

excluded from this analysis because sterile gloves were used. In the remaining 126 procedures there were four complications of which three (2.4%) were a SSI. None of these patients had diabetes or used anticoagulant or antiplatelet medication. In the group in whom no sutures were used there were no complications.

Cultures on blood agar plates were taken of clean examination gloves after opening a new box and 1 week later. They showed no bacterial growth. It might be concluded that bacterial contamination of the gloves occurs after they are put on. This corresponds with earlier findings.<sup>3</sup>

Randomised controlled trial's on this subject are scarce because of ethical constraints.<sup>4</sup> One study showed that the risk for wound infection in dermatological surgery after using clean gloves is not significantly greater than after using sterile gloves; that is, 1.7% versus 1.6%.<sup>5</sup> This corresponds with our results showing that the use of clean gloves has a low incidence of SSI.

Despite the retrospective nature of our study, our results question the recommended routine use of sterile gloves for minor surgery in general practice but further research is needed. Based on earlier reports and the results of our study, the ethical considerations preventing a randomised controlled trial might be overcome.

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## Centralised pathology services

GPs frequently find high serum potassium results unexpected, difficult to explain and therefore hard to interpret. The need for serum potassium to be urgently repeated causes anxiety and frustration to both patient and GP. Usually no explanation for the spuriously high serum potassium concentration (pseudohyperkalaemia) is found, but our informal local survey suggested around 50% of GPs thought a laboratory error was the cause.

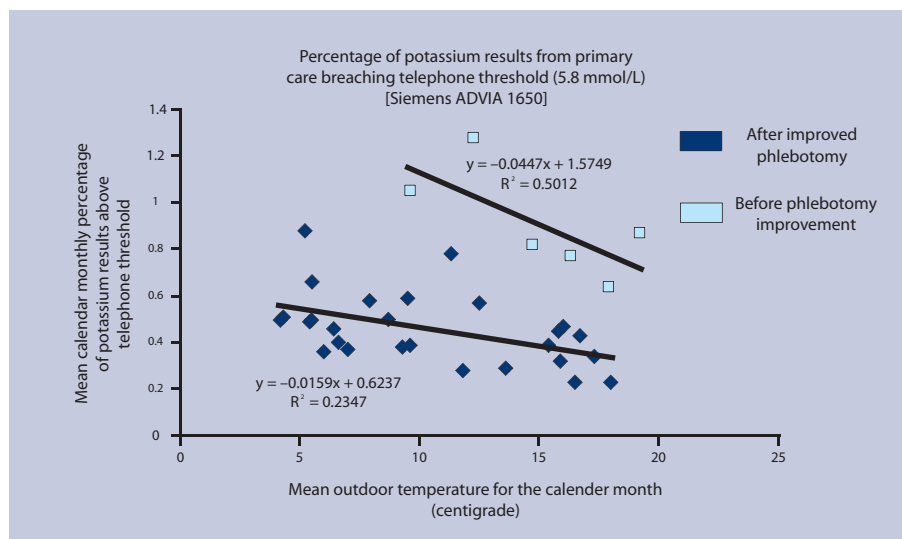
Our study<sup>1</sup> showed that pseudohyperkalaemia is almost invariably associated with factors affecting the pre-

analytical stage. This includes the phlebotomy and transport temperature of blood samples to the laboratory. We carried out an audit of all GP requested potassium results over a 4-year period (224 000 samples). We confirmed the findings of other workers<sup>2</sup> that there is an inverse relationship between mean serum potassium concentration for the primary care population and outdoor ambient temperature. The proportion of results above the normal range (5.2 mmol/L or higher) varied between 6% in hot weather to 17% in the coolest. This is partly due to passive movement of potassium from the intracellular to extracellular fluid as the energy dependant sodium/potassium pump activity declines as temperature falls. We reduced this frequency to between 4.5% and 9% (depending on external ambient temperature) by ensuring that phlebotomists did not facilitate venesection by asking patients to hand grip/fist clench. Potassium is released from myocytes into extracellular fluid during muscle contraction.

The majority of our ambulant GP patients attend hospital clinics for phlebotomy, all within 5 miles of the laboratory. Inter-site transport ensures that most samples arrive within 1 hour. However, proposed centralisation of pathology services (with laboratory closures) will increase sample transport

#### Centralised pathology services:

Figure 1. Effect of temperature and phlebotomy on the incidence of hyperkalaemia.



time and distance, exacerbating the low temperature effect (unless heated transit vehicles are used). Provision of the phlebotomy service and appropriate sample transport may become an additional responsibility for those GPs who presently have these services provided by the hospital. Figure 1 shows the effect of outdoor ambient temperature and improving phlebotomy technique on the percentage of samples giving significant hyperkalaemia (5.8 mmol/L or higher).

Changes to pathology services may be introduced insidiously and GPs need to be aware of proposals that will affect their practice. Automated sample analysis can be performed in bulk on large analysers, but phlebotomy and pre-analytical handling require skill and knowledge. If this is overlooked in planned changes, news of pathology modernisation may be heralded by an epidemic of pseudohyperkalaemia. Periodic assessments of the incidence of hyperkalaemia in GPs' own practices can yield powerful information. If the incidence of moderate hyperkalaemia (5.8 mmol/L or higher) rises above 0.7% or >9% are above reference range, transport and phlebotomy arrangements should be reviewed.

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## Connecting for Health

In an editorial in your March issue,<sup>1</sup> senior officials from the Department of Health claimed of the Summary Care Record (SCR) that 'It is a health record and there will be no access for police, immigration authorities, or others.'

This credulous view was undermined when *Computer Weekly* noted that the health minister Ben Bradshaw had already told parliament last year that the police have access given a court order, or where there is statutory authority, or where there is an overriding public interest.<sup>2</sup> As I had pointed out in my February editorial to which the Department was responding,<sup>3</sup> the police have always been able to get a court order to seize material that is actual evidence of a crime. For the Department to affect ignorance of this was perplexing.

In practice, medical confidentiality depends on who controls access as much as on the letter of the law. For example, one of the family planning charities was asked by the police to supply the names of all their under-16 patients; they refused, and the police sensibly did not press the matter.<sup>4</sup> Had they gone to court, there could have been an interesting test of whether UK law on medical privacy complies with the European Convention on Human Rights (a 2006 study for the Information Commissioner concluded that it doesn't).<sup>5</sup> However, in future the police will have a less troublesome option: they will be able to ask BT, the custodian of the secondary uses service (SUS). A BT manager may well be less combative than a practising gynaecologist who sees her patient relationships, professional integrity, self-esteem, and business viability all directly under threat from a police fishing trip.

Michael Thick and his colleagues also had a letter in your March issue that made an intemperate personal attack on me for encouraging patients to opt out of the SCR,<sup>6</sup> while their editorial boasted of

the fact that patients can opt out of the SCR. This bluster — that we can opt out of the SCR if we want to, though it's irresponsible to suggest that anyone actually do so — was echoed in parliament. When Mr Bradshaw was asked whether patients would be able to opt out of the care records service, he answered it by referring solely to the SCR.<sup>7</sup> Ministers and officials have been careful to focus on the safeguards for SCR, and avoid discussing SUS. Yet the new centralised system has at least three components holding large amounts of identifiable health information — SUS, the SCR, and the Detailed Care Record (DCR). The first two are already beyond clinical control, and the third is heading that way as more and more records from both primary and secondary care migrate from local to hosted systems. As I noted in February, many government departments have declared intentions to use identifiable health data, such as the Home Office's ONSET database that tries to predict which children will offend. And, despite the Department's comments, GP data have already been used to hunt illegal migrants.

I repeat my call for GPs to make leaflets from The Big Opt Out<sup>8</sup> available in waiting rooms. This will reassure patients that they will not suffer discrimination (in the practice at least) if they exercise their advertised right to opt out. Finally, I would like to invite all GP partners to think very carefully about whether it's wise to accept the Department's kind offer to move your practice records to a hosted system. Once you lose control, you will have a hard time getting it back.

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