and Dr Watson's figures merely confirm the increasing daily displacement of people from home, family, and practitioner in the twentieth century social revolution and the increasing hazards to which they are subject while displaced. In fact there has not been one year since attendance rates of casualties were first recorded in 1828⁷ that the rate has dropped.

During the period of National Health Insurance, if the patient had a free choice, then, unless he was referred by his GP, he was an inappropriate attender at the casualty department. Has there been a change?

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Referral of mothers and infants for intensive care

SIR,—We read with interest the account of the University College Hospital experience of perinatal transfer of "at risk" low-birthweight infants (18 August, p 414) and the subsequent letter by Dr M L Chiswick (22 September, p 733).

Intensive care methods were introduced into the special care baby unit of the Jessop Hospital for Women, Sheffield, in early 1977 and a policy of active encouragement of the transfer from outlying hospitals to our maternity unit of mothers likely to deliver very low-birthweight infants was adopted. We also started to operate a neonatal intensive care transport service similar to that of Blake *et al*¹ and Chiswick *et al*,² using a modified Vickers 77 transport incubator.

Between January 1977 and August 1979 the survival rate for infants of birth weight 1.5 kg or less was better for those transferred in utero than for those transferred after delivery, the survival rate for the former being similar to that of the infants born here (see table). Ventilatory assistance was required less frequently in those infants transferred in utero (10 out of 16 (63%)), compared with 29 out of 30 infants (97%) transferred after delivery. There was also a higher survival rate following ventilation of those transferred in utero—(7 out of 10 (70%))—than in those transferred after birth—12 out of 29 (41%). Infants of less than 1000 grams or of gestational age 26 weeks or less formed a higher proportion of the infants transferred after birth, but this does not completely explain the discrepancy in the survival figures. It is difficult to compare in the two groups the extent to which the six infants transferred in utero who did not require ventilatory support may have benefited from intensive antenatal and neonatal monitoring. These infants may be seen as competing for intensive

care cot space with infants whose needs may be greater, an effect which we try to minimise by early return of mother and baby to the referring hospital. We agree with Dr Chiswick that the infants transferred after birth are a different population, frequently with additional adverse perinatal factors, as illustrated by the excess of extremely small infants among those transferred after delivery (see table); and accurate comparison of the two methods of transport is therefore impossible.

Although we shall continue to encourage the transfer of very low-birthweight infants in utero, circumstances prevent antenatal referral in a large proportion of cases and the baby is frequently delivered in the district general hospital unit soon after arrival there. The prognosis of the very low-birthweight infant, even after delivery and transfer to the regional neonatal intensive care unit, is dependent on the level of obstetric and neonatal skill available at the district general hospital maternity unit in the immediate perinatal period; and improvements in facilities and training at this level are a high priority if we wish further to improve the prognosis of the very low-birthweight infant.

Despite the excellent results of Blake *et al*¹ demonstrating transport of the sick low-birthweight infant to be a relatively safe procedure after delivery, as smaller and smaller infants become potentially capable of survival the sophistication of the transport equipment required increases. We have found it impossible to maintain the temperature of infants of less than 1000 grams ventilated with cold oxygen straight from a cylinder for more than 45 minutes and refinements in the currently available transport equipment are needed urgently to make it suitable to transport very small infants long distances safely.

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¹ Blake, A M, *et al*, *British Medical Journal*, 1979, **2**, 414.

² Chiswick, M L, *British Medical Journal*, 1979, **2**, 733.

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Antibiotic lavage for peritonitis

SIR,—Your leading article "Antibiotic lavage for peritonitis" (22 September, p 691) highlights the problems still experienced by surgeons when dealing with severe peritonitis. Stephen and Loewenthal¹ have recently reminded us of the high mortality associated with this condition and have also demonstrated the benefits to be gained from lavage with multiple antibiotics.

Peritoneal lavage has never been popular in Britain since it was condemned by Lord

Moynihan² and the most recent edition of Maingot's *Abdominal Operations*³ continues to perpetuate the myth that irrigation of the peritoneal cavity for cleansing purposes is never justified even in the presence of gross faecal contamination. However, it has been widely used in Europe,⁴ the USSR,⁵ and the USA⁶; and the use of the three or four drain technique with lavage through each drain in turn has been frequently reported. Recent animal studies⁷ have continued to demonstrate the benefits of lavage in experimental peritonitis.

The use of intraperitoneal antibiotics both by instillation and by lavage is widespread and well documented, though in most cases only a single drug is used: but, as you point out, with such a mix of organisms combination chemotherapy seems more logical, although most surgeons today would probably prefer metronidazole to lincomycin for the control of *Bacteroides* spp. One of the factors accounting for the high mortality in faecal peritonitis may be a failure of peritoneal fibrinolysis.⁸ This allows the infection to become walled off, hinders antibiotic penetration, and leads to residual abscesses. It has been shown that heparin lavage⁹ in experimental animals prevents fatalities in induced peritonitis, probably by preventing fibrin deposition; and it seems reasonable to add this to other regimens in peritonitis.

The use of multiple antibiotics does raise some problems, such as the development of resistance, allergic reactions, anaesthetic difficulties, and perhaps the rather theoretical endotoxaemia resulting from "overkill."¹⁰ In an attempt to avoid the difficulties associated with the use of antibiotics and yet cover all the bowel organisms antiseptics are being used by instillation and lavage. Two groups of these have been reported—povidone-iodine¹¹ and methylol donors,^{12 13} both of which confer considerable protection in the experimental animal and also in the clinical situation. A recently developed antiseptic (Taurolin) of the latter group has an added advantage over the antibiotics and other antiseptics. It has been shown to be active against the toxins from *Escherichia coli*, *Bacteroides fragilis*, and *Salmonella typhi*,¹⁴ probably by direct reaction with the endotoxin; and its active metabolites are rapidly absorbed from the peritoneum to give effective levels in the blood. In a series (to be reported elsewhere) of 70 cases of purulent peritonitis arising from gangrenous or perforated appendices treated with intraperitoneal taurolin without any antibiotics there have been no deaths and only one residual abscess, the wound sepsis rate by the strictest criteria being 18%; while in the more severe cases of peritonitis, arising from perforation of colon, small bowel, or gall bladder, out of 33 cases treated with intraperitoneal taurolin there were no deaths, but the wound infection rate was 43%. The latter, apart from reflecting the severity of the causative lesion, is probably due to too low a dose of taurolin, since, unlike antibiotics, antiseptics have a direct relationship to the number of organisms and must always be present in excess.

It is to be hoped that in severe peritonitis the use of lavage to clear away organisms, toxins, and particulate matter and to control electrolyte balance will be adopted in this country. As an alternative to combination chemotherapy with several antibiotics and their attendant risks, a return to the Listerian concept of antisepsis might be indicated. Several modern antiseptics are now available

Survival of infants of 1.5 kg birth weight and below after referral in utero and after delivery (January 1977-August 1979)

Birth weight (g)	Transferred in utero				Transferred after delivery			
	No	Survivors No (%)	Birth weight (kg) Mean (range)	Gestational age (weeks) Mean (range)	No	Survivors No (%)	Birth weight (kg) Mean (range)	Gestational age (weeks) Mean (range)
≤1000	3	2 (67)	0.89 (0.84-1.0)	27.3 (26-28)	13	3 (23)	0.86 (0.63-1.0)	26.4 (25-28)
1001-1500	13	11 (85)	1.24 (1.02-1.40)	30.6 (27-36)	17	10 (59)	1.22 (1.06-1.46)	29.2 (27-35)

for intraperitoneal use and preliminary clinical results with them are proving to be most encouraging.

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Barbiturate hypnotics

SIR,—Insomnia is a symptom, a complaint. The Committee on the Review of Medicines concludes (22 September, p 719) that "severe, intractable insomnia" (presumably the persistently complaining patient) provides an indication for the prescription of barbiturate hypnotics.

Pain too is a symptom. Another four years of deliberations may enable the committee to conclude that the complaint of severe, intractable abdominal pain is an indication for the prescription of daily enemas.

In the resurgence of Edwardian medicine prescriptions shall be written in Latin.

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Contamination of injections

SIR,—The inconvenient report of Blogg *et al*,¹ which confirms my own previous findings² that at least 50% of syringes have their contents contaminated by the second refill, implies that present methods of preparing thiopentone injections are unsatisfactory. Even when a single dose is prepared from an ampoule of water drawn up, transferred to the thiopentone powder for solution, and aspirated again into the syringe ready for use, this danger is present.

Obsessed by theoretical dangers of decanting in the preparation of solutions in multidose (100 ml) containers, the manufacturers—encouraged by the DHSS—now supply the water in narrow-necked bottles and advise that the solution should be prepared by syringe aspiration of the water and its injection into the thiopentone container. Clearly one cannot use one 20-ml syringe five times because of the dangers mentioned above. Should we use five fresh syringes and further syringes when the solution is injected into patients? This seems wasteful—so would the use of a disposable and cumbersome 100-ml syringe.

The alternatives seem to be to use a special transfer needle to couple the two bottles (such needles are not currently available in the UK),

or to have the solution prepared in the sterile products division of the hospital pharmacy in those places where such provision exists.

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Unwanted journals

SIR,—The issue Dr R E Simmons raises is by no means an OLVPS—a One Lone Voice Protesting Subject. I would like to support him in his criticism (6 October, p 867) of the way doctors get bombarded with unsolicited journals. He receives *World Medicine* only because last June he signed a card asking us to send it to him. We send *World Medicine* only to doctors who within the previous three years have signed a card requesting it. And many moons ago we instructed our distributors not to let our list of readers be used for distribution of other journals or promotional literature.

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Deployment of mental handicap specialists

SIR,—Dr D A Spencer (6 October, p 863) rightly draws attention to the crisis in the number of psychiatrists specialising in mental handicap, but his suggestion that consultants should be appointed to districts rather than hospitals was put forward by Mrs Barbara Castle in February 1974. She then promoted a package that also contained the National Development Group for the Mentally Handicapped and the Jay Inquiry into mental handicap nursing; this predictably caused disruptions, not least among the consultant force.

In 1973 the total number of consultants in mental handicap in England and Wales was 183.¹ At that time the Royal College of Psychiatrists said that a realistic minimum was 375 and the ideal 500. Five years later, according to the *Medical Directory*, the number has fallen to 162. Over 20% of these are from overseas and, on the basis of a representative sample, it seems that 48% are over 50 and only 4% under 40. During 1974-7 no appointments were made in 42% of the registrar posts advertised in mental subnormality and reservations were expressed about a further 18% of the successful applicants.² The assessors of the college reported that "the calibre of those interviewed seemed particularly low in subnormality." The national development team devoted less than 1% of its first report to the role of consultants and there is no evidence that its "community units" attract "new consultant blood" to their associated multidisciplinary teams.

As Dr Spencer points out, it is an impossible task for a consultant to be responsible for hundreds of inpatients, and neither is this necessary. Whether or not the patients require nursing care (and most do not), the present arrangements for nursing accountability would

make it a relatively simple matter for the responsibility for care, including admissions, to be accorded to nurses. This, however, should release specialists not to do vaguely defined consultant work in the community (unless we are looking for a declining number of preretirement jobs) but to concentrate in much greater depth on the *psychiatric* aspects of the care and treatment of the mentally handicapped.

Pioneering work on this has already been done in Dundee (and elsewhere) and there is now a chair with this title in London. Much more needs to be done in this area, however, than has been achieved in the past by lone workers, often against considerable odds. RHAs should cut out the dead wood of consultant responsibility that amounts to a charade in clinical terms, *reduce* their consultant establishments, and use the money they save to follow the example of authorities south of the Thames—that is, fund academic departments in the psychiatry of mental handicap, with senior staff having service commitments, at the local universities and medical schools. This strategy may involve sacrifices by some existing consultants, but if there is a conviction that such work needs to be done a way must be found out of the ravages that have characterised this field since the watershed public events of 1967.

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- ¹ Royal College of Psychiatrists, *British Journal of Psychiatry*, suppl *News and Notes*, December 1973, p 2.
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Clinical practice and community medicine

SIR,—With reference to Professor E D Acheson's "Clinical practice and community medicine" (6 October, p 880), when are community physicians going to realise that credibility has to be earned by the effective practice of their own specialty rather than by aping their clinical colleagues?

The role of the community physician is complex,¹ and requires a wide knowledge base and traverses a number of disciplines. A synthesis of medical knowledge and understanding together with knowledge in the field of the behavioural sciences, economics, epidemiology, statistics, etc, enables the community physician to take the broad approach to health that is his brief. It is essential for the community physician to view the total picture if he is to make an impact on health, and assuming any clinical responsibilities will diminish his ability to practise community medicine. It is his job to see the forest rather than to deal with the individual trees. If it is medical knowledge he is seeking, this is more effectively gained by reading the journals and attending post-graduate meetings.

Trainees in community medicine hankering after clinical work should question their motives for choosing the specialty and ask themselves whether they are actually committed to the underlying concepts. It may be that in seeking a clinical role they are opting out of the more difficult task that constitutes the prime function of the community physician.

As a community physician I respect my clinical colleagues for the clinical expertise that they exhibit. I am delighted when they take an interest in the wider aspects of health