

## **Questionnaire survey of British Society for Paediatric Gastroenterology Hepatology And Nutrition members to examine workload and resources for paediatric gastroenterologists.**

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Recent policies have introduced very rapid and major changes in the NHS with enormous potential consequences for consultant doctors. These include changes associated with Clinical Governance (CG), and changes in the relationships between hospital Trusts and their consultant employees in the new consultant contract (CC). Both have implications for hours of employment spent in hospital. A very important component of the new contract is compliance with the European Working Time Directive (EWTD) limiting working hours to 48 per week (1). In addition, changes in junior doctors' hours have shifted responsibility for continuity of patient care to consultant level. It is unclear whether there are adequate resources to accommodate the above changes or what ultimately their combined effects will be on the workload, and quality of service provided. This is a particular concern for paediatrics that has been recognised as a 'Hard Pressed' speciality with high intensity of work. In order to provide data on the current situation for UK paediatric gastroenterologists, we designed a questionnaire and sent it to the UK medical membership of the British Society for Paediatric Gastroenterology, Hepatology and Nutrition (BSPGHAN) under the auspices of the Council.

### **Methods**

The questionnaire was piloted and modified in January 2003. It comprised 13 sections with 104 quantitative (numerical, yes/no, 5 point Likert scale) and qualitative questions under the headings; 1.demography, 2.details of clinical workload, 3.teaching, training and clinical supervision, 4. research and publication, 5. management roles, 6. clinical administration, 7.clinical governance, 8. patient and carer experiences, 9. assistance and facilities, 10. personal satisfaction, 11. Quality of Life score, 12. Please list the three best things and the three worst things about your job. 13. Any further comments. It was circulated on 3 occasions by e-mail using addresses provided by BSPGHAN between April and July 2003 to all 89 UK full (non-associate) members of BSPGHAN. Seventy-two were subsequently confirmed as active consultants with clinical paediatric GI responsibilities in England, Scotland Wales and Northern Ireland. Each circulation was separated by approximately one month, and a circulation accompanied the third circulation of e-mail addresses by post of members with e-mail addresses that had not been recognised or were inactive. Professional addresses were used from the 2002-3 RCPCH handbook. Circulation was organised by AB's secretary who was responsible for anonymising responses. She allocated a code number when the questionnaire was first sent to allow repeat circulation of non-responders.

## Results

This paper deals with consultants' workload and resources. Therefore, trainees' responses (n=2) were removed from the analysis. Respondents who anonymised their own replies by removing the code number before returning the reply form (n=2) were also removed as it was noted that two responses were identical. Retrieving them showed that one had a code number and one did not, which was excluded. It was considered unsafe to include the second set of data without a code number in case that individual was represented twice. Thirty-seven replies were analysed. Results were transcribed onto an Excel spreadsheet, which was used for simple statistical analysis of numerical data. Seven respondents were considered mainly academic (5 or more academic sessions), twenty-two were clinically based in teaching hospitals (one part time and 3 maximum part time) and 8 were based in district general hospitals. Eight non-academic teaching hospital consultants had 1-3 academic sessions and two DGH consultants had 1 or 2 sessions. The status of non-responders was reviewed and it was established that 35 were clinically active consultants at the time of circulation with 13 in DGHs, and twenty-two in either teaching or academic posts. Results are presented according to the three clinical roles because one might anticipate significant differences, which was variably the case, and because, as the response rate for DGH consultants was sub optimal, the data can be interpreted most reliably for the other groups.

### Sessions and hours worked

Eighteen responses were based on diary records. One DGH consultant had 4 hours of protected time, 4 teaching hospital consultants had 1,3,4 and 6 hours and 3 academics had 3, 8, 30 hours protected. DGH consultants took 25-36 median 30 days holiday per year, and 5-10 median 9 days study leave per year. Teaching hospital consultants (part time consultant excluded) took 25-35, median 30 days holiday per year and 4-30 median 10 days study leave per year while academic consultants took 25-36 median 25 days holiday per year and 0-23 median 10 days study leave per year. No DGH, 9 teaching hospital and one academic consultants, i.e. well under half, felt under pressure from their employers to reduce their hours to comply with the 48 hour EU maximum. Sessions, frequency on call and hours worked according to role are shown in table 1. Calls per night on call refer to telephone contacts.

Table 1. Details of hours worked and on-call.

institution	academic sessions	Proportion working >48hrs /week	GI sessions	Frequency on call	Total hours	Weekly hours	Calls /night on call	Called in per month
DGH median (range)	0 (0to2)	37.50%	3 (1-5)	1 in 4 (3.5to8)	65.5 (48-80)	48 (45-57)	2 (1to3)	2 (2to4)
teaching median (range)	1.75 (0to3)	85%	7 (0-11)	1 in 4 (0-14)	60 (22-106)	52 (22-64)	1 (0-5)	1 (0-14)
academic median (range)	6 (5to11)	43%	4 (0-11)	1 in 6 (0-7)	60 (0-70)	45 (9to60)	1 (0-3)	1 (0-4)

### Workload and quality of service

Consultants from a DGH were each involved with the care of median 2775 patients per year (range 2000-6000), teaching hospital consultants cared for 450 (6-12000), and academic consultants cared for 550 (20-1535). Day case workload was median 580 patients (30-429) for DGH, 300 (20-2500) for teaching institutions and 300 (30-429) for those served by academics. DGH consultants' units performed median 65 (50-800) procedures per year, 26% personally but all supervised by themselves, while teaching hospital consultants' units performed 300 procedures per year (30-3000), 30% personally and 17% supervised and academics' units performed 250 procedures per year (30-1000) but none performed or supervised personally with a few exceptions. Table. 2 shows waiting times and duration of consultations.

Table 2.

Number of patients waiting		
	Median	range
DGH	10	0-25
Teaching	17.5	0-120
Academic	60	15-100
Weeks wait for out-patient appointment		
DGH	8	5-14
Teaching	10	0-26
Academic	9	4-10
Days wait for in-patient admission		
DGH	2	0-7
Teaching	7	0-180
Academic	3	1-7
Minutes for first consultation		
DGH	30	20-30
Teaching	30	15-60
Academic	30	15-60
Minutes for follow-up consultation		
DGH	15	5-15
Teaching	20	10-30
Academic	15	10-20

Among DGH consultants 4 believe workload will increase, 1 believes it will stay the same while 1 believes it will decrease. For teaching hospital consultants 13 believe workload will increase, 5 believe it will stay the same while 1 believes it will decrease and for academics 2 believe workload will increase, 4 believe it will stay the same while none believes it will decrease. Among the 19 who provided comments 11 cited their previous experience of workload consistently increasing, 3 had new or additional roles or objectives, 2 cited organisational changes including the contribution of junior doctors and one cited delay in replacing staff. They predict future increases of 10-20% per annum.

## Resources

All consultants had the assistance of a secretary but not necessarily full time; DGH median 0.92 (0.3-1), teaching hospital 1(0.1-3.5), academic 0.84 (0.3-7) but 3, 6 and 3 from each group did not have the equivalent of a full time secretary. Among DGH consultants, 4 had assistance from 0.2-1 specialist nurses, 6 had the time of 0.2-1.2 dieticians, 3 had the time of 0.05 – 0.2 psychologists and 2 had the time of 0.1-0.2 pharmacists. Among teaching hospital consultants, 18 had assistance from 0.5-6 specialist nurses, 22 had the time of 0.1-5 dieticians, 15 had the time of 0.2-2 pharmacists, and 11 had the time of 0.2 –1.75 psychologists. Among academics, 5 had assistance from 0.3-3 specialist nurses, 6 had the time of 0.3-2.5 dieticians, 4 had the time of 0.3-1 pharmacists, and 4 had the time of 0.15 –1 psychologists. Those from a DGH had access to 28 (20-60) beds compared with 12 (8-123) available to teaching hospital consultants and 9 (4-18) available to academics with bed occupancy respectively 65% (60-80), 95% (85-100) and 87% (70-100), which was well above the accepted optimal maximum of 70% for the second two groups. Lists per week for procedures were for DGH median 0.375 (0-1), teaching 1(0-3) and academic 1 (0-2) with those provided under general anaesthesia were 0.25 (0-0.5), 1 (0-3), 1 (0-2) respectively. Only 5 respondents considered themselves to have sufficient resources for effectiveness (table 3). Figure 1 shows comments to the question ‘Could you be more effective with more resources?’ Needs are variable but often specific.

### **Figure 1.**

- there is always room for improvement.*
- Lack of a dedicated SpR means difficult to attract trainees into paed GI.*
- Well established multidisciplinary team*
- Clinical support is reasonable – better theatre/endoscopy access & trained staff would be great.*
- my need is for more senior support not junior/allied services*
- I keep my own diary, and CV, do a proportion of my own typing have no research support write my own clinic letters on a computer programme.*
- need more nursing and admin support and a designated social worker.*
- a consultant led service that would benefit from 3 specialist nurses, a psychologist and a further dietitian for the nutrition team.*
- will be able to deliver better quality service with more clinical support.*
- No middle grade! I'm single handed as a gastroenterologist with inadequate dietetic support.*
- Another colleague would be a major help all round.*
- Need another consultant.*
- Trying to get nurse for constipation service – will take years/decades; no interest from anyone including community colleagues.*
- pressures – time & other commitments.*

Consultants	Median sessions	Range	Number who find it enough	Number who felt they would not be more effective with more resources
DGH	2	0.5-3	3	1
Teaching hospital	1	0-2	0	0
Academic	2	1-3	3	4

Those who found it sufficient all had at least 2 sessions.

Figure 2 shows comments following the question ‘How much time do you have for clinical preparation/administration? Is it enough?’ (results in table 3). Together they suggest that this important task is performed out of hours and as a final task and that at least 2 and probably more than 3 protected sessions are necessary.

**Figure 2.**

- too much admin etc.
- most of this kind of thing is done out of hours.
- I do 12-15 hours/week administration
- correspondence/literature searches usually extend to out of hours.
- This isn't formalized. It just gets done around everything else.
- constantly answering patient queries, chasing results writing letters etc.
- approx 16 hours additional time per week – evenings, weekends, in place of CPD

**Academic roles: Teaching and Research**

The groups could be expected to have very different roles responsibilities for research and teaching, yet just less than one PA equivalent is used for teaching by all groups and research was similar between DGH and teaching hospital consultants (0.5vs.1 PA equivalent). Three DGH, 5 teaching and 7 academic consultants had a role in medical school administration, including those requiring some of the committee attendance shown in table 5. Three, 9 and 4 from each group respectively run educational courses. Time spent in these pursuits is summarised in table 4.

	DGH		Teaching		Academic	
	median	range	median	Range	median	range
Teaching time/week						
Undergraduate hrs	2	0.5-5	1	0-4	2	0-6
Postgraduate hrs	2	1-4	2	0-4	1	1-24
Research hrs	2	0-4	4	0-15	10	4-35

**Management roles and skills**

Most respondents were involved in some form of medical or academic administration or both. Protected sessions were rare except for academic consultants. (Table 5.)

Table 5.	DGH		Teaching		Academic	
Management role (no. individuals)	6		16		7	
Clinical lead (no. individuals)	4		13		4	
	median	range	median	range	median	range
Number of committees	1.5	0-5	2.5	0-8	3	0-5
Protected sessions for committees	0	0-1	0	0-5	2	0-7

### Clinical governance and administration

While almost every respondent had been appraised, possibly as a preliminary to instituting the consultant contract, only 4 respondents had any protected time for the typical 1 PA equivalent used for the elements of clinical governance. (Table 6.)

Table 6.	Appraised?	Sessions for clinical governance		
		median	range	protected?
DGH	No;n=0	0.75	0-1	Yes: n=1
Teaching	No;n=3	1	0-2	Yes: n=2
academic	No;n=1	1.5	0-2	Yes: n=1

### Discussion

Most consultants work longer hours than the EWTD or the new consultant contract allow, with conflicts within their roles particularly due to the complexity of their environment and responsibilities. They feel that academic work and administration are often pushed out by pressure of clinical work that is continuously increasing. Many appear under-resourced and most feel they could benefit from a variety of resources. Academic consultants are surprisingly similar to clinicians except in the allocation of their time. Given the data, it is hard to see how the current changes can result in anything but greater levels of individual conflict and deterioration in services to patients. However, the fact that less than half had felt that their employers wished them to reduce their hours suggests that either the significance of the changes is not appreciated at Trust level or that there is limited intention to observe EWTD aspects of the new consultants' contract in practice. It is worth remembering the legal and psychological significance of long working hours (2,3)

The response rate of 51.4 % of eligible consultants is only moderate. The DGH response rate of 38.1% compared with 57% of teaching hospital gastroenterology consultants is typical of complex postal questionnaires to doctors with published reply rates of 56-79% (3,4). A bias in the results from the decision not to contribute may be explained by the size and complexity of the questionnaire itself, non-respondents being too busy, the questionnaire being seen as serving the purposes of the council or academic gastroenterologists rather than DGH paediatricians, perhaps reflecting the ethos of the society, being a purely academic undertaking or being subject to the purposes of the individual who organised it. Despite being presented as neutral, if the questionnaire was interpreted as a means to protest or change the current direction of the development of paediatric gastroenterology, individuals relatively satisfied with the progress towards the new contract might not wish to protest, or conversely there might be doubt over the importance or influence of any report generated.

Nevertheless, we have collected comprehensive experiential data from half of UK paediatric gastroenterologists at a critical time in the development of the profession.

Immediate need for additional consultants is indicated by the data. Accuracy of prediction of the number is limited by data only from proportion that replied. Since 23 were working a mean of 17% in excess of 48 hours per week, 4 consultants are required for the respondents to conform to EWTD. If trusts intend to reduce hours to 40 per week all consultants except one part time were working on average 37% in excess making 13.3 extra consultants necessary. At worst if the study is representative of the whole UK, 8 or 27 consultants are necessary to reduce to 48 or 40 hours respectively. The argument for more consultants assumes there is some way to distribute their hours among the subspecialty throughout the UK. Unfortunately, the resources and infrastructure are not in place to simply employ more consultants. For example, the teaching hospital consultants, who evidently need hours of consultant assistance most, work in units with very high in-patient bed occupancy, so beds could be a barrier to effectiveness of extra consultants in those units. In addition, at present 14 prospective GI consultants are in training at various levels, but only 5 will be fully trained within 6 months. The projected needs therefore could not be met for at 2 years without significant restriction in workload and services with consequences for the quality of service and its patient experience. While consultant expansion is essential, it cannot solve the problem of hours and quality of professional life, especially in the short term (5.6).

Most respondents felt they could be more effective with more resources, and almost all expected workload, individual and departmental, to increase based on experience of referral patterns. Their perceived requirements were varied but included senior (consultant) colleagues (3), nurses including specialist nurses (3), dieticians (2), junior doctor (1), clerical support (1), social worker (1), and psychologist (1). Out-patient waiting times at 10 weeks (and up to 26 weeks) are clearly far from ideal especially for children's services. However, 4 consultants had waiting times of 4 weeks and 4 of less than 4 weeks (0,2,2,3 weeks).

Maximum 2 outpatient sessions and 1 procedure session per week is typical of current workload and seems a reasonable benchmark. In-patient bed occupancy rates for teaching hospitals are clearly well above the levels at which care can be given most effectively and with optimal patient experience and this report should serve to alert Trusts to the inappropriate level of use of in-patient services with potential adverse effects for staff and patients. A minimum 2 and probably at least 3 PAs are needed to manage administration (Table 4 & Figure 4). Additional sessions including those for clinical governance need to be protected, while a typical consultant serves on 2-3 committees with variable workload associated but mostly unprotected. (Both table 5). Suggested benchmark standards are shown in table 6, although they were only met by 5 (13.5%) consultants from 1 DGH and 4 teaching hospitals, who were working 48, 48, 50, 55 and an unspecified number of hours per week.

Many individuals felt a conflict between clinical and academic work and with the pressure of administration most have resolved it in favour of clinical work. Despite this effect, DGH and teaching hospital consultants still managed to teach the equivalent of 1PA per week and teaching hospital consultants managed 1 PA of research per week with DGH consultants managing 0.5 PA. These medians seem reasonable as benchmarks. Table 5 shows that almost all respondents had been appraised. They use approximately 1 session per week for the elements of clinical governance but it is rarely protected. We suggest 1 protected session as a benchmark. While paediatric gastroenterologists must campaign for more resources, such a campaign has a better chance of success if it can be seen that current resources are being used as effectively as possible. Waiting times for out patient appointments, the

major environment for hollow-organ GI services, are generally suboptimal, while some consultants have short waiting times. It is possible to establish a BSPGHAN website operated as part of a managed clinical network open to GI referrers with simple data such as time to next outpatient appointment and time to admission for basic investigations such as endoscopies for each participating unit and suitable for the majority of straightforward GI referrals. Families willing to travel could choose earlier appointments in association with their referrer depending on geographical location, clinical need and parent preference. Standardisation of investigation and treatment for the diagnoses representing the majority of referrals, combined with good communication would ensure that once started, treatments could, if appropriate, be transferred closer to home. This project could be organised on the model of the 'Patient's Choice' programme, which is currently being extended by the government as a model for future care with resources allocated to units that could show sufficient capacity and the ability to provide high quality care. Contracts for this solution would need to continue for at least 3 years to justify the employment of additional staff. Measures to improve communication while reducing necessary medical time and improving access to patients such as telephone clinics and video conferencing may offer radical ways to cope with increasing workload without equivalent increases in resources.

### **Recommendations**

To prevent the near certain deterioration of paediatric GI services in the next 2-5 years brought about by the current changes, pre-emptive action is necessary. We propose the following strategy:

1. All recognised paediatric GI consultants to have resources as described in table 7 and to have those standards incorporated into their job plans. Allocation should be pro rata for part time posts except those marked \* to the same standard as full time consultants. DGH consultants should also have the same pro rata resources, but all need to have at least 3PA/week for GI with 1 for outpatients, a proportion of at least weekly ward rounds (e.g. 0.2 PA), 1 PA for administration, 0.5 for CME & clinical governance and 0.5 for procedure lists devoted to paediatric GI. Similarly clinical academics should have 3PA per week as clinical sessions.
2. All consultants who are currently working at least 48 hours to have the option of 12 PAs and paid as such with review of the need for this part of the strategy by diaries for each individual after 12 months.
3. Need for 9 new posts accepted and allocated to departments of greatest need within 12 months. Greatest need must be decided equitably and representations made to the employing Trusts.
4. Establishment of a managed clinical network for paediatric gastroenterology to promote patient choice and referral of new patients between units for optimal use of resources as above.
5. Establishment of a web-site to record and make available current waiting times so that units with excess capacity can offer care to patients referred to those with long waiting times and referrers can choose to send patients where resources are least stretched as part of the managed clinical network.
6. Additional PAs for DGH consultants to take on additional work where possible, with full support from their Trusts.

7. Making an application to the Department of Health for an allocation of funds to support new consultant posts with appropriate support and also to run a programme equivalent to 'Patient Choice' whereby business plans for the care of a fixed number of patients over 3 years is accepted and funded in units that can show the capacity and organisation to provide care rapidly and to a high standard.

Table 7.

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Recommendations – benchmark standards for a full time clinical gastroenterologist, corresponding to 6-7 PAs of direct clinical care.

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A full time secretary

\*Access to a paediatric dietitian during out-patients, day case sessions & ward round

\*Access to psychologist & speech therapist weekly

\*Access to trained specialist nurse for share care, ward rounds and outpatients

1 PA protected for clinical governance reading/CME, at least 3 PAs/week for clinical preparation & correspondence, 1 PA for multidisciplinary meetings/clinical supervision of service, communication with colleagues, 1 PA for teaching & training, 1PA for research, committee work.

1 GA list per week for procedures

Not more than 2.0 clinics/week average (2.0 PA)

\*1 in 5 on call or less, with likelihood of being called in no more than once a month.

\*Waiting times for out patients not more than 1 month, \*for admission not more than 2 weeks and \*emergency admission not more than 3 days with \*same day for possible acute liver failure pending referral to a specialist centre.

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### Conflicting interests.

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Abstract: Between April and July 2003 a questionnaire was sent by e-mail to all 72 active consultant members of BSPGHAN with clinical paediatric GI responsibilities to provide data for job plans and workforce planning in keeping with the new consultant contract (CC) and the European Working Time Directive (EWD). 37 (51.4%) replied using an anonymised system. We report working hours, resources and responsibilities. **Results:** 7 had at least half academic roles, while 22 were working in clinical roles in teaching hospitals and 8 worked in district general hospitals. Median on-call frequency was 1 in 5 (range 1 in 1.8 to 1 in 14), 2 did no on-call. They reported median 50 hrs/week in hospital (9-64) with 25 (61%) >48 hrs/wk (CC and EWD maximum) by median 8hrs (2-16). Few had protected time for non-clinical responsibilities and a significant minority had significant deficits in resources. Implementing the new Consultant's Contract and European Working Time Directive will entail a major threat to paediatric gastroenterology services. Recommendations: Benchmark standards for workload for paediatric gastroenterologists are described to improve services. Four to seven new paediatric gastroenterology posts are needed nationally immediately. A managed clinical network to increase flexibility of services based on Patient's Choice principles should be developed without delay.