The conflict between specialist diabetes services and acute-general internal medicine for consultant diabetologists in the UK in 2006

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ABSTRACT – An online survey of consultant diabetologists in the UK examined the interface between specialist services and acute-general internal medicine (acute-GIM). Out of 592 consultants, 289 (49%) responded. Of these, 94% contributed to acute-GIM, devoting equivalent time to acute-GIM and specialist diabetes services. Of the respondents, 10% provided a single-handed specialist service and 78% provided endocrine services. The survey found the input to acute-GIM was increasing, partly because other specialties were opting out. The increased commitment to acute-GIM compromised specialist diabetes activity through reduced consultant and training-grade time for outpatient activity and service development. The shift to primary care of chronic disease led to further conflict between acute-GIM and delivery of a specialist service, given the current systems for provision of consultant-led care. The large number of specialist trainees in diabetes and endocrinology will require innovative commissioning mechanisms that reflect the need to sustain and develop specialist diabetes and endocrine care in the appropriate settings as well as the continued input in acute trusts for acute-GIM.

KEY WORDS: acute-general internal medicine, community shift, consultant physicians, diabetes, endocrinology, specialist training

Introduction

There has been a rapid pace of change in the NHS over the past five years. The magnitude and range of reforms has been likened to a 'process of creative destruction'.[1] Uncertainty about the changing roles for healthcare professionals working in such an environment has led to a lack of clarity about the most effective means of service delivery and development.

Consultant physicians have been affected by these changes, and although their role in providing services to acute general hospitals is an established part of the UK healthcare structure, it is rapidly evolving. In the 2005 census of consultant physicians, the central role of key specialties providing support to acute-general internal medicine (GIM) was emphasised alongside their responsibility to their particular specialty.[2] The development of acute physician posts has been actively supported by the Royal Colleges of Physicians (RCP), although the commitment to acute-GIM from consultant physicians with specialist interests will continue to be encouraged.[3]

Currently consultants with a special interest in diabetes and endocrinology are the highest contributors to acute-GIM and therefore most likely to be affected by the changes.[2] Alongside developments in acute-GIM, there are profound reforms in the delivery of diabetes services. Government initiatives have moved towards an increasingly primary care-based delivery of chronic diseases including diabetes.[4,5] Consultant diabetologists may be working increasingly outside acute hospital settings and therefore a conflict between the delivery of acute-GIM and specialist services has arisen.

As the impact of service reforms on consultant diabetologists and the service they provide are largely unknown, the Association of British Clinical Diabetologists (ABCD) and Diabetes UK carried out a web-based survey of current working practices of UK consultant diabetologists in 2006. This survey was part of a larger body of work addressing other aspects of specialist diabetes services. These surveys were designed to identify current provision in specialist services and enable comparison with the 2000 survey.[6]

This report describes the role of the consultant diabetologist in the provision of acute-GIM and its impact on specialist diabetes services. Consultant attitudes towards the relationship between acute-GIM and diabetes services were also assessed.

Methods

An online survey was undertaken between May 2006 and February 2007 using the Opinion taker website. The survey was designed by the authors and included closed and open questions about the provision of

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acute-GIM and diabetes services. The questionnaire was piloted by the professional committees of ABCD and Diabetes UK prior to general circulation.

In total, 693 UK consultants involved in the provision of specialist diabetes and endocrinology services in the UK were identified through the databases of ABCD, Diabetes UK and the RCP Manpower survey. Their email addresses were obtained from the directories of ABCD, Diabetes UK and other sources available to these associations. An e-invitation was sent to complete the online survey in May 2006. A reminder was sent in September 2006 with the option of completing a hard-copy survey and non-responders were contacted by telephone. The survey was publicised through the ABCD and Diabetes UK websites and mail shots.

Of the 693 physicians 101 were excluded (34 only provided endocrine services, 23 had retired, 20 did not provide diabetes services, 10 were not consultants, 9 had moved post, 3 were duplicated or unknown at the address selected, 2 provided paediatric care, and 1 was deceased), leaving a total of 592 consultants actively involved in diabetes care.

Statistical analysis

The results were analysed using excel and SPSS using parametric and non-parametric tests according to the distribution of the data. Association and correlation between variables were measured by Pearson's r or Spearman's r and chi-square tests. ANOVA was used to assess variance between means and an online statistical calculator (http://survey.pearsonncs.com/significant-calc.htm) tested significant differences between survey results in 2000 to 2006. A p value of <0.05 was considered statistically significant. Data has been presented as frequencies, medians and ranges. Open-ended questions were systematically coded by CG, using an approach based on the framework method. Each response was read, assigned a code and grouped into themes that emerged from the data. To validate the interpretation, three consultant physicians (PHW, RIGH and CW) checked the interpretation of responses into codes and themes and adjustments were made as required. Codes and themes were counted and ranked in order of frequency to represent the strength of respondent views.

Results

In total, 289 (49%) responses covering 48% of UK acute NHS trusts were received and analysed. An analysis of the 303 non-responders by gender and locality revealed no significant differences compared to responders. The response rate, and age and gender breakdown was similar to the RCP census, and the RCP–Diabetes UK Manpower survey of 2006.[2,7] Of the respondents, 80% were male, 55% were aged over 46 years, 32% had been in posts for six years or less, and 25% had previously occupied a consultant post in a different trust. The number of single-handed consultants had fallen from 36% of respondents in 2000 to 10%.[4] There were two consultant diabetologists in each acute NHS trust (median (range)) (0–10). Of respondents, 92% were employed on the new NHS contract, carrying out a median (range) of 11.5 (1–15) programmed activities per week; 2.9 (0–10.5) were devoted to acute-GIM, 1 (0–7) to endocrinology and 3 (0–8) to diabetes outpatient activity. Services with two or more consultants took part in more diabetes outpatient activities. Two or more programmed activities were carried out by 92%, compared to 80% of single-handed consultants ($p=0.05$). Of respondents, 78% provided endocrine services.

Responsibility for acute-GIM

Of consultants, 94% provided a service to acute-GIM, mainly operating through medical assessment units (95%). Only 38% remained on call for unselected emergencies alongside their junior diabetes team. The remainder undertook on-call duties with other junior members of staff. Specialist diabetes sessions were cancelled to cover on-call commitments for 66% of consultants and 88% of specialist registrars. The median frequency of consultant on-call commitment was 1 in 10, compared with 1 in 7 in the 2000 ABCD specialist service survey.[4] The median daily admission rate was 30 (range 7–100) patients. When on call, 24% of respondents participated in a 'physician of the week' system, with weekdays and weekends separated as duty periods in 54% of cases. Medical specialties were fully integrated with care of the elderly for unselected emergency admissions in 52% of responses. A team ward-based system for general on-going care was operated in 81%, but only 67% had access to a designated ward for all diabetes inpatients. Contribution to acute-GIM was proportionately similar among part-time and full-time consultants, and equivalent among younger (aged less then 46 years) and older consultants.

Physicians opting out of unselected acute GIM

Colleagues working in other specialties had opted out of responsibility for an acute GIM on-call rota in 69% of responses. The specialties most frequently cited were: cardiology (77%), neurology (56%), rheumatology (56%), renal medicine (42%), gastroenterology (23%), care of the elderly (13%), respiratory medicine (11%), and least frequently diabetes and endocrinology (9%). Of those who had opted out 14% were aged less than 40, 58% were aged 40–49 years, and 28% were aged 50 years or more. Opting out of acute-GIM was more common in designated teaching hospitals (43%) than in district general (34%) and associated teaching hospitals (23%) ($p=0.001$).

Qualitative perceptions of interface between diabetes and acute-GIM

The broad themes are summarised in Table 1, with direct quotations in Box 1. Consultants were concerned that the increasing acute-GIM workload compromised the provision of specialist diabetes services. Most respondents indicated there was less time available for specialist service development, and a difficulty in balancing both roles. The commitment to acute-GIM required cancellations or reductions in specialist sessions within a fixed envelope of programmed activities in job plans. Reduced avail-

ability of junior doctors was reported, as a result of the European Working Time Directive, shift work, and fragmentation of the specialist team when on-call for acute-GIM. Consequently juniors were less experienced and more dependent on consultants for support and service delivery. This led to fewer opportunities for training and recruitment into diabetes.

Consultants also highlighted the impact of bed shortages and pressure to meet targets such as the four-hour wait in emergency departments without compromising care. The need to secure inpatient beds often meant that patients admitted primarily with diabetes-related morbidity were not admitted to the specialist ward. Many diabetologists were responsible for an increasing case-mix of less acute elderly care patients who required rehabilitation and social care. However, many considered acute-GIM central to the role of consultant diabetologists. Many consultants enjoyed acute-GIM because of the broader case-mix, pace, diagnostic challenges, and opportunity afforded to teach junior members of the team. The contribution to acute-GIM also helped to raise the profile of consultant diabetologists within acute trusts.

Table 1. Themes emerging from qualitative analyses about acute-general internal medicine (acute-GIM) and interface with diabetes.

General issues	Effects on specialist services
Increased workload	Decreased time available for specialist services
• High pressure throughput	• Cancelled clinics
• Increased demand for consultant delivered service	• Increased GIM component of job plan
• Less experienced juniors	
• Less availability of juniors	Lack of opportunity for training
• European working time directive	Lack of exposure to specialty for doctors in training
Inadequate facilities	
• Lack of inpatient beds	Inappropriate case mix
• Lack of discharge arrangements for frail elderly without active medical issues	
Lack of continuity of care	
Team fragmentation	
Opt-out of other specialties	
Inappropriate case mix	
Government targets	
• 4-hour waits in emergency department	

Discussion

This survey provides an insight into the working lives of consultants with a special interest in diabetes and endocrinology. Both quantitative and qualitative data show that there is a growing tension between the provision of specialist diabetes, endocrine and acute-GIM services. Working patterns have changed since the 2000 survey and these changes have had positive and negative effects.

This survey has shown that following the publication of the National Service Framework (NSF) for diabetes, whose aim was to ensure a high-quality service, there has been a clear increase in the number of consultant physicians with an interest in diabetes in the UK. In this regard, this survey is in keeping with the RCP Manpower results.[6] Of specialist services 10%, however, are still provided by single-handed consultants, which is inappropriate on grounds of service, training and governance needs. The expansion of consultant numbers needs to continue to meet the rapidly increasing prevalence of diabetes in the UK. Even the most conservative estimates suggest that specialists should be actively involved with the care of 10–15% of people with diabetes, which will affect over 5% of the population by 2010.[8] It is concerning therefore to see that the growth in consultant diabetologist posts has slowed down dramatically in the last two years.[7] Although the number of consultant diabetologists has increased, the time devoted to diabetes services has not increased proportionately. Although the methodology used in the 2000 survey and the change in the consultant contract makes direct comparison difficult, in 2000, consultants reported that they devoted at least 40% of their time to diabetes compared with 3 out of 11.5 programmed activities (26%) in 2007.

With approximately 75% of current consultant diabetologist job plans devoted to non-diabetes-related activities, it is now estimated that at least three whole time equivalent consultant diabetologists will be necessary to serve a 250,000 population in order to meet the standards set out in the NSF for diabetes.[9]

There may be several reasons why diabetologists have less time for their specialty. Although it may be argued that the reduction in time available to specialty activity has resulted from the shift of

Box 1. Quotations from consultant diabetologists regarding acute-GIM and specialist diabetes services.

'A steady erosion of specialty time as general medicine has become more demanding.'

'Expectations of general medicine are rising – whenever anything comes up, it is always a specialty clinic that is cancelled.'

'General medical on call means that my specialist registrar is absent from clinics 60% of the time. This affects my ability to provide a service and specialty training.'

'Senior house officers hardly ever attend clinics…this will make it harder to attract trainees as specialty is largely out-patient based.'

'Chaos at times, poor communication with specialties, high bed occupancy means we cannot admit to base ward…. Safari ward rounds.'

'I enjoy working on acute medical unit where I can make a real difference to people early in their hospital admission.'

diabetes care to primary care and a fall in the number of diabetes referrals has been reported, consultants stated that the diabetes workload has not decreased with the more complex case-mix of patients attending hospital outpatient clinics. Furthermore, the introduction of increasing numbers of new therapeutic agents and technologies require the skills and expertise of consultant diabetologists.

Consultant physicians with an interest in diabetes continue to make a major contribution to acute-GIM in the UK and indeed they form the largest group of sub-specialties undertaking this role. Despite their support for acute-GIM, the experience of consultant diabetologists is that there has been an increased commitment to this at the expense of specialty activity, predominantly diabetes but also endocrinology. Consultant diabetologists continue to provide endocrine services in district general hospitals as only 10% of consultant physicians in the RCP–Diabetes Manpower survey exclusively provide endocrinology services without diabetes, and most usually in teaching centres.[7]

There is a discrepancy between the quantitative measures of GIM workload and qualitative reports. For example, the frequency of on-call commitment associated with increased consultant numbers and the reduction from five sessions in 2000 to 2.9 programmed activities suggest a reduced GIM workload. These measures are crude and do not reflect the shift from consultant-led to consultant-delivered care since 2000. The 2000 sessional figures fail to take into account the number of cancelled specialty sessions to allow participation in GIM. In 2006, consultants reported greater frequency of ward rounds and intensity of consultant input as less experienced junior doctors were more dependent on senior support. Furthermore the involvement has increased as physicians from other specialties such as cardiology have opted out of acute-GIM, and part-time consultant appointments have increased.

A further challenge to the split role of specialty and GIM is the need for consultant diabetologists to devote more time working in the community, where they will have an increasing role in providing leadership of community diabetes services, commissioning integrated diabetes care, and training primary care and public health colleagues. The current survey recorded that only 12.8% are currently engaged in community diabetes clinics but this is likely to increase.

The changing nature and uncertainty about the role of the hospital diabetologist may explain the increasing reports of vacancies for consultant diabetologists that are being frozen or converted to acute physician posts. While this strategy may address the provision of acute-GIM within a trust, it seems inappropriate because there are insufficient trainees in acute medicine to fill these posts.

Currently there are 105 trainees in acute medicine, with 85 scheduled to complete specialist training within the next five years (22 by the end of 2008). In contrast there are over 420 in diabetes and endocrinology, with 377 due to complete specialist training within the next five years. Certificates of completion of specialist training will be awarded to 144 trainees by the end of 2008 (N Newberry, personal communication, 2007). The mismatch between acute medicine trainees and posts and diabetes and endocrinology trainees and posts has meant that diabetes and endocrinology trainees are being appointed to acute medicine posts. This situation does not appear to be in the best interest of diabetes and endocrinology trainees and ultimately patients, if career aspirations are frustrated and specialist services are compromised. An online survey commissioned by ABCD and Diabetes UK in May 2006 completed by 44% of specialist registrars indicated that 54% stated they would not consider a position in acute medicine while 52% stated a desire to work in diabetes and endocrinology while supporting acute-GIM.[12]

When considering future development in acute-GIM, diabetes and endocrinology workforce planning commissioners should recognise the contribution that consultant diabetologists make to these three areas of medicine.[13] Adequate levels of specialist staff are needed to support the complex health needs of people with diabetes, including the often unmet needs of diabetes inpatients. Flexibility is needed to allow consultants to ensure that a balance is achieved between time dedicated to GIM and the time needed to develop specialist diabetes and endocrine services by providing leadership and working in the community with primary care and public health colleagues and in supporting the care of all diabetes inpatients in acute trusts.

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