individual patient, with the district health authority paying for care costing more than this. The importance of this safeguard could not be assessed in our simulation as there was no easy way of linking the finished consultant episodes to individual patients. However, because none of the 113 surgical procedures has a mean price higher than £5000 in the west midlands, and 100 have a price lower than £2000, multiple admissions for operations would be required to exceed the limit and thus the safeguard is more likely to be relevant for patients with long term illnesses requiring repeated surgery.

Secondly, the Department of Health could allow fundholding practices considerable virement in the amount of underspending or overspending to be carried forward from year to year. As mentioned above, this would have to be greater than that allowed for district health authorities to date. If too much virement is allowed, however, practices may be less likely to use savings on the fund in a given year to improve the range or quality of services offered if they fear that a random variation in a future year may lead to significant overspending. If this happened it would undermine one of the largest potential benefits of general practitioner fundholding.

Thirdly, practices could be encouraged to pool their financial risk by joining together in consortiums. Alternatively they could contribute to a contingency reserve to be held by the regional health authority. This would be similar to the scheme currently used by districts to cope with medical negligence claims.

Finally, the ultimate security for potential fundholders is that they can stop participating in the scheme whenever they wish. As this may be perceived as a failure of the scheme, there may be a temptation to set funds at a level that would cushion the financial effect of random variation; but this would mean that the resources available to other services operated by the district health authority would be diminished because the general practitioner funds are deducted from the district's financial allocation.

We have previously pointed out that general practitioner fundholding embodies a complex array of benefits and risks.[4] By simulating 100 years of general practitioner fundholding by using historical data on referrals and newly available hospital prices we have quantified the financial effect of random variations in service need for practices eligible for fundholding. We conclude that the financial impact is sufficiently great to be of concern to fundholding general practitioners and their patients. Additional measures are needed to ensure that the scheme is not undermined and that the potential benefits are secured.

1 Smith R. Words from the source: an interview with Alain Enthoven. *BMJ* 1989;**298**:1166-8.
2 Department of Health. *Funding general practice*. London: DoH, 1989.
3 Hall C. Hospital to begin two-tier service. *Independent* 1991 May 3:2.
4 Drummond MF, Crump BJ, Hawkes A, Marchment MD. General practice fundholding. *BMJ* 1990;**301**:1288-9.

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The Future of General Practice

Out of hours work in general practice

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General practice is a demanding job in which the subjective experience of stress is associated with lack of mental wellbeing, marital problems, and alcohol abuse.[1-3] Out of hours calls are a particular source of stress, especially night calls,[4] and older general practitioners report more difficulties with out of hours work than do younger principals.[5] General practitioners have described out of hours calls as being consultations that are diagnostically demanding[6] and occur at a time when they are tired and prone to cope with rather than deal with problems.[4] Misjudgment can be serious for doctor and patient; physical violence against general practitioners occurs more frequently on out of hours calls than at any other time.[7]

Most out of hours calls are from parents about their children.[8] They may reflect parental inexperience,[9] lack of social support driving parents to seek professional help urgently,[10] or maladaptive behaviour transmitted as a family tradition.[11] Elderly people are the second most frequent callers and are taken more seriously by their general practitioner than are anxious parents.[8] Social class may be an important determinant of frequency of calls,[8] but some evidence suggests that although working class people value house visits more than do the middle class, they request them less often.[12] Nevertheless, deprived inner city areas tend to have high rates of out of hours visits.[8 13]

Deputising services

It is hardly surprising that general practitioners are tending to reduce their hours of personal availability, mainly by transferring responsibility for night calls to deputies.[14] Though groups of general practitioners provide most out of hours care through crosscover within or between practices, commercial deputising services are used by a growing proportion of general practitioners, with 45% of practitioners nationally,[15] 67% of a selected sample in London,[4] and over 90% in Manchester[8] making some use of commercial deputising services. The greatest obstacle to wider use of deputising services is probably not professional antipathy but the absence of commercial services outside urban areas.

Nevertheless, there has been much discussion about the merits and demerits of commercial deputising services, and the new contract for general practitioners has attempted to limit the transfer of out of hours work to deputies by financially rewarding doctors for doing their own night calls.[16] The clinical quality of the care provided by commercial deputising services is difficult to assess, but studies of patient satisfaction with out of hours cover in general and by deputising services have shown that 70-80% of people seen by deputising service doctors are satisfied with the service they receive,[15 17 18] similar to the overall public satisfaction with NHS general practitioner services and rather better than that with hospital services.[19] Satisfaction tends to be highest among older people and lowest among the parents of young children,[8 18] perhaps reflecting the seriousness with which the general practitioners treated their calls.

Increase in demand

The number of night calls nearly trebled between 1967 and 1976,[20] and good reasons exist for thinking that the out of hours workload may continue to

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High out of hours workload reduces doctors' ability to work effectively

increase. Part of the high level of satisfaction with deputising services among older people may derive from low expectations of the NHS, but rising generations may have a different attitude. Demand for out of hours care may also increase because of what Helman describes as the shift in public classification of illness from "colds" (illnesses that are largely self cured) to fevers (illnesses that require professional assessment and intervention).[21] This shift, which parallels the rise in medicine's real effectiveness, seems unlikely to reverse, at least in the short term. If accident and emergency services contract further[22] and are not replaced by neighbourhood casualty units the demand for out of hours care may increase yet further, at least in deprived urban areas where people may use the accident and emergency department more readily than they call their general practitioner out of hours.[8] Increasing health promotion within hours may reduce general practitioner availability for ill people and inadvertently increase demand out of hours.

How should general practitioners respond to the demand for out of hours care? General practitioners must be aware of their tendency to omnipotent thinking and behaviour, define the boundaries of professional responsibility, and make time for their domestic responsibilities. The demand for 24 hour personal medical care is unrealistic but feeds ideas of omnipotence in doctors, and these ideas in turn reinforce the belief that such demand should be met. Just as the obligation on parents is simply to be "good enough,"[23] so the obligation on general practitioners should be to become "good enough" doctors, not supermen or superwomen. Continuity of care is assumed by some general practitioners to be overwhelmingly beneficial without the benefit of research that tests this hypothesis, even though many NHS users seem to opt for discontinuity through an increased use of deputising services[20] and of casualty departments.[24]

Avoiding sleep deprivation

Similarly, little research has been done on the impact of sleep disruption on daytime clinical decision making in general practice, although the experience from hospital medicine shows that functioning is impaired. How can general practitioners or the Department of Health justify working shifts of 24 hours or more without good evidence that this does not harm "within hours" clinical work or overall service provision when it occurs on a regular basis over a working lifetime? Even if general practitioners can take off some part of the day after a night on call, can their absence from daytime work be justified by the benefits of their presence on a night visit or two?

We believe that out or hours work should be limited to allow undisturbed sleep and that the 24 hour commitment should be abandoned because it wastes a costly resource—the fully functioning general practitioner. Practices can decide for themselves how to organise a 17 hour day, in negotiation with their family health services authority and (ideally) in consultation with their patients, perhaps with special provision for a 24 hour service for discrete categories of users—for example, those needing continuing care or being born.

Deputising services funded by health authorities and based on the existing network of accident and emergency departments, health centres, and clinics would be an alternative to commercial services with doctors paid on piece rates, and these services could be offered to most general practitioners. Communication between the emergency service and the doctor should be an obligation for the health authority staff and not the responsibility of the patient or the patient's family, as it is now. This network might not cover everybody in the country, leaving some general practitioners with an ongoing 24 hour commitment for which they would need extra support, but if it is possible for a large supermarket chain to place an outlet within 10 miles of 90% of the population then the biggest employer in western Europe should be able to do the same, or better.

Causes of high out of hours workload

General practitioners should interpret their out of hours workload with caution. Though we agree with Livingstone *et al* that high rates of out of hours calls may be explained by indices of deprivation,[13] we believe that other explanations also need consideration. Other possible causal factors include the use of appointment systems as a barrier to demand, limited daytime availability, poor communication by doctors, inadequate educational skills on the part of general practitioners, foreshortened consultations with insufficient awareness of psychosocial problems, insufficient anticipatory care of older people, or even a practice policy that is demand led in an uncritical way. These are serious concerns in which expert help from outside general practice may be more helpful than enthusiastic but superficial audit. One general practitioner reported that an information booklet for patients on how to deal with cough, fever, sore throat, and diarrhoea and vomiting in children, with specific recommendations when to call for medical help, reduced daytime requests for home visits but increased out of hours calls.[25] The suggestion made by Bollam *et al* that practices should review their out of hours provision regularly is sensible,[18] and such reviews might usefully consider these issues.

General practitioners must relinquish the fantasy of omnicompetence and use other professions' approaches, particularly for parents and their children. Family therapy methods may be fruitful in changing medicalised habits,[11 26] and patch based services offering individual and group therapy tailored to a working class community may move individuals out of dependency towards autonomy.[27] Regular review of out of hours caseload may be a useful way of identifying individuals and families who would benefit from a new approach to their health and illnesses.

General practitioners' isolation as independent contractors and their predominance within primary care teams are unhelpful attributes of the existing service. Serious consideration should be given to a salaried option that will integrate all primary care services.[28] Experimental multidisciplinary approaches in which the doctor is not necessarily the central figure

should be supported and evaluated with realistic criteria and timescales for assessment, given the unconscious roots of many communication problems between professional disciplines.[29]

Finally, out of hours work requires special skills that warrant special attention in postgraduate education. The Balint approach has sensitised general practitioners to the complexities of their task,[6] and family therapy approaches are beginning to offer general practitioners new problem solving techniques.[11] Another example is the American experience in training doctors in telephone consultation techniques,[30] now widely integrated into paediatric internships but largely overlooked in Britain despite the increasing tendency of general practitioners to deal with out of hours calls by telephone.[31] All of these working styles need development and reinforcement if general practitioners are to cope with the population's diminishing tolerance for inattentive and uncommunicative doctors.[12]

Out of hours work is both an inevitable part of general practitioners' gatekeeper task and an important source of personal security for the public. Despite its difficulties it can also be a source of education and satisfaction for the provider. Organising its boundaries in a realistic way, reviewing out of hours workload in a self critical fashion, and refining both problem solving and consultation techniques are the key issues in the debate about changing general practitioners' responsibilities.

1 Cooper CL, Rout U, Faragher B. Mental health, job satisfaction, and job stress among general practitioners. *BMJ* 1989;**298**:366-70.
2 Gathorne-Hardy J. *Doctors: an open look at doctors' lives*. London: Weidenfeld and Nicholson, 1984.
3 Bennet G. *The wound and the doctor: healing, power and technology in modern medicine*. London: Secker and Warburg, 1987.
4 Myerson S. Investigating stresses in general practice using an open ended approach in interviews. *Fam Pract* 1990;7:91-5.
5 Myerson S. Doctors' methods of dealing with 'on going' stress in general practice. *Medical and Scientific Research* 1991;**19**:267-9.
6 Clyne MB. The diagnosis. In: Balint E, Norell JS, eds. *Six minutes for the patient: interactions in general practice consultation*. London: Tavistock, 1973:58-78.
7 Hobbs FDR. Violence in general practice: a survey of general practitioners views. *BMJ* 1991;**302**:329-32.
8 Wilkin D, Hallam L, Leavey R, *et al. Anatomy of urban general practice*. London: Tavistock, 1987.
9 Cunningham-Burley S. Mothers' beliefs about and perceptions of their children's illnesses. In: Cunningham-Burley S, McKeganey NP, eds. *Readings in medical sociology*, London: Tavistock/Routledge, 1990:85-109.
10 Virji A. Study of patients attending urgently without appointments in an urban general practice. *BMJ* 1990;**301**:22-6.
11 Huygen F. *Family medicine: the medical life history of families*. London: Royal College of General Practitioners, 1991.
12 Cartwright A, Anderson R. *General practice revisited*. London: Tavistock, 1987.
13 Livingstone A, Jewell JA, Robson J. Twenty four hour care in inner cities: two years' out of hours workload in east London general practice. *BMJ* 1989;**299**:368-70.
14 Department of Health. *General medical practitioners workload survey 1989-90*. Vol 1. *Main findings*. London: HMSO, 1991.
15 Dixon RA, Williams BT. Patient satisfaction with general practitioner deputising services. *BMJ* 1988;**297**:1519-22.
16 Department of Health. A new contract for general practice. London: HMSO, 1990.
17 Hamilton I, Bhopal JS, Gilmour WH, *et al.* Patients' attitudes to deputising services. *J R Coll Gen Pract* 1988;**38**:171.
18 Bolam M, McCarthy M, Modell M. Patients' assessment of out of hours care in general practice. *BMJ* 1988;**296**:829-32.
19 Prescott-Clarke P, Brooks T, Machary C. *Focus on health care—surveying the public in four health districts*. Vol 1. London: Social and Community Planning Research and Royal Institute of Public Administration, 1988.
20 Fry J. *Present state and future needs in general practice*. London: MTP and Royal College of General Practitioners, 1977.
21 Helman C. Feed a cold, starve a fever. *Cultural and Medical Psychiatry* 1978;2:107-37.
22 Skinner DV. Accident and emergency services: radical restructuring is needed. *BMJ* 1990;**301**:1292.
23 Bettleheim B. *A good enough parent*. London: Thames and Hudson, 1987.
24 Jones CS, McGowan A. Self referral to an accident and emergency department for another opinion. *BMJ* 1989;**298**:859-62.
25 Usherwood TP. Development and randomised controlled trial of a booklet of advice for parents. *Br J Gen Pract* 1991;**41**:58-62.
26 Furnivall J, Wilson P. A family perspective on illness: 2. *Medical Monitor* 1991, Feb 22:37-41.
27 Holland S. Women and urban community mental health: twenty years on. *Clinical Psychology Forum* 1989;**22**:35-7.
28 Smith R, Freudenstein U, Gibbons B. *A salaried service for general practitioners —why now, and how?* London: Medical Practitioners Union, 1991.
29 Wilson S, Wilson K. Close encounters in general practice: experiences of a psychotherapy liaison team. *Br J Psychiatry* 1985;**146**:277-87.
30 Zylke JW. Physicians need better line on how, when to respond to patients via the telephone. *JAMA* 1990;**264**:1797-8.
31 Hobday PJ. Telephone management of out of hours calls. *J R Coll Gen Pract* 1988;**38**:35.