nonsense to use them to measure intravascular pressures. Arterial blood pressure is measured in millimetres of mercury because most manual sphygmomanometers are filled with mercury. In the Grand Round the confusion is compounded because the offending sentence reads: "the patient . . . was . . . hypotensive (90/40 mm Hg) with 15 mm Hg paradox, central venous pressure was 1·86 kPa." Thus two separate units of intravascular pressure are used in the same sentence. As 1 mm Hg = 0·133 kPa, a central venous pressure of 1·865 kPa equates to 13·98496 mm Hg. I therefore suspect that the patient's central venous pressure was measured as 14 mm Hg and converted into kilopascals later. Certainly, I have never seen a central venous pressure manometer calibrated in kilopascals. A further problem lies in the computation of vascular resistance, for which all pressures must be in the same units. There is therefore an overwhelming case for ignoring the SI units where intravascular pressures are concerned.

J ROBERT SNEYD
Consultant anaesthetist

Department of Anaesthesia,
Derriford Hospital,
Plymouth PL6 8DH

1 Tabrizi SJ. Nocardia pericarditis. *BMJ* 1994;309:1495-7. (3 December.)

**The *BMJ* accepts that it was wrong in its use of kilopascals as units of central venous pressure. When pressure is measured as a column of mercury the SI units are mm Hg.—EDITOR

Hepatitis C in asymptomatic blood donors

EDITOR,—In their response to a letter about their paper on hepatitis C in asymptomatic blood donors D J Multimer and E Elias state that "guidelines on counselling and investigating these donors do not exist."[1] They are no doubt referring to clinical guidelines for doctors dealing with these people once they have been referred for further investigation by specialist hepatology units. The National Blood Service has had detailed guidelines for confirming hepatitis C, counselling donors, and referral since screening was initiated in 1991.

E ANGELA ROBINSON
Medical director

National Blood Authority,
Watford,
Hertfordshire WD1 1QH

1 Multimer DJ, Elias E. Hepatitis C in asymptomatic blood donors. *BMJ* 1995;310:260. (28 January.)

Clinical Negligence Scheme for Trusts

Department of Health's view

EDITOR,—I wish to correct a few misconceptions in Paul Fenn and Robert Dingwall's editorial on the new Clinical Negligence Scheme for Trusts.[1]

Firstly, the Department of Health's actuaries have not assumed that all claims for clinical negligence pending against the NHS will result in financial settlements; they have assumed a drop out rate of around 30-40% (but lower for the high value claims, which make up a disproportionate share of the total cost). It is unfortunate that Fenn did not take up an earlier invitation to check the facts before repeating such a misleading assertion. While I welcome informed debate on the likely future costs of clinical negligence in the NHS—the scheme's designers would not claim to know all the answers—it would be better if debate started from a more accurate understanding of the assumptions made.

Secondly, if the scheme does collect more in contributions than are needed in any year the surplus will be refunded to members as soon as the scheme's managers judge prudent—if necessary, within the financial year in which it is realised that a surplus arose. I have no wish to see funds tied up that could have been used for patients' care; that is one of the scheme's main motivations.

Thirdly, the current arrangement, under which trusts can take out a "loan" from the department against large clinical negligence losses, may seem (in the short term) like a free lunch for the individual trust; it is not for the NHS as a whole. The funds needed for the loan will have to be top sliced from allocations available to purchasers generally and are therefore lost to patients' care in just the same way as when trusts (or the scheme) make the payments.

Having said this, I agree with Fenn and Dingwall's advice that any trust still undecided about the scheme should carefully consider the fine print; we have nothing to hide. For some trusts, using self insurance for the smaller claims and the loan scheme for the larger claims may be a satisfactory solution. Alternatively, they could join the scheme but choose a relatively high value of the excess, covering the cost of the more frequent (and therefore more predictable) low value claims themselves while using the scheme to even out the incidence of the relatively rare high value claims. I am confident that those trusts that have chosen to join the scheme will find it a valuable way of reducing future financial uncertainties while using the available funds to the maximum extent for patients' care.

GERALD MALONE
Health minister

Department of Health,
London SW1A 2NS

1 Fenn P, Dingwall R. Mutual trust? *BMJ* 1995;310:756. (25 March.)

Authors' reply

EDITOR,—We had no knowledge of what actuarial calculations had been performed before the scheme was launched and did not comment on them. What we referred to was the illustrative projections in the documentation for the induction seminar at which the scheme was presented to the trusts. Figure 4 of this document suggests that ultimately a trust with 300 doctors would have to meet financial liabilities of £2·25 million a year. This is the result of multiplying the assumed number of claims opened each year (45) by the assumed average size of the claim (£50 000). It now seems that the latter figure is supposed to take into account the fact that some claims are not paid. But if it is true that the scheme's actuaries assumed on average a "drop out rate of around 30-40%" then this is inconsistent with the evidence. As we pointed out in our editorial, all of the available evidence points to a settlement rate of around 25-33%, which in turn implies a drop out rate of 65-75%. We are unaware of any published information suggesting that this drop out rate varies with the size of the claim. If the scheme assumes a drop out rate of 30-40% it will incorporate subscriptions that are twice as high as needed. The fact that the resulting surplus will be returned to member trusts as soon as possible does not, to our mind's, justify the error.

Secondly, we did not imply in any way that the loan arrangements at present were a "free lunch." We did imply that they at least ensured a direct equivalence between the provisions made by trusts and the cost of claims settled and therefore that there was less likelihood that funds would be unnecessarily diverted from current patient care.

We are not trying to minimise in any way the severity of the problem of clinical negligence for trusts or the importance of an effective system for dealing with pooling risk and risk management. The points we made are based on information we have made public over many years and reflect our view that this is an area in which good data are in short supply. We are heartened that the minister agrees with us that a fully informed decision is a good decision.

PAUL FENN
Norwich Union professor of insurance studies
School of Management and Finance,
University of Nottingham,
Nottingham NG7 2RD

ROBERT DINGWALL
Professor of social studies
School of Social Studies,
University of Nottingham

Ocular injuries due to alkaline substances

EDITOR,—Within the past few weeks several people with severe ocular chemical injuries have presented to the accident and emergency department at Birmingham and Midland Eye Hospital. The wounds have been due to deliberate splashing of alkaline substances into the victims' eyes. Robbery and violent assault seem to have been the motives in most cases.

In these injuries massive corneal and conjunctival epithelial loss occurs within seconds. Necrosis of corneal epithelial stem cells may ensue, resulting in delayed and cicatricial healing of the ocular surface. Alkali burns to the eye trigger a cascade of proteolytic events, causing varying degrees of destruction depending on the strength of the alkali. Zonal or diffuse opacification of the cornea, cataract, and secondary glaucoma may follow. The eye may ultimately become irreparably damaged, and a blind, painful eye may result in the worst cases.

Severe ocular chemical injuries necessitate prolonged admission to hospital and intensive and long term treatment, requiring multiple outpatient visits. Recovery and rehabilitation may take many months. As a result of loss of vision in one or both eyes the patients may lose their ability to drive, lose their job, or become dependent.

The consequences of an action that takes seconds to execute have devasting implications for the victim. The assailants, many of whom are children and young adults, may be unaware of the effects of alkali on the eyes. Indeed, many health workers may be unaware of the full importance of these injuries. Members of the public are less likely to be aware of the severe ocular toxicity of alkaline substances. We need to increase general awareness of the danger of using these substances during an assault.

A M O'DRISCOLL
Senior house officer

P SHAH
Registrar

R K AGGARWAL
Senior registrar

P B CHELL
Senior registrar

M W HOPE-ROSS
Consultant

P J McDONNELL
Consultant

Birmingham and Midland Eye Hospital,
Birmingham B3 2NS

Correction

Diagnosing pulmonary embolism

An editorial error occurred in the final sentence of this letter by J Richard Harding (18 February, p 467). The sentence should have read: "In institutions where lower limb venography remains the usual investigation for deep vein thrombosis, use of liquid crystal thermography has the added advantage that the risks due to ionising radiation or allergy to contrast medium are avoided in 36% of patients."