Health care international

The editor asked Norman Macrae to spend four weeks studying international health-care statistics, so as to report on whether what is becoming the largest industry in many rich countries is being organised in the most economically efficient way. Here are Macrae's conclusions

Better care at one eighth the cost?

All the western democracies are seesawing between different sorts of health-care crises, which they are trying to meet by slightly modified versions of policies that have caused more expensive difficulties somewhere else. Great unpopularity falls on anybody who points this out. Almost every advanced country's system of medical finance is bringing results that are the opposite of those predicted by its politicians, professed by its doctors, believed by its voters and hoped for by its saints.

In consequence, most governments are facing the problems and securing the achievements that they and their detractors both expected least. After the standard-bearing advocates of socialist versus free-market medical systems have charged each other with levelled lances through the political fog, the British socialist finds he is pig-sticking the poor with a cheap National Health Service that has embarrassingly seen mortality ratios move further in favour of the upper-middle classes, while the American taxpayer finds he is paying between four and six times as much for the health care of his poorest and sickest old fellow-citizen as the British taxpayer does.

Each country now seems likely to spend the 1980s charging back determinedly into adopting some of the other's present worst mistakes.

America's problem is that more than 90% of the $1m that will be spent in American hospitals during the next three minutes will be paid by third parties—mainly private insurance (with three quarters of the premiums borne by your breadwinners' employers), Medicare or Medicaid. American hospital patients thus have every incentive to demand the most lavish treatment which those third parties do not yet know they have paid for, and American doctors like this fine.

An American doctor will generally make about 10 times as much if he undertakes $500-worth of tests which will give 98% certainty of diagnosing your condition, rather than $50-worth of tests which will give 97% certainty. American doctors who charge only for the $50 tests may be bankrupted by a malpractice suit in the one out of a hundred cases where opting for the $500 tests would accidentally have proven right.

The waste or the agony

The supposedly free-market Reagan administration intends to meet this problem with 467 varieties of price controls, which will soon have all of any price controls' ludicrous results. These diagnostic-related groupings (DRGs) will be seeking to move Medicare patients into a cheaper and more controlled system, which will then ration its consequent undersupply of medical care by queueing—and by undertreatment of the inarticulate—instead of by price.

It is by such rationing against the inarticulate that Britain's National Health Service now unfortunately works, and almost every saintly Briton assumes that his NHS is thereby the envy of the world. That assumption turns intelligent inquiring foreigners berserk. One party of visiting American congressmen found a young Englishwoman who had waited eight years after an accident for plastic surgery to remove facial scars that had by then blighted most of her youth. They asked sympathetically for her comments on the NHS. "Oh, it's a wonderful system we have in Britain", she replied, "you know our medical care is all free".

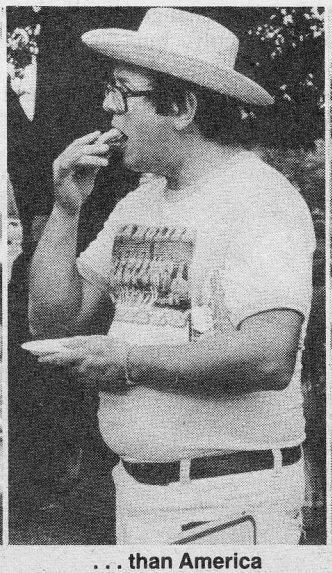
Those congressmen then went home, and some presumably voted for Mr Reagan's DRG price controls which will do the same thing.

Consider Japan

As the Reagan administration and the congress move towards embracing Britain's mistakes, Mrs Thatcher is riding the other way through the fog to embrace America's. During the 1980s Britons will be encouraged to take out more private health insurance, without learning from America's experience that third-party insurance plus fee-for-service sends private health-care costs soaring out of control. There will be a large accession of loss-making business to British provident associations like Bupa which will thus probably start going bust.

The British Labour party is choosing its

Can you see why Japan has better health care



. . . than America

. . . or Britain?

Table 1. Lowest input brings best output

	Est 1984 health expenditure $ per head	Number of doctors per 100,000*	Life expectancy at birth*	Infant mortality per 1,000 live births*	Deaths from heart disease per 100,000*
USA	1,500	192	75	12	435
W. Germany	900	222	73	13	584
France	800	172	76	10	380
Japan	500	**128●**	**77●**	**7●**	**266●**
Britain	**400●**	154	74	12	579

● *Blob shows most economical or most effective performance in that column.* **Latest available years.*

usual weapons against any mistaken Conservative policy, namely boomerangs. Labour says that if people are allowed to jump from NHS queues to get quicker relief from great pain, tax unconcessions must ensure this is available only to the rich, mainly to fit under-65s on cost-unconscious business expenses.

On the continent of Europe, France and West Germany have turned their originally social-democratic health insurance systems into methods of over-enriching doctors through over-large employers' national insurance contributions (ie, through the most unemployment-creating sort of tax). Table 1 above shows that both now spend twice as much per head on health as Britain does, but over-doctored West Germany has slightly the worst record in every measure of health delivery among the big five.

Japan's unplanned medical system is proving the most economic, with the best health delivery per few dollars spent. In table 1 Japan emerges as the second lowest spender (above only Britain) but it successfully has the fewest doctors, the highest life expectancy, the lowest recorded infant mortality and fewest deaths from heart disease; it also has the fewest workdays lost through workers saying they are sick.

Supporters of other countries' medical systems always wax cross with output figures like table 1 (saying, eg, that Japan has a different method of counting live babies), but in every industry the reaction to output figures from Japan has been "at first deny, then copy". Other rich countries will some day suddenly imitate some features of Japan's medical system, including its emphasis on preventive medicine and extensive use of unqualified medical staff. There will be huge political and professional ructions as they do.

Let's be vulgar, and count

In the land of the determinedly blind, the one-eyed man is called figure-crazy and politically unrealistic. This survey will assume it is time to risk that charge, and to discuss how a modern country could get the best health care for all its people per dollar spent.

Consider three countries. The United States will this year spend about $1,500 per head on health care. Britain will spend about $400 per head. Singapore will probably spend under $200 a head.

All three peoples now have almost exactly the same expectation of life, but Singapore's is increasing faster. Despite its crowded housing, Singapore's infant mortality is now slightly the lowest of the three. Britain records the most sick people of the three and takes the longest time to cure them. Britain has 600,000 people in queues for the oldest and least sanitary hospitals. Its socialist medical system is now arguably the least egalitarian of the three.

America's commercial medical system is more wasteful than the other two by a factor of between three and eight.

Britons and Americans have a lot to learn from each other about how their health systems have gone wrong. We will spend the next few pages moving back and forth across the Atlantic, starting in Britain.

NHS, born 1948, died 1949

Britons' supply of health care is now decided once a year by a single politician who is temporarily obsessed with something else, and its distribution depends partly on senior doctors' views about what might be interesting

In 1948, Britain established the first comprehensive National Health Service in any western country, promising unlimited free medical care of the best possible standard to the entire population. In 1949, it replaced this with something completely different.

As costs soared out of control in Nye Bevan's first year, Stafford Cripps announced in his 1949 budget that henceforth the treasury would set an annual ceiling for NHS spending, and Britons would be allowed as much free health care as could be afforded within that.

This was a straight proclamation that Britain would ration an undersupply of medical care by queueing instead of by price. In each of the following 35 years the rate at which Britons' sicknesses can be cured has depended not on what customers show they want in a market with a quickly changing technological capacity to supply, but on how hard-pressed about other matters a chancellor of the exchequer has felt at budget time.

Since a Conservative chancellor is always hard-pressed in his annual budget, while a Labour chancellor is usually harder-pressed in half-a-dozen crisis minibudgets during each year as well, Conservative governments have regularly increased NHS spending by more than Labour ones, though not by much.

This weird system has had three great advantages, each with a snag.

Saints, but not equalisers

First, the illusion of a comprehensive NHS has brought to its service a genuinely devoted army of some saints. A good example is a doctor who was arrested for attempted child-murder. He prescribed "nursing care only" for a rejected dying baby whom an American hospital would keep profitably alive by stuffing with more care for much longer; he was rightly

Blissful dawn—Bevan in the NHS's first week

acquitted of any crime, but died soon after. The defeated Labour MP for whom he campaigned in last June's election wrote movingly in his obituary that this Dr Leonard Arthur was:

> one of the finest men I ever met . . . the very model of what the National Health Service should be, humane, tenacious, principled. . . . You came upon him late at night launching some new group based on felt need—readers and teachers for dyslexic children, riding lessons for the handicapped, social clubs for parents under extreme stress. . . . He took no private patients, gave no thought to the "market value" of his exceptional gifts. . . . There are still thousands like him, happy to ignore the new world of market values. . . .

If any alternative health system does not enlist the support of the thousands of Dr Arthurs and their nursing kin, it will not be worth the cost-benefit analysis it is based on. I hope the competitive system advocated at the end of this survey should attract them, but cannot know since so many saints slave today because they think the NHS is the best way of bringing care to the poor. Yet it manifestly isn't.

The rich die later

Look at table 2, drawn from the muddled Merrison royal commission—the Labour-appointed body which recommended that Britain should again abolish prescription charges in 1979. Merrison commented on table 2, with an embarrassed cough and streaming non-sequiturs, that "since the establishment of the NHS"

> the position of those in social classes IV and V appears to have worsened relative to those in social classes I and II, though it should be remembered that all social classes are healthier than they were 30 years ago and the proportion of the population in social classes IV and V has fallen. There is also evidence that the higher socio-economic groups receive relatively more of the expenditure on the NHS.

Merrison's footnote to this last sentence referred to a 1978 statistical article in Economica by Mr Julian Le Grand, who estimated broadly that a British managing director can expect to have about 40% more of the taxpayers' NHS money spent on him than a hod-carrier who gets the same illness.

Almost certainly, Mr Le Grand underestimated. Richard Titmuss, one of socialist medicine's godfathers, was rightly complaining as early as 1968 that:

> the higher income groups know how to make better use of the NHS. They tend to receive more specialist attention; occupy more of the beds in better-equipped and staffed hospitals; receive more elective surgery; have better maternity care, and are more likely to get psychiatric help than low income groups—particularly the unskilled.

Add to this the 1981 Acheson report's calculation that in one inner London borough over a quarter of the population, maybe including one child in seven, are not registered with a doctor at all; and that in some other inner areas 30% of those for whom doctors are drawing capitation fees have really died or moved away. The NHS is breaking down in precisely the areas to which it was intended to bring most help.

Table 2: Male standardised mortality ratios

(England and Wales) Social Class	1930-32 (age 20-64)	1949-53 (age 20-64)	1970-72 (age 15-64)
I Professional	90	86	77
II Managerial, etc	94	92	81
III Skilled workers	97	101	104
IV Partly skilled	102	104	113
V Unskilled workers	111	118	137

Who's for the knife?

Since British surgeons are not paid more if they perform the surgery that market demand would show is most urgently wanted, many of the surgical operations with Britain's longest waiting lists are things like varicose veins and hernias (operated on five times more frequently per person in the United States) which are curable with surgical operations that would be cheap, unprestigious and for the surgeon frightfully boring. Patients on the most painful part of the orthopaedic waiting-list in some poor areas have been untreated for six years. Doctors retort that waiting lists have long varied enormously from area to area, and that Arthritic Annie could get even a hip replacement if she moved from Sheffield to somewhere else; they don't grasp that a proper system would move medical resources eagerly to the longest queues.

Merrison rightly said that "waiting lists are one mechanism for controlling access to services free at time of use", and queried whether any caring person would prefer to control it with other countries' methods which are "often financial". Any computer fed with the relative hours in pain now spent by poor sick Britons would answer "all caring people must".

The point of a price mechanism is not to put rich individuals into the operation room fastest; you can easily arrange that a price system does not do that, and anyway Britain has got a non-price system that nuttily does. The point is to see that some regulator is in place to bring the optimal best mix and allocation of outputs, rather than subconsciously just fitting in with producers' convenience.

Beloved, but why?

Despite this, the second great advantage of the NHS (and embarrassment to critics like me) is that over 80% of the British people tell opinion pollsters they love it. The good reason is that all Britons feel secure they will get emergency treatment if they are hit by a bus or a heart attack in the next minute. If the competitive system, which I eventually suggest, does not also satisfy that, don't support it.

The bad reason is that a NHS gives politicians 5½% of gnp to buy votes with. They can buy them better by a "caring rather than curing" approach—by free medicines spread over 56m people today, not by the expenditure needed for tomorrow (new hospitals, equipment, preventive medicine) or by relieving the pain of a few thousands who have been six years on the waiting list. If any American or West German learned his insurance policy left people six years in pain, he would change insurances—although in a way that put national health costs up.

The third advantage of the NHS is that it keeps national health costs down. We will examine later whether it keeps them down productively, but turn now to America which raises them exorbitantly.

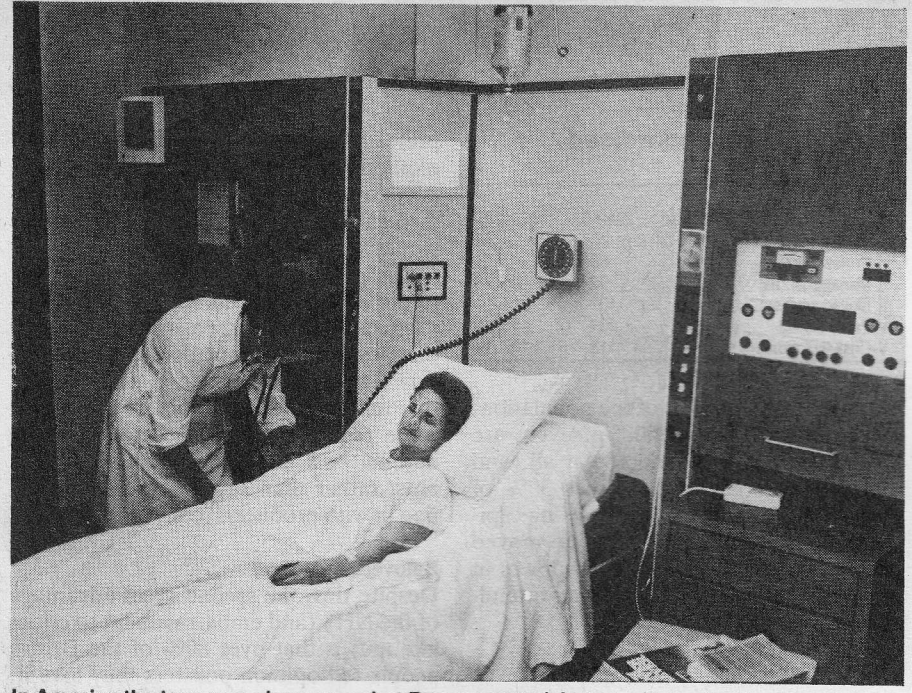
America throws money

And generates some improvements, with much waste, plus a crisis for 2011 and after.

Even in 1965 the United States spent far more per head on health care than any other nation, but its men then died earlier than Bulgaria's, and all its health indicators showed dreadful discrimination against its poor and its black. In those days the children of the poorest one quarter of Americans saw a doctor only half as often as did the children of the richest one third.

Then, during 1965-84, while two Democrats and three Republicans were presidents, American doubled its government expenditure on health every 4½ years, in a more egalitarian health revolution than Britain's 1945-51 Attlee government achieved. Today poor Americans see a doctor more frequently than rich ones, and rates of surgery are equal between social classes. Even in Mr Reagan's 1984, America's Medicare outlays are rising by more than its defence programme.

Total American expenditure on health care has inflated from $129 per head in 1960 to a likely $1,500 per head in 1984. Of this year's $1,500 per head, only about $450 per head will be paid directly by patients, about $400 will be paid by private insurance (with three quarters of the premiums paid by employers) and



In America the taxpayer gives you what Bevan wanted, but sends you bust

over $600 by federal and local government.

That $600 per head of American government money alone is 1½ times the $400 per head which the NHS will spend on Britons this year. Since American taxpayers' money is meant to be centred on America's oldest and poorest one quarter, the average qualifying member of that oldest and poorest one quarter of Americans will get something like six times as much taxpayers' money spent on his or her health this year as the average Briton will get.

In consequence, some 90% of President Reagan's Americans have now got what Nye Bevan wanted for Britons in 1948: a system where medical care is close to what would be provided if cost were no object and if benefit to patients were the sole concern. The result, as under Bevan, is that costs have soared embarrassingly out of control.

Once through this safety net, bump

The average cost of an in-patient day in an American hospital has risen to $300. So (a) America's health expenditure is buying something which in other countries would cost only a fraction as much; and (b) many Americans fear that they could be bankrupted if they stay in hospital long enough to exhaust their insurances. The Americans, having erected the world's most expensive medical safety net, have also arranged that anybody who falls hard upon it will pass through with a bump.

A hospital in Florida reports that its revenues last year were 47% from Medicare (state payments for the old), 5% from Medicaid (state aid for the poor), 27% from insurance, only 8% from patients' payments and 13% bad debts. In poor areas the proportion of bad debts is larger, so hospitals which serve poor people are closing down. Older and middle-class people are more fearful of going through normal insurance limits, so they buy extra catastrophe insurance against this. Two thirds of elderly Americans have topped up their state Medicare with "Medigap" insurance, costing them about $400 a year, to give such cover. This has most especially inflated the American cost of dying.

Last year Medicare alone paid out around $15 billion—more than the whole national income of Bangladesh—on care of terminally ill Americans in their last six months of life. Although third-party insurance makes it profitable for a doctor to pump the finest medicaments into an unprotesting near-corpse, there is no evidence that this extended the average such patient's life by more than a few harrowing days. For each day that it did, it will have raised the national health bill by nearly another $100m.

In black and white

Have the poor gained from America's post-1965 medical flood, and are the old going to? Conservative Americans said in 1965 that the throwing of money at the health of the poor would have nil effects.

Instead, it has had erratically good ones. In America, this can best be measured in terms of black and white. In 1960-82 black women's life expectancy has soared from 65.9 years to 72.8, while white women's rose from 74.1 to 78.7. A black lady reaching 65 today can expect to reach 82.4, by now closer to her white contemporary's 83.8 than a Glaswegian is to a Londoner.

By contrast, black males' life expectancy (still a low 64.8) rose in 1960-82 by only approximately the same three years as white men's (now 71.4) did. A main reason is that fat men's heart disease, still the biggest killer of American males, has switched from being a predominantly white illness to being a bigger black one—aided by the 45% of black men who still smoke cigarettes, while only 37% of white men do. Black men are also six times more likely to be murdered than white men, but less than half as likely to commit suicide (white wives go most frequently to the psychiatrist).

In the 15 years after 1965, America's disgraceful 42 per thousand rate of black infant mortality astonishingly halved, but the remaining gap between America's 21 per thousand black infant mortality and its 11 per thousand white rate is one of the health indicators where America's social gap still is worse than Britain's (with 16 per thousand infant mortality for British unskilled workers' babies and 9 per thousand for British professionals' babies). However, the American gap is what one would sadly expect from young black American mothers' existing environmental and pre-1965 health disadvantages, without any present underdoctoring of the poor. America's medical problem really is no longer one of health-care inegalitarianism. Instead, it faces a crisis of health-care inflation. All of the 77m Americans born in 1946-66 should feel especially worried about that.

You are the grandpa bulge

The number of Americans aged over 65 has grown from 4m in 1900 to 25m today. It will reach at least 55m in 2031, probably much more. The Americans who will be over 65 in 2031 will be the survivors from the 77m Americans born in 1946-66, plus over 85-year-olds born before that.

An over-65 American today absorbs about three times as much in health care as any other citizen except a newborn baby. This ratio will rise if expensive ways are found of countering degenerative diseases. Any such breakthroughs will keep more ill old people alive longer. Congress has been told the Medicare hospital budget for the old looks like reaching a $250 billion deficit by 1995, but that is not the date of the real problem. There will be a pause in the mass creation of new 65-year-olds in 1997-2010 in countries which in 1932-45 were making slump and war instead of babies. Then there will be at least 20 years of new grandpa bulge after 2011, as the babies born with much lower infant mortality in and after 1946 arrive with a rush on the pension rolls.

Since America is spending more than a tenth of its income on health care even while the babies of 1946-65 are at peak earning power, one of two things may happen if it and other rich countries do not reach more cost-effective health-care systems before 2011. The main danger is

that those of us born before 1965 could become the unwanted and expensive generation in our old age. The smaller danger is that there could be a change in liberal values about death control with the arrival of 2011's senior-citizen bulge, rather like the change this generation itself created about birth control after 1965.

Until about 1965, no respectable western woman admitted to having an abortion; and the two most intellectual religions (Catholicism and Communism) disapproved even of contraception. When the babies of 1946 became teenagers and then potential parents in the 1960s, just as overpopulation was threatened by the world drop in infant mortality, liberal values changed overnight so as to approve of these two methods of culling babies. When the baby bulge of 1946 becomes the 65-year-old bulge of 2011, absorbing excessive medical resources just as breakthroughs against cancer or something may make geriatric wards fuller still, it is plausible that younger people may overnight turn liberal values in favour of culling grandpas—through "caring" euthanasia.

The rest of this survey is therefore going to be a pre-bulge grandpa's search for ways to keep the cost of health care competitively down.

Primary care

Needs a price mechanism, and must not encourage overhospitalisation

The Merrison royal commission, which wanted Britain's prescription charges to be abolished in 1979, said it could see no evidence that charges would "discourage frivolous use of the health service", and feared they "could well discourage patients from seeking help when they really needed it". This was an amazing denial of established statistical facts, equivalent to a Royal Commission on Geography saying it could see no evidence that the earth was not made of green cheese.

The Rand Corporation has made a large and totally scientific sample study of Americans with 14 different grades of co-insurance. It found that families which received free care spent 50% more of other people's money than people who faced deterrent initial charges, and it then checked whether the people thus deterred had poorer health over an extended period. In general, they didn't. In all categories except two there was no correlation. The exceptions were that free medical care leads to a small improvement in the vision of near-sighted people, and to slightly lower blood pressure in poor people who are hypertensive. Instead of free care, said Rand, "more targeted programmes, such as screening and testing for people with high blood pressure, might save as many lives at far less cost".

One way forward for primary care will be via many more such targeted programmes and screenings. Targeted programmes would be helped if nearly everybody in future carried computerised medical cards, so that anybody examining him could contact a database for his last case notes, which admittedly might read: "This mildly alcoholic old man generally invents some physical illness when he is depressed by his nagging wife in his needlessly dirty house". I would be willing for a medical database to have such information about me if it brought me better health care cheaper. Other people would not. That is one reason we must have individual choices between competitive health schemes, not a single NHS.

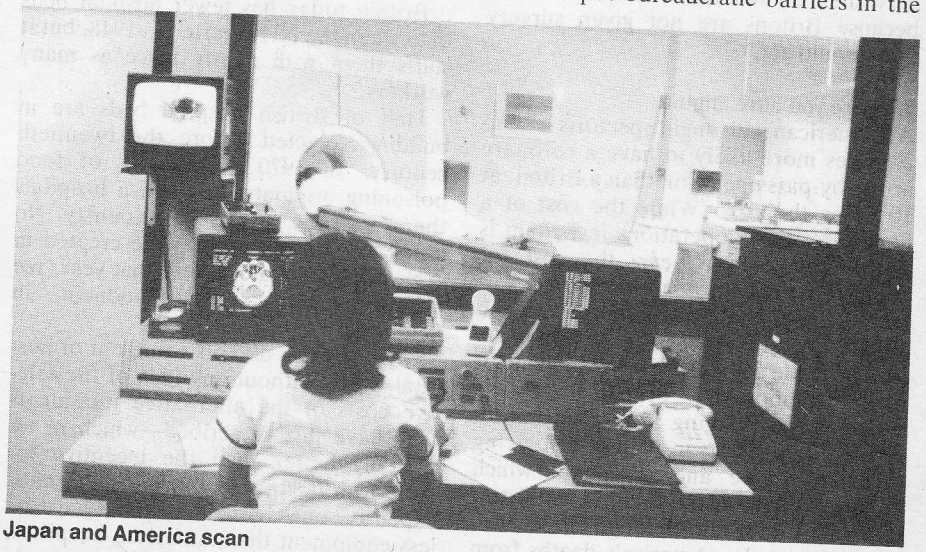
Because screenings are going to be important, a good test of a country with an effective health programme today is whether it has lots of the new computed tomographic (CT) scanners. Until recently, Japan had proportionately twice as many as America, while America does 10 times as many CT body scans (and $3\frac{1}{2}$ times as many head scans) per 1,000 people as the British, who invented the scanner. Defenders of the NHS say that distances are shorter in Britain, so that patients needing to be scanned can usually reach a scanner-possessing hospital; and that it is unethical as well as uneconomic to scan fit and uncomplaining people for maladies like brain tumours that cannot be cured even if discovered in the pre-symptomatic phase (see chart in final article). But general health indicators are now clearly better in countries which scan often to find early who is ill with what, even though they are not better in rich countries with free medicine.

Japan, which provides the world's best health delivery per fewest dollars spent, has a system based on well-documented competition between hospitals. The pacesetters are hospitals run by the big companies for their workers, families and neighbours. Each of these proudly boasts of having better statistics than some rival hospital in "keeping our workers healthy", which is exactly the right output-aim to have. They have lots of scanners manned by cheap paramedics. Japan's big companies' hospitals have some of the objectives originally sought in California by Health Maintenance Organisations (HMOs), to which we will return.

In praise of drugs

Outside the hospitals Japanese doctors are competitive small businessmen, sometimes with tiny in-patient clinics attached to their houses, and are allowed to sell medicines at a profit. This last shocks westerners, who say "the sale of drugs is everywhere too commercial", and it is clear some Japanese doctors do pollute their patients' bloodstream with too many medicines (they gave lots of people in Japan a horrid disease called smon through too much enterovioform, and the Japanese have the worst stomach cancer in the world). But, once again, look at the rise in their expectation of life.

It is new drugs and vaccines that have brought the greatest and cheapest medical advances in the past 40 years: eliminating most forms of polio, smallpox and soon to abolish children's diseases like measles. The reaction in the west has been to put bureaucratic barriers in the



Japan and America scan

way of new commercial pharmaceuticals, lest they might harm a minority. Says Lord Vaizey in his new book on National Health (see acknowledgments on later page, and for why we make all such initial references to sources à tout court): "A death rate of one in 1m for a drug would cause it to be withdrawn from use. There are surgical procedures in which a death rate of 1 in 100 is common and acceptable. But cigarette smoking is much more risky than our hypothetical drug. So, if it were a pharmaceutical, tobacco would undoubtedly be banned, as (probably) would alcohol".

A 1983 report by Britain's family doctors or general practitioners (GPs) said that 90% of perceived episodes of ill-health in Britain are sensibly dealt with by the slightly sick people themselves. Of the remaining one tenth, over 90% came to the family doctors. These then remitted rather over one in 10 of their cases (ie, just over 1% of all cases of illness) to a hospital. Together with the ½% or so of all British people who went to hospital directly, this meant that under 2% of ill Britons ended up in a hospital bed. These few hospitalised Britons absorb around two thirds of the costs of the NHS. Hospitals also absorb two thirds of health-care in America.

Most people do not go into hospital for the exhilarating fun of being cut up even if taxpayers' money pays for this. "If incentives and disincentives are to have a major effect on the use of hospital resources", said the Merrison royal commission on one of its 491 pages which did seem logical, "then they must be offered to doctors and not to patients".

This is even truer in the United States where rates of surgery are over twice as high per head as in Britain, for some illnesses 20 times as high. This is sometimes because Americans are given surgery they do not need, and sometimes because Britons are not given surgery they should get.

Suppose you have angina

An American with angina pectoris is 10 to 20 times more likely to have a coronary artery by-pass operation than a Briton, at 10 times the cost. While the cost of a handful of these operations in Britain is about $20m-30m a year, the cost for 160,000 patients in America in 1982 was near to $3 billion. "Ho, ho", says the British liberal, "Americans' deaths from heart trouble are still bigger than many of their neighbours' ", probably because surgeons are charging $20,000 a time to poke at their hearts instead of just giving them nifedipine and verapamil which America's Food and Drug Administration delayed for far too long. This canard no longer works. America's deaths from heart disease have dropped by over a fifth since these operations really began in 1974. Up to a third of them clearly increase life expectancy while most of the other two thirds reduce cardiac pain. Follow, to their doctors, American and British patients called Joe Soap.

America's Joe Soap, under a normal third-party insurance, can go to any doctor he wants, and sees different doctors for different problems. For a worrying possibility like angina, this Joe goes straight to a specialist, which means to a profit-making businessman who uses the cardiac surgical unit in a nearby hospital as his place for doing business.

If the specialist tells him (possibly rightly) just to lose weight and stop smoking, Joe goes to another doctor. Aaron and Schwartz's brilliant new book (see acknowledgments) notes that in several American states cardiac surgical units must be closed if they have fewer than 250 operations a year. If the undertaking of only 249 operations this year threatens the existence of this specialist's main place of business, and this Medicare-covered Joe has come in with indigestion insisting it's angina. . . .

There are two British Joe Soaps worried about angina. One is a hod carrier who lives in Liverpool's piggeries, and the other a managing director in Reigate. Liverpudlian Soap goes to the GP virtually allotted to his slum, a Pakistani with a voluble command of Welsh but unproficient in Joe's Scouse. Dr Mohammed tells Joe he will write a letter to one of the few consultants who might do by-pass operations (which the consultant will politely acknowledge and file); meanwhile here is a prescription for verapamil. The managing director's doctor is George at Reigate golf club. He will be met by initial banter about stopping smoking, but, as Mr Soap has read some subversive statistics about by-pass operations in this week's *The Economist*, he will get George to telephone a consultant (who responds to George's phone call more readily than to Dr Mohammed's letter).

The British system leaves the poor man in his piggery, while the American system piles everybody with third-party insurance into hospital with profit to the doctor. We had better look now at productivity in the NHS hospital, once the managing director gets there.

Yesterday's mirage

Why Britain's NHS needs competition

Although Liverpudlians may not appreciate it, the last article contained some praise of Britain's NHS. Nearly half of Britain's doctors are in the highly productive GP sector (while fewer than a fifth of America's doctors are); and British GPs try to restrict expensive hospital entries, although by a method that is socially unfair. A main test should be whether in the hospital sector the NHS (which is now the largest employer in Europe) has put productivity up. Look at the figures.

Britain today has fewer hospital beds than when the NHS started in 1948, but it staffs them with nearly twice as many workers.

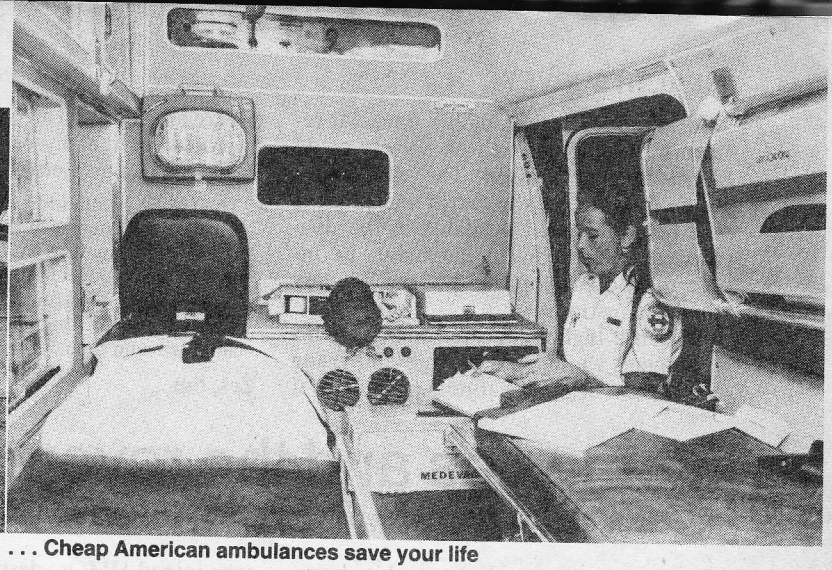
Half of British hospital beds are in buildings erected before the twentieth century. In 1970 more cases of food poisoning originated in British hospitals than in all the cafes of the country. No cases of food poisoning were created in American hospital kitchens that year (see acknowledgments for Goodman in Seldon).

Many British doctors come out of hospital wards without any idea of the relative costs of the alternative treatments they have just prescribed—which is admittedly better than the incentive for American doctors to prescribe the most expensive ones. British hospitals have far less equipment than American hospitals, but use it for fewer hours. A current scandal (probably eventually to be over-corrected) is that many Britons needing kidney dialysis are left to die, because of lack of machines which in America have been lent during the daytime to animals at Washington zoo. American patients needing special machines lead normal working lives in office hours, and come to use hospital machines in the evening, which is when trade-unionised workers in some (not all) British hospitals have shut shop and gone home.

Ambulances or taxis?

If you have a heart attack when reading this in an American suburb or city, you are likely to see a doctor faster than in a British suburb or city—going there in an American ambulance which is really a "mobile emergency treatment centre", where the paramedic keeps in radio contact with a doctor about your emergency case. Yet America's ambulance costs are a fraction of Britain's because more than 90% of British ambulance trips are really a free taxi ride. If non-emergency patients had to pay the full costs of an ambulance ride (and therefore went by taxi), suggests America's Professor John Goodman (see acknowledgments), around 93% of Britain's ambulance drivers could be made redundant. Their wages could be

British ambulances save you a taxi fare . . .



. . . Cheap American ambulances save your life

diverted to give British hospitals as many CT scanners, kidney dialysis machines and some other life-saving devices as America's hospitals. The disadvantage is that the whole NHS would then be stopped by a strike.

Only around £17m of the £1 billion spent annually on British hospitals' laundry, catering and cleaning services is contracted out to competitive private tender. Says Vaizey in his latest book (see acknowledgments) "the proportion should be well over half". When Mrs Thatcher's budget controllers called for a 1% increase in productivity from the NHS, in an industry where differences in productivity between units are amazing, and during a year when productivity in British manufacturing industry had risen by 6%, some hospitals made what they called this 1% "cut" by reducing hospital beds and increasing waiting lists, while keeping the same staff—ie, by putting productivity further down. Although British hospitals operate under cash limits, Vaizey is right to say they "do not have budgets in the commercial sense. Resources—doctors, other staff—are allocated to them. These resources are felt to be inadequate. The pressure therefore is to acquire more staff, not to fit expenditure to income".

The pressure on hospital workers is then to become militant trade unionists. They have no career structure outside the NHS; they have only this monopoly employer, which itself thinks it should be allowed to spend more as a religious rite. This has happened in an industry where militant trade unionism must eventually lose itself votes. Many hospitals exploit their willing saints with high hours and low pay, to finance the jobs of people who would have been slimmed off in a commercial organisation two decades ago. Vaizey rightly says it is

> essential to challenge the idea of national scales of wages and salaries. If there were, say, some 2,000 units of health care—hospitals and health centres—negotiating according to individual and local circumstances, some wages and salaries might rise and others might fall, but in every case the emphasis would be upon higher productivity, better pay and fewer people in non-essential roles.

This is not British political orthodoxy, but it is sound economics and compassion.

Consultants' feudal rule

Successive British governments have sought radically to reform the administrative structure of the NHS. Unfortunately, in a service which needs more competition from the bottom up, they keep on fiddling with mechanisms to pass more orders from the top down. When the government tried to tempt the excess of hospital administrators to retire by offering large redundancy payments, the administrators gratefully accepted—and some moved sideways into each other's jobs. This time an expert from Sainsbury's has recommended a supremo for the NHS, and a generally non-medical—ie, bureaucratic—manager in each unit. The consultants (senior doctors) fear this might disrupt their power, and the junior doctors hope it will.

A hospital doctor is supposed to become a consultant at the age of about 37, and can expect to remain one for 28 years. Since there are about 2⅓ times as many people aged 37-65 as there are people aged 25-37, a balanced profession would have 2⅓ times as many consultants as junior doctors. The consultants' interest is to try to keep proportions the other way round; there is then less competition for lucrative private consulting fees, and hospitals can have a large army of ill-paid junior doctors who can be overworked doing boring chores at all hours.

It is not right to say that Britain gets Japan's advantages from paramedics by setting this mass of ill-paid junior doctors (many from India and Africa) to do routine work. There is no machinery to equate supply to market demand, such as by letting specially trained technicians do such simple surgery as varicose veins. Instead of recruiting the new non-medical managers to order resentful doctors about, it would be much better to set targets for each hospital ("an increased number of hernia operations next month to reduce waiting time") and allow doctors to share in the bonuses (equivalent to stock options) if the targets were achieved. But the NHS is not geared to such "vulgar commercialism".

Yes, but . . .

The embarrassment of the commentator who retails these ruderies is that many NHS workers are the salt of the earth. As we leave British hospitals, let us take their savour with three quotes, to each of which one wants to add "Yes, but".

After the novelist Mr David Hart had suggested it was time to sell off the NHS, an indignant Mr Brian Cummins wrote to The Times:

> I am a consultant neurosurgeon with some private practice. After six years' university, my postgraduate education lasted 12 years, when my service commitment to the NHS averaged 85 hours a week. My training, by surgeons of the highest skill, made me competent to perform some of the most complex operations in surgery. As a consultant I work at least 60 hours each week for the NHS, and so do my colleagues. I am paid for 35 hours. My salary is about £25,000 gross, which I consider good money. In 1982 I personally performed for the NHS over 200 major brain and spinal operations. In private practice this would have earned me at least £100,000, cheap by international standards. I saw several hundred patients, and attended many committee meetings . . . God help the party Mr Hart advises.

From an even greater height the president of the Royal College of Surgeons told the Daily Telegraph last November that the increase in Britain's bills for high-technology surgery would no doubt be very considerable, but medicine should not be considered in economic terms. It was more akin to art or music, things

which yielded little tangible financial return but without which no society could consider itself civilised. The NHS ought to be the envy of the world and provide the best treatment available in the doctors' opinion. Clinical judgment, he insisted, should not be fettered by any financial restraint.

When a highly educated man says his colleagues should run a large and rising proportion of gross national product as if it were art or music, an economist reaches for cost-benefit analyses. One remembers Professor Dennis Lees's angry finding:

> The British health industry exists for its own sake, in the interest of the producer groups that make it up. The welfare of patients is a random by-product, depending on how conflicts between the groups, and between them and government, happen to shake down at any particular time.

Yes, but . . .

Remedies and the reverse.

The cures are now fairly clear, but most politicians and doctors hate them

Enter every reformer's great white hope. In America one answer to containment of hospital costs may have emerged. American patients who enrol in Health Maintenance Organisations (HMOs) use hospitals 25-40% less than those with ordinary insurance.

You enrol in an HMO by pre-paying it to look after your health care in the period ahead. While a fee-for-service doctor makes most money if he treats you in the most expensive possible way after you have become ill, doctors who are partners in HMOs will have more profits to share between themselves if they treat you in the cheapest possible way consistent with keeping you healthy enough to want to choose to enrol with them again next year.

Economists have drooled over the success of some HMOs, ever since the Kaiser organisation in California pioneered them. For example, the Group Health Association of Washington, DC, was charging an average $282 per member per year in 1976, and clearly maintained its members' health better in subsequent years than did those levying the average $465 Medicaid fee-for-service bill that year. As American health expenditure has trebled since 1976, multiply each figure by about three now, but expect the HMOs' patients to be healthier in eight years' time, and their care to have cost less. Why then have only 4% of Americans joined HMOs, despite legislation in the 1970s that was meant to encourage them? Three main reasons.

First, patients and doctors both prefer $465 rather than $282 of other people's money to be spent on, by and to them. If your HMO doctor spends $10 more on some frill which the computer printout says other doctors in the HMO have found to be unnecessary, he is told to desist. This is exactly the right way to run a cost-effective medical system, but the patients liked a third party to pay for that frill, and the doctor thinks "clinical freedom" should permit him to prescribe and profit from it.

The key is Enthoven

Second, the pattern of America's medical care is distorted by its tax system. To quote Enthoven (see acknowledgments)

> If your employer contributes $1,200 to your health-insurance premiums, that amount is tax-free pay. If, instead, the employer pays you $1,200 in cash and tells you to go out and buy your own insurance, you and the employer must first pay a total of roughly $300 to $600 in federal and state income taxes and social security taxes on the $1,200.

This means that most American health insurance is done through employers, and health-insurance schemes are packaged to be bargains for them, not for the patients. If a nearby HMO charges $1,200 per enrolled member a year, it is easy to tailor an insurance scheme which will cost an employer $1,100 per worker a year—by (eg) loading more deductibles and co-insurance into the part for which the employee pays himself.

Third, the risk of "adverse selection". When congress offered loans for the establishment of HMOs in the 1970s, it said a borrower must agree to a period each year in which it would "accept, up to capacity, individuals in the order in which they apply for enrolment". This was a requirement that aided HMOs should kindly agree to go bust. When HMOs are the only fully comprehensive health-care organisations in their area, anybody who is told he will need expensive surgery next Tuesday will logically want to join an HMO next Monday.

By far the most sensible health proposals in America have been those put forward by Professor Alain Enthoven of Stanford University. The essence of his scheme is that "Once a year, each family (or individual) would have the opportunity to enrol for the coming year in any of the qualifying health plans operating in its area. The amount of financial help each family gets towards the purchase of its health plan membership—from Medi-

HMOs want to stop you being ill

Acknowledgments

I started by talking to experts in this field of which I knew nothing, but rudely stopped because even on facts they said such different things. I then buried myself under a mountain of books and papers in London and from Washington. I was soon hooked on Professor Alain Enthoven's "Health Plan" (Addison-Wesley), though surprised that he is polite to DRGs. I have pinched copiously from two published Brookings studies ("The Painful Prescription" by Henry Aaron and William Schwartz, "HMOs as Federal Policy" by Lawrence Brown), and used Brookings and Rand as main information sources for what else in America to read. A goldmine was the debate on Medicare this February before the house of representatives' ways and means committee.

In Britain, the text makes acknowledgments to "The Public-private Mix for Health", edited by Gordon McLachlan and Alan Maynard (Nuffield Provincial Hospitals Trust); and "The Economics of Medical Care", edited by M. M. Hauser (University of York Studies in economics). I have followed through to other works by the same stables. From the anti-establishment side Martin Robertson kindly sent me a pre-publication proof of their new "National Health" by John Vaizey, and I had earlier read "The Litmus Papers. A National Health Disservice", edited by the IEA's redoubtable Arthur Seldon but published by the Centre For Policy Studies. I followed Seldon's 24 polemicists to some of their other writings, and can see why "National Health Care in Great Britain", by the University of Dallas's Professor John Goodman (published by the Fisher Institute) makes British mainstreamers so cross. I read enough official reports to realise that health figures published by different governments are differently based and often wrong. I fear I will have repeated some of officialdom's inaccuracies here, but had the advantage that I could attempt cross-checking without being beholden to any pressure group. I was horrified to find how many pressure groups exist.

care, Medicaid, employer or tax laws—would be the same whichever plan it chooses. The subsidy might be more for poor than for non-poor, for old than for young, for families than for individuals, but not more for people who choose more expensive health plans. The family that chooses a more costly plan would pay the extra cost itself".

However, under Enthoven, one of the requirements for being accepted as a qualifying plan is that insurers would have "to charge the same premiums for the same benefits to all persons in the same demographic category, such as adults aged 45 to 65".

How competition could work

Suppose that the average HMO in America could make money if it offered full HMO care to young adults at $800 a year and to over-65s at $2,500 a year. Then, under Enthoven, governments would have to see that each old person could afford $2,500 a year for health care. Maybe—this is my preference—an old person could buy $2,500-worth of health stamps from the government from pre-tax income at cost or at one tenth of income, whichever was less; everybody in America could then be assured of full health care for 10% of income, with incentives for cost containment and competition both in place.

In Britain it should be possible to buy the basic stamps for around 6% of income, and to say that access to the NHS was one of the options buyable with those stamps. See next article.

In America, small experiments have suggested that an Enthoven system would push far more people than now into cost-containing HMOs, or new variants of them; but there would also be custom for innovative schemes offering a different mix from both HMOs and present Medicare. One positive choice among the old would be for better cover of eventual need to move long-term into a nursing home. If anybody opted for a scheme which says "you will not have so much medicament pumped in, at such enormous cost, when two competent doctors proclaim that you are clearly dying", then he could have better frills.

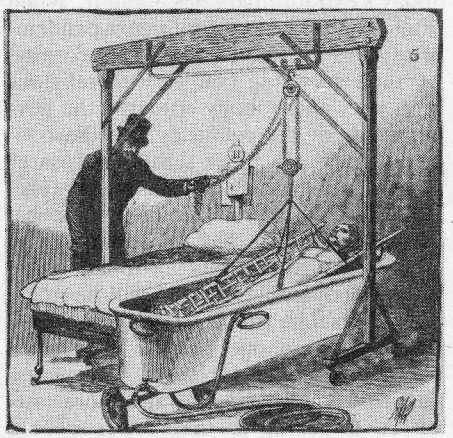
I believe that some version of the Enthoven plan, with trimmings, is going to be the sensible health-care policy for every country, and will argue in the next article why it should be especially easy for a country with an existing NHS system, like Britain, to pioneer the right way forward. Unfortunately, I believe that America, Britain and most other countries will set themselves in the immediate future on the wrong road back.

The trend in health care in America is for the government to do more than ever before of what any government has always done worst—namely, try to fix the price of everything. Ever since President Nixon in 1971, the federal government and the congress and the sillier states have been introducing various controls to try to hold health-care prices down. Most have so far resulted in sending prices and distortions faster further up.

How DRGs will fail

Consider the distortions likely from Mr Reagan's new price-control system based on 467 diagnostic-related groups devised by a computer at Yale. The idea is that Medicare and some other insurance systems will pay the same for each patient within a particular DRG, however long or short his stay in hospital.

Henceforth, if an American is rather mildly ill, but within a DRG that is profitable, the hospital will have an incentive unnecessarily to admit him, preferably for lots of short re-admissions. If he is very ill within the same DRG, and thus will require more treatment than the DRG average, and unless he looks likely profitably to die in the corridor just past the admission room, then all hospitals will hope he goes to another one; or, if he must come to them, be quickly dumped on outpatient care or on some non-medical nursing home.



Sorry, you're an unprofitable DRG

If he has a transutheral resection of the prostate gland, his classification for "frequency of urination" under DRG 306 would bring the hospital $290 more than his detailed classification for "hypertrophy of the prostate" under DRG 336. Harvard is taking the piss out of Yale by forecasting its computer will record more DRGs 306.

If price controls are ever justified, it is only in conditions of extreme physical shortage. This DRG system is being implemented when America has too many doctors, too many hospital beds and is closing some surplus hospitals down. The present is classically a time when Mr Enthoven's sort of competition should be introduced. The technology and classifications and available treatments in health care are changing all the time. In immunological diagnostics alone, knowledge is doubling every other year. This DRG system is going to impede and distort changes in the most ridiculous ways.

It was therefore to be feared that the DRG system would attract some enthusiasm among Mrs Thatcher's advisers.

Britain for DRGs?

Lord Vaizey seemed to be reaching for a continental European version of the DRG system for Britain in his recent book (see acknowledgments). He thought that the taxpayer-via-NHS should remain the main source of finance (or "funding agency") for health care in Britain, but rightly wanted to introduce some competition with the NHS. Unfortunately, he went on:

> By far the simplest way to do this is for the funding agency to pay a unit per item of service. Thus if a hospital were taken as the unit, then its income could be x appendectomies, y normal births and so on, until the payments retrospectively covered the costs. This is the French and German system, and it requires a standard cost per unit of treatment, with a fall-back for exceptional cases.

Lord Vaizey rightly thinks it an advantage of his proposed system that each NHS hospital or other

> budgetary unit should be autonomous and should have an incentive to economise as much as possible in its administration. If payment were per unit of service, it would be perfectly possible to include private payment in the system since if £x were allowed for a hip operation, for example, then 10% could be added for a private operation and 10% for immediacy. Moreover, there is no reason why the standard cost per item should not be paid to private hospitals and clinics; in fact, if every hospital and clinic were autonomous, the distinction would virtually disappear.

Operating on broadly these lines, the French and West German medical systems can justly claim (see Rodwin and Lacronique in McLachlan and Maynard cited in acknowledgments) to have "led to a dynamic proprietary medical sector, the growth and modernisation of public hospitals, and a flood of new doctors".

Unfortunately—Mrs Thatcher should look at table 1 in the first article—they have done this by costing twice as much as Britain's NHS does, and West Germans still die earlier.

Lord Vaizey recognises that everything in his system would depend on whether the British set the "price per unit" (broadly what Americans are now to call "cost per DRG") more economically

than the West Germans and French have done. Because of Europe's interest-group-bargaining sycophancy, Britain would be likely to set it just as badly.

Although the West Germans have a twice-yearly meeting of bargainers and bureaucrats to set their fees-for-service under a regularly amended and bureaucratic cost-control law (called a Krankenversicher-ungskostendämpfungsergänzungsgesetz—yes, honestly), and although the French run the same system more tersely, a doctor's earnings in France are 7 times the average worker's wage, a West German doctor's 6 times it, an American doctor's 5½ times it, a British doctor's 2½ times it.

This is largely because every Frenchman and German involved in this bargaining, and every medical journalist and propagandist writing about it, wants to use other people's insurance money to please the distinguished constituency with whom he is in daily contact. Similarly many British medical journalists and academics and bureaucrats have codwallopped Britons to believe that Britain's medical care is more humane and egalitarian than other countries', which for two decades it hasn't been.

In America, nobody says that doctors are not getting sufficient money. It is probable that American bargaining about DRGs will go the other way from continental Europe's. Prices will be kept down, and rationing begin.

American politicians run for cover

On the hustings, neither Mr Mondale nor Mr Reagan is going to sound enamoured with anything like the Enthoven version of health-care reform. One of Mr Mondale's supporters inveighs against "the kinds of so-called competitive plans that offer cash rebates which may provide a perverse financial incentive for senior citizens on fixed incomes not to seek treatment for essential health-care needs". One of Mr Reagan's supporters explains more honestly "some 60-80% of the older people vote, while only 20-50% of the young do. The old like existing Medicare, and they assume DRGs will make it cheaper, further reducing the co-payments that can fall on them. Why should we terrify them with complicated new schemes which. . . ?"

Yet, when rationing by queue does start in America, there will be an outcry against it. Even in Britain the many shortfalls in the NHS have not been at all those got up by the press. Aaron and Schwartz (see acknowledgments) were intrigued that two of the most common newspaper accusations against Mrs Thatcher were that she is robbing children of bone marrow transplants and of clotting factors to treat haemophilia. Actually these two, plus megavoltage radiotherapy for cancer, are three of the very few treatments which are carried on in Britain up to the degree that American physicians consider optimal, precisely because innumerate newspaper campaigns can be raised about them.

The three main sorts of undertreatment in Britain are: (a) anything new, but unspecific enough not to have a lobby, such as total parenteral nutrition (TPN, the life-saving intravenous solutions which are administered four times more frequently in America than in Britain); (b) anything diagnostic—the British carry out only half as many X-rays per person as the Americans, and use only half as much film each time, though this is partly an example of American waste; and (c) pain-relieving operations on the inarticulate old, whom British surgeons say are "anyway a bit crumbly". Now, in the United States, where 60-80% of crumbly old people vote. . .

The way ahead

The system to vote for

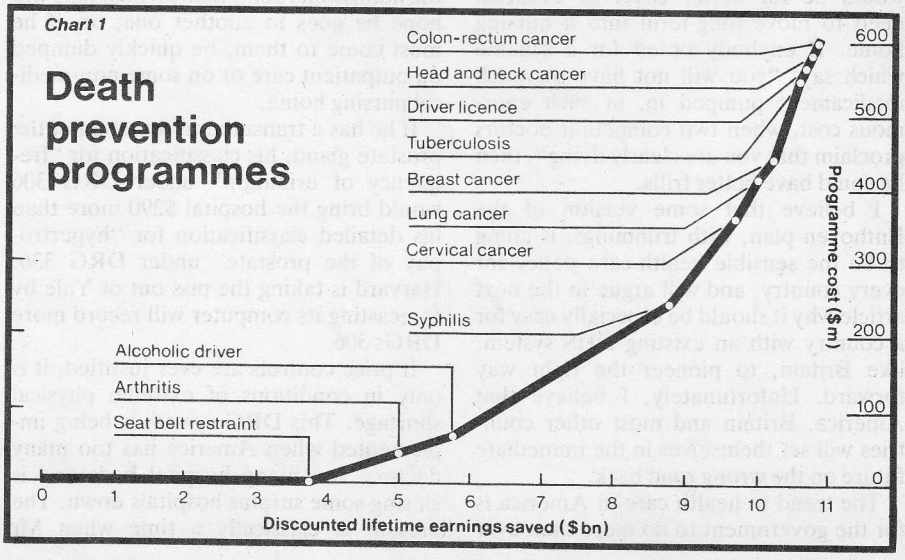
It is only within the lifetimes of most people dying today that politicians have been brought into the business of health care, and have therefore begun to tell today's extraordinary lies about it. When 20m people died in the influenza pandemic of 1918-19 their deaths were accepted by their surviving familes with religious fortitude, and nobody criticised the governments of the countries that the pandemic hit worst. Since sensible measures can aid prevention, this was under-reaction, but now there is suddenly fanatical political fetishism the other way. The grubbiest sort of politician today is one who pretends that doctors will be made alchemists if he (the politician) is allowed much more monopoly power to pour out taxpayers' money for them. The necessary first political step towards more cost-effective health is that fewer people should ever vote for such a man.

Second, any reforming government today should introduce politically unpopular cost-benefit analyses into quite cheap public health programmes. In the early 1970s some brave Washington cost analysts devised the chart below. Up the y axis they charted the extra cost of federal "death prevention" programmes, along the x axis they plotted medical spending averted and lives apparently saved in terms of future dollar earning power (so as to show the saving of young lives as more valuable than decrepit ones). The greatest profit sprang from propaganda urging people to wear seatbelts in cars; the biggest waste came from tests which allowed the exclamation in one case out of a million "Ha, you've cancer of the rectum or head or neck and therefore will now die". The recommendation was to stop the programmes above the third kink in the curve (above breast cancer) and devote the money saved to preventive programmes below that. It was after this that most countries eventually introduced what had been called "politically impossible" legislation pinioning people in their car seats. The devisers of the chart deserved the Nobel Prize for medicine, but got brickbats instead.

This survey has not suggested that America's health minister, even though she is called Ms Heckler, should go as far as the Singapore authorities do in exhort-

Chart 1

Death prevention programmes



'Flu prevention in 1919

ing citizens to keep their fingernails clean. But Japan's and Singapore's efficiency in health delivery owes much to the fact that affluent Asians are more naggable about things like their body weight than most westerners except mad joggers. Many more cost analyses like those in the chart are needed, and governments should persuade everybody to measure all the time whether he is likely to get a heart attack.

Sensible policies of this kind would save many million more lives than resort to the most perfect system of financing health care, but this survey has made clear which financing system it would like. The advance should be to variants of the Enthoven plan, with vouchers giving to each citizen a sufficient fixed sum of money for anybody in his age-health category to buy an adequate health plan from many types of competing health-care providers.

Socialism makes Enthoven easier

It ought to be particularly easy to advance from a socialist system like Britain's NHS into an Enthoven plan. The big problem is to know what value of voucher to give to different categories (eg, to an old person rather than a young one, to a woman rather than a man), in order to persuade private-enterprise HMOs and similar competitive private insurance plans to come into being.

The latest research suggests the whole problem might be eased because such a very small portion of the public absorbs so much of each nation's health costs. The University of California has said that 0.4% of people in its Blue Cross plan account for 21% of the expenditures. Another American study has suggested that 1% of Americans absorbed 17% of American health costs just before Medicare in 1963, but may absorb 30% now. A more conservative French study (see Lévy in Hauser in acknowledgments)—which I will use here although the more startling American figures would fit my argument even better—says that 3% of French people use one third of France's medical services, and another 12% use another third, while 50% of the population use only 3% of the whole. The 15% of the population who take two thirds of French health care are a ragbag of crumblingly sick and foolishly hypochondriac or irresponsible (eg, fat, drunk) people, mostly the crumblers.

If a country like Britain went over to an Enthoven plan, an NHS would initially be running a lot of the competing units of health-care providers, and all of the 15% of excess users would have an opportunity to belong to one. This concentration of ill customers would keep up the losses of the NHS providers, while private health plans would make money out of any patients who voluntarily transferred to them. Never mind.

The authorities would then have the data required to raise the annual vouchers given to those "bad risk" categories (plus charges on the hypochondriacs and irresponsible), towards the point where the NHS plans broke even. As soon as it raised any category's payment too high, private health plans would find it profitable to woo away that category's custom. The wooing away would mean that very ill people were getting better and cheaper treatment than that provided for them under the NHS.

If nobody was wooed away before the NHS schemes reached balance, then almost everything written in this survey has been tosh, and the NHS really is the best system for the needs of Britain's sick people. Which would be surprising.

There is no argument on grounds of cost, efficiency or compassion against the reform suggested above. There is merely the argument that it would cause political and professional embarrassment, which is why it will not be implemented. There is therefore a temptation to stop there. For just three more paragraphs, the temptation will be resisted.

Best buy

Anybody who has read the data so far can ponder what would be the "best buy" plan—the one he or she would like to join. My preference would be an HMO which—beside annual prepayment fee—charged modestly for each visit to the doctor. That would keep out the trivial users who might otherwise pinch too much of my prepayment money. This HMO would give regular access to scanners. It would not actually force me to play squash, but it could put up next year's prepayment fees to, eg, those who had got fatter. If its studies showed that old people living without central heating were a category it wanted to avoid, this would confirm that lack of such heating is a health problem.

It would use computerised medical cards which were embarrassingly frank, frightening away the expensive idiots who object to a database knowing if they smoke too much. It would use lots of paramedics, and make large profits for its partners so that brilliant young doctors always wanted to join it. It would not itself be a partner in a hospital, but it would pay a range of hospitals where it put patients in and could charge them extra for a hospital stay if they wanted privacy or perhaps a choice of surgeons.

If it did not attract sufficient customers, as medical opportunities changed, it would go bust.

It's being so independent that has kept me so healthy