SPECIAL REPORT

Consultant staffing and career prospects in gastroenterology for England and Wales

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In the three years since the last report on career prospects in medical gastroenterology in England and Wales¹ the need for more specialist gastroenterologists has become increasingly evident. In part this is because of an increased demand for endoscopy²; and in particular the development of laparoscopic cholecystectomy which has expanded requirements for endoscopic retrograde cholangiopancreatography (ERCP). Five years ago it was suggested that ERCP would be limited to larger centres; now it is required in every district general hospital of average size. In addition liver transplantation is becoming a routine procedure and Newcastle is soon to be added to the five centres already offering this surgical solution to liver failure and end stage liver disorders. Hepatologists are required, not only for the development of transplant centres, but also throughout the country for the accurate assessment of patients with liver disease. Finally, specialist gastroenterologists are playing a major role in developing the services for artificial nutritional support.³ Recently published evidence shows that gastroenterologists are undertaking more service sessions than consultants in other general medical specialties^{4,5} and, on average, work well above scheduled hours. Thus there is strong evidence to support a further expansion in consultant staffing for gastroenterology.

Methods of enquiry

DATA ON CONSULTANT STAFFING

A survey of staffing in gastroenterology was first undertaken in 1980 by John Lennard-Jones as chairman of the Gastroenterology Committee of the Royal College of Physicians and reports on career prospects followed at intervals.^{1,6-9} In 1990 the British Society of Gastroenterology (BSG), through the first of their annual censuses, identified the number of practising gastroenterologists throughout England and Wales and the following year the Royal College of Physicians attempted to enumerate all hospital consultant posts. The Royal College of Physicians and the British Society of Gastroenterology are working closely together in order to maintain accurate figures for manpower; the data are held in computers and have been analysed and checked region by region. Information on projected retirement

dates are regarded as confidential and are discussed and released only as group data.

DATA ON SENIOR REGISTRARS AND RESEARCH FELLOWS

Accredited training posts for senior registrars were identified on the previous survey¹ and updated after the submission to the Joint Planning Committee in February 1990. By scanning advertisements for posts in gastroenterology and following up the results, the census data are now updated each month. The Royal College of Physicians Committee for Gastroenterology and the Services Committee of the BSG assess accumulated data annually. Unfortunately data on clinical research posts are incomplete and difficult to monitor.

Results

GEOGRAPHIC PROVISION OF GASTROENTEROLOGY SERVICES IN THE UNITED KINGDOM

The number and distribution of consultants with an interest in gastroenterology is shown in Table I. At present there is, on average, one gastroenterologist to 150 000 population. This was the target proposed in 1984 by the Committee of the Royal College of Physicians.⁹ The distribution overall, however, is inequitable. In two regions the average ratio still exceeds one per 200 000 and more than 30 districts in England and Wales have a similarly high ratio.

WORK OF PHYSICIANS WITH AN INTEREST IN GASTROENTEROLOGY

In nearly all hospitals, gastroenterologists contribute to the service for medical emergencies.⁵ Data from the manpower unit of the Royal College of Physicians show that 86% of consultant gastroenterologists have one or more sessions for general medicine (compared with 81% for thoracic medicine; 80% for endocrinology; 63% for nephrology and 54% for cardiology) (personal communication). Over England and Wales physician-gastroenterologists undertake a mean of 5.2 specialist clinical sessions per week (Table I) in addition to the work undertaken in general medicine for the care of inpatients. In the smaller hospitals (with five or less consultants in

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TABLE I Regional distribution of consultants and sessions devoted to gastroenterology in England and Wales (data from census of British Society of Gastroenterology, 1 June 1991) updated to 1 Nov 1992)

Region	Population (millions)	Consultants (gastroenterology) (n)	Sessions devoted to gastroenterology (n)	Population per consultant (thousands)	Population per WTE gastroenterology (thousands)
E Anglia	2.014	13	65	154	223
Mersey	2.409	16	85	151	201
Northern	3.077	20	101	153	225
North West	3.991	29	144	138	194
Oxford	2.502	11	67	227	260
South West	3.206	15	65	214	357
Thames NE	3.772	42	234	90	114
Thames NW	3.488	27	160	129	152
Thames SE	3.635	29	141	126	182
Thames SW	2.960	19	89	156	233
Trent	4.646	27	150	172	217
Wessex	2.905	17	85	171	239
W Midlands	5.198	35	201	149	181
Yorkshire	3.605	23	112	157	225
Wales	2.836	17	85 est	167	235 est
E & W	50.244	340	1774	148	198

Assumes a WTE equivalent to seven sessions (allowing one session office work; one session administration; one session audit and teaching).

medical specialties) physician-gastroenterologists either provide outpatient consultations for general medical problems as well as for gastroenterology or cover a second specialty – for example, diabetes. In most centres gastroenterologists provide an emergency service for acute gastrointestinal bleeding (an activity of increasing importance now that it has been shown that endoscopic intervention significantly reduces the need for emergency surgery¹⁰) and increasingly gastroenterologists are responsible for the organisation of nutritional support services.³

NUMBER OF GASTROENTEROLOGISTS REQUIRED

Although it is difficult to define clinical need, published data on the demand made on physician gastroenterologists⁴⁻⁶ suggest that two consultants are needed for a district general hospital serving 200 000–250 000 population. Each might expect to expend two sessions on ward work (including the supervision of the care of emergency admissions); three sessions on outpatient clinics and three sessions on endoscopy. The remaining two sessions might be devoted to administration, teaching, audit, research and special interests – for example, running a nutritional support service or organising a gastroenterology laboratory. In the submission of the Royal College of Physicians to the Campbell Manpower Committee the target figure for gastroenterology was one consultant per 100 000 population (approximately 500 for England and Wales). In attempting to reach this figure an objective of one per 125 000 (or a total of 400) should be used as a basis for planning in the present decade together with a supplement for academic posts which are not evenly distributed across the country.

The requirement for additional gastroenterologists is similarly supported by a recent analysis of BSG data on the distribution of consultants by districts. Seventeen districts have no trained gastroenterologist; 37 districts have only one gastroenterologist to serve populations of greater than 250 000 (mean 295 000, range 250 000–400 000); and a further 34 districts have one gastroenterologist serving a population of between 200 000 and 250 000. These data,

however, must be interpreted with some caution because they take no account of cross boundary flow which may be considerable especially in the large urban conurbations.

GROWTH RATE OF CONSULTANT NUMBERS IN GASTROENTEROLOGY

During the 1980s, National Health Service services grew at an annual rate of about 2–3% per annum. In gastroenterology the number of consultants increased from about 245 in 1980 to about 340 by the end of 1991 (Table II). This shows an average growth rate of nearly 3% per annum. By the turn of the century a similar rate of growth should provide 420 consultant gastroenterologists in post, a figure which closely matches the initial target based on perceived needs.

DEMOGRAPHIC FEATURES OF GASTROENTEROLOGICAL SERVICES

The number and distribution of consultant gastroenterologists in England and Wales are shown in Tables I and II. Their ages are summarised in Table III. The data show the effect of expansion in the age distribution of consultants. There is a steady increase in numbers of consultants over successive quinquennia but there may be a tendency to plateau.

Data from the BSG survey on expected year of retirement have been plotted on Figure 1. At

TABLE II Increase in numbers of consultant gastroenterologists 1980–1992

Region	1980	1982	1986	1988	1990	Nov 1992
East Anglia	7	8	9	11	13	13
Mersey	10	12	12	12	12	16
Northern	13	17	19	19	20	20
North-west	20	23	25	27	26	29
Oxford	7	7	9	11	11	11
South-west	11	12	14	14	15	15
Thames NE	27	33	34	35	40	42
Thames NW	28	29	27	28	28	27
Thames SE	22	22	23	26	30	29
Thames SW	16	16	15	16	17	19
Trent	17	18	22	26	24	27
Wessex	13	13	13	15	16	17
West Midlands	27	27	28	31	31	35
Yorkshire	17	22	21	22	21	23
Wales	10	11	14	14	15	17
Total	245	270	286	307	319	340

Figure 1: Vacancies for consultant physicians (gastroenterology) likely to appear as a result of retirement.

TABLE III Age distribution of consultant gastroenterologists (1 June 1992 as calculated from the BSG census)

Age	
35-40	28
41-45	70
46-50	80
51-55	63
56-60	50
61-65	29

present consultant physicians with an interest in gastroenterology retire at a mean age of 63 years and there is some evidence to suggest that this might fall closer to 60 years during the coming decade. The available data appears reasonably accurate and would suggest that there will not be a big increase in annual retirements from this category of senior hospital staff until near to the turn of the century. From 1993-95 the average rate is projected at six per annum; for 1996-1998 eight per annum; and for 1999-2001 14 per annum.

SENIOR REGISTRARS

The numbers and distribution of senior registrars and the regional quotas recommended by the Joint Professional Advisory Committee (JPAC) for England and Wales are shown in Table IV. The year of appointment to a specialised training post is shown in Figure 2. These data show an improvement from the situation reported in 1989.¹ The number of senior registrars in post for more than four to five years has fallen from 25% to around 12%. In recent times several senior registrars have been appointed to consultant grade after three years.

Discussion

Predicting the number of consultant vacancies is an uncertain exercise. Data on the number of posts likely to become available by retirement is reasonably accurate and at present it is reason-

Figure 2: Senior registrars by year of appointment. (Data from June 1992)

TABLE IV Joint Professional Advisory Committee (JPAC) quotas for senior registrars (Note: In 1980 there were 102 senior registrars in gastroenterology (Ref 8). It took 10 years to equilibrate numbers with the present quota)

	Funding (NHS/Acad)	1988 quota	1990 quota	1992 quota
East Anglia	1/1†	2	2	3
Mersey	3/0	2	3	3
Northern	2/1	3	3	3
North West	2/4	5	5	5
Oxford	1/1	2	2	2
South West	2/1	3	3	3
Thames NE	6/2	6	7	8
Thames NW	4/1	4	5	5
Thames SE*	3/3	5	6	6
Thames SW	2/1	3	3	3
Trent	3/2†	5	5	6
Wessex	1/2	2	3	3
West Midlands	4/2	6	6	6
Yorkshire	2/3†	4	4	5
Wales	2/0†	3	2	3
Special Health Authority	0/1	1	1	1
Research*	0/3	-	3	2
Part-time	1/0†	-	1	2

*All research posts are in Thames SE.

†Increased by 1 under 1992 proposals (funding of additional posts awaited). A further 5 posts are to be allocated

able to assume that such posts will be filled by trained gastroenterologists. Over the next three years retirements in England and Wales may be no more than six per annum and thus the placement of senior registrars will depend largely on the creation of new posts. From 1980-1986 there were seven to eight new posts per year. In 1987 and 1988 there was an increase to 12 posts per year partly because of the Government's 'pump priming' exercise as part of the *Achieving a Balance* proposals¹¹ and partly because of an increase in academic appointments not all of which have unlimited tenure. More recently the number of new posts has been approximately 10 per annum. The JPAC 1990 quota allowed 64 senior registrars in training. This included three places for research occupied by clinical scientists who may seek academic careers or may move into established senior registrar posts to complete their specialist training. In addition three university lecturers were identified who have occupied senior registrar posts for 10 years or more and who appear to be outside the 'active pool' of trainees seeking consultant appointments. Thus the quota of 64 was reduced to 58 posts from which consultants were being selected. Past experience suggest that two posts should be allowed for senior registrars who elect not to continue in the mainstream. With a training period of four years this quota provides an average of 14 new consultants a year. Earlier this year these data were presented to JPAC and it has been agreed in principle that the quota should be allowed to rise to 74. It may be assumed that there will be a delay in the funding of at least some of the additional posts and that the new quota will not be reached until the end of 1994. At present there are no reliable data on the numbers of registrars and research fellows who will be seeking senior registrar posts in the next two years. Recently advertised posts have attracted 10-15 applications for each post and the quality of applicants suggests that there is a surplus of adequately trained clinicians who have considerable experience in gastroenterology and who have chosen the specialty for their future career. As from now, however, the number of career

posts are to be limited and ultimately these may be insufficient for the expanding senior registrar quota. Possibly this will lead to selection for specialist training at an earlier stage of a clinician's career.

If the apparent deficiencies in gastroenterology services in England and Wales are to a large extent eliminated by the turn of the century then the prospects for those entering career registrar and senior registrar posts appear to be good. Factors which may increase the number of vacancies becoming available include: (1) The development of the purchaser-provider principle in the National Health Service. Gastroenterologists provide services which are in high demand and currently poorly provided hospitals may be expected to remedy defects in staffing. In addition there is likely to be a demand for a specialist unit for hepatology in each region. (2) An increasing emphasis on home care which may be expected to lead to the development of more centres for the provision of artificial nutrition – and more physicians with an interest and training in this specialised facet of gastroenterological practice. (3) The further development of health screening which may lead to an increase in the demand for endoscopic examination of the gastrointestinal tract.

Factors which may decrease predictions of consultant vacancies include: (1) A small but growing tendency for gastroenterologists to drop their role as general physicians. (2) Changes in surgical practice with an increasing emphasis on endoscopic procedures which may alter the balance or provision of services between surgeons and physicians. (3) The financial constraints on universities which have inhibited the development of tenured posts in academic departments.

It seems unlikely that there will be rapid changes in the pattern of training of consultant physicians with an interest in gastroenterology.

Both the college committee and the British Society of Gastroenterology support a reduction in the overall period of training for a consultant. Members of these committees support the concept of only two levels of postregistration activity for intending specialists in gastroenterology – general professional training and higher specialist training as foreshadowed in the document *Achieving a Balance*.¹¹ More detailed consideration of these proposals is currently under discussion. Despite these uncertainties consultant prospects in gastroenterology appear to be reasonably good for doctors currently undergoing general professional training. There should be an average of between 15 and 20 vacancies for consultant physicians with an interest in gastroenterology (or specialist gastroenterology) each year for the next five years.

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