

TALKING POINTS

Radiology work load—a solution

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Our problem is not unique: the work of the radiology department in King's Lynn has doubled since the second radiologist was appointed in 1972. The problem has been compounded by the development of a thoroughly justified ultrasound service and is likely to be further complicated with the commissioning of the new district general hospital. This will increase the number of radiographic rooms from four to nine and introduce nuclear medicine.

In a recent newsletter from the Royal College of Radiologists¹ an editorial described two ways to deal with increasing work load. The standard approach is to demand more staff and to continue to lobby authorities until the establishment of consultant radiologists is increased. This, the reflex approach of most radiologists, was tried. We assumed that, with the commissioning of the new hospital, a third radiologist would be appointed, but it was subsequently pointed out that East Anglia is already well provided with radiologists compared with the rest of the country and that within East Anglia other districts were worse off than King's Lynn. The alternative approach is to examine the value of current radiological practice and to reduce the volume of unnecessary and unrewarding examinations. Experience here has shown that this approach will achieve only moderate success at the expense of much time, effort, diligence, persistence, and acrimony.

Other alternatives have been considered in King's Lynn. We debated with medical staff the feasibility of reporting only when specifically requested to do so. Although the proposal received some encouragement the difficulties and dangers were clear to all of us. A new approach to the problem was stimulated by the local radiological postgraduate committee, which, concerned at the inability of departments to undertake teaching, asked the regional radiological advisory committee to look at work load. We submitted the following paper to the committee and they approved it.

Paper from local radiologists

PROBLEM

The regional committee responsible for radiology training in East Anglia has expressed concern at the inability of departments without formal training programmes to undertake a programme consistent with the requirements of the Royal College of Radiologists. This is because of heavy service commitments which not only prevent consultants from giving sufficient time to potential trainees but also

demoralise trainee radiologists, who are inadequately supervised and have too much service work. The committee thinks that the problem will not be resolved until the work load of each radiologist has been reduced to a reasonable level.

BACKGROUND

The past two decades have seen a considerable expansion in the radiology service. It has been stimulated by radiologists willing and able to offer a wider variety of investigations, but the increase has not been matched by an increase in radiologists. So the work load has progressively increased.² Radiology is not a popular specialty. Only 1.5% of new graduates chose radiology as a career in 1975.³ The unpopularity is confirmed by the low average number of candidates for registrar posts (1.2 per post) and the low average number of candidates for consultant posts (1.2 per post) in 1976.⁴

The increase in the number of consultant posts which has partially offset the increase in radiology work load may have come to an end. A recent review suggests that East Anglia is relatively well provided with diagnostic radiologists compared with the rest of the country.⁵ The present constraints in manpower and financial terms on resources are well known. The DHSS's pronouncements on priorities do not encourage us to believe that radiology services will continue to expand.

SOLUTION

The registrar of the Royal College of Radiologists has recently affirmed⁶ that when the college instituted its points system some years ago it thought that 70 points per session was a reasonable work load for radiologists: class I ordinary examinations 1 point, class II short special examinations 7 points, and class III long special examinations 24 points. The college is dismayed that the average work load now exceeds 100 points per session, a level justifying an additional radiologist. The college believes that 12 000 to 15 000 investigations per annum per radiologist would constitute the right sort of work load. The present ratio of 1.4 radiologists per 100 000 population in England is regarded by the college as far too low and illustrates the chronic understaffing throughout the country. These views should be accepted by the radiological advisory committee and commended to radiologists in the region.

The reduction of work load to the recommended level is the next task. Radiologists in each district must agree a "reasonable capacity" for each department and district and ask clinicians who refer patients to determine, with advice from radiologists, the

way in which each limited facility is to be used to the best advantage of patients. The proper forum for this discussion is the district medical committee. When faced with the decision of how to divide up the "reasonable capacity" priority may be given to the demands of hospital inpatients and the accident and emergency department. While some outpatient work may have a relatively high priority, the rest, together with work undertaken on the open service, must have a lower priority and may have to be rationed by means of a waiting list. This waiting list would reflect the difference between demand and the department's reasonable capacity. Its presence may encourage all doctors to take a keener interest in the efficient and effective use of the department.

Within this framework the individual districts could vary the details of organisation. For example, district medical committees may advise that fracture follow-up examinations should no longer be reported or that visiting consultants should have their outpatient work undertaken as a priority. Some arrangement is necessary for urgent problems seen by GPs, when some form of approval by an appropriate consultant may be necessary. Junior medical staff, particularly preregistration housemen, may be discouraged from initiating radiological examinations.

EFFECT

The effect of this exercise will be to reduce radiological work load to manageable levels, allowing radiologists to perform their work at a rate consistent with a high professional standard. It will leave time to improve liaison with clinical colleagues and to teach radiology to trainees and other junior medical staff, thus raising morale within radiology and improving the attractiveness of the specialty to prospective trainees.

Plan in practice

A proposal based on this paper was submitted to our district medical committee. They approved a scheme to limit examinations to the "reasonable capacity," which was estimated by reference to the advice from the registrar of the royal college⁶ and to the *Guide to Good Practices in Hospital Administration*.⁷ It was agreed that the limiting factor in determining the reasonable capacity in King's Lynn was the number of consultant radiologist sessions. We offered to undertake 30 000 examinations (exclusive of ultrasound) per annum, equivalent to 24 000 attendances. The district medical committee agreed that we should continue unrestricted radiology for inpatients, casualties, and urgent outpatients. Less urgent outpatient and all general practitioner referrals would be given appointments in the ratio of two outpatients to one GP patient. Urgent GP work would be channelled through the appropriate hospital consultant or medical assistant. It was estimated that at the current rate of referral casualties, inpatients, and urgent outpatients would take about 70% of the available capacity. We estimated that we would be able to absorb

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New contract for senior academic staff

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Consultants have balloted in favour of a new contract by a two to one majority. As senior academic clinical staff have shown vicarious approval by a somewhat smaller margin, it is time that they debated seriously the long-term implications of the vote. As a former clinical representative for Cardiff on the BMA's Medical Academic Staff Committee (MASC), I attempt in this paper to crystallise my views on the possibility of a contract for clinical academic medical staff. There have been discussions locally and nationally in MASC and in the subcommittee of the Association of Professors of Surgery.

Comparability

While the principle of comparability between the earnings of NHS and clinical academic senior staff still stands and has not been challenged by the Committee of Vice-chancellors and Principals, the introduction of a complicated new contract for NHS staff will make the definition of a reference point for comparability impossible.

The beauty of the new NHS contract, according to Mr David Bolt (the consultants' negotiator), is to make the system of payment so complicated that it will be impossible to define exactly the average gross income of consultant staff. There will, therefore, be no easily defined salary scale and whatever is decided as appropriate for the pay of senior lecturers, readers, and professors will almost certainly be less than the real income of comparable groups. Furthermore, as payment

will depend on so many different components of the consultants' work, each of which is liable to be repriced at every review, senior academic clinical staff will for ever be one or two steps behind their NHS colleagues. Academic surgeons and obstetricians will be at an even greater disadvantage than groups with less on-call and recall commitments.

Who are our employers?

It is relatively "easy" for the BMA to negotiate a contract with a single employer, the Department of Health and Social Security. But clinical academic staff are employed by 34 separate and autonomous bodies. It would be laborious to negotiate a separate contract with each of these employers. Furthermore, during the period of negotiations wide discrepancies will result between the various employing authorities, which may lead to differential real incomes between teaching hospitals.

The only alternative, therefore, would be to negotiate general principles with the Committee of Vice-chancellors and Principals. The CVC/CP, however, has been reluctant to meet MASC and furthermore will be heavily influenced by the Association of University Teachers.

The A plus B contract

The honest and realistic solution for clinical academic staff would be to attempt to negotiate an A plus B contract, the NHS paying for all

clinical duties and the university for all academic responsibilities.

CLINICAL COMPONENT OF CONTRACT

At present, most clinical academic staff have a nominal six-elevenths responsibility to the NHS. This would be easy to interpret within the terms of the new NHS contract. A good argument could be made for six notional half days (NHDs) to recognise routine clinical work plus a notional half day for continuing on-call commitment and a further NHD for administrative responsibilities in the NHS. Beyond this, clinical academic staff would be eligible to compete for additional NHDs up to the maximum allowed by virtue of the fact that they renounce their rights to private practice. They would automatically be eligible for recall fees and further on-call commitments within the same band as their equivalent colleagues in the NHS. Additional perks, like motoring and telephone costs, would automatically accrue as the principle would already be established with the current contract. They would, therefore, have an identical salary structure apart from a shortfall of four NHDs.

ACADEMIC COMPONENT OF CONTRACT

Given that clinical academic staff teach throughout the whole year, and not strictly within the academic terms, they could make a realistic case for having the equivalent of four NHDs in their annual salary made up from the university. An alternative would be to claim a percentage of the salary of a senior lecturer or professor in one of the non-medical faculties. For example, as six-tenths of their time during the week is devoted to NHS work, the minimum that could be claimed would be 40%. But, as they teach throughout the year and often conduct teaching ward rounds in unsocial hours, an additional 20% of a senior lecturer's or professor's salary would be appropriate. In this way it might be possible to top up earnings to overtake NHS colleagues. There is no compelling reason why there should not be some financial inducement to a career in academic medicine.

Conclusions

This scheme is honest because the payment will strictly reflect the work carried out, whereas a rolled-up contract at some arbitrary reference point on the NHS scale would certainly penalise those with a heavy clinical commitment or alternatively be a source of continuing jealousy and contention for non-clinical academic medical staff or the Association of University Teachers. The scheme is realistic because both the NHS and university authorities would know exactly what they were paying for. The alternative would be the loss of comparability, the continued widening of the differential between academic and NHS staff, and a fall in recruitment, leading to the ultimate demise of university medical faculties.

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Radiology work load (cont)

half of the current demand for non-urgent outpatient work and a third of the demand for general practitioner work. The plan was approved by the hospital medical staff, the district management team, and, later, by the area health authority.

The scheme's implementation encountered some difficulties. The district medical committee was forced to accept that all requests for orthopaedic outpatient work would receive immediate attention. It was agreed that chest radiology for the chest and thoracic surgery clinics would be regarded as urgent and the consultant geriatrician argued that elderly patients should not be asked to return for radiography if this could be avoided. These modifications increased the proportion of urgent to non-urgent outpatient work, and appointments were divided equally between non-urgent outpatients and GP referrals.

The introduction of the scheme in November 1977 stimulated a considerable reduction in requests for examinations on inpatients, outpatients, and accident and emergency patients, despite an increase in the referral rate to the outpatient and casualty departments. The waiting time for most examinations has been one to two weeks for outpatients and two to four weeks for GPs. The exercise has been successful in reducing radiological work load to manageable levels. The waiting list acts as a constant reminder

of the difference between demand and the "reasonable capacity" of the department. The whole health district is now concerned about the capacity of the radiological facility and its effective use. Future proposals for the development of the district service may take greater account of their effect on radiological services.

The demand for radiography by the casualty department has doubled recently. A major contribution has been an instruction from the consultant in charge to the casualty officers that no head injury should leave the department no matter how minor until it had been x-rayed. This has so reduced the available capacity to undertake non-urgent outpatient and GP work that the waiting time for GP examinations has extended to almost two months. The chairman of the DMC has initiated urgent consultations but the incident exemplifies the underlying premise of my solution, that when demand exceeds capacity it is other users and not the department who suffer.

References

- ¹ Royal College of Radiologists Newsletter, October 1977.
- ² Raison, J C A, *Proceedings of the Royal Society of Medicine*, 1976, 69, 755.
- ³ Parkhouse, J, and Palmer, M K, *British Medical Journal*, 1977, 2, 25.
- ⁴ DHSS, *Health Trends*, 1977, 9, 45.
- ⁵ Vaughan, D H, *British Medical Journal*, 1977, 2, 842.
- ⁶ Davies, E R, personal communication, 1977.
- ⁷ *Guide to Good Practices in Hospital Administration*, Management Services NHS. London, HMSO, 1970.