SIR,—In a leading article (5 February, p 337), under the above title reference is made to reports of "critical" blood concentrations of hexachlorophane (HCP) of approximately 0.75-1.0 $\mu\text{g/ml}$ determining neurological damage in animals. The comment appended to this was that "this concentration has been reported in one study of blood samples from a few infants,¹ but the laboratory techniques used have been criticised, and much lower levels, <0.15 $\mu\text{g/ml}$, have been claimed even in premature babies repeatedly washed with HCP." Criticism and alternative findings both emanated from the same source.^{2,3}

Our own findings⁴ confirm that higher blood levels such as those found by Curley *et al.*,¹ up to 0.646 $\mu\text{g/ml}$, may be found even in full-term infants, up to 0.61 $\mu\text{g/ml}$ for repeated application, and up to 0.50 $\mu\text{g/ml}$ after a single application on the day of delivery only. Moreover, our estimations⁵ in three premature infants having a single application of 5 ml HCP included levels of 1.18, 1.37, and 0.75 $\mu\text{g/ml}$. Where a 15-ml application was made a level of 2.28 $\mu\text{g/ml}$ was recorded and the peak in that case may well have been higher. These values cannot be criticised on the grounds of contamination at the site of collection as they were collected by umbilical arterial catheter.

The criticism in the leading article of regulatory action taken on the basis of "incomplete evidence and the scientific uncertainty inevitable with negative findings in clinical practice" is scarcely reconcilable with Pleuckhahn and Collins's own observations² of central nervous system vacuolation seen at necropsy in 48 of 245 premature infants bathed with HCP. Even though Pleuckhahn and Collins² failed to find subsequent evidence of cerebral deficit in similarly treated infants which survived, it is a little difficult to agree with the conclusion that HCP application is justifiable when such an acknowledged lesion was demonstrable in the infants that died.

Furthermore, the article makes no mention of another (although possibly related) property of HCP, that of uncoupling of oxidative phosphorylation. HCP has been shown to uncouple oxidative phosphorylation in liver and brain homogenates^{6,7} and in rat muscles.⁵ While there is no firm evidence that this occurs in infants washed with HCP, the possibility that uncoupling may occur at this critical stage can hardly be ignored.

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¹ Curley, A, *et al*, *Lancet*, 1971, 2, 296.

² Pleuckhahn, V D, and Collins, R B, *Medical Journal of Australia*, 1976, 1, 815.

³ Pleuckhahn, V D, *Medical Journal of Australia*, 1973, 1, 93.

⁴ Abbott, L M, *et al*, *Australian Paediatric Journal*, 1972, 8, 246.

⁵ Greaves, S J, *et al*, *New Zealand Medical Journal*, 1975, 81, 334.

⁶ Caldwell, R S, Nakaue, H S, and Buhler, D R, *Biochemical Pharmacology*, 1972, 21, 2425.

⁷ Cammer, W, and Moore, C L, *Biochemical and Biophysical Research Communications*, 1972, 46, 1887.

Experiments with computers

SIR,—We believe your readers would be interested in the views of consultants who use the computer system at Stoke-on-Trent. These views are corrective to the sweeping and surprising generalisations of your leading

article (12 February, p 404), which refers to the "poverty of achievement" of the computer project at Stoke.

It can be established that any rise in financial estimates for installation was largely attributable to inflation and that the "prototype" used in the Stoke project is disproportionately expensive in comparison with "manufactured systems" which may be subsequently introduced to other hospitals as a result of the experience at Stoke and other centres.

The system was introduced into one of the largest outpatient departments in Great Britain, averaging 179 000 attendances annually, at a time when efficiency was undermined by an increasingly obvious and unacceptable strain on resources. Its introduction in 1972 has resulted in smooth, unobtrusive, and highly effective management which is completely acceptable to the majority of consultants and medical and other staff, including a number who did not welcome the original concept in principle.

This was followed by the installation of an "inpatient system" providing continuous responsibility for 35 000 patient admissions annually. The immediate benefits are clearly apparent to medical and nursing staff, particularly in relation to the organisation and flow of waiting lists for admission and the 24-hour monitoring of available beds for acute admissions to all wards and special units within the 1500-bedded hospital centre. The full potential will be realised over the next two years, when the pathology service, which produces 5000 reports daily, links with the hospital system and automatically presents its results to all wards and case-note records.

We believe the acceptable success of the computer system at Stoke-on-Trent is due to the skill and practical competence of the computer team and to the frank and open discussion with clinicians at the introduction of the system and at each stage of its evolution. The development was radical but clearly understood. You instance "worthwhile developments delayed by the dead hand of inertia." We invite you to redress the inertia by a closer scrutiny of an effective computer system operating in a large hospital centre at Stoke-on-Trent.

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PETER CARSON
G M ABER
J R HERON
D W STUART

North Staffordshire Hospital Centre,
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SIR,—We write as co-directors of one of the major projects in the NHS's experimental programme dealt with in your leading article (12 February, p 404).

Comment regarding the inaccuracy of the information printed, concerning named projects, is perhaps best left to those individual projects. We feel, however, that we must challenge the latter part of the article, especially those sections advocating that computers should do only what clinicians want them to do. This attitude reveals an all too common attitude of medical staff, who either do not recognise or underestimate the importance of the complex systems which support staff provide to themselves and the patients. The "simple systems" for clinicians require other basic non-clinical information in order to provide the data useful to the clinician. The com-

munications aspects of medical records systems are of crucial importance to patient care.

It is relevant to compare computer systems for clinicians with those for airline pilots. The airline computer-assisted booking systems provide no direct assistance to pilots but have still proved extremely successful and effective. The passengers catch the right plane going to the right place at the right time and the airline makes the best use of the available seats. NHS support services perform a similar task for clinicians. The present experimental programme does not exclude research in clinical systems but to date they have concentrated more on the support services. Our own project is one in which clinical processes at primary care level have been tackled in conjunction with other administrative systems and linked with a variety of hospital applications. Reference to an article in your own journal by Dr J H Bradshaw-Smith¹ will illustrate that some clinicians in Devon already have and know all too clearly what they need.

A "programme" composed of clinical teams, as advocated, using mini-computers for their own purposes with no overall plan, would be likely to lead to wastage of scarce resources with little benefit to patients in general. In using computer aids, as in any other activity in the NHS, it should be remembered that the patients should be the focus of a well-managed patient care system and that they require service from support staff as well as from clinicians.

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¹ Bradshaw-Smith, J H, *British Medical Journal*, 1976, 1, 1395.

SIR,—As previously reported (5 June 1976, p 1395), we have been using a computer for our total record keeping effort since August 1975. As this is funded by the DHSS we feel that we are qualified to comment on your leading article (12 February, p 404).

We have no doubts that the computer-maintained record we are using makes our lives easier, the running of our practice more efficient, and the care that the patient receives more skilful and accurate. We consider that our success is due to the record being designed as a joint enterprise between the doctors and the systems analysts.

J F SIDEBOTHAM
G WARD
J H BRADSHAW-SMITH
J G PEGG
JOHN T ACKROYD

Ottery St Mary, Devon

Cigarette smoking and cancer of bladder and lung

SIR,—Dr S Dische and his colleagues (13 November, p 1174) record eight patients with bladder cancer who later, or in two cases simultaneously, developed carcinoma of lung. They say, "So far we have not seen a patient treated for carcinoma of the lung subsequently developing carcinoma of the bladder," but add, "As a longer latent interval with regard to cigarette smoking has been suggested for

bladder cancer than for lung cancer such cases might be expected." I have two such patients whose abbreviated case histories are here reported.

A man born in 1902 smoked 85 g (3 oz) of tobacco per week, making his own cigarettes. He had a right pneumonectomy for squamous cell carcinoma in 1957. He remained fairly well and at work until 1966, when he was found to have a hiatus hernia. This was repaired surgically. In 1971 he developed haematuria which was shown to be due to a well-differentiated transitional cell carcinoma of bladder. This was treated with a radical course of radiotherapy, 6000 rads in 42 days, with an excellent result. He is still alive.

A man born in 1895 smoked 20 cigarettes a day from 1917 to 1938 and then a pipe. A right middle and lower lobectomy was done in 1961 for an anaplastic carcinoma of lung. In May 1971 he had haematuria and cystoscopy showed a carcinoma of bladder. A satisfactory biopsy specimen was not obtained. It was treated by cystodiathermy. In November 1973 new opacities developed in the right lung, the largest being 3.5 x 6 cm. These were considered to be metastases from the bladder carcinoma. They increased in size and he died in May 1975.

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Staffing in hospital laboratories

SIR,—Those of your readers who have not had an opportunity to study the policy statement of the Institute of Medical Laboratory Sciences on future staffing in the medical laboratory service will have gained a totally erroneous impression of the document from the letter you published from consultant pathologists in the Trent Region (12 February, p 441).

The implication of that letter seemed to be that the institute in its policy statement recognised no place for medically qualified staff; the institute's assumption, however, was that it was inappropriate to consider them in the same context as non-medical staff. As the first paragraph of the policy statement pointed out, medical staff were therefore excluded from the subsequent discussion. The statement did include, however, arguments for integrating the "scientific" and "technical" staff of laboratories as the distinction between the two is becoming increasingly artificial on grounds of either function or qualification. Those who work in medical laboratories will know just how trivial is the difference in function and, as the institute's evidence to the Royal Commission on the NHS pointed out, more graduates are now entering the "technician" class than are entering as "scientists." In these circumstances the distinction which the authors of the letter try to make between graduates and technicians does not bear examination.

Your correspondents choose to attack the policy statement as containing "many assumptions and inaccuracies" but fail to quote a single example. In contrast, inaccuracies can be demonstrated in their letter: two in the first sentence. This institute was formerly known as the Institute of Medical Laboratory Technology, not Technicians, and the title and content of our policy statement referred to staffing in the medical laboratory service, not of the service as your correspondents claimed. The institute observed this important distinction by deliberately refraining from comment on the medical staffing of hospital laboratories;

the courtesy of reciprocation would have been appreciated.

There has been no evidence during the months since publication of the policy statement to justify its condemnation as "a divisive document which could sour the currently good relations built up over the years between all grades of laboratory staff"—perhaps because most readers did not misinterpret it. Good relations in the service will not be encouraged by a letter inciting others to inflammatory correspondence. In the interest of the medical laboratory service it would have been better left unwritten.

F J BAKER

President,

J K FAWCETT

Secretary,

Institute of Medical Laboratory Sciences

London W1

Chemotherapy for varicella-zoster infections

SIR,—Dr R P R Dawber (29 January, p 286) makes a number of dogmatic statements which should not go unchallenged. MacCallum and I¹ recommended cytarabine and vidarabine in the treatment of severe zoster in our book five years ago. We did not refer to clinical trials because there had not been any at that stage. The drugs were quite new. In the case reports² that gave rise to your leading article (18 December, p 1466) I actually tried to measure the fate of the virus when it was treated with the antiviral drug and this, as well as recording the clinical course, is probably as much as one can hope to do in rare and life-threatening conditions like purpura fulminans in zoster. It is difficult or impossible to get enough patients with severe herpes simplex and varicella zoster manifestations to make a double-blind controlled trial possible. The best one can hope for often is to monitor the virus shedding. I have given examples of this elsewhere.³ A double-blind controlled trial on the relative merits of cytarabine and idoxuridine in uncomplicated zoster is in progress at the moment.

I agree with Dr Dawber that the reason for treating even uncomplicated segmental zoster is not only to deal with the immediate problem of pain but with postherpetic neuralgia. I do not agree with his statements about the concentration of idoxuridine to be used. MacCallum and I¹ have already pointed out that a 35% solution of idoxuridine in dimethylsulphoxide (DMSO) is more effective than a 20% solution, and that in turn more effective than a 5% solution. I have treated in excess of 2000 patients and less than 5% get severe histamine reaction from the DMSO. In none have there been necrotic skin changes. If bought in bulk idoxuridine is not very expensive and the cost of treating the average patient with zoster by continuous topical application of a 35% solution, which I now use, varies between £15 and £30 depending on the extent of the lesion. The number of admissions for zoster to the infectious disease unit has dropped to about one-twentieth of what it used to be before there was an active treatment available, so the outlay on drugs is paid for many times over by keeping people out of hospital.

Dr P A M Walden and others (*BMJ*, 5 February, p 378) state that I have reported "a good clinical response in two out of three cases with herpes zoster infections."⁴ If the

authors refer to the paper they quote they will see that it describes the use of vidarabine in two cases of severe chickenpox in adults and the use of the drug in that extremely rare condition purpura fulminans in zoster.

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¹ Juel-Jensen, B E, and MacCallum, F O, *Herpes Simplex, Varicella and Zoster*. London, Heinemann, 1972.

² Juel-Jensen, B E, *Journal of Antimicrobial Chemotherapy*, 1976, 2, 261.

³ Juel-Jensen, B E, *Journal of Antimicrobial Chemotherapy*, In press.

⁴ Juel-Jensen, B E, and MacCallum, F O, *British Medical Journal*, 1974, 3, 41.

Royal College of General Practitioners

SIR,—Many founder members of the Royal College of General Practitioners must have been very depressed by Dr I Capstick's Personal View (5 February, p 373). After two years in resident posts I entered general practice early in 1930 because I wanted to deal with "people" and not just to treat "cases" with various anatomical and physiological defects. After some years (seven as secretary of a BMA division) I realised that standards in general practice varied enormously and I was proud to join a professional body that was concerned solely with the standards and quality of work in general practice—a body that was able to contradict Lord Moran's statement that "GPs were the doctors who had fallen off the hospital promotion ladder." Our college has done this.

If general practice is to be recognised as a specialty in its own right our college must behave as the other royal colleges have done. No doctor can become a full consultant now without a higher qualification (FRCS, MRCP, MRCOG). Our college should press the authorities to rule that no doctor can become a full partner or unsupervised singlehanded GP without the MRCGP diploma.

Since retiring at the end of 1968 I have been saddened to see how mercenary the profession has become. The idea of doctors arguing like dockers about hours of work and overtime pay appals me. But if the younger generation want it that way we cannot stop them. They have been taking the DRCOG because it gave them higher fees in the NHS. If the MRCGP will do the same they will take that too. At least we shall know that they have achieved a certain standard of knowledge. But in the years to come I wonder if their old patients will send them Christmas cards and come down to visit them, as some of mine still do.

A S HATCH

Matfield, Kent

SIR,—To judge from his writings in your columns and elsewhere Dr D R Cargill (19 February, p 508) does not always appear to view with detachment the postgraduate scene in relation to general practice. However, he has a point in emphasising the need to seek out the professional and informed views of general practitioners concerning vocational training.

This letter seeks to draw attention to a survey, conducted with support from the Royal College of General Practitioners and the Scottish General Medical Services Committee.