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Working for Patients: The Implications of the NHS White Paper for the Private Sector

by

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WORKING FOR PATIENTS:
THE IMPLICATIONS OF THE NHS WHITE PAPER FOR THE PRIVATE SECTOR

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ABSTRACT

This paper discusses the possible consequences of the 1989 White Paper *Working for Patients* for the future growth of the UK private health care sector. The paper outlines those proposals in the White Paper which are of most relevance to the private sector and discusses their implications for both the private health insurance market and the Independent hospital sector. It examines the effect of tax relief on the purchase of health insurance for the over-60s for new sales to this age group, for insurance supplier revenue and for the loss in tax receipts for the Exchequer. The findings indicate that unless the type of policy offered for sale changes, the effect on new sales will be limited and that the loss in tax revenues will be greater than the revenue from new sales. The implications for the Independent hospital sector depend crucially upon the extent of competition from the NHS and NHS Trust hospitals for patients and for staff. The paper concludes that to avoid rationalisation in this sector, Independent sector costs must be lower than those of the NHS.

INTRODUCTION

This paper examines the implications of the 1989 White Paper **Working for Patients** for the UK private acute health sector. The private sector in the UK is small in overall size and its activities are delineated by those of the National Health Service (NHS). Therefore proposals which deal in the main with the future structure of the NHS will have implications too for the future of the private sector. Many of these proposals are not spelt out in great detail in the White Paper or the associated Working Papers, and many of the changes will take place only slowly. Further, whilst more data are becoming available for the NHS, the quantity of data for the private sector are very limited and its quality unassessed. Therefore the conclusions of the present paper are necessarily speculative.

The paper begins with a brief review of the current position of the private health care market in the UK which examines both the private health insurance market and the private market in the provision of acute care. Implications the Review may have for the private provision of long term non-acute health care are not addressed. In Section II the proposals of the Review which appear to be of most importance for the UK private health market are outlined. The implications of these changes for the private insurance market and the independent hospital sector are examined in Sections III and IV respectively. The main conclusions of the paper are drawn together in Section V.

I. THE UK PRIVATE ACUTE HEALTH CARE MARKET

In terms of total size the UK private health sector is dwarfed by the NHS. Estimates of the value of private health care vary, but the value of private health care is estimated by industry sources for the UK (Graham 1988) to be around £1b in 1988 and the value of private health insurance sales estimated by independent sources to be at around £750m in 1987 for the UK (Orros 1988). By comparison, the Revenue budget for England and Wales for the NHS for 1988/89 was £11,539m and the Capital Budget £766m (Edwards 1988). But any size based comparison masks the contribution of the private sector to the provision of acute, particularly elective, medical care. In the main, private health insurance contracts provide reimbursement for elective acute medical care. The private health care suppliers specialise in the provision of such care. In addition, the sector emphasises its provision of what may be termed 'consumer orientated' attributes of the medical care package - the hotel facilities, access to better information, choice of provider hospital and medical specialist. Elective acute care is rationed in the NHS by means of waiting list and the NHS has been accused of failing to provide sufficient attention to the needs of the patient as a consumer. In short, the private sector currently seeks to fill a perceived gap in NHS provision.

It is helpful for an analysis of the impact of the White Paper to review the current activities of the private market in finance and the private market in supply of medical care separately.

1. The Private Health Insurance Market

It is estimated that there were 2.7m policy holders and 6.1m persons

covered by private health insurance in the UK in 1987 (Orros 1988). Total premium income for that year was estimated at about £750m and claims paid at £615m (Orros 1988). Whilst there are a number of insurers operating in the market, the market place is basically split between five or six main insurers. The three largest of these are not-for-profit Provident Associations, together accounting in 1986 for 86 per cent of the market (Laings 1987), and one of which (BUPA) has over 50 per cent of the market

The growth rate in the number of subscribers in the market has been estimated at about 5 per cent per annum over the three years 1985-1988 (Andrews 1988), though this is not necessarily exactly the same as the growth rate in number of persons covered because a subscription may cover more than one person (Laings 1988). There are three broad types of subscription - individual, group and corporate, the last being paid for by an employer, the first two by an individual. Currently, 27 per cent of subscriptions are individual, 17 per cent are group and 56 per cent are corporate. Whilst the corporate sector has been the fastest growing sector in recent years, in 1987 individual purchase became the fastest growing sector (Laings 1988) and a sizeable proportion of purchases would appear to remain an individual decision. Figures from the 1983 General Household Survey suggest that up to 62 per cent of purchase is wholly individually paid, though a 1987 survey suggests that within the 25 to 70 year olds this proportion may be somewhat lower at 56 per cent (Propper and Eastwood 1989).

Most of the policies sold in the market offer full or near full cover for the direct financial costs of certain types of medical care taken either in the independent (the private) sector or in NHS pay beds. Until recently, cost sharing devices such as coinsurance or deductibles (the latter similar to the excess used in car insurance) were not widely used,

though small providers of insurance have offered policies with either no-claims bonuses or deductibles. To limit claims, policies restrict the set of treatments covered by the insurance, thus basically restricting cover for acute care. Long term nursing, geriatric, long term psychiatric treatment and pregnancy are excluded in most policies. To limit adverse selection (the attraction of bad risks), cover is not given for treatment of pre-existing medical conditions (whether or not these were treated in the private sector).

In general, the suppliers of insurance have followed the lead of the largest Provident Association which, until recently, has sought to provide only full or near full cover for a limited set of treatments. Recently this supplier has introduced a new policy, which extends cover to first time buyers between the ages of 65 and 74 (previously no individuals in this age group could buy insurance unless they had previously had cover). The policy covers a more restricted set of conditions, but offers the purchaser choice of two levels of deductible, in return for a lower premium. No information is currently available on sales of this policy.

It is not clear how the levels of reimbursement set by the insurance companies are negotiated with private sector providers of care, but until the early part of the 1980s, cost containment did not appear to have been a major concern of the insurance suppliers (Maynard 1982). Thus the insurers may have been price takers and premiums dependent on the prices set by consultants and private sector hospitals. Following a rapid increase in the ratio of benefits paid to subscription income in the early 1980s, greater concern over cost containment has been shown. Cost containment attempts are not directed at the purchaser of insurance, but rather at the supplier of medical care. Cost containment measures have taken the form of moral suasion and recently, insurers have attempted to contain costs by entering

into 'Preferred Provider' type arrangements with hospitals, for example, BUPA with BUPA Hospitals and Crusader with Nuffield Hospitals. Cost containment measures may also take the form of negotiated rates with private sector clinicians (the consultants), but there is currently little available information on how prices are negotiated with private sector clinicians.

2. The Independent Hospital Sector

Recent analysis of the private sector (Nicholl et al. 1989a) estimated that in 1986 there were 9526 beds in 187 independent hospitals in England and Wales with operating theatre facilities, in which 503,260 cases were treated as either inpatients or day cases. The largest component of the estimated caseload was abortions (19%) and the rest was predominantly routine elective surgery, though there has been some expansion in activity into more major surgery (though currently most cases of such procedures are carried out on patients who were not residents of England and Wales (Nicholl et al. 1989a)). Three-quarters of the cases treated in 1986 were of working age, and children and the elderly were under-represented in comparison with the caseload of NHS hospitals.

There is considerable regional imbalance in the distribution of hospitals, the number of beds per capita being lowest in the Northern region and highest in the Thames regions. The most rapid growth of supply in the period 1981 to 1986 was in the southern part of England. Despite the rise in the number covered by private health insurance and a 57 per cent increase in admittance between 1981 and 1986 (Laings 1988) bed occupancy rates in the independent sector fell during this period. Nicholl et al. (1989a) estimate average daily bed occupancy rates to be about 55

per cent, and to be lower in the region of greatest supply (52 per cent in the Thames Region). Forty-seven per cent of independent hospitals are not-for-profit organizations, the rest are for-profit. The trend appears to be an increase in ownership by for-profits and an increase in the importance of hospital chains (Laings 1988).

The current position of the private sector can be summarised as follows. On the finance side the private sector has been experiencing moderate growth in a period of rising real after-tax incomes for those in the labour market. The range of contracts offered is fairly limited and attempts to control provider costs have only been undertaken recently. On the supply side Nicholl et al. conclude that most of the private sector is currently not set up to provide much more than routine elective surgery and could not, in its current form, provide health care to all groups of people. Despite the increase in private insurance (which pays for about 75 per cent of care) the sector has low occupancy rates, which are probably below the rates required for profit (estimated by Grant (1985) to be 70 per cent). This suggests that there is excess capacity in the industry and that rates of return to capital may be low.

On the demand side, the activities of the private sector are heavily circumscribed by those of the NHS. This interrelationship also exists on the supply side. Most of labour employed in the private sector is drawn from the same pool as NHS labour. The 1981 changes to the conditions of employment for NHS consultants essentially increased the incentives to undertake work in the private sector (Maynard 1982). Most of the consultants employed in the private sector are concurrently employed, either on a full- or part-time basis, in the NHS. Whilst nurses do not tend to work concurrently in both sectors, the private sector is dependent on the NHS for training of nursing staff. It is estimated that 7.1 per

cent of the overall proportion of the nursing workforce in 1985 was located in the private sector and the 42 per cent of the nurses joining private acute hospitals came directly from the NHS workforce. Within this group, theatre and younger nursing staff are over-represented (Thomas et al. 1988). In the 1990s it is expected demographic changes will reduce the size of the pool of potential young recruits to the nursing labour force, thus exacerbating the extent of competition between the NHS and the private sector for nursing staff.

Given these interrelationships, major changes in either the patterns of NHS service delivery and/or factor prices will have an impact on the private sector. Further, the impact on the markets for finance and delivery of private care will not necessarily be the same. It is worth noting that while links exist between these markets, for example, the largest health insurance supplier owns a chain of not-for-profit hospitals and other insurers have been adopting preferred provider arrangements with hospital chains, in general the suppliers of health insurance are separate businesses from the suppliers of private health care.

II. MAIN CHANGES OUTLINED IN THE WHITE PAPER

Although the White Paper contains a separate chapter on the Private Sector, in general there are few direct changes outlined for this sector. Instead, most of the changes will be the result of changes in the NHS. Those NHS changes which may have greatest impact on the private sector and the direct changes are outlined below, beginning with those that have direct effect. Figures in square parentheses refer to the White Paper or the accompanying Working papers.

1. Changes with Direct Impact on the Private Sector

The first such change is the announcement of tax relief on non-corporate purchase of private health insurance for the over-60s [White Paper, section 9.8]. It appears that the purchaser will get tax relief at his or her marginal rate, so that the tax relief could be up to 40 per cent (1988/89 tax rates). The second change, less clearly spelt out at present, is the general encouragement of increased private sector involvement in delivery of NHS care, both in the form of increased 'contracting-out' and the development of joint ventures. Most contracting out to date has been in non-clinical areas and much has actually gone to 'in-house' contractors, but the White Paper argues for more purchasing of medical services, both as an extension of the Waiting List Initiative and as part of the process of divorcing NHS responsibility for care from NHS provision of that care [9.12]. Finally, joint ventures are to be encouraged in the use and provision of capital, for example, in the building of new hospitals and the development of green field sites [9.13-9.15].

2. Changes to the NHS

The changes to the NHS with greatest impact on the private sector can be grouped as follows. In the first set are those related to the proposed divorce between the financing of and supply of medical care. These include measures to allow Districts to buy certain services for patients from suppliers other than the Health Authority, generally on a block contract basis, though some cases can be bought on a one-off basis [Working Paper 2]. These services are surgical care, those services not provided currently at district level and long term care for the elderly. Similar arrangements are to be introduced for GPs who become budget practices. They may use their budgets to buy a defined group of surgical inpatient and day case

treatments which cover most elective procedures, outpatient services and diagnostic tests [Working Paper 3].

The second set of changes are those which either increase or explicitly re-direct resources. These include an extension to the current Waiting List Initiative, the proposal to target revenue at Districts which 'show they can use the money effectively' [4.26], and the change of RAWP to a formula in which more weight is put on population, with an allowance for the relative costs of service provision, plus an additional 3 per cent increase for the Thames regions.

Into the third set fall changes associated with the formation of NHS Hospital Trusts, which include powers to allow 'opted out' hospitals to set their own pay scales, buy in services and raise income within the scope of the Health and Medicines Act 1988 [Working Paper 1].

In the fourth set are changes to the remuneration and level of pay of staff in the NHS. There will be a small (0.5%) overall increase in numbers of consultant posts, to be targeted at Districts which have longest waiting lists for treatment for acute cases. Pay for consultants is to be related to management duties and it is proposed there will be regular review of bonuses. It appears that there is to be some allowance for local discretionary payments to nursing staff to reflect local labour market conditions. In addition, as noted above, NHS Hospital Trusts are to be allowed to set own pay rates.

Finally, other general changes are that hospitals are to be encouraged to provide a wider range of amenities to NHS patients (for which they will pay) and capital is to be charged for [2.23,2.24].

To summarise, the aim of the White Paper is to improve the efficiency of service delivery by the NHS. To achieve this, the changes will include the development of internal markets and the breaking of the link between service finance and delivery, 'opting out' of certain NHS hospitals, greater freedom within the NHS to set pay and encouragement of links with the private sector. In addition, the White Paper places considerable emphasis on improvements in the 'consumer orientated' attributes.

III. IMPLICATIONS FOR THE PRIVATE INSURANCE MARKET

At their broadest, the White Paper changes may affect the type of care offered in the NHS, the prices for factor inputs, the geographical distribution of facilities, the development of private facilities within NHS hospitals, and the use of the private sector suppliers of care. All these changes may affect the private sector. Further, the results will not necessarily have the same impact upon insurance suppliers as on the independent hospital sector.

The demand for private health insurance is a demand derived from the demand for private health care. Thus any factor which decreases the demand for private health care will also decrease demand for private health insurance. It will also reduce the extent to which the private sector supplies private health care, but does not necessarily reduce the extent to which the private sector supplies facilities to the NHS (for example, the provision of beds under the Waiting List Initiative). Conversely, an increased demand for private health care may be met from within the NHS by the increased provision of NHS pay beds. This will probably increase the demand for health insurance but decrease the demand for the independent hospital sector facilities. In the long run, most changes would appear to affect both the finance and the delivery sides of the private market.

However, to keep the discussion simple, we have chosen to discuss the possible implications first for the suppliers of insurance and second for the independent hospital sector.

1. Tax relief on Health Insurance Purchase

In the short run, the proposal to give tax relief on insurance policies for the elderly will have a positive effect on sales and so on insurers' revenues, assuming insurance prices remain unchanged in the short-run. The impact on the revenue of the sellers of insurance and on the levels of tax lost by the Exchequer depend upon the price elasticity of demand for private health insurance, the size of the price cut that results from the tax relief and the average cost of a health insurance policy.

There are currently no estimates of the price elasticity of demand for the over-60 age group. In fact, presently the only elasticity estimate available is an aggregate estimate, derived from data for all subscriber types (i.e. individual and corporate cover) and all age groups for the period 1955 to 1986 (Propper and Maynard 1989). These data suggest a short run price elasticity of -0.6 (95% confidence interval -0.5 to -0.7) which is within the range suggested by North American data (Pauly 1986).

The size of the price cut depends on how many of the over-60s are tax payers, or will have their insurance purchased for them by tax payers, and the marginal tax rates of the tax payers. Obviously, the proposed changes give an incentive to higher marginal rate tax payers to purchase insurance for a relative over-60 who was previously personally covered, as well as increasing total purchase for or by the over-60s, but the likely size of a switch between purchasers is not known. In the population as a whole it

is estimated that one third of the over-60s are tax payers. Thus at its lowest, assuming all policies are bought by the over-60s, the tax relief could amount to an average cut in price of 8.3 per cent ($1/3 \times 25\%$). At its highest, assuming all policies were paid for by working individuals with income subject to the highest tax rate, the fall in price would be 40 per cent.

The predicted increase in the number of subscribers, the increase in insurance company revenue and the revenue loss to the Exchequer under three different assumptions of the size of the effect of the tax relief on price are given in Table 1. The three assumptions are labelled Scenarios A, B and C respectively. In calculating the changes presented in the table it is assumed tax relief is treated as a price decrease by all those who are eligible for relief.

The table shows that the predicted growth in the number of subscribers is relatively small. Under Scenario A, in which one third of the purchasers of health insurance claim tax relief at a marginal rate of 25 per cent and all other are non-tax payers, the predicted increase in subscribers is just under 30,000. Under Scenario B, which assumes all policies are purchased by individuals whose marginal rate of tax is 25 per cent, the increase in subscribers is 90,000. Under Scenario C, in which all purchasers claim tax relief at 40 per cent, the predicted increase is 144,000.

As a consequence of the relatively small increase in the number of subscribers, the immediate revenue implications for the suppliers of insurance are limited. The revenue implications obviously depend on the price of the contracts purchased. Under the fairly conservative estimates of the price of insurance given in Table 1 (£100-£500 per annum), the

Table 1 : Estimated effects of Tax Relief for numbers of new subscribers, insurance supplier revenue and cost to the Exchequer

The data used assume:

1. Number of current subscribers over 60 = 600,000
2. Price elasticity of demand for insurance = - 0.6

Estimates calculated under three assumptions as to impact of tax relief on insurance purchased for the over 60s

- Scenario A : 1/3 of purchasers pay tax at standard rate (25%); remaining 2/3 pay no tax
- Scenario B : All purchasers pay tax at the standard rate
- Scenario C : All purchasers pay tax at highest rate (40%)

Increase in number of subscribers aged 60 and over

	Scenario A	Scenario B	Scenario C
New subscribers	29,800	90,000	144,000

Increase in insurance sales revenue (£m)

Average Price of Policy	Scenario A	Scenario B	Scenario C
£100	2.99	9.0	14.4
£250	7.5	22.5	36.0
£500	14.9	45.0	72.0
£1000	29.9	90.0	144.0

Cost to Exchequer (£m)

Average Price of Policy	Scenario A	Scenario B	Scenario C
£100	5.23	17.25	29.6
£250	13.11	43.13	74.0
£500	26.22	86.25	148.0
£1000	54.44	172.5	296.0

Sources

Number of subscribers over 60: BUPA Press Release 2/2/89
 Estimate of price elasticity: Propper and Maynard (1989)
 Cost of insurance: £100 p.a. is approximate cost of lowest BUDGETBUPA policy (Press release 2/2/89); £250 p.a. is approximate cost of WPA Health Contract Scale 3; £500 p.a. is approximate cost of WPA Health Contract Scale 1; £1000 p.a. is approximate cost of BUPAcare London Scale

increase in revenue ranges from 2.99 to 72 million pounds per annum. This first figure assumes the lowest average policy cost (100 pounds per annum) and smallest extent of tax relief, and the second figure assumes a policy price of 500 pounds per annum and greatest tax relief. The higher the price of insurance the higher the revenue gain (assuming the price elasticity of demand does not change). Given that we have taken fairly conservative estimates of the price of insurance, the expected gain in revenue may be larger.

The final section of the table presents the fall in tax revenue resulting from the tax relief. Under the assumptions used to construct the table, this loss is estimated to be between 5.2 and 148 million pounds per annum. It should be noted that this loss in Exchequer revenues is greater under each price of insurance and extent of tax relief assumption than the revenue gain for the sellers of insurance. The reason for the difference is that the insurers gain revenue only from new subscribers, but tax relief is given to both existing and new subscribers. The divergence between the revenue loss for the Exchequer and the revenue gain for the insurance suppliers is greater the higher the tax relief and the higher the price of insurance. If the actual price of insurance were higher than the prices assumed in Table 1, the gap between the Exchequer loss and insurer gain would be larger than that presented here.

The analysis presented in Table 1 is a short run analysis, based on the assumption that suppliers respond passively to an increase in demand by offering more of the same type of contracts and that the nature of demand does not change. It also does not take into account any increase in sales to the under-60s which may result from the publicity about private health insurance in the debate around the White Paper. Recently, it has been

argued that there are limits to the ability of the private sector in its present form to treat the elderly (Nicholl et al 1989a; Orros 1988) and this may limit any growth in insurance sales to the over-60s.

At present, the private sector does not treat a high proportion of the elderly (Nicholl et al. 1989a). This may be because of a lack of demand resulting either from restricted access to finance (until recently, no new policies were sold to the over 64s) or from the high cost of finance. It is possible that in response to tax relief, insurance suppliers will respond by issuing new types of contract, aimed specifically at the over-60s, which are lower cost. One such contract is currently on the market (BudgetBUPA) but sales figures are not available. Such new contracts may increase purchase. It is worth noting that in any attempt to increase purchase, contracts will have to be carefully designed to avoid adverse selection, and the devices used to achieve this may mean sales are fairly limited. For example, restrictions on the treatments covered by insurance helps keep down costs, but also limits the attractiveness of a policy.

However, low demand may not stem only from high cost of insurance. Low demand by the over-60s may be the result of the lack of provision of treatment within the private sector for chronic medical conditions. If low purchase of insurance and/or low usage of the private sector by the over-60s is the result of a lack of supply of appropriate private sector facilities, then changing the price of contracts which provide care of the type currently supplied by the private sector will not result in a large increase in demand by the over-60s. In other words, even if restrictions on access to finance are relaxed, the increase in demand for private health insurance will be limited unless there is a large increase in the demand

for private sector care.

In terms of the impact on welfare subsidisation of health insurance purchase will move the market away from, rather than towards, greater efficiency. Subsidisation results in a distorted (lower) price for insurance. Ceteris paribus, this will lead to overconsumption of insurance relative to the efficient level. In addition, it has been argued in the North American market that tax subsidisation of health insurance has resulted in cost escalation in the medical care market (Pauly 1986). The argument runs as follows. Full cover insurance reduces the price of medical care at point of demand, thereby increasing consumption of medical care. This increase in consumption is passed on into higher premia, but because of tax relief, demanders of health insurance are relatively insensitive to increases in the price of premia. Thus they continue to buy health insurance and a cost spiral occurs.

Although the price of insurance will be lower than the efficient price, the effects of this type of cost escalation will be limited in the UK while the private sector remains a small provider of health care. The limited nature of private sector provision means that any cost escalation that arises from increased provision of full cover health insurance will be confined to acute care and so will be small in relation to the whole of the medical care market. Nevertheless, the price of insurance remains distorted by tax relief, thus encouraging over-consumption of health insurance.

Tax relief on health insurance would also not appear to promote equity, defined either in terms of an after-tax income distribution which is more pro-poor than the pre-tax distribution (vertical equity) or in

terms of equal access to medical care for those in equal need or ability to benefit (horizontal equity). Social surveys show that the insured tend to be of higher average income than the uninsured (General Household Surveys 1982, 1983). Thus as tax relief represents a transfer to all purchasers of health insurance for the over-60s (i.e. to existing as well as new subscribers), it will go predominantly to those with higher incomes. Thus tax relief will decrease rather than promote vertical equity. As the over-60s covered by health insurance are currently of higher income than the over-60s who are not, tax relief will permit greater access to health care by a higher income group and so, unless this group are sicker, will decrease horizontal equity.

2. Effect of Changes to the NHS

The introduction of GPs as budget holders may alter the incentives of GPs to promote private insurance and private sector health care. This may result in increases in insurer costs and premia. At present, GPs perform a gatekeeper role for private care financed by private health insurance in much the same way as for NHS care. Reimbursement for private care is not given unless such care was authorised by a medical practitioner, generally the GP. Currently a GP has no financial incentive to refer a patient to the private sector, though there is some evidence that private patients are referred more often (Gillam 1985), perhaps because referral to the private sector has fewer time or reputational costs for the GP. If GPs become budget holders these incentives change.

A GP with a limited budget has an incentive to encourage patients to take out insurance in order to reduce outgoings from his own budget. For

example, diagnostic tests will be included in the GP's budget. If the GP can persuade practice patients to use the private sector, paid for by insurance, then the GP will use less of the practice budget. If GPs respond in this manner to the new incentives, insurers will no longer be able to use these GPs as their gatekeepers and will have to seek new methods of cost containment. This will probably raise administration costs, as GPs currently receive no remuneration from insurance suppliers for their gatekeeping role. The implications for supplier profitability depend on whether such costs are passed on into premia and the price elasticity of demand.

Waiting lists, or more properly, waiting times, are argued to be a key determinant of insurance purchase (Laings 1988; Propper and Eastwood 1989). While the White Paper extends the current Waiting List Initiative, which reduces lists if suppliers do not respond to shorter lists by increasing referrals (see, for example, Cullis and Jones 1985), in the short run it does not seem likely that this will much affect the demand for private health insurance. It has been argued, both in North America (Neipp and Zeckhauser 1986) and in the UK (Propper and Eastwood 1988), that individual insurance buyers are slow to respond to marginal changes in their purchase of insurance. Corporate buyers appear to use insurance, at least in part, as part of a package to attract employees (Stockwell 1988). Thus neither individual nor corporate subscribers appear likely to reduce purchase in the short run simply because the Waiting List Initiative is extended.

In the longer run, the NHS Review will lead to some type of internal market. Whether this will reduce the long term equilibrium level of lists depends on the willingness of patients to travel to receive care and the response of consultants to shorter lists. If waiting times are

significantly reduced by the development of an internal market then the demand for private insurance may fall, but if there is no perceived fall in waiting times then the demand for private insurance may rise because the expectations about a better NHS service have not been met.

Changes in the nature of NHS provision will provide competition for the private sector. This may decrease the demand for insurance. For example, the increased use of amenity beds and the provision of more consumer orientated care in the NHS sector may reduce the long term demand for wholly private care. The creation of NHS Hospital Trusts may create direct competition for the private sector, particularly if these hospitals raise their level of amenity provision. Any increase in the geographical imbalance of better NHS facilities that favours the South-East (say due to distribution of NHS Trust hospitals and better funding for the Thames regions) will result in a pattern where better NHS facilities will be in the same areas as the insurance buyers (Propper and Eastwood 1989). Thus potential purchasers have some incentive not to move out of the NHS. Again, the extent of change will depend on the responsiveness of both individuals and corporate purchase to these factors and the ability of NHS managers to increase the provision of amenities. The stricter the cash constraints on the NHS, the smaller may be the ability of managers and clinicians to increase 'consumer orientated' provision, thus the smaller will be any fall in demand (or in the growth in demand) for private sector care and so for health insurance. The development of an internal market may also lead to greater provision and marketing of NHS pay beds. If demand for these increases, so will the purchase of private health insurance.

Finally, unless efficiency increases, any increase in costs in the private sector will be passed on into insurance premia. In the short run, there will be cost increases from the nurses pay award of 1988 (Laings 1988). Other longer term possible private sector cost increases are discussed in the next section. It is worth noting that as demand appears to be inelastic, the affect of an increase in premia, at least in the short run, will not reduce insurance revenues as a whole. However, it may encourage switching to lower cost suppliers if there are substantial price differences between suppliers. In the long run, any cost increases in the private sector are unlikely to be beneficial for the health insurance market, particularly if NHS hospitals increase their provision of amenities. Finally, the increased provision of such amenities at a positive price may stimulate the growth of other forms of medical insurance, for example, Health Cash Insurance, which provides cash in the event of a hospital inpatient stay.

IV. IMPLICATIONS FOR THE INDEPENDENT HOSPITAL SECTOR

The effects on this sector depend first on any change in demand for private care and second on the costs of private provision relative to NHS costs. Certain proposals in the White Paper would appear to benefit the private independent sector.

1. Proposals which positively benefit the private sector

First, given the amount of extent of spare capacity in the private sector, the extension of the Waiting List Initiative and the development of a provider market should provide opportunities for greater use of private sector capacity. In the short run, the private sector can price at marginal

cost. If this is below NHS costs the private sector would attract patients and so increase revenue. There is very little evidence as to the relative costs of the NHS and the private sector, though isolated examples suggest the costs charged to the NHS by the private sector are not necessarily lower than NHS (marginal?) costs (see, for example, the report in the Health Service Journal 21 January 1988, p69). The use of private sector facilities under the Waiting List Initiative to date has been relatively limited. For example, in 1986, 10,655 surgical and medical NHS patients were treated in non-NHS facilities and just under 40 per cent of these were resident in one regional health authority (Nicholl et al 1989a). However, this may reflect political unwillingness to use the private sector. Under the type of provider market system that may emerge from the White Paper, such political reluctance may diminish in the face of cost incentives.

Incentives for Health Authorities to engage in joint capital projects with the private sector are clearly of benefit to the private sector. To date such ventures have been limited in number, but have extended in 1988 from partnerships in prestige hospitals to joint ventures in district services and facilities. Despite evidence of considerable interest in the private sector in such activities, it is too early to assess their profitability. In addition, rules to include capital costs in NHS pricing will lead to a fall in the relative price of the independent hospital sector and so benefit the private sector.

2. Proposals which have either positive or negative effects

The long run implications of provider markets for the private sector appear to be less clear-cut. In the long run, a private supplier must

cover fixed as well as variable costs. Given the amount of excess capacity in the industry, it would seem as if the private sector would have to have significant cost advantages relative to the NHS in order to avoid some decline.

The White Paper probably increases the incentives for NHS managers to re-introduce NHS pay beds. While little costing data is available (and the Independent sector argue that the NHS does not calculate costs correctly (Randall 1988)), the amount of day surgery is greater and length of stay in NHS pay beds is shorter than length of stay in the independent sector (Nicholl et al 1989b). If charges are related to length of stay then NHS pay beds will be cheaper. On the other hand prices may be higher in the NHS because of 24 hour cover by doctors (though the findings of Nicholl et al (1989a) suggest that the amount of medical cover in the private sector may be rising). If there is a price difference in favour of NHS facilities, cost containment measures by insurers may lead to encouragement of subscribers to use NHS pay beds rather than the independent sector. Limited evidence from the corporate purchasers of insurance suggest that cost containment is a concern for corporate purchasers (Stockwell 1988), so moves to lower premia would have the support of this group of purchasers.

While the independent hospital sector may not face competition from all NHS hospitals (particularly since the cash constraints on the NHS seem likely to continue) the NHS Trust Hospitals may present competition for the private sector. This could be competition for patients (inside and outside pay beds) and/or for labour. If these hospitals are predominantly located in South Eastern England, in the absence of a substantial increase in the demand for private sector care, the demand for care in the Independent Sector may diminish.

3. Long-term effects of increased competition

In general, any long term boost to demand from the divorce of service provision and budget receipt will depend on how the private sector costs or efficiency compare with that of the NHS. It is not clear that the attempts to increase the amount of competition in the health care market will necessarily be beneficial to the private sector. The private sector will face competition for patients, factor inputs and insurance finance from NHS hospitals, NHS pay beds and the new NHS Trust hospitals. All of these will probably be cash constrained and seeking ways of increasing their revenue within the wide ranging powers offered by the 1988 Health and Medicines Act. First, relative costs in the two sectors are currently unknown, though as noted above, length of stay for similar elective treatments is lower in the NHS pay bed sector than in the Independent Sector. If this reflects costs, then total costs per case may be higher in the private sector.

Second, as the private sector currently has very limited training facilities, it has to compete with the NHS for staff. Nicholl et al. (1989b) have commented that there is probably no spare labour capacity in the health care sector at present. Any increase in staff in the private sector must come from a shift from the NHS. If consultants see their NHS wages as fixed, then the effect of an increased demand for consultant staff in the private sector will probably be to increase wages in this sector.

Third, any general increase in wage costs that results from the NHS reforms will be passed on to the private sector, although costs relative to the NHS may remain unchanged. The NHS is presently a monopsonistic

purchaser of medical labour and the medical staff have some degree of power. The fragmentation of the NHS may lead to a reduction in the NHS' monopsony power. The consequences of a breakup of a monopsonist are difficult to predict when the prior situation was one in which a monopolist faced a monopsonist (Pauly 1988) but given that medical inputs remain monopolistically organised, wage increases may be expected following the development of internal markets. Any increase in wages will increase the costs of the private sector. Even if there is only a small increase in costs on average, the ability of NHS Hospital Trusts to set their own pay scales will probably raise the costs of labour to hospitals in the same location. If these Trust hospitals are predominately located in the South-East, the private sector will again face higher input cost in a region which already has considerable over-capacity.

Fourth, there is evidence from North America that increased competition by hospitals to attract physicians increases hospital costs. Robinson and Luft (1985) suggest that the more competitive the market for physician inputs, the higher hospital costs. Under a system in which physicians are not full-time hospital employees but bring patients to the hospitals (as in the UK private sector) hospitals must compete for physicians. To compete they tend to introduce capital equipment and procedures which raise patient demand for physicians' services, so attracting physicians. However, this introduction of increased capital and diagnostic procedures increases the hospital's costs. If NHS hospitals do not have to compete for physicians to the same extent as Independent hospitals, or consultants in NHS hospitals do not compete with other consultants for patients, or the NHS hospitals are unable to increase their capital to the same extent as the private sector, the impact on costs of competition for consultants will be greater for the Independent sector.

Finally, the aim of the White Paper is to improve efficiency. In order to improve efficiency, the NHS budget holder should not seek merely to reduce costs, but to obtain lowest cost for a certain level of quality. Freeland et al. (1988) argue that it is extremely difficult, even within the American health care market in which better data on outcomes is available, to issue contracts which simultaneously monitor price, quantity and quality. One response to this problem is to increase regulation. Robinson and Luft (1985) have argued that increased regulation is associated with higher health care provider costs. Thus any regulatory response will decrease the long-run profitability of the private sector unless these costs can be passed on. Another response to the problem of measuring quality is to set minimum volume requirements, as volume appears to be associated with (crude) measures of better outcome (Hughes et al, 1987). Bed sizes vary in private hospitals, but a minimum volume measure would probably have greatest adverse consequences for the not-for-profit hospitals which have tended to operate smaller units. If non-pay bed NHS volume was taken into account in assessing volume, then it would be expected that such regulation would have greater impact on the Independent than the NHS sector.

V. CONCLUSIONS

Many of the changes outlined in the Review are not spelt out in any detail. Hence, predictions of the impact of these changes on the private sector are necessarily speculative. However, the following broad conclusions may be drawn.

The effect of tax relief on private health insurance purchased to cover the over-60s will be to increase sales of private health insurance. The increase depends upon the size of the tax relief and the elasticity of demand with respect to the tax cut. Preliminary estimates suggest that demand appears to be price inelastic. Even under the assumption of 40 per cent tax relief for all purchasers of health insurance for the over-60s, the increase in sales would appear to be below 150,000. The loss in tax revenues following tax relief is greater than the gain in insurance supplier revenue from higher sales. The increase in revenue from new sales is insufficient to outweigh the tax loss consequent on relief for both existing and new subscribers. These results are based on the assumption that the average cost of an insurance policy for the over-60s is at most £500 per annum; if the average premia is higher then the gap between tax loss and insurance supplier revenue would widen. Under the assumption that insurance is currently priced at marginal cost, tax subsidisation of insurance purchase reduces welfare because it reduces the price to the consumer to below marginal cost.

The effect of the Review on the Independent hospital sector depends first upon the change in demand for private sector care and second upon the relative costs of this sector compared to the NHS. In the short run, an extension of the Waiting List Initiative would appear likely to benefit a sector with over-capacity. Encouragement of joint public-private sector ventures will expand a developing area of activity. In the longer run, on the demand side, the private sector is likely to face competition from the NHS, particularly if there is increased provision of amenities either in all NHS hospitals or in those located close to private sector hospitals. On the supply side, the Independent sector may face greater competition from NHS pay beds for private patients (and perhaps insurance finance) and

with the NHS as a whole for staff. The breakup of the NHS as a monopsonist may increase the average level of wages in the health care sector, so generally increasing private sector costs. Competition for staff may raise Independent sector costs more than those of the NHS; competition for patients may be accompanied by increased regulation which if volume based would have greatest impact on the smaller not-for-profit segments of the Independent sector. Given the current low occupancy rates, it appears likely that the Independent sector must have a significant cost advantage over the NHS to avoid rationalisation and perhaps greater concentration of ownership.

The private sector has developed to fill a perceived gap in NHS provision. Given that the dominant mode of financing health care is not altered by the Review, to the extent that the Review sets in motion changes which improve NHS acute services, at least in regions with higher per capita income, then the private sector is likely to face more competition. If the overall level of demand for private care does not increase very much or most of the growth in demand is for amenity beds and consumer extras to NHS care, then the scope for the private sector is diminished rather than boosted by the Review. On the other hand, if there is a large demand for private care as the result of higher incomes and expectations and the private sector is more efficient (or lower cost), then the incentives for increased competition between providers that the introduction of budget holders is designed to give will increase the demand for private provision and for private insurance. Finally, NHS Trust hospitals may provide rather more competition for the private sector than the NHS as a whole has done in the 1980s. It has been argued that the debate over pay beds initiated by the Labour government in the mid 1970s sharply increased the opportunities

for the private sector. The introduction of an internal market, coupled with the provision for larger NHS hospitals to 'opt out' and the associated need to raise revenue, in part through the provision of more consumer orientated care, could reverse this trend and result in a reduction in the growth of the Independent Hospital sector.

REFERENCES

- Andrews, D. (1988) Paper given at the Financial Times Conference on Private Health Care, London 29-30 November 1988, Speakers Papers.
- Cullis J and Jones P (1985) 'National Health Service Waiting Lists' **Journal of Health Economics** 4,119-135
- Edwards, B (1988) 'The Importance of the Public/Private Partnership' Paper given at the Financial Times Conference on Private Health Care, London 29-30 Nov 1988, Speakers Papers
- Freeland, M.S., Hunt, S.S. and Luft H.S. (1988). 'Selective Contract for Hospital Care based on volume, quality and price: prospects, problems and unanswered questions. Journal of Health Politics Policy and Law, 12, 3, 409-426.
- Gillam, D (1985) 'Referrals to Consultants - the NHS versus private practice' **Journal of the Royal College of General Practitioners** 35, 15-18
- Graham, R (1988) 'The Widening Role of the Independent Sector' Paper given at the Financial Times Conference on Private Health Care, London 29-30 Nov 1988, Speakers Papers
- Grant, C (1985) **Private Health Care in the UK**. Economist Intelligence Unit, Report No. 207
- Hughes, R.G., Hunt, S.S. and Luft, H.S. (1987). Effects of Surgeon volume and hospital volume on quality of care in Hospitals. Medical Care, 25, 6, 489.
- Laings Review of Private Healthcare 1988/89**. London: Laing and Buisson Publications Ltd.
- Laings Review of Private Healthcare 1987**. London: Laing and Buisson Publications Ltd.
- Maynard, A (1982) 'The Private health Care Sector in Britain' in G. McLachlan and A Maynard (eds) **The Public/Private Mix for Health**. Nuffield Provincial Hospitals Trust
- Neipp, J and Zeckhauser, R (1986) 'Persistence in the Choice of Health Plans' in R. Scheffler and L. Rossiter (eds) **Advances in Health Economics and Health Services Research** Vol. 6, 47-72. Greenwich, CT and London: JAI Press
- Nicholl, J P, Beeby, N and Williams, B (1989a) 'Comparison of the Activity of short stay independent hospitals in England and Wales, 1981 and 1986' **British Medical Journal** 298, 239-42
- Nicholl, J P, Beeby, N and Williams, B (1989b) 'Role of the private sector in elective surgery in England and Wales, 1986' **British Medical Journal** 298, 243-7

- Orros, G (1988) 'The Potential Role of Private Health Insurance' Working Paper No. 6 of the Working Party on Alternative Delivery and Funding of Health Services, Institute of Health Service Management, London
- Pauly, M (1986) 'Taxation, Health Insurance and Market Failure in the Medical Economy' *Journal of Economic Literature* 24 629-675
- Pauly, M (1988) 'Market Power, Monopsony and Health Insurance Markets' *Journal of Health Economics* 7, 111-128
- Propper, C and Eastwood, A (1989) 'The Reasons for Non-Corporate Health Insurance Purchase in the UK: The results of a New Survey' Centre for Health Economics, University of York Discussion Paper 52
- Propper, C and Maynard, A K M (1989) 'The Market for Private Health Insurance and the Demand for Private Health Insurance in the UK' Centre for Health Economics, University of York Discussion Paper 53
- Robinson, J.C. and Luft, H.S. (1985). 'The impact of hospital market structure on patient volume, average length of stay and the cost of care'. *Journal of Health Economics* 4, 333-356.
- Stockwell, M (1988) 'The Role of Private Health Care as an Employee Benefit' Paper given at the Financial Times Conference on Private Health Care, London 29-30 Nov 1988 Speakers Papers
- Thomas, K T, Nicholl, J P and Williams, B T (1988) 'A Study of the Movement of Nurses and Nursing Skills between the NHS and the Private Sector in England and Wales' *International Journal of Nursing Studies* 25, 1, 1-10