hospital

Working methods relates to consultant involvement in general medicine, the number of medical admissions, physician of the week schemes, ward based systems, on-call duties, integration with elderly care with general medicine and diabetes in-patient wards.

Key findings:

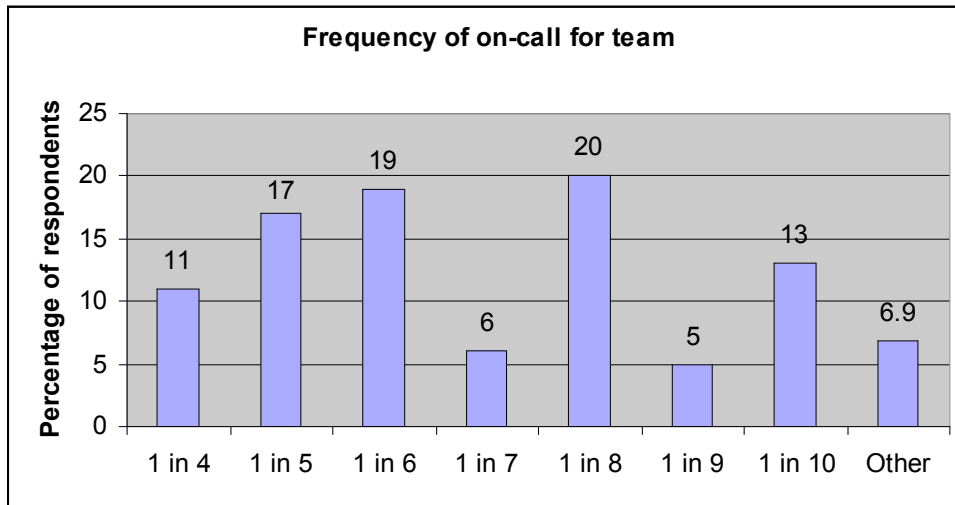
- 93.7% are involved in general medicine
- 80.2% report a different frequency of on-call for consultants to other team members
- 24.0% take part in a physician of the week system
- 80.7% work a ward based system
- 52.3% integrate general medicine with care of the elderly
- 66.5% have a designated ward for diabetes in-patients

More respondents worked in district general hospitals (42.4%) compared to designated teaching (36.4%) and associated teaching hospitals (21.2%). Nearly all consultants were involved in general medicine (93.7%) and 94.8% had a medical admissions unit and the mean number of acute medical admissions per 24 hrs was 33.71 (median = 30 and range = 7 to 100).

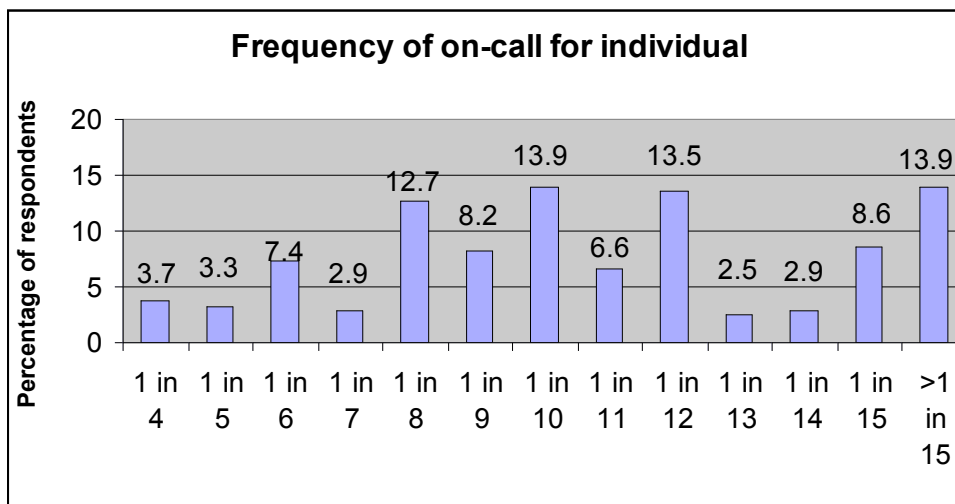
Average number of acute medical admissions per 24 hours:

- 20 or less = 19.6%
- 21 to 30 = 35.1%
- 31 to 40 = 25.3%
- 41 and more = 20.0%

38.1% operate together when on-call and of those who do, frequency of the on-call is as follows:



80.2% reported a different frequency of on-call for the consultant to other team members. The median frequency of on-call duties was 1 in 10 and the frequencies are as follows:



24.0% take part in a physician of the week system and of those who do, 54.1% separate weekdays and weekends, 29.5% cover the whole 7 day week and 16.4% cover a block of days.

80.7% work a ward-based system. This varied by nation, England (83.3%) and Scotland (87.0%) were more likely to work a ward based system compared to Wales (53.8%) and Northern Ireland (66.7%) ($p = 0.03$).

52.3% integrate general medicine with the care of the elderly. Wales was the most likely to have general medicine integrated with care of the elderly (Wales = 84.6%; England = 53.4%; Scotland = 26.1% and Northern Ireland = 41.7%) ($p = 0.006$).

66.5% have a designated ward for diabetes in-patients. Scotland was the most likely to have a designated ward for diabetes in-patients (Scotland = 78.3%; England = 68.6%; Wales = 61.5% and Northern Ireland = 25.0%) ($p = 0.01$).

General and specialist duties

There have been concerns that colleagues from other specialities have been increasingly opting out of the on-call rota placing extra pressure on consultant diabetologists to spend more time on acute medicine work leaving less time for diabetes clinics, to develop the specialist service and to train junior doctors. These activities are essential to ensure the provision of a high quality service for people with diabetes. The following questions explore the issue of opting out from the acute medicine on-call rota and how this may be impacted by the speciality of the colleagues and by their approximate age.

Key findings:

- Colleagues in England in other specialities were more likely to opt-out
- Most of those opting out were from cardiology, neurology and rheumatology
- 58.1% of those opting out were aged 40-49 yrs

➤ Consultants from designated teaching hospitals were more likely to opt-out

Opting out

68.6% reported that physician colleagues have opted out of acute medical on call rotas. The respondents reported that colleagues in England were more likely to opt out when compared to other nations (England = 71.4%; Wales = 28.6%; Scotland = 66.7%; Northern Ireland = 66.7%) (p = 0.01).

Specialities of colleagues who have opted out

Of those who were reported to have opted out were from the following specialities:

- Cardiology = 76.8% (149)
- Neurology = 56.2% (109)
- Rheumatology = 55.7% (108)
- Renal medicine = 41.8% (81)
- Gastroenterology = 23.2% (45)
- Elderly care = 13.4% (26)
- Thoracic = 10.8% (21)
- Respiratory = 10.8% (21)
- Diabetes and Endocrinology = 8.8% (17)
- Other = 5.7% (11)

Other includes: Dermatology, Haematology, Oncology and Pharmacology

Age of colleagues opting out

- Up to 39 = 13.8%
- 40 to 49 = 58.1%
- 50 and over = 28.1%

Type of hospital and opting-out

Consultants from designated teaching hospitals were more likely to opt-out than those from associated teaching or district general hospitals (p = 0.000).

- 42.7% from designated teaching hospitals said colleagues had opted out
- 34.1% from district general hospitals
- 23.2% from associated teaching

Contracts, programmed activities and clinics

Consultant contracts, proportion of time spent in different activities and types of clinics were investigated along with free comments from consultants giving their own views on the impact of acute medicine on speciality workload and job satisfaction.

Key findings:

The average programmed activities for diabetes specialist services:

- 3.41 for diabetes out-patient activity
- 2.14 for diabetes in-patient activity
- 0.22 for community diabetes

The average programmed activities for acute medicine:

- 2.8 to acute medicine

Endocrine activities:

- 78.4% take part in endocrine activities

Commitment to acute medicine leads to cancelled clinics for:

- 65.5% of consultants

➤ 87.6% of registrars

➤ 44.2% SHOs

Job satisfaction:

➤ Job satisfaction is moderate (44.2%)

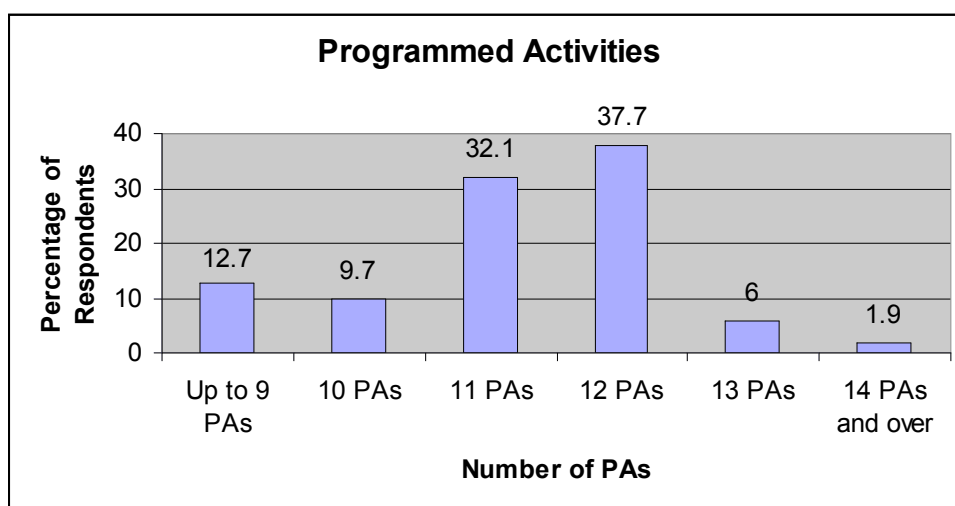
Contract

91.9% of respondents are employed on the new NHS consultant's contract, 4.6% are on university contracts, 1.4% on old NHS consultant contracts and 2.1% other.

Programmed activities

A programmed activity is a scheduled session which lasts on average four hours in duration.

Consultants carry out an average of 10.99 programmed activities (PAs) (median is 11.5 and range = 1 to 15). 12.7% of respondents were part time consultants (up to 9 PAs).



When comparing full-time to part-time consultants by nation, there are proportionally more full time consultants (ie 10 PAs or more) in England compared to other nations (p=0.05):

Nation	Part-time consultants (1 to 9 PAs)	Full-time consultants (10 PAs and over)
England	10.4%	89.6%
Wales	33.3%	66.7%
Scotland	22.7%	77.3%
Northern Ireland	16.7%	83.3%

Programme activities:

For diabetes specialist services:

An average of 3.41 PAs are devoted to diabetes out-patient activity (median = 3.0 and range = 0 to 8):

- Up to 1.9 Pas = 9.3%
- 2 PAs = 18.9%
- 3 PAs = 33.6%
- 4 PAs = 20.1%
- 5 PAs and over = 18.1%

An average of 2.14 PAs are devoted to diabetes in-patient activity (median = 2.0 and range = 0 to 10):

- Up to 1.9 Pas = 33.6%
- 2 PAs = 36.0%
- 3 PAs = 19.8%

- 4 PAs = 5.7%
- 5 PAs and over = 4.9%

An average of 1.21 to endocrine activity (median = 1.0 and range = 0 to 7)

- Up to 0.9 Pas = 30.7%
- 1 PAs = 40.9%
- 2 PAs = 20.5%
- 3 PAs = 6.3%
- 4 PAs and over = 1.6%

An average of 0.22 to community diabetes (median = 0 and range = 0 to 6)

- Up to 0.9 Pas = 86.5%
- 1 PAs = 11.2%
- 2 PAs = 1.2%
- 3 PAs = 0.8%
- 4 PAs and over = 0.4%

The number of PAs devoted to diabetes medicine was not affected by the well resourced score, ie those services which were better resourced did not have more PAs devoted to diabetes medicine.

For acute medicine:

Respondents reported devoting an average of 2.8 PAs to acute medicine (median = 2.9 and range = 0 to 10.5):

- Up to 1.9 Pas = 25.2%
- 2 PAs = 24.8%

- 3 PAs = 23.3%
- 4 PAs = 14.3%
- 5 PAs and over = 12.4%

The number of PAs devoted to acute medicine varies depending on whether the consultant is full or part time. Part-time consultants work proportionately more PAs compared to full-time consultants (p=0.03).

Consultant	Percentage of time working in acute medicine			Total
	0-30%	31-60%	61-100%	
Part-time consultants (1 to 9 PAs)	51.5%	39.4%	9.1%	100%
Full-time consultants (10 or more PAs)	71.8%	24.5%	3.7%	100%

Age however does not have a bearing on the number of PAs undertaken in acute medicine.

Clinics

Consultants take part in a wide range of clinics:

- General diabetes = 98.6% (278)
- Ante-natal = 48.2% (136)
- Transitional adolescent-adult clinics = 41.5% (117)
- Joint foot = 37.9% (107)
- Pump-intensive management = 25.5% (72)
- Diabetes renal = 22.3% (63)

- Joint adolescent = 20.9% (59)
- Other specialist clinics = 16% (45)
- Community diabetes clinics = 12.8% (36)
- Joint paediatric = 8.87% (25)
- Joint ophthalmology = 5.3% (15)
- Liaison psychiatry diabetes = 2.1% (6)
- Joint men’s health = 1.4% (4)
- HIV – diabetes = 1.1% (3)
- Sport and diabetes = 0.7% (2)

Endocrine clinics

78.35% of respondents take part in specialist endocrine activities. Type of clinics participate in include thyroid (78.06%), obesity (23.87%), lipid clinics (20.65%), metabolic bone-osteoporosis (16.13%), reproductive (13.55) and paediatric-adolescent endocrine (12.26%).

Comments on the impact of acute medicine on speciality workload

Consultants gave their comments on the impact of acute medicine on speciality workload. These were divided broadly into positive and negative themes of which 52 were positive compared to 210 negative comments made by 192 consultants.

Negative themes	Number of counts
Less time for speciality and to develop service	46
Increased acute and overall workload and difficulty balancing both roles	45
Cancelled and reduced sessions	42

Reduced junior doctor input into service due to rotas increasingly consultant led and juniors deskilled	38
Quality of care has reduced	23
Case mix	10
Problems with poor rota system poor organisation and split sites	6

Further analysis explored combining two negative themes and other relationships within the data. The theme “less time for speciality and to develop service” (negative theme 1, 46 out of 210 comments) and “increased acute and overall workload and difficulty balancing both roles” (negative theme 2, 45 out of 210) were combined.

47.3% of respondents from district general hospitals reported either or both of these themes compared to 35.1% from designated teaching and 17.6% from associated teaching hospitals (but this was not significant).

There was also no relationship between the occurrence of negative theme 1 and 2 and the well resourced score, age of consultants, being either full or part time consultants or the number of PAs devoted to acute medicine, diabetes out-patient activity, community diabetes, endocrine activity or to in-patient activity.

Positive themes

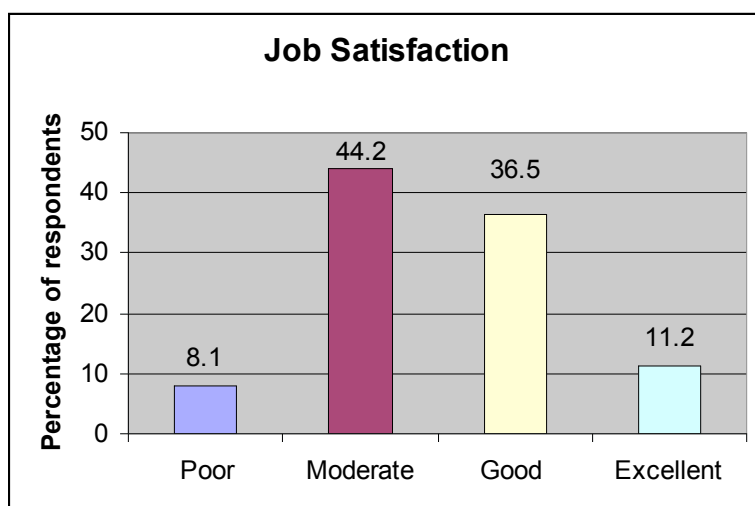
Positive themes	Number of counts
Acute medicine is central to role and provides leverage with the Trust	20
Low or no impact from acute medicine	15
Efficient when system not overloaded, well managed and sufficient	15

consultant numbers	
Diabetes is a common accompaniment of the acute medical problem and diabetologists are best placed to manage both	2

Cancelled clinics

As a result of commitments to acute medicine, 65.5% of consultants, 87.6% registrars and 44.2% SHOs have had to cancel diabetes clinics. The cancellation of clinics was not related to how consultants perceived their service to be resourced (for consultants, registrars and SHOs) nor with the actual well resourced score achieved and the WTE of consultants. These relationships were explored to find out if services with few consultants and that were less well resourced would have to cancel more clinics, but this was not the case.

Job satisfaction



There was a relationship between job satisfaction and the well resourced score, consultants were more satisfied at services with higher the scores (p=0.001).

	Job satisfaction	
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Well resourced score	Poor	Moderate	Good	Excellent	Total
A*A	3.3%	36.1%	39.3%	21.3%	100%
BC	8.2%	44.1%	38.8%	8.8%	100%
DE	13.0%	53.7%	25.9%	7.4%	100%

Job satisfaction was not affected by having previously occupied a post in another Trust.

NHS system reform

Recent changes in the NHS have seen the introduction of new structures such as practice based commissioning and payment by results however not all partners are equally engaged in the new processes.

Key findings England only:

- 99.9% are aware of practice based commissioning
- 98.7% are aware of payment by results
- 63.3% were aware of proposed tariffs for new diabetes consultation
- 17.2% were involved in discussions regarding the tariffs

In England, 99.9% of respondents are aware of practice based commissioning and 98.7% of payment by results but only 17.2% of respondents from England were involved in discussions regarding the tariffs.

Tariffs

63.3% said they were aware of the proposed tariffs for specialist diabetes service and were asked what the recommended tariff for a new diabetes consultation is (£247).

None of the respondents produced the correct figure, 51% came within £10 of the correct figure:

Mean: £215.18

Median: £241.00

Range: £80 to £388

- Up to £235 = 39.7%
- £236 to £246 = 40.4%
- £247 = 0%
- £248 to £258 = 10.6%
- £259 or over = 9.2%

When asked about the recommended tariff for a follow up consultation, 4.3% gave the correct figure of £90 and 65.5% were within £10:

Mean: £80.53

Median: £86.00

Range: £30 to £180

- Up to £79 = 26.6%
- £80 to £89 = 61.9%
- £90 = 4.3%
- £91 to £99 = 3.6%
- £100 and over = 3.6%

Best and worst issues of consultant post and/or most pressing concerns

Consultants were invited to give their own opinions on the best and worst issues of the consultant post and most pressing concerns for acute medicine and diabetes.

Acute medicine

There were 338 negative comments and 108 positive comments. There was no significant variation of theme by nation.

Worst themes	Number of counts
High pressure through-put, lack of beds, poor ward facilities and ineffective discharge policy	59
Increasing workload and intensive	51
Less availability of junior doctors	37
Team fragmentation	32
Lack of continuity of care	29
Increased dependency of inexperienced juniors requiring an increasingly consultant lead service	28
Pressure of targets reducing quality of care	26
Poor morale, stress, quality of life and low job satisfaction	22
Less time for diabetes speciality	21
Impact of opt out of other specialties on ward case mix	14
Financial cuts, staff shortages and job losses	12
Harder to keep up to date and maintain skills in acute GIM	7

'Expectations of general medicine are rising- whenever anything comes up, it is always a specialty clinic that is cancelled' (Quote from consultant)

Best themes	Number of counts
Diagnostically challenging and broad case mix	36
Robust integrated team approach to on-call	22
Enjoyable	20
Opportunities for teaching and training and recruitment into D&E	15
Maintaining skills	7
The patients	5
Provides important role as perceived by Trust Executives	3

'I enjoy working on Acute Medical Unit where I can make a real difference to people early in their hospital admission' (Quote from consultant)

Diabetes

There were 372 negative comments and 140 positive comments.

Worst themes	Number of counts
Commissioning, negative impact of central government policy on diabetes care and uncertainty over future eg PBR/PBC, perverse incentives, policy intervention and creating divisions between primary and specialist services	94
NHS Funding/Finances/Deficits and no prospect of service development	47

Shift to primary care with limited capacity, lack of knowledge and experience and quality of care is variable	40
Lack of staff, downgrading of posts and job losses eg Downgraded, lack of DSNs, threats and job losses	32
Lack of understanding of complexity of diabetes, diabetes not considered a priority and poor management support	24
Specific diabetes services not adequately supported, eg education, psychology and retinal screening	24
Poor communication and collaboration primary care, PCTs and specialist services	23
High workload and increasing prevalence	22
Loss of specialist skills, difficulty recruiting and training staff	20
Lack of time	10
Low morale	8
Service reconfiguration and fragmentation	8
Poor admin, facilities and IT	8
Poor inpatient care	6
Acute medicine reduces time for speciality	2
Unrealistic patient expectations	1
Poor knowledge of hospital staff (not diabetes specialists)	1
Difficulty mixing community and acute work	1
Change in case mix	1

“Uncertainty of practice based commissioning plus acute financial constraints of trust is putting morale at all time low. Almost certainly services will be cut further.”
(Quote from consultant)

“Huge impact on moral of diabetes specialist teams from the threat of decimation of the service that we have worked so hard to develop.” (Quote from consultant)

“Inability to get funding for dietetic & psychology support due to the transfer of DOH funding to primary care” (Quote from consultant)

Best themes	Number of counts
Good team and MDT working and expertise	39
Enjoyable, challenging and satisfying	25
Good quality, well organised service and facilities	20
Patients and developing long term relationships with patients	19
Good network and engagement with primary care	15
Specific diabetes services supported	10
New treatments, therapies and involvement in research	8
Good staffing levels	2
Good training	

“Excellent team with close working relationships” (Quote from consultant)

General strengths, weaknesses and issues within the specialist service

Consultants were invited to write their own thoughts on the strengths, weaknesses and threats to their specialist service:

Strengths of your specialist service	Number of counts
Expert, committed and motivated specialist staff	166
Excellent team work and MDT working	118
Good links with primary care, effective networks and integrated community focussed services	88
Good range of speciality and sub-specialist clinics	86
Patient focused, innovative and high quality service	78
Comprehensive, well organised and well resourced service	68
Excellent education for patients and healthcare professionals	28
Good systems in place for achieving targets	22
Good facilities in place	19
Good IT systems in place	18
Research	12
Enough staff	9
Good laboratory support	5
Tertiary support	2
The patients	2
Good telephone support	1
Supported by charity	1
Enjoy general medicine	1

“Great experience and stability” (Quote from consultant)

Weaknesses of your specialist service	Number of counts
Under resourced specialist services, in particular psychology (33), dietetics (35), education (23), podiatry (22), paediatric and	169

adolescent clinics (13)	
Lack of staff	99
Organisation of service, including no prospect for development, lack of a register and too much work	73
Poor facilities, also includes split site working	42
Funding and finance cuts and higher prevalence	41
Lack of strategy and leadership	32
Poor links with community and/or primary care	32
Poor IT	29
Poorly organised commissioning, including shift to primary care, expensive or undervalued service and threats from PBR	19
Poor inpatient care	11
Too generalised service	11
Poor MDT and team working	10
Access to the service	7
Case mix and do not attends	6
Impact of GIM	6
Targets and guidelines	6
Diabetes not prioritised	5
Low morale and stress	5
Poor community diabetes	5
Poor awareness or promotion of service	4
Poor training	4
Research	2
Not enough prevention	1
Size of service	1

“Lack of psychological support” (Quote from consultant)

Issues that threaten your specialist service	Number of counts
Commissioning and negative impact of central government policy on diabetes care	176
Lack of understanding of complexity of diabetes and shift to primary care	106
Staffing and training cuts	93
NHS Funding/Finances/Deficits	88
Service reconfiguration and fragmentation of care provision	51
Diabetes not prioritised, poorly valued and reduced investment to specific services	46
Pressures from acute medicine or general medicine	19
Poor communication and collaboration primary care, PCTs and specialist services	16
None	3
Lack of IT support	2

“Government policy eg PBR and PBC” (Quote from consultant)

“Unsophisticated grasp of diabetes care by commissioners” (Quote from consultant)

Discussion

This research aimed to review the nature and extent of specialist diabetes services, to compare service provision to 2000 and explore the impact of acute medicine on diabetes services. Overall the response rate to the survey was lower than anticipated,

in particular from Scotland, Wales and Northern Ireland. Extra measures in analysis were undertaken by comparing like for like hospital responses from 2000 and 2006 to overcome this response weakness. However there is considerable strength in being able to draw comparison to the previous survey and the qualitative responses add strength to the survey findings, giving an in-depth understanding of the issues.

Specialist diabetes staffing level

Since 2000 there have been improvements in specialist staffing levels, there are more consultants, DSNs, podiatrists and dietitians, although they are still short of recommended levels. Consultants identified staff as being one of the key strengths of the service. Staff were described as highly skilled, expert and motivated and many described excellent team working as one of the best things about their diabetes service.

However, there are still consultants working on their own, which impacts on their ability to provide a well resourced service. Where there was more than one consultant, it was easier to manage the workload from acute medicine, to develop services and provide leadership when working in the community with primary care. Despite the increase in staffing numbers reported, these increases are under threat, and there were reports of cuts in staffing and training, a view that was also matched by the findings from the recent Diabetes UK survey in 2006 on specialist staffing cuts. In this survey, there was significant reporting of the cutting, freezing and down grading of posts as well as the redeployment of staff onto general wards and reduction in posts and hours. Up to a third of all professionals responding to the Staffing Cuts survey identified one or more cuts to their service, which was either planned or by stealth. Of the healthcare professional respondents who knew that changes to posts had occurred, 43% believed vacant posts had been frozen and 32% had seen a downgrading in posts as a result of agenda for change.

Status of specific specialist diabetes services

The survey set out to find out if the provision of specific specialist diabetes services has improved since 2000, if services are now comparatively better resourced, and where there are gaps in provision. Overall services scored lower in 2006 compared to 2000 and there were regional and national variations, the North in England were better off than those elsewhere. Some services had improved eg the measurement of lipids, HDL and microalbuminuria, most probably due to the impact of QOF. However some are still under-resourced including access to a psychologist. Services which have not changed since 2000 include erectile dysfunction and having guidelines in place. Consultants were concerned that where progress has been made, this is now under threat and will not be maintained due to loss of staff and lack of funding.

Impact of acute and general medicine on diabetes service provision

Consultants with a special interest in diabetes and endocrinology are facing a growing tension between providing specialist diabetes services and acute and general medicine, as also documented in “Diabetes and Diabetologists”, a report from the Department of Health⁴.

As senior physicians from other specialities opt out of acute medicine, a greater burden is placed on consultant diabetologists to provide these services. Consultants feel that they do not have enough time for their speciality and find it difficult to balance both roles. On the one hand, involvement in acute medicine is seen positively by diabetologists as acute medicine is seen as central to the role of the consultant, as being enjoyable and diagnostically challenging, providing important leverage with trust managers and many enjoy the opportunity to develop long term relationships with patients.

However there are problems with the sheer volume of work, poor ward facilities, and pressure to meet targets without compromising care. The impact of the European Working Time Directive has meant there is less support available from junior doctors

who are now becoming comparatively deskilled and inexperienced and are increasingly dependent on consultants. These pressures mean there is less time available to develop diabetes services, to train and recruit and junior doctors into diabetes and to provide leadership and training in the community to primary care colleagues.

Recruitment of new consultants is also adversely affected by the perception of a reducing role for specialist care and the limited experience of diabetes care that junior doctors receive in post-graduate training. This could in the future lead to a skills gap with fewer specialists available to deliver care and to train primary care staff.

NHS system reform

There was considerable concerns voiced by the consultants that they were not engaged with primary care in the planning and commissioning of diabetes services. Very few consultants accurately knew the proposed tariffs or had been involved in the decision making process to decide what the tariffs should be. As a result consultants felt that the lack of engagement in practice based commissioning and payment by results could divide and fragment diabetes services. Consultants were concerned that commissioners do not understand the complexity of diabetes. This lack of understanding of the complexity of diabetes also prompted fears that commissioners would not prioritise diabetes, that it would be poorly valued and that services would lose essential investment. These changes have lead to feelings of uncertainty in the future, over what might happen to their role leading to low morale and problems for recruitment in the future.

The prevalence of diabetes is increasing and to ensure the standards for care set out in the National Service Framework are met, specialists have a vital role to play working in collaboration with primary care colleagues in the design and commissioning of diabetes services. Reductions in funding and lack of support for the development of services and for training and development of specialist staff must end if the standards for care set out in the National Service Framework are to be met. Diabetes UK, people with diabetes and professionals working with diabetes care need to work

together to address these challenges and ensure high quality diabetes care is accessible to people with diabetes regardless of geography and location of care.

Recommendations

The Department of Health needs to take action to ensure that the skills of diabetes specialist teams are retained and ensure there are adequate staffing levels to support the population of people with diabetes and to meet their complex health needs.

Investment in diabetes care is required to ensure that people with diabetes receive the standards of care that they should expect as defined within the NSF for diabetes and by the National Institute for Health and Clinical Excellence.

Specific diabetes services such as education, dietetics and psychological support are in urgent need of greater investment; reductions in these critical areas will negatively impact the long term health of people with diabetes.

Commissioners must recognise, support and value the skills of specialist diabetes teams and utilise these skills appropriately. They are vital to tackle the unmet need of poor quality management of diabetes in hospitals and to provide integrated care for all people with diabetes.

Commissioners must recognise the shortfall in provision of acute medicine posts and plan accordingly. Careful planning for staffing is needed to meet the demands of acute and general medicine work as well as specialist services within the hospital. If consultants involved in diabetes care are to be expected to backfill for specialities opting out of acute medicine then more diabetes consultant posts will be needed.

More flexibility around the involvement in acute and general medicine by consultant diabetologists is needed to ensure that a balance is achieved between time used in general and acute medicine and to allow consultants to develop specialist diabetes

services and provide leadership working in the community with primary care and public health colleagues.

There is a need to increase the exposure and involvement of junior doctors in training to diabetes to ensure continuity of care and investment in future expertise. Training programmes that provide adequate clinical experience of working with primary care are required to reflect changing models of delivery of diabetes services.

- Training programmes for junior doctors must be revised in line with changes in service delivery. A core component of the training curriculum needs to comprise of time spent in community settings to gain the knowledge, skills and experience of diabetes care, at all levels of complexity, and how it can be delivered in different places.

Primary, community and specialist services need to have effective networks to encourage collaboration in the design and delivery of diabetes services, recognising and utilising the skills of all, to plan, organise and deliver high quality integrated diabetes care for all people with diabetes.

Specialist teams need to have dedicated time to be able to work with primary care to provide the education, training and support so that people with diabetes receive high quality care by trained and expert healthcare professionals across the board.

All people with diabetes need to be confident that the care they are receiving is being delivered by staff trained in the delivery of diabetes care.

Acknowledgements

We would like to thank those who took part in the pilot, Ian Gallen, Rudy Bilous, Mark Savage, Kay Hircock, James Walker, Peter Daggett, Professor Frier and Jan Mitchell. We would also like to thank all the consultant diabetologists who took part in the survey, to Felix Burden of CDC for his input and to Elise Harvey of ABCD.

References

¹Winocour PH, Ainsworth A, Williams R, on behalf of the Association of British Clinical Diabetologists (ABCD). Association of British Clinical Diabetologists (ABCD) survey of secondary care services for diabetes in the UK, 2000. 1. Methods and major findings. *Diabetic Med* 2002; 19: 327 – 333

²Winocour PH, Mearing C, Ainsworth A, Williams DRR, on behalf of the Association of British Clinical Diabetologists. Association of British Clinical Diabetologists (ABCD): survey of specialist diabetes care services in the UK, 2000. 4. Dietetic services and nutritional issues. *Diabetic Med* 2002; 19 (Supp 4): 39 – 43.

³Winocour PH, Morgan J, Ainsworth A, Williams DRR, on behalf of the Association of British Clinical Diabetologists. Association of British Clinical Diabetologists (ABCD): survey of specialist diabetes care services in the UK, 2000. 3. Podiatry services and related foot care issues. *Diabetic Med* 2002; 19 (Supp 4): 32-38

⁴MacLeod K, Carter M, Asprey A, Britten N, Dean J, Hillson R, et al. A review of the job satisfaction and current practice of consultant diabetologists in England- barriers and successes. *Diabetic Med* 2007; 24(9): 946-954

Bibliography

Department of Health. National Service Framework for Diabetes: Standards. London, Department of Health, 2001.

Department of Health. National Service Framework for Diabetes. Delivery Strategy. Department of Health, 2002.

Welsh Assembly Government. National Service Framework for Diabetes in Wales: Standards and Delivery Strategy (2003)

Scottish Executive Health Department. Scottish Diabetes Framework (2002)

CREST and Diabetes UK. Report of the Northern Ireland Task Force on diabetes. A blueprint for diabetes care in Northern Ireland in the 21st Century (2003).

Department of Health / Diabetes. 2006. Diabetes Commissioning Toolkit, London 2006.

Department of Health. Diabetes in the NHS: Commissioning and providing specialist services. National Diabetes Support Team, Leicester, 2007.

Department of Health. Insulin pump services. Report of the Insulin pumps working group. Department of Health, London, 2007.

Department of Health. Our health, Our Care, Our Say: a new direction for community services. January 2006. Available from: Publications

Department of Health. Shifting the Balance of Power within the NHS: Securing Delivery. London: Department of Health, July 2001.

Campbell S, Reeves D, Kontopantelis E, Middleton E, Sibbald B, Roland M. Quality of Primary Care in England with the Introduction of Pay for Performance. *New Eng J Med* 2007; 357: 181-190

Winocour PH, Ainsworth A, Williams R, on behalf of the Association of British Clinical Diabetologists (ABCD). Association of British Clinical Diabetologists (ABCD) survey of secondary care services for diabetes in the UK, 2000. 1. Methods and major findings. *Diabetic Med* 2002; 19: 327 – 333

Winocour PH, Ford M, Ainsworth A, on behalf of the Association of British Clinical Diabetologists. Association of British Clinical Diabetologists (ABCD): survey of specialist diabetes care services in the UK, 2000. 2. Workforce issues, roles and responsibilities of diabetes specialist nurses. *Diabetic Med* 2002; 19 (Supp 4): 27 – 31.

Winocour PH, Morgan J, Ainsworth A, Williams DRR, on behalf of the Association of British Clinical Diabetologists. Association of British Clinical Diabetologists (ABCD): survey of specialist diabetes care services in the UK, 2000. 3. Podiatry services and related foot care issues. *Diabetic Med* 2002; 19 (Supp 4): 32-38

Winocour PH, Mearing C, Ainsworth A, Williams DRR, on behalf of the Association of British Clinical Diabetologists. Association of British Clinical Diabetologists (ABCD): survey of specialist diabetes care services in the UK, 2000. 4. Dietetic services and nutritional issues. *Diabetic Med* 2002; 19 (Supp 4): 39 – 43.

British Diabetic Association. Recommendations for the structure of specialist diabetes care services, A British Diabetic Association Report, 1999

MacLeod K, Carter M, Asprey A, Britten N, Dean J, Hillson R, et al. A review of the job satisfaction and current practice of consultant diabetologists in England- barriers and successes. *Diabetic Med* 2007; 24(9): 946-954

Department of Health. Chief Executive's report to the NHS. June 2006. Department of Health, Leeds , 2006.

Diabetes UK. Diabetes: State of the nations 2006. Progress made in delivering the National Diabetes Frameworks. Diabetes UK, 2007.

Healthcare Commission. Managing Diabetes . Improving services for people with diabetes. Service Review. Commission for Health Care and Inspection; London, 2007.

Winocour PH, Gosden C, Walton C, Turner B, Nagi D, Holt RIG. The conflict between specialist diabetes services and acute-general internal medicine for consultant diabetologists in the United Kingdom in 2006 –Findings from the 2006 ABCD-Diabetes UK survey of specialist diabetes services. *Clin Med* 2008; in press

Morrish N. Diabetes UK – Royal College of Physicians Diabetes Manpower Survey; 2006. Presented at DUK Annual Conference, Glasgow, 2007.

Federation of the Royal Colleges of Physicians of the United Kingdom. Census of Consultant Physicians in the UK, 2006. Data and Commentary. The Federation of the Royal Colleges of Physicians of the United Kingdom , 2007.

James J, Gosden C, Holt RIG. Agenda for Change and NHS reconfiguration. Effects on diabetes specialist nursing, and the impact on diabetes service delivery and patient care. *Practical Diabetes* 2007; 24: 247 – 251.

Public Health Agency of Canada. Building a national diabetes strategy. Canadian Diabetes Strategy. 2005; Volume 2. Accessed at: <http://www.phac-aspc.gc.ca/ccdpc-cpcmc/diabetes-diabete/english/strategy/index.html>

Policy Review “Cuts in Diabetes Specialist Services” 2006, Diabetes UK,

Position statement “Ensuring access to high quality care for people with diabetes”, 2005, Association of British Clinical Diabetologists and Diabetes UK

Appendix 1

Questionnaire

ABCD & Diabetes UK survey of specialist diabetes services 2006

Individual Consultants

1. If you would like identifying information to be kept confidential, please tick yes

Y/N

Details about where you work:

2. Name of your acute NHS trust

3. Name of your network

4. Name of your hospital

5. Please write the number of commissioning bodies (ie PCTs in England, LHBs in Wales, Health Boards in Scotland and HSSBs in Northern Ireland) service by your Acute Trust?

Details about yourself

7. What is your age?

<31, 31-35, 36-40, 41-45, 46-50, 51-55, 56-60, >61

8. Are you male or female?

9. How many years have you been in a consultant post (or equivalent)

10. Have you previously occupied a consultant post (or equivalent) in a different trust? Y/N

Status of diabetes service

11. How many other consultants are there working on your Acute site in diabetes?

12. Please state the number of whole time equivalent (WTE) consultants per 100,000 of the catchment population

Greater than 1.5, 1.26-1.5, 1.1-1.25, 0.76-1.0, 0.51-0.75, 0.26-0.50, 0.1-0.25, no consultants

13. Please state the number of WTE hospital diabetes specialist nurses per 100,000 of the catchment population

Greater than 1.5, 1.26-1.5, 1.1-1.25, 0.76-1.0, 0.51-0.75, 0.26-0.50, 0.1-0.25, no DSNs

14. What WTE dietitian availability is there for the specialist diabetes service?

15. What WTE podiatrist availability is there for the specialist diabetes service?

16. Does the diabetes service have a diabetes register?

17. Is there a joint ante-natal diabetes service?

18. Is there a joint diabetes-ophthalmology clinic in the specialist diabetes service

19. Are there separate diabetes clinics for the elderly?

20. Is there a local vascular surgeon in your hospital?

21. Are lipids measured in your specialist diabetes service?

22. Is microalbuminuria available in your specialist diabetes service?

23. Is HDL measured in your specialist diabetes service?

24. Is there a specific service for erectile dysfunction?

25. Is there a joint paediatric and adult specialist diabetes service?
26. Are there guidelines to ensure comprehensive diabetes care in all settings?
27. Is structured education offered to people with diabetes?
28. Is education offered to medical staff?
29. Do patients have access to a psychologist?
30. Based on your answers to the above questions, do you feel your specialist diabetes service is well resourced?

Well resourced, Reasonably well resourced, Not well resourced

31. Comments

Working methods within your current hospital

32. Are you involved in general medicine? If no, please proceed to the next section

Y/N

33. Is your current hospital?

Designated teaching, Associated teaching, District general

34. Do you have a medical admissions unit? Y/N

35. What is the average number of acute medical admissions per 24 hours?

36. Does your 'team' operate together for on-call or not? Y/N

37. If 'Yes', how often are they on-call?

1 in 4, 1 in 5, 1 in 6, 1 in 7, 1 in 8, 1 in 9, 1 in 10, other

38. Is the frequency of on-call different for consultants to other team members? Y/N

39. How frequently do you carry out on-call duties?

1 in 4, 1 in 5, 1 in 6, 1 in 7, 1 in 8, 1 in 9, 1 in 10, 1 in 11, 1 in 12, 1 in 13, 1 in 14, 1 in 15, >1 in 15

40. Do you participate in a physician of the week system? Y/N

41. If 'Yes' how long is the duty period?

Whole 7 day week, Blocks of days, Weekdays and weekends separated

42. Do you work a ward-based system? Y/N

43. Is general medicine fully integrated with care of the elderly? Y/N/Partially

44. Is there a designated ward for diabetes in-patients? Y/N

General and specialist duties

45. Have any of your physician colleagues opted out of the acute medical on call rota? Y/N

46. If 'Yes', what speciality/specialities?

Cardiology

Respiratory

Rheumatology

Neurology

Thoracic

Renal medicine

Elderly care

Gastroenterology

Diabetes and endocrinology

Other

47. If 'Other', please specify

48. If 'Yes', rough age(s) of colleagues who have opted out

29 and under, 30-39, 40-49, 50-59, 60 and over

49. If 'Yes', reason for colleague opting out (ie seniority)

Your contract and working patterns

50. What type is your current contract?

New NHS consultants contract

Old NHS consultants contract

Equivalent

University

Other contract

51. If on the 'New NHS contract', please write

How many programmed activities do you carry out?

How many are devoted to acute medicine/ general medicine

How many are devoted to diabetes out-patient activity (including admin)

How many are spent in community diabetes

How many to endocrine activity

How many sessions are devoted to in-patient activities

52. Which type of clinics do you participate in

General diabetes

Ante-natal

Pump-intensive management

Diabetes renal

Joint paediatric

Joint adolescent

Transitional adolescent-adult clinics

Joint Ophthalmology

Joint foot

Joint men's health

Sport and diabetes

HIV – diabetes

Liaison psychiatry diabetes

Community diabetes clinic

Other specialist clinics

53. Do you participate in specialist endocrine clinics?

Reproductive

Metabolic bone-osteoporosis

Paediatric-adolescent endocrine

Pituitary

Thyroid

Lipid clinics

Obesity

54. Qualitative thoughts on impact of acute medicine on speciality workload?

55. Impact of commitments to acute medicine on speciality: does this lead to cancelled clinics for:

Consultants, registrar, SHO

56. How would you rate your current job satisfaction

Poor, moderate, good, excellent

Changing specialist diabetes services

57. Are you aware of practice based commissioning? Y/N/Not applicable in my nation

58. If Yes, how will this impact on specialist service provision

59. Are you aware of the DoH scheme in England and Wales for 'Payment by Results'? Y/N

60. If 'Yes', how will it impact on specialist diabetes services?

61. Are you aware of proposed tariffs for specialist diabetes services? Y/N

62. If 'Yes', what is the recommended tariff for a new diabetes consultation?

63. If 'Yes', what is the recommended tariff for a follow up consultation?

64. Have you been involved in any discussions regarding these? Y/N

Best and worst issues of Consultant post and/or most pressing concerns regarding:

65. Acute medicine

66. Diabetes

67. Endocrinology

General strengths, weaknesses and issues within your specialist service?

68. Please offer 3 main strengths of your specialist service

69. Please offer 3 main weaknesses of your specialist service

70. Please offer 3 main threats of your specialist service

71. Any other comments

Thank you for filling in our survey

Appendix 2

Weightings assigned to the components of the Well Resourced Score

Score Component		Maximum Score
The number of wte consultants per 100,000 catchment pop	>0.76=4 0.51-0.75=3 0.26-0.5=2 0.1-0.25=1 0=0	4
The number of wte DSNs per 100,000 catchment population	>1.5=3 1.1-1.5=2 0.1-1.0=1 0=0	3
WTE dietitian for service	0.6 and over=2 0.1-0.5=1 0=0	2
WTE podiatrist availability for diabetes service	1 and over=2 0.1-0.9=1 0=0	2
Register	Yes=2 No=0	2
Joint ante-natal diabetes service	Yes=1 No=0	1

Joint diabetes ophthalmology clinic	Yes=1 No=0	1
Separate diabetes clinic for elderly	Yes=1 No=0	1
Local vascular surgeon	Yes=1 No=0	1
Lipids measured	Yes=1 No=0	1
Microalbuminuria available	Yes=1 No=0	1
HDL measured	Yes=1 No=0	1
Erectile dysfunction service	Yes=1 No=0	1
Joint paediatric and adult specialist diabetes service	Yes=1 No=0	1
Guidelines	Yes=1 No=0	1
Structured education for people with diabetes	Yes=1 No=0	1
Access to a psychologist	Yes=1 No=0	1

Appendix 3

Well Resourced Score

Maximum score = 25

A*	24 - 25
A	21 - 23
B	18 - 20
C	15 - 17
D	12 to14
E	<12

Appendix 4

Individual consultants ID and component scores