sector those who can afford it and reduced the expectations of those who cannot. General practitioners will continue to be advocates on behalf of their patients, but they will also be expected to shop around for more distant hospitals with shorter waiting times so that the expectations of the poor can be raised to those of the better off.

General practice is faced with an increasing role in screening not only for specific diseases but also in the contractually required examinations of the "unseen healthy"—yet it must continue to carry the burden of providing traditional medical services but in a more demanding and custom orientated market: something must happen. Will it cope with the change by increasing its efficiency and its numbers or will its standards start to fall as the workload increases? The relative priorities of screening programmes and therapeutic services are always difficult to balance but are also made so when doctors and their political managers are ignorant of, or simply ignore, each other's objectives. The resolution of ignorance is through better understanding. The key to better understanding is good quality information, reliably and simply presented.

We have now entered an era where it is not difficult to gather information and analyse it at a standard that is universally accepted and believed. Dealing with these new data will require an openness not only of clinical decision making (in which the cost implications of those decisions are a crucial factor) but also from the government. If some services are not to be provided within the NHS then the politicians must be honest enough to say so and declare their reasons, even if they are simply those of cost.

How far are we away from the goal of "information accuracy" that will allow the reasonable on both sides of the negotiating table to prevail over the intransigence of the dogmatists? At a guess—10 years.

But the foundations are being put in place. The gross inaccuracies of family practitioner committee registers will

soon be challenged by those general practitioners with practice based information that is more up to date—and with the added imperative that their income will depend on successful challenges. The NHS number is to become the "unique patient identifier," and the computerisation of the NHS Central Register and all family practitioner committee records should eliminate many of the inaccuracies. Each general practitioner will be uniquely identified through his Prescription Pricing Authority number (which is stamped on the bottom of the prescription pad). Each district health authority will also have a unique number, and ultimately each contract that a district health authority agrees to place with a hospital provider will be tagged, costed, and related to an episode of health care.

It may be that the intention of the government is to put a downward pressure on indicative budgets through better "PACT" (prescribing analysis and cost) information and that its idea of general practitioner budget holders is one of cost containment, but I believe that on the other side of the information equation there will be new opportunities to show gaps in health care provision and to identify the resource deficiencies that are often responsible for those gaps.

The screening revolution that has been impelled by the government's white papers and underpinned by its commitment to better information systems may ultimately become its bête noir. The better the quality of the information the less easy it will be for politicians to get away with failing to provide adequate resources. Unsubstantiated arguments about "the wasteful inefficiency of health authorities" or "the idleness of general practitioners" will not be possible in a brave new world—where all information about the NHS is accurate, believable, timely, and uncensored.

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Venous ulcers

General practitioners should organise the care of these

Long after we have found a way of preventing deep vein thrombosis, probably the most common cause of ulceration of the legs, venous ulcers will still be giving rise to much disability, especially in the elderly. This is not because the actual ulceration is untreatable but because even when it is healed the underlying condition—a failure of the venous drainage with consequent serious pathological changes in the skin and underlying tissues—remains. As this defect in venous drainage cannot be reversed continuing episodes of ulceration are inevitable.

Because the clinical picture starts to emerge long before any actual ulceration appears general practitioners are best placed to manage the care of patients with impaired venous drainage. They should recognise the condition in the earliest stages, when oedema, lipodermatosclerosis, and staining indicate serious deficiencies in the venous system.² At this stage the treatment needed is mobilisation—that is, the reinforcement of the calf muscle pump by active ankle movement—combined with adequate elastic support; at the very least this regimen should slow the development of damaging skin changes.

When the stage of ulceration is reached the primary

treatment is some form of compression bandaging. Because it is the failure of the venous drainage that has caused the changes leading to skin breakdown this failure has to be dealt with. It is not sufficient to apply dressings, which provide only an environment that does not damage the ulcer surface, without an associated compression bandage to control the venous failure.

To advise that the patient should rest in bed with the legs raised may be tempting for the doctor—but rest has to be prolonged to have any real effect and this is rarely possible outside hospital. Experience shows that ulcers in more mobile patients heal more quickly. Once the ulcers have healed physical activity remains just as important, supplemented by suitable elastic stockings worn indefinitely during the day. Attention should also be paid to psychological factors. Some patients use their condition to manipulate relatives and neighbours—and even nursing staff—in the classic attention seeking manner, but others all too easily sink into an apathetic, hopeless state. Nevertheless, most venous ulcers can and should be treated within the community. The techniques of care are not difficult, and most district nurses are now trained in their use.

Referral to hospital is always a difficult decision. In the stages before ulceration varicosities or prominent incompetent perforator veins should be treated surgically. They never regress by themselves. Once ulceration has occurred, however, admission to hospital should be reserved for the patients with intractable lesions. Of course, every venous ulcer will heal if the patient is kept long enough in bed with the leg raised, but admission to hospital, especially in the elderly, may have serious side effects—and all too often ulcers heal in hospital only to recur after discharge. Admission should, however, at least be considered if the ulcer is not responding to adequate compression or is accompanied by severe pain (when an arterial element must always be suspected). And surgical advice should be sought for varicosities or incompetent perforator veins in patients with healed ulcers—just as in those with early symptoms.

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Foodborne infections and intoxications

Prevention requires education and training of staff and monitoring of production and processing

Our species evolved and flourished on diets that were never germ free and sometimes made us ill. In the past two centuries factors such as population growth, crowding into cities with imperfect sanitation and hygiene, the increasing need to provide foods for large aggregates of people, and, in recent years, a great expansion in eating out all necessitated new and latterly intensive methods of producing, processing, and marketing foods. When things go wrong these provide potential for outbreaks of foodborne disease on a bigger scale than possible previously—except, perhaps, for outbreaks of ergotism. Britain has seen an explosion of new catering procedures, of convenience foods, and of new "ethnic" restaurants serving foods that were previously unknown. Economic pressures have led to increasingly intensive production of food animals and recycling of their residues procedures equivalent to "serial blind passage" in microbiology to unmask latent infections. The consequences have included nationwide outbreaks and recent alarms over salmonellosis, listeriosis, and bovine spongiform encephalomyelitis. Though bovine spongiform encephalomyelitis may not prove transmissible to man, agricultural economists are calculating the economic losses from the epidemic and weighing them against the economic gains forecast from the recycling of animal wastes.

Recent official figures have suggested a substantial and sustained increase in salmonellosis, campylobacter, and other foodborne infections. The data must be interpreted with caution: to some extent they reflect improving epidemiological surveillance and better detection of infections, some unknown or unrecognisable until recently. The high position of Scotland in the food poisoning league, with a virtually static incidence of salmonellosis of about 50 per 100 000 throughout the 1980s, reflects good surveillance² and contrasts with the continuing increase in reports from many other European countries. Thus figures for England and Wales have now risen to reach the same incidence as Scotland,34 though it is difficult to believe that trends have really been so different north and south of the border. At all events the unacceptably high incidence of these diseases has raised public and professional concern and brought the new Food Safety Bill before

The bill attempts to safeguard food (and drink) throughout the chain from farm to shop by extending legislative controls.

It empowers ministers to make regulations and adapt food law to present and future needs and meet European Community obligations, and it tidies up various statutes into one statute for the United Kingdom. If powers are used and resources suffice (£30 million a year promised from 1991-2) this should achieve the objectives that are achievable by legislation. Trained staff will be needed to educate food handlers and local government inspectorates-despite current shortages of environmental health officers. Omissions from the bill include measures to require good practice in the initial stages of food production—that is, in agronomy to minimise the chance of infections entering the food chain. Emergence of listeria, campylobacter, cryptosporidia, verotoxic Escherichia coli O 157, and other previously unknown or underrecognised problems and the constantly evolving salmonellae require continued monitoring and multidisciplinary research by experts such as those of the Public Health Laboratory Service Food Hygiene Laboratory, Colindale, and the Bristol laboratory of the Institute of Food Research—which is threatened with closure.

Human error and ignorance will inevitably act as limiting factors and ensure the continuance of problems. These usually arise from failure to observe proper standards in preparation, processing, cooking, storing, or retailing food. Elimination of infection from raw food requires correct processing techniques at the industrial, retail, and domestic stages; proper storage; and the prevention of cross contamination. This will require great improvement in education and awareness by personnel and recognition of responsibilities for food hygiene by staff at all levels. Too often the final food handlers have low status, pay, and motivation: there is a rapid turnover of workers, and there are recruitment problems—as described recently by Pollock and Whitty.5

Precise recommendations for tackling these problems have been published in an important technical report by the World Health Organisation.⁶ This included examples for food managers, whose training needs to be given priority; essential information and outline curricula for staff handling food; and the World Health Organisation's "golden rules for safe food preparation," which are applicable to domestic as well as earlier stages in the food chain. The report emphasises the value of hazard analysis and identification of critical control points in the system at which pathogens are likely to enter or