MEDICAL EDUCATION

Education and training in the paediatric senior house officer grade: analysis of RCPCH hospital/child health visits reports, 1997–2001

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Arch Dis Child 2003;88:450–453

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Accepted
5 October 2002

Aims: To review the process and outcome of education and training visits to paediatric departments by the RCPCH.

Methods: Retrospective audit of visits reports (1997–2001) against the RCPCH criteria for general professional training. Hospital and/or community child health departments who were responsible for training paediatric senior house officers were visited to assess whether RCPCH criteria of education were being met. Follow up visits were undertaken where limited education and training approval was given. Reports were received from 214 of 242 (88%) hospital and/or community based departments in England, Wales, and Northern Ireland.

Results: Satisfactory achievement of the 12 training criteria by departments varied widely: 39–95% (median 66%) achieved. Follow up visits reported significant improvements in most departments. Criteria which departments struggled to achieve reasonable standards were: (1) ensuring SHOs were performing educationally appropriate duties (39% achieved); and (2) satisfactory outpatient experience (41% achieved). Twenty four per cent of hospital based departments did not have a paediatrician with 12 months or more experience of paediatrics resident on call.

Conclusions: The visiting process highlighted areas of good practice, encouraged change to meet the criteria, and recommended increased resources and staffing where necessary to improve training and hence the service. The need for continuing approval for education and training in these departments encouraged significant efforts on the part of trainers and managers to meet the requirements, and consequently the quality of service to children has been enhanced.

In 1997 the newly established Royal College of Paediatrics and Child Health (RCPCH) took over the responsibility of setting standards and monitoring senior house officer (SHO) training in paediatrics from the Royal College of Physicians. New criteria were drawn up on the basis of improving the education and training of SHOs in paediatrics, whether they were destined for a career in paediatrics or in primary care.¹

SHOs have been referred to as the "lost tribes".^{2,3} Initiatives were developed and implemented to improve the lot of preregistration house officers⁴ and specialist registrars (SpRs).⁵ Criteria for SHO training were developed by the Academy of Royal Medical Colleges,⁶ and postgraduate deans developed guidance and standards for the monitoring of educational facilities.⁷ However, SHOs have worked long hours with poor supervision, excessive inappropriate duties, inadequate training, and assessment of competence in the

workplace. Implementation of the European working hours directive has improved working hours, but has made other areas of training and service more difficult in ward based and community settings.

Concerns were expressed in a number of forums over the monitoring of training, the lack of consistency in criteria used in judging the quality of training, and the uncoordinated approach to visiting. However, the quality of training needs to be assessed in order for standards to be maintained and to ensure that junior doctors are appropriately supported and trained.

Abbreviations: GPT, general professional training; RCGP, Royal College of General Practitioners; RCPCH, Royal College of Paediatrics and Child Health; SHO, senior house officer; SpR, specialist registrar

Table 1 The RCPCH criteria for GPT which were used in the audit

1.	Workload: ≥ 1800 acute general paediatric contacts and/or ≥ 1800 deliveries each year
2.	Up to date job description
3.	Educational supervision: all SHOs should have educational supervisor who they meet within two weeks of starting post and 2–3 monthly thereafter
4.	Safety net: resident paediatrician with ≥ 12 months experience at all times
5.	Guidelines: easily accessible guidelines relating to common paediatric illnesses
6.	Induction: relevant induction course within first week of post, including neonatal and paediatric resuscitation training
7.	Protected education: three hours bleep-free department based education per week; $\geq 75\%$ attendance should be achieved
8.	Outpatient experience: in six months, general and specialty SHOs should attend ≥ 10 outpatient clinics; neonatal SHOs should attend ≥ 5 clinics
9.	Post-take ward round: all SHOs should receive feedback on work they have done overnight, usually on a post-take ward round
10.	Audit: all SHOs should participate in one audit project in a six month post
11.	Domestic: appropriate provision of food out of hours, sleeping/resting facilities, and security
12.	Educationally appropriate duties: within level of competence and not educationally unproductive

Table 2 Audit of College reports—GPT criteria: % of satisfactory achievement

Region	% reports returned	Workload	Job description	Educational supervision	Safety net	Guidelines	Induction	Protected education	OPD	Post-take ward round	Audit	Domestic	Educationally appropriate duties
1	85	73	100	73	64	91	73	64	100	73	73	82	55
2	83	100	93	67	93	73	100	73	27	67	47	27	27
3	100	67	100	80	60	93	80	53	33	67	73	40	40
4	100	78	96	74	78	91	70	65	48	65	52	39	39
5	100	93	93	53	93	87	60	40	20	40	53	27	33
6	89	88	100	100	88	75	75	50	50	75	63	38	63
7	79	93	93	73	87	73	93	53	40	47	53	33	47
8	92	82	100	36	55	64	82	55	18	82	45	73	64
9	87	77	85	77	77	77	77	62	15	38	54	62	23
10	79	93	93	80	67	87	87	67	38	73	60	87	53
11	86	89	95	68	89	53	84	68	47	32	53	42	16
12	86	75	100	67	58	75	92	42	25	75	33	25	17
13	82	56	100	100	78	78	89	67	44	67	33	56	56
14	67	100	100	63	75	75	75	38	38	50	38	63	38
15	100	77	92	85	62	77	85	69	38	69	54	46	38
16	100	75	92	67	75	75	83	75	33	58	58	50	50
Total: % (number)	88 (214/242)	83 (177)	95 (204)	72 (154)	76 (162)	78 (167)	81 (174)	60 (128)	41 (88)	60 (128)	53 (114)	52 (112)	39 (83)

To achieve the goal of providing first class paediatric training, a list of essential criteria was published, some generic, some specialty specific,¹ and a new education and training visit format was developed. All RCPCH visitors were consultants who were trained in the process of education and training visits. In addition to SHO training, it was decided to assess the training opportunities for SpRs in core and general/community paediatrics, and to meet with non-consultant career grade doctors. As far as possible visits were arranged to coincide with postgraduate deans' visits, and always with a representative of the Royal College of General Practitioners (RCGP).

Reports were submitted to the General Professional Training Committee (now Visits Committee), discussed, and recommendations made on good practice or areas of concern. This paper reports how paediatric departments in England, Wales, and Northern Ireland (Scotland has a separate policy) met the RCPCH's general professional training (GPT) criteria from 1997 to 2001.

METHODS

During the period 1997–2001, paediatric departments in England, Wales, and Northern Ireland who were responsible for the training of SHOs were visited. The majority of departments who were training SHOs were hospital based, but some SHOs were receiving training in Community Child Health as well. In these instances, training in Community Child Health was assessed alongside hospital based training, and a single report was submitted to the RCPCH for consideration. When major concerns were identified in the report, departments were revisited, usually after one year.

The visiting team was made up of a lead visitor from outside the region, community paediatric assessor where appropriate, the regional adviser and/or deputy, an RCGP representative, and a representative from the Postgraduate Deanery. A standard visit proforma was used for the visits, and following each visit, a training visit report was prepared by the lead visitor in consultation with other members of the visiting team.

Training visit reports received between January 1997 and April 2001 were examined by the officer for GPT and/or her assistant. The reports were analysed against a selection of the criteria set for GPT as described in table 1. Some of the criteria for approval of GPT in paediatrics were omitted because it was not possible to obtain sufficient detail from the early reports. These criteria were: (1) whether SHOs were receiving training in child protection and child development; and (2) whether SHOs had presented at clinical meetings. Each selected criterion was assessed to see whether it was achieved or not. The percentage attainment of each criterion was determined for all departments visited, and the results from the different regions were compared. Individual regions were numbered to anonymise the results.

RESULTS

Training visit reports were received from 214 of 242 (88%) paediatric departments from within the 16 "old" regions in England, Wales, and Northern Ireland. The number of paediatric units within each region varied (median 15, range 9–23); the median number of training visit reports which were returned from regions was 13 (87%) (range 8–23 (67–100%)).

Satisfactory achievement of the 12 criteria varied widely (table 2) and ranged between 39% and 95% (median 66%). The criteria which units struggled to achieve included: (1) ensuring SHOs were performing educationally appropriate duties (39% achieved); and (2) satisfactory outpatient experience (41% achieved). Eighty one per cent of departments had well attended induction courses at the start of SHO posts, but

only 60% of departments were achieving well attended, bleep-free education for three hours each week. Most departments had developed an appropriate structured educational programme, but the difficulty was achieving good attendance by SHOs and ensuring that this time was protected (data not shown).

There was considerable variation between regions over the percentage of units achieving the different criteria (table 2). For example, units within regions where SHOs received adequate feedback on post-take ward rounds varied between 32% and 82% (median 67%). The presence of a paediatrician with 12 months or more of appropriate experience of paediatrics on-site at all times to provide a safe service varied between 55% and 93% (median 76%). A total of 162/214 (76%) paediatric departments were able to provide a complete safety net; failure to do so was either because there was no middle grade tier, or because the middle grade tier covered physically separate sites when on call.

During the period of the audit, educational approval was removed from only three departments, principally because of insufficient workload for training or inadequate supervision of trainees.

DISCUSSION

This report gives an overview of how paediatric departments across England, Wales, and Northern Ireland managed to achieve the SHO training criteria which are agreed by the RCPCH. To our knowledge, this is the only publication of its kind by a Royal College, although there are previous reports of SHOs' experience and training elicited through questionnaire surveys. Cooke and Hurlock showed wide variability in the quality of training of SHOs, with a tendency for trainees in general practice, accident and emergency, paediatrics, and psychiatry to be enjoying the highest standard of training.⁸ Paice *et al* evaluated trainee satisfaction in the North Thames region before and after the Calman reforms and, encouragingly, improvements were seen in all areas, with SHOs as well as SpRs reaping the benefit.⁹ Despite this apparent improvement, another questionnaire survey revealed that junior doctors were far from satisfied with their training and experience.¹⁰

All of the above reports were about training in all specialties, whereas Davies *et al* confined their survey to paediatric SHO training in Wales.¹¹ They found SHOs to be reasonably satisfied with their education, but there was considerable variation between different units. The RCPCH tries to help through the visiting process by supporting good practice in education and training and by suggesting some solutions on how problems encountered can be resolved. Over the past four years, RCPCH training visits have become much more structured, detailed, and rigorous. Many paediatric departments have undergone interim visits after one year in addition to the full visits which are reported above. It was not possible to analyse the data from interim visits, because the information was incomplete and tended to concentrate on areas of concern which varied between units. However, preliminary results in over 60% of revisits indicate that the visiting process is facilitating change and consultant numbers often increase as a result of the Visits Committee recommendations. Alternatively, government initiatives to improve the National Health Service could be responsible for staff expansion, but the timing and wording of reports which indicate that new consultant posts are being established suggests that the visit is the main stimulus for change.

The standards which many departments struggled to achieve were in protected education and satisfactory outpatient experience. The reason for this was mostly because of service pressures. SHOs were undertaking educationally inappropriate duties in 61% of departments (for example, routine venepunctures, intravenous drug administration, newborn

examinations, and unnecessary attendances to the delivery suite). While some exposure to these tasks is useful, excessive exposure is educationally unproductive and it prevents SHOs fulfilling their other training needs. These difficulties have been compounded by the New Deal, which has resulted in the introduction of partial or full shift patterns of working for an increasing proportion of SHOs. This has been achieved in many cases without any expansion in SHO numbers. Shift working results in fewer SHOs being available between 9 am and 5 pm during weekdays, which makes it virtually impossible for them to meet some of the training criteria, for example, attending $\geq 75\%$ of protected education sessions. Training visit reports often recommend consultant expansion, extending the role of the nurse, or the use of other trained health workers to reduce SHO workload intensity. These recommendations are essential to try and prevent service needs encroaching on the training needs of SHOs. The reduced quantity (hours) of experience during the SHO years must be counter-balanced by improved quality of experience, because otherwise these SHOs will not be prepared adequately for the specialist registrar grade. With this in mind, the RCPCH believes that training standards should not be lowered and that training visits should continue to try and help paediatric units achieve them.

The absence of a resident experienced doctor available at all times in 24% of paediatric departments in England, Wales, and Northern Ireland is particularly concerning. Not only does this expose SHOs to situations beyond their competence, it also places patients at risk because of the lack of adequately experienced medical staff on-site out of hours. This predicament may be the result of split site working, or because there is no middle grade trainee or consultant presence in some units overnight and at weekends. Regardless of the reason, the current situation is likely to deteriorate when the latest European Working Hours initiatives are implemented. There is little prospect of sufficient extra staff being available to safely cover existing units. The alternative solution is to reconfigure services, amalgamating some closely parallel services and looking at greater ambulatory service to meet the needs of the children closer to home.

The visiting process has been accused of destabilising local services by withdrawing education and training approval from some posts. However, education and training are inextricably linked to service, and if training is poor the service is often unsafe. Reviewing both general and higher specialist training during one visit gives a good view of the whole training environment and hence the service. College visitors are specialists in their field and so are in the best position to make informed recommendations. The RCPCH only recommends withdrawal of educational approval from posts after sufficient warning has been given, allowing time for correction. When the situation is irremediable, the RCPCH submits the case to the Specialty Training Authority who now make the final decision over whether to remove educational approval or not.

We have no doubt that the public would support the RCPCH's aspirations to set fair and realistic training criteria and to monitor their delivery so that, once trained, the paediatricians of the future will be adequately equipped to care for children in the UK.

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