

## Consultants' involvement in the contracting process in Yorkshire region

D C Bensley, A R Bull, R A Haward

**Regional Department of Public Health Medicine, Yorkshire Health, Harrogate HG1 5AH**  
D C Bensley, FSS, *regional statistician*  
A R Bull, MFCM, *consultant in public health medicine*  
R A Haward, FFCM, *director of public health*

Correspondence and requests for reprints to: Dr Haward.

BMJ 1991;303:95

Clinicians need to be fully involved in the contracting process if service agreements between purchaser and provider are to be both accepted and workable. We performed a random sample survey of consultants in Yorkshire during February 1991 to assess their involvement in discussions about contracts.

### Subjects, methods, and results

A stratified random sample design with variable sampling fraction was used to select from the 1118 consultants employed in the region. Stratification was by both district and four broad specialty groups. A total of 162 questionnaires were sent; a reminder was sent after one week and a telephone reminder given after two weeks.

Of the 162 consultants surveyed, 153 (94%) responded. In all, 89 (57%, 95% confidence interval 51 to 65%) had been involved in discussing specifications for their services more than once (table), with a range across districts of 33% to 80%.

In discussions about quality standards 88 (58%, 57 to 62%) of consultants had been involved more than once (range across districts 38% to 100%), but 49 (32%) had not been involved at all. Significantly more respondents who were heads of department or division had been involved more than once (26 out of 40 (65%) compared with 64 out of 112 (57%) others;  $p < 0.05$ ). When asked whether their hospital or district had organised at least one event or seminar to discuss the contracting process 96 (63%) consultants said no

(range across districts 17% to 85%). Thirty seven (24%) consultants had attended such an event. In all, 24 consultants (16%, 14 to 18%) were members of contracting teams (range across districts 0% to 40%); 10 (25%) senior consultants were represented on these teams compared with seven (6%) other consultants ( $p = 0.003$ ).

Discussions on the overall range of services provided by the hospital had involved 56 (37%, 34 to 42%) consultants more than once. Heads of department or division were more frequently involved, with 20 (50%) consulted more than once ( $p < 0.05$ ). Only 33 consultants (22%, 20 to 26%) had been involved more than once in discussions on how to monitor contracts. Of these, significantly more were heads of department or division (16 (41%) compared with 26 (23%) who were not;  $p = 0.03$ ). These observations applied to all specialty groups. Whether or not consultants worked in units designated as NHS trusts made no significant difference.

### Comment

Over a half of surveyed consultants had been involved in discussions about service specification or standards of care on more than one occasion (table), and in some districts the proportion was over 80%. Given that contracting is an important new process within the NHS, this is probably satisfactory. Of concern, however, are the results showing that less than a third had been involved on a formal or regular basis, and similarly that a third had no involvement in discussions on quality issues. The variation in proportion of consultants who were aware of seminars on contracting across districts suggests that communication about such events was often inadequate.

Although 57% of consultants had been involved more than once in discussions of quality in contracts, more than two thirds had had no discussion as to how contracts are to be monitored and managed. This may reflect less overall discussion of monitoring of contracts.

We conclude that the involvement of clinicians in the contracting process, although appreciable, must increase if contracting is to develop effectively. There should be improved communication about the contracting process and more clinical involvement in consideration of how contracts should be monitored.

(Accepted 25 April 1991)

*Involvement of consultants (n=153) in discussions concerning various aspects of contracts. Figures are numbers (percentages) of consultants*

	On a formal/regular basis	On an informal/irregular basis	Once only	Not at all	Not known
Specification of services	43 (28)	44 (29)	22 (14)	42 (27)	2 (1)
Quality standards	45 (29)	43 (28)	13 (8)	49 (32)	3 (2)
Overall hospital services	19 (12)	37 (24)	14 (9)	80 (52)	3 (2)
Monitoring contracts	11 (7)	22 (14)	8 (5)	108 (71)	4 (3)

## Raised proinsulin concentration as early indicator of $\beta$ cell dysfunction

D R Rhys Williams, Christopher Byrne, Penelope M S Clark, Lorna Cox, Nicholas E Day, Gerry Rayman, Tim Wang, C Nicholas Hales

The contributions of insulin deficiency and resistance to insulin in non-insulin dependent diabetes and impaired glucose tolerance are unresolved. Immunoradiometric assays can now distinguish proinsulin and the split proinsulins from each other and from insulin.<sup>1</sup> Patients with newly diagnosed diabetes have lower insulin concentrations 30 minutes after a 75 g glucose load than controls, and proinsulin-like molecules constitute a higher proportion of molecules containing insulin in these patients when fasted than in controls.<sup>2</sup>

We studied people with previously undiagnosed impaired glucose tolerance to see if they showed similar insulin and proinsulin profiles after a challenge with oral glucose.

### Subjects, methods, and results

We selected subjects aged 50-64 from the age-sex register of a general practice. We excluded those known to have diabetes and those receiving long term drug treatment. We carried out a standard 75 g oral glucose tolerance test in 58 subjects, taking venous blood samples at 0, 30, and 120 minutes. Results were assessed according to criteria of the World Health Organisation.<sup>3</sup> Each subject with previously undiagnosed impaired glucose tolerance was matched for sex and age (to within three years) with three controls randomly selected from the screened group.

Plasma glucose concentration was measured by a standard hexokinase method. Plasma insulin, proinsulin, and 32-33 and 65-66 split proinsulin concentrations were measured by two site immunoradiometric assays.<sup>1</sup> Concentrations of 65-66 proinsulin were mostly

Correspondence to: Dr Williams.

BMJ 1991;303:95-6

Time of sample	Insulin (pmol/l)		Intact proinsulin (pmol/l)		32-33 Split proinsulin (pmol/l)		Total proinsulin: Total proinsulin plus insulin (*, %)		Insulin:glucose	
	Impaired glucose tolerance	Controls	Impaired glucose tolerance	Controls	Impaired glucose tolerance	Controls	Impaired glucose tolerance	Controls	Impaired glucose tolerance	Controls
Basal	49.1 (15.7)	53.0 (4.2)	3.2 (0.9)	2.2 (0.2)	8.2 (2.9)	3.2 (0.6)	20.0† (4.7)	9.4 (1.0)	7.9 (2.1)	10.1 (1.0)
30 Minutes	284.3 (60.8)	331.9 (42.1)	7.4 (1.8)	6.3 (0.7)	16.4 (6.4)	12.4 (2.3)	8.0 (1.9)	5.5 (0.6)	25.8‡ (5.7)	41.0 (5.6)
120 Minutes	236.0 (50.2)	171.1 (26.5)	21.8§ (3.9)	12.1 (2.2)	30.3 (11.7)	16.3 (4.0)	18.0 (3.0)	14.3 (1.8)	26.4 (5.6)	36.5 (5.4)

\*Total proinsulin:total proinsulin plus insulin=(intact proinsulin plus 32-33 split proinsulin):(intact proinsulin plus 32-33 split proinsulin plus insulin). Significance of difference from control values: †*t*=2.16, *p*=0.04 (one tailed); ‡*t*=-2.44, *p*=0.03 (one tailed); §*t*=2.29, *p*=0.03 (one tailed) (all based on log transformed values).

below the limit of sensitivity of the assay and were excluded from the analysis. The case-control matching was retained in the statistical comparisons, and, unless stated otherwise, paired *t* tests were used on log transformed values (significance accepted at *p*<0.05).

We found impaired glucose tolerance in six men and one woman. There was no difference between the groups in their body mass index, waist to hip ratio, or fasting blood glucose concentrations, but the subjects with impaired glucose tolerance were significantly shorter than their controls (mean 169.5 (SEM 2.1) cm *v* 177.1 (2.9) cm; *p*=0.006 (two tailed, not log transformed)). Compared with the controls the subjects with impaired glucose tolerance had significantly higher mean fasting ratios of total proinsulin-like molecules to total proinsulin-like molecules plus insulin; a significantly higher intact proinsulin concentration at 120 minutes; and a significantly lower ratio of insulin to glucose concentrations at 30 minutes (table).

Comment

Assertions that insulin resistance is the primary defect in most or all patients with non-insulin dependent diabetes are opposed by the finding of subnormal insulin responses in these patients.<sup>2</sup> Furthermore, some radioimmunoassays cannot distinguish intact and partially split molecules of proinsulin from biologically active insulin, so that descriptions of patterns of secretion of insulin derived with this technique may be suspect.

In our study the subjects with impaired glucose tolerance did not have higher basal concentrations of insulin than the controls. They did have a higher fasting ratio of total proinsulin-like molecules to total

proinsulin-like molecules plus insulin and raised concentrations of intact proinsulin at 120 minutes; these reflected previous findings in diabetic subjects. The significantly lower ratios of insulin to glucose concentrations at 30 minutes in the subjects with impaired glucose tolerance suggest early failure of β cells.

The importance of impaired glucose tolerance has recently been reviewed.<sup>4</sup> Without follow up and re-testing it is impossible to determine the importance of the characteristics we have described.

We were intrigued to find that our seven subjects with glucose intolerance were significantly shorter than their controls, although the mean body mass index in the two groups was identical. This may be a chance finding and needs to be examined in a larger group of subjects. It raises interesting questions about the influence of early development on functional adult β cell mass.

We thank the subjects and the general practitioners who helped with this study and Marianne Quinn, Michael Brown, and members of the department of clinical biochemistry. We acknowledge the support of Annerose Schneider, the British Diabetic Association, the Medical Research Council, Eli Lilly, and East Anglian Regional Health Authority.

1 Sobey WJ, Beer SF, Carrington CA, Clark PMS, Frank BH, Gray IP, *et al*. Sensitive and specific two-site immunoradiometric assays for human insulin, proinsulin, 65-66 split and 32-33 split proinsulins. *Biochem J* 1989;260: 535-41.  
2 Temple RC, Carrington CA, Luzio SD, Owens DR, Schneider AE, Sobey AE, *et al*. Insulin deficiency in non insulin dependent diabetes. *Lancet* 1989;i: 293-5.  
3 Anonymous. Diabetes mellitus. *WHO Tech Rep Ser* 1985;No 727.  
4 Yudkin JS, Alberti KGMM, McLarty DG, Swai ABM. Impaired glucose tolerance: is it a risk factor for diabetes or a diagnostic ragbag? *BMJ* 1990;301:397-402.

(Accepted 3 April 1991)

ONE HUNDRED YEARS AGO

Hysteria in men is apparently not rare in other countries, but in this it is, relatively speaking, very uncommon. Not many years ago a Russian physician observed that true hysterical fits were common amongst young Circassian men, and the disease might reasonably be suspected to prevail where men of an imaginative and impressionable stock predominate. Judging by the evidence of French medical publications, Frenchmen are far more subject to hysteria in adult life than Englishmen. Occasionally certain cases recorded in French medical newspapers must cause us to reflect; are such cases hysterical at all, or are certain nervous affections common in England really forms of hysteria? The doctrine that hypochondria is in males the homologue of hysteria must be accepted by the French on the evidence of what prevails in England. For hypochondria, low spirits, or "spleen," is proverbially common here, and the French hold exaggerated opinions on the subject. In a more excitable race, more acute nervous symptoms might be expected. M. Debove has recently had under his care in the Hôpital Andral two cases of hysterical trembling. The first patient was aged 54; he was well till last summer, when he was knocked down by a mounted trooper at a review. Violent tremors set in, simulating disseminated

sclerosis, and he could not do his work at a sugar refiner's. He had plantar and pharyngeal anæsthesia and other symptoms of hysteria. Fifteen grains of bromide of sodium were given daily, and, with moral treatment, the patient recovered. The cure was sufficient to counterindicate sclerosis. The second patient was aged 38, but the case seems doubtful. He fell from a roof about a year since, and remained for over five months hemiplegic and aphasic. A fortnight before admission into M. Debove's wards, the patient, returning home from work, found that his wife had deserted him. He fell down unconscious, and on recovering his senses he found that the limbs of his body trembled violently. The tremors remained very severe in the right arm. The case, being compared to similar instances in women—held by Dr. Debove to be truly hysterical—was reported as hysterical trembling in a male subject. The history of an injury, with symptoms indicating, indeed proving, very definite cerebral lesions, may make many readers sceptical about the hysteria in this case. Yet it would be interesting to determine how far tremulousness in sober fairly-nourished men may be an evidence of true hysteria.

(British Medical Journal 1891;iii:135)

Departments of  
Community Medicine,  
Clinical Biochemistry, and  
Medicine, Addenbrooke's  
Hospital, Cambridge  
D R Rhys Williams, FFPHM,  
university lecturer in  
community medicine  
Christopher Byrne, MRCP,  
Medical Research Council  
training fellow  
Penelope M S Clark, PHD,  
principal biochemist  
Lorna Cox, MSC, research  
assistant  
Nicholas E Day, PHD,  
professor of public health  
Gerry Rayman, MRCP, senior  
registrar in medicine  
Tim Wang, MB, research  
registrar in clinical  
biochemistry  
C Nicholas Hales, PHD,  
professor of clinical  
biochemistry