Tighter medical controls proposed for boxing

New measures designed to make boxing safer in Britain were announced last week as fresh controversy arose over the future of the sport. The announcement from the British Board of Boxing Control came only a week after the death of Mr James Murray, a boxer who died after receiving repeated blows to the head during a professional match in Glasgow.

The board has been advised by a working party of neurosurgeons and neurologists that was convened after the death of another boxer, Mr Bradley Stone, 18 months ago. Its recommendations include plans for tighter medical checks and longer periods of compulsory rest after knockout bouts.

The board wants to reduce the number of boxers who box while dehydrated, having struggled to make the weight in the steam room. Dehydration is thought to increase the risks of serious brain injury as well as reducing the fighter's general physical condition. The weigh in, which currently takes place one to two days before the fight, will be brought forward by another day to achieve this.

Medical supervision at the ringside will be improved further, and the doctor responsible for the bout will have the right to raise any concerns between rounds, though the final responsibility for stopping the fight will continue to rest with the referee. Both boxers will be examined immediately after the fight, and admission to hospital will be compulsory after a knockout blow.

All professional boxers undergo computed tomography of the head once a year. This will be abandoned, and magnetic resonance imaging will take its place. The first scan for aspiring professionals will include angiography, which will exclude those with undiagnosed cranial aneurysms, arteriovenous malformations, arachnoid cysts, and brain tumours.

Magnetic resonance imaging is much more sensitive than computed tomography at detecting chronic changes to the white matter and cerebral atrophy, though the board has yet to set standards on the degree of brain damage necessary for a boxer's professional licence to be revoked.

The board has also increased the compulsory rest period for a fighter who has been knocked out from 28 to 45 days, and sparing will be banned for the first 28 days of this period. The expert working group stopped short of recommending shorter matches. Mr Peter Richards, the consultant

Would the new rules have saved James Murray?

neurosurgeon who chaired the working party, said, "We feel it would be wise to reduce the number of rounds, but this would have to be world wide."

The House of Lords also discussed boxing last week, but the government rejected a proposal by Lord Taylor of Gryfe to appoint a royal commission to report on the matter. Lord Taylor asked how many cases of brain damage and death there would have to be before the government considered an independent inquiry.

Other peers spoke of boxing encouraging a violent society and suggested a parliamentary select committee as an alternative to a royal commission.

For the government, Lord Inglewood said that it had no plans for an inquiry. It believed that safety was paramount in boxing, which was the least risky of sports as analysed by the Sports Council. Lord Donoughue, for Labour, said that any attempt to ban a sport that was entered into voluntarily and willingly by the participants needed careful thought.—DOUGLAS CARNALL, *BMJ*, and, JOHN WARDEN, parliamentary correspondent, *BMJ*

Dutch doctor given suspended sentence over euthanasia case

A Dutch hospital neurologist has been given a three month suspended prison sentence after he left instructions to give an increasingly large dose of morphine to a terminally ill 63 year old man in a coma. He then left for the weekend. Nursing staff were left in "great uncertainty," and the patient died the next day. The Hague district court rejected a defence under the euthanasia laws and found the doctor, referred to as RG, guilty of the "premeditated ending" of his patient's life. The sentence is one of the most severe imposed on a doctor in a case of euthanasia and is being viewed as a signal to the profession. The inspectorate of public health has not yet decided whether to refer the case to a medical disciplinary board.

The court heard that RG had acted with the best intentions and in the interests of his patient. But he had not followed the guidelines of the Royal Dutch Medical Associa-

Headlines

WHO establishes rapid response unit: The World Health Organisation has set up a rapid response unit to control and prevent the growing incidence of new and re-emerging diseases. It hopes to improve containment of outbreaks such as the Ebola virus in Zaire earlier this year.

UK man receives new electric heart: A 64 year old Englishman is the world's first recipient of a battery powered left ventricle assist device. The new kind of electric heart was inserted at the John Radcliffe Hospital, Oxford, with support from the Texas Heart Institute, which helped to create the device.

Special screening offered for HIV surgeon's patients: A special department has been opened at a Paris hospital to screen patients treated by an orthopaedic surgeon, Patrick Cohen, who was accidentally contaminated with HIV while he was operating 11 years ago. The surgeon is suing for compensation.

UK women win compensation from asbestos firm: Two women have become the first to win compensation for the effects of asbestos. They had spent their childhood more than 50 years ago living under the shadow of the T&N subsidiary J W Roberts. Mrs June Hancock was awarded £65 000 and Mrs Evelyn Margerison was awarded £50 000 for the death of her husband.

Australians warn visitors of dangers of sun: Visitors to Australia are to be warned about the risk of skin cancer from too much sun. Brochures distributed at airports and hotels will advocate a midday siesta, sun cream, hats, and tightly woven clothing.

UK outlaws HIV discrimination: Discrimination against people infected with HIV is to be made illegal, the government has said, as part of its measures to advance the rights of disabled people. An amendment to the Disability Discrimination Bill makes clear that people at a "progressive stage" of the illness would receive the same protection as disabled people.

Judge strikes down teenage abortion law: A federal judge in New Orleans struck down a new state law that would have given judges greater discretion on whether girls under 18 should be allowed to have an abortion. The law would also have given discretion as to whether the girls' parents should be notified.

tion or been aware of his own hospital's protocol for euthanasia. The president of the court, Mr Leendert Verheij, said that a doctor must act not only with the best intentions but also according to professional standards. The court rejected the normal defence for doctors in cases of euthanasia because key requirements, such as the need for a longstanding and informed request by the patient, were absent.

In June 1993 RG was treating the patient at the 't Lange Land hospital in Zoetermeer near the Hague. The patient had had a severe brain haemorrhage and was not expected to live more than a few weeks. There was no written will requesting euthanasia, and the patient's wife asked merely that his life should not be unnecessarily prolonged. But the family then requested euthanasia and asked if the doctor could give "an injection." The doctor refused but later decided on a "less crude" form of action. Instead of being given food and medicine the patient was given an infusion of 10 mg of morphine an hour, to be doubled every four hours.

RG knew that it was likely to lead to the patient's death and that he was leaving the hospital that evening and would be unavailable. Nursing staff were left instructions to give the increasing doses of morphine. The patient died the next day.

The court said there that was a lack of care over how the decision was made and carried out. It said it was "difficult to discover the conscientiousness" in the doctor's actions. But it also noted that the patient was terminally ill and that the family was satisfied with the treatment.

The medical secretary of the Royal Dutch Medical Association, Dr Robert Dillmann, said that this was one of the most severe sentences in recent years and should be taken seriously by the profession. If there

was a signal to the profession it was to point out the association's guidelines. "It is clear there should be a well considered request from the patient, colleagues must be consulted beforehand, and the physician should be present when the euthanasia takes place."

A neurologist colleague of RG, referred to as S, who was on duty over the weekend was given a one month suspended prison sentence for falsely describing the cause of death as natural. Both prison sentences were suspended on condition of good behaviour for two years. A general practitioner who was found guilty of incorrectly completing the death certificate was not punished.—TONY SHELDON, freelance medical journalist, Utrecht

New York attacks raccoon rabies from the air

The largest vaccination programme against raccoon rabies in the United States started this month. Cornell University's College of Veterinary Medicine is cooperating with New York State in arranging an air drop of baits containing vaccinia-rabies glycoprotein around the St Lawrence River and Niagara County near the US-Canadian border.

The oral vaccine was recently approved by the US Department of Agriculture. The baits, flavoured to attract raccoons and containing tetracycline and iophenic acid to enable tracer studies to be done, are being dropped by specially equipped aircraft from the Ontario Ministry of Natural Resources. Although rabies is not a problem in Ontario, Canadian authorities are worried that diseased raccoons could cross the border on ice, over bridges, or even in the backs of trucks.

Raccoons will be fed flavoured bait from the sky

S.MASLOWSKI/FLPA

Dr Laura S Bigler, the wildlife biologist who is directing the distribution of the vaccine from the veterinary diagnostic laboratory at Cornell University, said, "We're asking the public's cooperation in this very important experiment to determine whether raccoon rabies can be kept from spreading through northern New York and into Canada." After the vaccine has been distributed wildlife biologists from the university will test raccoons that are killed on roads as well as those that die for other reasons. Tests will show whether the animals have rabies and whether they have eaten the vaccine.

"These wildlife rabies vaccination programmes are expensive. There's no question about that," said Dr Donald H Lein, director of the veterinary diagnostic laboratory at Cornell University. "But they are an investment that can pay off many times in cost avoidance," he said, noting that dealing with fox rabies costs the Ontario government and public an estimated \$24m (£16m) a year.—FRED CHARATAN, freelance journalist, Florida

Health chiefs review London's helicopter ambulance service

A study of London's helicopter ambulance service has concluded that two protocols exist for deciding when to bring in the helicopter and that they are not mutually consistent. The report, conducted on behalf of the chief executives of London's 16 health authorities, recommends that a new protocol be finalised and adopted "without delay."

The report was called for by government ministers earlier this year after the death of Lady Margaret Elton. Lady Elton died as a result of an accident in Chelsea, south west London, and the coroner expressed concern that a ground ambulance had been at the scene for 40 minutes before the air ambulance was able to take the patient. The air ambulance then took Lady Elton to the Royal London Hospital in east London despite the existence of an accident and emergency department at the nearby Chelsea and Westminster Hospital. The report emphasises that protocols were exactly followed in the case of Lady Elton.

Overall, the report expresses concern that use of the helicopter may not always have been essential, saying: "It is impossible to say that commissioners of the service can have confidence that [the Helicopter Emergency Medical Service] will be brought in only when it would be more appropriate than a ground based ambulance."

On the subject of comparative clinical quality, the report observes that "no convincing evidence was found either that patients attended by [the Helicopter Emergency Medical Service] had better clinical outcomes than those attended only by ground ambulance crews, or to support the advantages claimed for [Helicopter Emergency Medical Service] doctors over ground based paramedics."

Is your trip necessary?

JOHN ROGERS/REX FEATURES

This conclusion follows a recent *BMJ* paper (22 July, pp 217-22) on the effects of the London helicopter service on survival of patients with trauma. The authors concluded that any benefit in survival was restricted to patients with very severe injuries. When the entire helicopter caseload was considered there was no evidence that the helicopter service improved the chance of survival of patients with trauma.

The helicopter service currently costs a total of £3.9m a year, of which just under £1m is funded directly by the Department of Health. London health authorities meet the balance; from next April they will become responsible for funding the entire service.

The report concludes that funding for the helicopter for the financial year 1996-7 should be confirmed but says that "notice should be given to the London Ambulance Service and the Royal London that there is a strong possibility that this will not continue for 1997/98 and future years."

The London helicopter service began in 1989 and was the first of its kind in Britain. It carried out 1200 missions last year, of which 70% led to patients being transported to hospital, roughly half by air. The service handles about three emergency calls a day.

The report suggests that neighbouring ambulance authorities in Surrey, Kent, Essex, and Hertfordshire might be approached to use the helicopter for major trauma. It also recommends that a standing forum be set up between London accident and emergency consultants and the London Ambulance Service.

The chief executive of Kensington and Chelsea and Westminster Health Authority, Mr John James, spoke of the expense of the present helicopter service and its draw-

backs—it cannot fly at night, has less flying time in winter, and has to land more than 200m from the scene of the accident in about a fifth of cases.

Mr James said that a standing forum would be "the first important step in clarifying current misconceptions and concerns and enabling us all to move forward in shaping an emergency/trauma service which meets the needs of all Londoners in the future."—CLAUDIA COURT, *BMJ*

Helicopter Emergency Medical Service: Report from Inner London Chief Executives is available from Keith Ford, director of contracts, Kensington and Chelsea and Westminster Health Authority, 50 Eastbourne Terrace, London W2 6LX.

Patients given LSD may be able to claim compensation

Solicitors acting for dozens of British people who were given lysergide (LSD) in psychiatric hospitals in the late 1950s and early 1960s have won legal aid to investigate a possible claim for compensation. The law firm Alexander Harris, in Sale, Cheshire, has 56 clients who were given the hallucinogenic drug. Mr Edward Myers, a partner, took on the cases after being approached by Mr Ken Purchase, Labour MP for Wolverhampton North East, who has compiled a dossier of nearly 80 such cases. "The more I looked into this, the more I was concerned about what had happened to people," Mr Purchase said.

Psychiatrists gave LSD to an estimated 4500 patients in Britain in the 1950s and 1960s, mainly those with symptoms of depression. The firm says that many were admitted to hospital "with very minor ailments, only to be given large doses of LSD without any warning, explanation, or monitoring." All 56 of Alexander Harris's clients developed chronic symptoms which they blame on the administration of LSD. These include hallucinations, flashbacks, acute paranoia, and chronic anxiety syndrome. He has asked a consultant psychiatrist to research the background to the medical use of LSD.

Mr Myers, who is president of a mental health review tribunal, said: "I have been overcome by the response from individuals who have suffered privately and silently for 40 years. There is a chilling similarity to their descriptions of both the administering of the drug and terrible suffering that they have endured. We are busy investigating the state of knowledge of the medical profession at the time, especially as it related to the use and side effects of LSD. If we are able to show that the practice was negligent we will be in a position to pursue each and every case for compensation."

LSD, first used therapeutically in the early 1950s for people in the United States who were alcohol dependent, was thought by some psychiatrists to help patients regress to a childlike state, allowing access to their "inner being" for treatment purposes. Psychiatrists now recognise that the drug can tip those who are already predisposed that way into schizophrenia.

The use of LSD by psychiatrists in Britain was pioneered at Powick Hospital in Malvern, Worcestershire, where some 700 people are thought to have received it. The hospital, since demolished, had a purpose built LSD unit. Clifton Hospital in York was also a leading centre, but the drug was used by more than 70 doctors nation wide.

If the case goes ahead claims will be launched against health authorities. Many of the psychiatrists who administered the drug are now dead. The claimants' main hurdle may be to prove that the LSD and not the illnesses for which they received hospital treatment caused their later problems. They will also have to show that doctors were negligent in the way that they used the drug. There were no hospital ethical committees at the time to vet experimental treatment and no requirement for patients to give informed consent.

One specialist in psychopharmacology who has reviewed the research papers on LSD said these showed that people who took the drug could have flashbacks and other side effects years later, but the effects 30 years on were unknown.

Malcolm Lader, professor of clinical psychopharmacology at the University of London's Institute of Psychiatry, said: "Reviews of the literature would suggest a proportion of people do get continuing problems of this type—flashbacks, bouts of depression." He said that several side effects would have been documented by the late 1950s.

LSD was used on psychiatric patients in a Canadian hospital in the 1950s and 1960s in an experiment in mind control funded by the

US Central Intelligence Agency. British soldiers used as guinea pigs in the 1960s for LSD, mustard gas, and nerve gas at the army's chemical weapons laboratories at Porton Down were granted legal aid last year to pursue compensation claims.—CLARE DYER, legal correspondent, *BMJ*

Mandatory rural practice proposed in India

India's health advisory body has proposed mandatory rural service for medical graduates and wants a greater role for traditional medicine. The proposals from the Central Council of Health and Family Welfare are intended to boost the delivery of health care across the country.

The council has also spelt out guidelines for setting up new hospitals to be funded jointly by the government and the private sector.

The council wants the rules governing medical education to be changed so that future medical graduates receive only a provisional degree until they have completed a three year rural tenure. The council has also asked the Indian Medical Council to consider making rural service a prerequisite for entry to postgraduate training.

It is still uncertain whether the medical council will accept these recommendations. "There is a need to increase the number of doctors in rural areas, but we'll have to examine all aspects of these recommendations before [there is] any move to amend rules," said Dr Narasimba Rao, the council's president. Postgraduate medical students

seem confident that the proposals will not be accepted.

Nearly 70% of India's 450 000 doctors are concentrated in urban areas. According to government estimates, nearly 480 000 out of the country's 600 000 hospital beds are in towns.

Health expenditure reflects this urban bias. According to one study, urban health spending accounts for 55% of the health budget. Hundreds of primary health centres, which are intended to serve rural areas, lack staff, diagnostic facilities, and adequate supplies of drugs. "If the government wants to make rural service compulsory it will have to increase its own investments in a major way," said Dr Nalin Nag, a consultant physician in New Delhi. "Who's going to pay the doctors working in villages?"

The proposals to involve practitioners of traditional medicine in national health programmes might help to alleviate the problem. India has some 550 000 doctors practising traditional medical systems, of whom 60% work in rural areas. The health council has asked the government to offer graduates in traditional medicine the same pay scales and conditions of service that are offered to those qualified in modern medicine.

The council has asked state governments to raise investments for research in traditional medicine and to set up drug testing laboratories to produce standards for traditional drugs. "Production standards simply do not exist for many of these traditional drugs," said Rasheeduddin Ahmed, director of the health ministry's Pharmacopoeial Laboratory for Indian Medicine.

The council has also urged the government to establish specialised centres that offer traditional treatments for selected neurological, skin, and rheumatic disorders and liver diseases.

Many doctors in rural areas lack adequate equipment and drugs

REX FEATURES

In a bid to raise investment in hospitals the council has put forward formal guidelines for joint venture hospitals. "The government alone will not be able to cater to the rapidly growing demand for secondary and tertiary care," said Dr Amya Kumar Kundu, secretary of the health council. "The joint venture hospitals will make profits as well as serve the poor." The government will offer free land and subsidised electricity and water to private and corporate organisations keen to set up hospitals. In return the hospitals will be expected to reserve 30% of beds and 40% of outpatient and diagnostic services for poor people, free of charge.—GANAPATI MUDUR, science writer, New Delhi

Prenatal testing leads to row in the Netherlands

A public debate has erupted in the Netherlands over the ethics of prenatal diagnostic testing since it was reported that two abortions were carried out last year after tests showed a hereditary disorder causing blindness.

In an interview for the evangelical broadcasting company a clinical geneticist at the prestigious Amsterdam Academic Medical Centre, Professor Liesbeth Bleeker-Wagemakers, explained that in the past two years 10 parents had had prenatal tests because of the possibility of serious hereditary eye disorders.

Two parents had chosen abortions after positive results of tests for retinitis pigmentosa, a disorder in which adults are likely to become blind in middle age. One woman, from a family in which half her uncles and nephews became blind before they were 40, reportedly chose a termination because she did not want her child to suffer the same fate.

The revelation was immediately criticised by some members of parliament as "horrible," and there has been pressure to redraft the abortion law. But the medical centre has responded angrily, pointing out that it is established medical practice to consider abortion in cases of a serious handicap such as retinitis pigmentosa. Its institute of human genetics, which carries out most Dutch prenatal testing, explained that the first 500 prenatal tests dating back to 1979 included two for serious eye disorders. In the past 10 years these tests have led to four abortions.

Earlier this year the *Nederlands Tijdschrift voor Geneeskunde*, the Dutch journal of medicine, carried an article giving details of a similar case by the professor of clinical genetics at the academic medical centre, Nico Leschot, who chairs the national prenatal diagnostic working party. The working party's position is that all prenatal diagnostic testing should be the result of talks between would be parents on the one hand and gynaecologists and medical geneticists on the other. In all centres of clinical genetics arrangements are in place to consider diffi-

Retinitis pigmentosa: grounds for abortion?

PAUL PARKER/SPL

cult questions.

Professor Leschot accepted that there was a "grey area" regarding testing for hereditary disorders. "The problem must be discussed carefully and privately between doctors and the future parents. If parents ask, who are we to say blindness is not serious? Our attitude is to stress the opinions of the parents." But there was a point at which doctors must say no, he argued. He did not regard treatable diseases, such as the metabolic disorder phenylketonuria which can be detected at birth and treated with a special diet, as suitable for prenatal testing. He rejected the view put forward by politicians and insurance companies that a list should be made of serious hereditary conditions suitable for testing. He said that this would be impossible because gene expression varied so much between generations. It would also have undesirable consequences for individual choice, he argued.

Now leaders of two of the governing political parties are calling for a discussion about the dilemmas of new medical techniques. Health spokesman for the Labour party, Dr Rob Oudkerk, who is also a general practitioner, said: "I don't want to live in a future where people feel they have to apologise for a handicapped child. We have the technology now. Let's start discussing the consequences of what we know. Society must be informed by doctors, academics, and politicians."

The abortion rate in the Netherlands is less than half that in Britain. It is estimated that 15 000 to 18 000 abortions take place each year. Of these, between 300 and 400 are done after tests that show genetic abnormalities such as Down's syndrome.—TONY SHELDON, freelance journalist, Utrecht

Half a million French are infected with hepatitis C virus

At least 500 000 people in France have been infected with hepatitis C virus, according to a report released last week by the minister of health, Dr Elisabeth Hubert. This is the first time that detailed statistics have been made available to evaluate the number of infections, which were previously estimated at 500 000 to two million. The report is the outcome of seven epidemiological surveys carried out over the past two years by teams of experts including virologists and specialists in public health. It was prepared by the national public health network, directed by Professor Jacques Drucker.

The survey found that 1.2% of adults aged 20 to 59 have antibodies to hepatitis C virus and that the virus is present in 80% of people who are seropositive. At least 60% of the infections were transmitted by blood transfusions or by drug misusers using infected needles. The prevalence of infection among health staff is not known but may be as high as 3%.

The surveys included a study among 20 000 pregnant women and another among 6000 volunteers from the rolls of people insured under the social security system. Results agreed with statistics gathered during routine screening of blood donors. Additional studies will be carried out to look at the prevalence of infection among children and young people under 20 and in people over 60. A survey among 6300 people who attended for health checks showed that one

third of those who were seropositive had received a blood transfusion and that one third of those infected were not aware of their seropositivity. It is estimated that 600 new cases will be diagnosed each year and that 3500 to 5000 patients should benefit from treatment with interferon.

The report found that many doctors were reluctant to use this treatment, although studies have shown that the earlier it is started the more effective it is. Two types of genetically engineered interferon alfa are used, one produced by Roche Laboratories and another by Schering-Plough. A year's treatment may cost about Fr20 000 (£2600), but discussions are under way to reduce the price.

Dr Hubert says that she will write to all general practitioners urging them to screen for the virus, paying particular attention to people who have received blood transfusions, patients with liver problems, and drug misusers. Another letter will urge surgeons, dentists, and other health staff using invasive techniques to pay more attention to the risks of infection.

Now that reliable data are available the government is turning to the problem of compensation. This was raised more than two years ago by patients' associations, which asked for compensation for patients with active chronic hepatitis who had received blood transfusions before screening

of donors for the virus became compulsory in March 1990. The associations have suggested that compensation should average about Fr500 000 (£65 000). If it turns out that a third of all infections can be proved to have been caused by blood transfusions compensation may total billions of francs.—ALEXANDER DOROZYNSKI, freelance journalist, Paris

Comparative advertising draft worries GMC

A European directive on comparative advertising is being opposed by the General Medical Council in Britain because of fears that it could open the door to advertising in the medical profession by which doctors might attempt to denigrate each other. When the issue was raised in the Commons last week the government agreed to consider changing the wording of the draft directive.

The purpose of the directive is to harmonise the limits of comparative advertising, which, for example, permits advertisers to compare margarine with butter or the of getting from London to Newcastle by bus

as opposed to train. Some European countries prohibit comparative advertising, but the British government supports the directive as a liberalising measure.

A Conservative MP, Mr Roger Sims, drew attention to the General Medical Council's anxiety that if the directive was incorporated into British law it might inhibit the current professional restraint on doctors from using advertising that seems to disparage other doctors or that makes claims about superior qualifications or skills.

Mr Sims, who is a lay member of the General Medical Council, said that comparative advertising, while acceptable in many spheres, was not appropriate in the provision of medical services. He asked for a government assurance that the proposed directive would not prevent the General Medical Council from continuing to issue its guidance to doctors.

Junior trade minister Jonathan Evans said that the government did not want the directive to produce that result. It would be happy to examine any amendment that would give the comfort that the General Medical Council sought, short of introducing a statutory restriction on comparative advertising in the medical or legal professions. The Department of Trade and Industry is now consulting the Department of Health on the next steps.—JOHN WARDEN, parliamentary correspondent, *BMJ*

Focus: Washington

Republicans subtly reform US medicine

If the devil is in the details then the health legislation wending its way through Congress has Lucifer's autograph on it. The reform bill that

passed the House last week (p 1118) is touted as being a lifesaver for Medicare, the insurance plan for 37 million elderly Americans. What has not been greatly discussed are the deals that were made with various interest groups.

The American Medical Association, which represents about 45% of US doctors, has done especially well. House Speaker Newt Gingrich admitted that he cut a deal with the AMA that protected doctors from draconian fee cuts. What he did not admit so openly were more subtle concessions. For example, in 1988 Congress banned doctors from setting up their own laboratories unless they met standards almost as stringent as those met by hospital laboratories. This action was in response to reports of inaccurate testing, and the result, according to the AMA, is that many doctors now send patients to hospitals and emergency departments for routine studies. The cur-

rent legislation would repeal these regulations. Another ban currently prevents physicians from referring patients to laboratories and radiological centres in which they have invested—for fear of overinvestigation. But again, Republicans say that the health market needs more freedom and that if doctors are deterred from investing in medical technology few will take their place.

The third quiet victory for the AMA is a revision of the rules against fraudulent billing. Doctors are guilty of fraudulent billing simply if they bill wrongly. Under the current bill the government's investigators will have to prove that doctors deliberately tried to deceive.

But perhaps one of the least known items in the bill may prove the most far reaching. At present, virtually all graduate medical education is supported by Medicare, which pays hospitals about \$150 000 per trainee (£90 000) to cover the salaries and extra costs that are assumed to accumulate in teaching hospitals. These payments have been especially critical to city hospitals, where many trainees are graduates of foreign medical schools. The bill approved by the House would halt payments for subspecialist training and penalise hospitals that used foreign medical graduates.

Education experts are divided on the issue. While they admit that many hospitals will have to find other ways of maintaining 24 hour cover and that some hospitals will close altogether, they have also said that the move may help shift graduate medical education away from service and towards real education.

All these changes have been little discussed by analysts, largely because the Republicans learnt from President Clinton's mistakes in his attempt to reform health care. Firstly, the Republicans are quietly altering the medical landscape under the guise of a bill that is meant to affect only elderly people. Secondly, the bill was written almost completely behind closed doors. And, thirdly, the Republican majority has rushed the bill through the House in little over six weeks.

By the end of the month the Senate will vote, and the bill will be sent to President Clinton, who has promised to veto it. But even though the Republicans admit that Clinton will force compromise on the major issues that affect elderly people, the "details" inserted by the lobbyists will probably remain in the version that the President finally signs.—JOHN ROBERTS, North American editor, *BMJ*