The private finance initiative

Planning the "new" NHS: downsizing for the 21st century

Allyson M Pollock, Matthew G Dunnigan, Declan Gaffney, David Price, Jean Shaoul

Summary points

- Hospitals funded through the private finance initiative are being planned on the basis of financial, not clinical, needs
- The data used in support of private finance initiative planning do not conform to the Department of Health's standards and definitions
- Full business cases under the private finance initiative are incomplete with respect to total and specialty bed numbers, the caseload to be treated, and the service needs of the population
- Private finance initiative hospitals entail major reductions in the clinical workforce, and service capacity—in direct contradiction of government policy
- In many areas private finance initiative hospitals will need to generate income from private patients; as a result some hospitals have increased the proportion of private beds
- The private finance initiative will result in a shrunken NHS, inadequate to meet the needs of the population

Growing numbers of health authorities and NHS trusts are carrying out service "reconfigurations" which involve the centralisation of services from two or more sites and the sale or downgrading of the other sites. Where structural change requires major investment, the private finance initiative is the only method of financing it. However, the higher cost of the private finance initiative increases the cost pressures on the revenue budgets.[1] The result is service contraction: on average, bed numbers are to be reduced by 31% over the next three to five years (table 1). It should be noted that, at a national level, there has been no reduction in acute beds since 1994-5 (figure).[2]

The relationship between new investment and service configuration raises questions about the planning process: who is making decisions on future services, and on what basis?[3] When faced with questions about the relative importance of clinical and financial factors in service planning, the government has tended to argue that the crucial decisions are all made by clinicians. Clinical directors are responsible for agreeing and medical directors for approving full business cases; however, healthcare planning has never been a core clinical competence, and making decisions is very different from agreeing to decisions taken by others. This issue was raised earlier this year in correspondence in the Glasgow *Herald*, in which the Scottish health minister responded to criticism of bed numbers at the controversial Royal Infirmary of Edinburgh private finance initiative scheme by stating, "It is the clinicians who decide on the number of beds.... The assumptions on bed numbers were developed by clinicians."[4] But one of the clinicians involved in the planning process illustrated the hidden ambiguity in the minister's statement: "We were told the maximum costs and told how this translated into maximum bed numbers ... and told that we could decide how they should be divided among the various specialties."[5] On this account, total capacity was determined on financial grounds, and clinical decisions are confined within these predetermined limits. As we shall see, business cases for other private finance initiative schemes lend support to this account of the planning process. In this paper we use the full business cases that are available to evaluate the adequacy and nature of the planning process as judged by the quality of the information and the nature of the evidence.

Table 1 Changes in bed numbers at NHS trusts under private finance initiative development. Values are average numbers of beds available daily (all specialties)

Trust	1995-6	1996-7	Planned*
Bromley Hospitals	610	625	507
Calderdale Healthcare	797	772	553
Dartford and Gravesham	524	506	400
North Durham Acute Hospitals	665	597	454
Norfolk and Norwich	1120	1008	809
South Manchester	1342	1238	736
Worcester Royal Infirmary	697	699	390
South Buckinghamshire	745	732	535
Hereford Hospitals	397	384	250
Carlisle	506	507	465
Greenwich	660	566	484
Total	8063	7634	5583
Change (percentage change) from 1995-6	—	429 (–5.2)	2542 (–30.8)

*Private finance initiative beds are not directly comparable (see box).

This is the third of four articles on Britain's public-private partnership in health care

Health Policy and Health Services Research Unit, School of Public Policy, University College London, London WC1H 9EZ
Allyson Pollock, *professor*
Declan Gaffney, *research fellow*
Department of Human Nutrition, University of Glasgow, Glasgow G31 2ER
Matthew G Dunnigan, *research fellow*
Social Welfare Research Unit, University of Northumbria, Newcastle upon Tyne NE7 7XA
David Price, *research fellow*

continued over

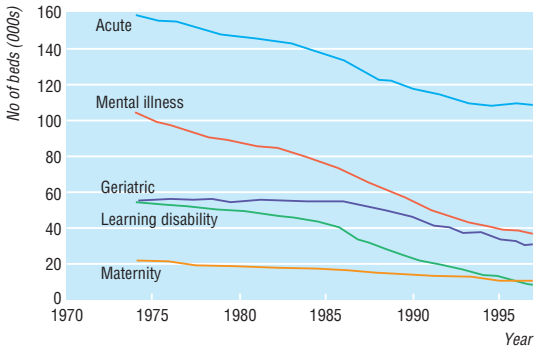
BMJ 1999;319:179–84

website *extra*

Sources of data in tables and figure and breakdown of availability payment calculations are given on the BMJ's website

www.bmj.com

Department of Accounting, University of Manchester, Manchester M13 9PL
Jean Shaoul, *lecturer*
Correspondence to: Allyson Pollock allyson.pollock@ucl.ac.uk



Average number of beds available daily, England, 1974 to 1997-8

Planning since the NHS Act 1990: drivers for change

By 1998, a third of health authorities and trusts were in serious financial difficulties.[6] There are two main causes for this. Firstly, the introduction of capital charges in 1991 diverted hospitals' operating income to pay for buildings and equipment that were already owned outright.[7] Secondly, revenue pressures have increased through 3% annual efficiency savings, unfunded pay awards, and other costs. Capital charges and clinical spending are inversely related: the higher the value of the asset base, the higher the capital charge and the lower the budget available for clinical care. Required by the 1990 NHS and Community Care Act to balance their budgets, trusts have reduced their capital charges through selling or mothballing assets and through mergers and rationalisations.[8]

The 1990 act also made trusts responsible for capital and service investment strategies which by 1998, with capital funding no longer available, they were largely funding out of their own cash savings. The original intention was to fund development under the private finance initiative through the sale of existing sites and the diversion to the private sector of the annual capital charge paid to the Treasury. This proved overoptimistic.[9] Because hospitals funded through the private finance initiative have turned out to be so expensive,[1 10] the proportion of income spent on capital has increased, thereby reversing NHS trusts' attempts to reduce their capital costs. What impact do these increased costs have on the planning process?

Planning in the devolved NHS

Until 1990, planning priorities were set by regional health authorities and were based on service needs. Regional planning departments estimated bed capacity by using population based measures of utilisation and service provision (adjusted to take account of sociodemographic projections, trends in utilisation, morbidity, and mortality, and estimates of changes in technology and clinical practice). The evidence from the available full business cases is that these methods have been abandoned.

Now the planning process starts with "outline business cases," which trigger the process of application to the private finance initiative; "full business cases" then set out for approval the final scheme negotiated with the private sector.[11] The *NHS Capital Investment Manual*, which is the guidance on procurement, describes affordability as the critical constraint in planning.[12] Under this system trusts have to justify the affordability of their proposals and show value for money.[13] Regional assessments of need have been replaced by trusts' own assessments of the case for change.

The case for change is not stringently tested in this procurement process. Despite the scale of investment in the private finance initiative, the 30 year contract, and the profound consequences for patient care, the financial exercise does not include an assessment of service needs. The guidance does not require clinicians and public health doctors to be involved. Demand projections have replaced estimates of service needs. These are usually expressed as caseload or admissions and measured as finished consultant episodes.

Performance, or the "efficiency" with which caseload is processed, is measured in several ways, most commonly as throughput, bed occupancy, day cases, and length of stay. In private finance initiative planning, these performance targets are used to reconcile projected caseload with projected bed numbers, as the Calderdale business case makes clear: "A further bed modelling exercise was commissioned by the health authority and included more stringent targets for length of stay, occupancy, and day cases. This was then supplemented by a jointly commissioned exercise to impute performance targets from the agreed bed numbers and to verify the extent of change of practice required."[14]

The full business cases released so far show serious departures from the Department of Health's definitions of admissions, bed numbers, and performance measures. The first box shows the way in which bed and caseload data have been altered, with the effect that comparisons with the Department of Health's data and some of the outline business cases can no longer be made, thereby concealing the extent of proposed changes in caseload and bed numbers. Case study 1 shows how Norfolk and Norwich's decision to use deaths and discharges rather than finished consultant episodes and to abandon trend analysis led the trust to seriously underestimate during the procurement process the caseload to be treated and the number of beds required. It is now preparing a new business case for a further 144 beds. The third box gives the example of Calderdale: the trust's departure from the Department of Health's definitions of beds and the inclusion of day case beds has led it to underestimate the scale of bed reductions that will take place under the private finance initiative. Data given in *Hansard* add to the confusion, as these state a total bed complement of 614 compared with 553 total beds in the full business case.[15] No explanation of how to reconcile the two sets of figures is given. In Scotland, Lothian Health Board's decision to use local classifications, which did not map to national classifications, disguised the scale of bed reductions; this was subsequently confirmed in a report from the information and statistics division of the Common Services Agency of the NHS in Scotland.[16 17]

Business cases in the private finance initiative contain little or no planning material. Many cases, for example those from the Norfolk and Norwich, Hereford, and Carlisle trusts, fail to define the numbers

of total and specialty beds available for NHS use, and several do not specify the NHS caseload to be treated.

The nature of the planning tasks

These departures from normal planning methods suggest that the main function of the current planning process is to justify cost restructuring: projected clinical activity has to be brought in line with the income and hospital capacity that will be available to cater for it. Four methods of restructuring costs are already common practice across the NHS as trusts struggle to resolve budget deficits. These are discussed below.

Shifting the costs of care out of the NHS

The NHS has a history of shifting out the costs of care in key areas such as NHS dentistry, optical services, and long term care. Between 1986-7 and 1996-7 the average number of NHS beds available daily decreased by 42%, 47%, and 74% of all beds for geriatric care, mental illness, and learning disability respectively.[19-21] These costs were mainly transferred to users, carers, and local authorities. Constraints on capacity are now emerging in the acute sector. Inpatient non-surgical acute caseload rose by 19% between 1994-5 and 1997-8; the number of acute surgical inpatient episodes fell by 5%, and waiting lists rose to record heights.[22 23] The private finance initiative plans are likely to accelerate the process of cost shifting because many assume a major reduction in caseload against a background of increasing hospital admissions (table 2). Described by one chief executive as "turning off trade," the private finance initiative plans justify reductions in caseload by mentioning high numbers of "inappropriate admissions" or "delayed discharges." Research on the development of utilisation review tools has shown that fewer than 4% of all admission days could be deemed inappropriate and that delayed discharge was due to lack of alternative provision.[24]

Furthermore, the private finance initiative business cases anticipate the diversion of caseload to care in the community without securing the resources to fund the alternative provision. The strategy of the Norfolk and Norwich Trust and the health authority, which was to divert up to 8% of current caseload into the community, was followed by the health authority's decision to close five community hospitals and to reduce the availability of beds in community hospitals by a third.[25] In Hereford, where the 50% reduction in acute beds will require increased health authority funding and "accommodating caseload accounting for 14 000 bed days" in community settings, the extra non-acute resources are not identified in the business case. In Dartford, community spending has been reduced to fund the additional costs of the acute sector: funding for the reprovision of services for mental health and learning difficulties and community nursing was withdrawn.[26]

Despite a background rise in inpatient admissions these plans also assume a change in case mix through

How planning documents depart from national standards for data collection

Baseline data for numbers of acute beds (national data from the Department of Health) are not comparable with projected bed data for private finance schemes because of various factors:

- Inclusion of some GP (general practitioner) beds, day care beds, and continuing care and long term care beds (these are currently counted separately and excluded from figures for availability of acute beds)
- Bed data for private finance schemes may include private beds, even though these will no longer be available for NHS care
- Inclusion of 5 day beds and cots (5 day beds will not be available for emergency care; an increasing proportion of beds in the private finance initiative hospitals will be 5 day beds)
- Bed data for private finance schemes always exclude beds lost across a district health authority as a result of hospital closures

Case study 1: how the planning assumptions went awry

In Norfolk and Norwich, admissions for all specialties (finished consultant episodes) rose by 4.1% annually from 1994-5 to 1997-8, and day case admissions for all specialties (finished consultant episodes) rose by 14.1% annually in this period. Under the private finance initiative, Norfolk and Norwich used deaths and discharges, rather than finished consultant episodes, to project a fall in inpatient caseload of 8% from 1993-4 to 2003-4 with an increase of less than 1.5% a year in day cases. Their projection of numbers of discharges and deaths for the new hospital of 68 000 in 2003-4 was exceeded in 1996-7 when the number of discharges and deaths was 89 665. The trust revised its caseload estimates to 84 700 deaths and discharges (a 6% decrease on 1996-7) and increased its bed numbers to 809, and the full business case was signed in 1998. In March 1999, the health authority increased its required capacity to 102 800 deaths and discharges.[18] On this basis the trust is now preparing a second business case for an additional 144 beds. The health authority plans to close 140 beds in community hospitals in the area.

Case study 2: Calderdale—why standard definitions of beds matter

The table shows changes in bed numbers from the Department of Health's "bed availability" numbers in 1995-6 to those given in the outline business case, in the full business case, and in parliament. Mapping beds back to standard definitions shows that the trusts' estimates of future numbers of acute and total NHS beds under the private finance initiative have been inflated to a total of 573 beds by including private and day case beds. Moreover, they do not reconcile with the data given by parliament in Hansard,[15] which states that final total numbers of NHS beds will be 614—that is, 11% higher than in the full business case.

		Projected bed numbers	
Category	No of beds* 1995-6	Outline business case	Full business case
Acute	370	301	283
Medicine		109	119
Surgery		120	100
Intensive care and special care baby unit		24	30
Paediatrics		27	20
Gynaecology		21	14
Geriatric	223	143	138†
Total acute and geriatric beds	593	444	421
Maternity	64	54	39
Mental illness	139	96	48
Total 24 hour beds	797	594	508
Day case beds	29	20	45
Total NHS beds	825	614	553
Private beds	0	0	20

*Average number of beds available daily.
†Includes 19 general medicine, general surgery, and orthopaedics beds.

Table 2 All specialty admissions in 1997-8 compared with all specialty admissions in new private finance initiative hospitals (numbers are finished consultant episodes) and annual trends in all specialty admissions, England 1993-4 to 1997-8

NHS trust*	All specialty admissions 1997-8	Projected admissions 2003/7	% Change
Calderdale Healthcare:			
Ordinary	35 080	31 765	–9
Day case	10 299	8 716	–15
Total	45 379	40 481	–11
Dartford and Gravesham:			
Ordinary	27 888	24 463	–12
Day case	5 260	9 828	87
Total	33 148	34 291	3
Norfolk and Norwich:			
Ordinary	83 659	Not stated	
Day case	32 406	Not stated	
Total	116 065	64 932†	‡
North Durham:			
Ordinary	36 022	Not stated	
Day case	14 634	Not stated	
Total	50 656	47 913	–5§
South Buckinghamshire**:			
Ordinary	29 434	Not stated	
Day case	8 233	Not stated	
Total	37 667	35 846	–5
Greenwich Healthcare:			
Ordinary	29 875	Not stated	
Day case	9 049	Not stated	
Total	38 924	37 622††	–3
% Annual average change in all specialty admissions (England) between 1993-4 and 1997-8 (finished consultant episodes):			
Ordinary			1.5
Day cases			11.4
Total			3.6

*Bromley has not released its full business case (signed in October 1998). Carlisle provided no data on caseload projection in its full business case.
†Uses deaths and discharges (caseload not updated in full business case) based on 701 beds. See case study (in box).
‡No comparison possible; see case study.
§Full business case assumes 1996-7 caseload; 9% fewer cases than in outline business case.
**Figures in appendix don't correspond with those in full business case. Excludes mental illness and learning disabilities.
††Based on comparative populations.

increased day case and private patient activity and reduced ordinary inpatient activity (see below).

Income generation and private patients

According to the Norfolk and Norwich full business case, "East Anglia has a very high incidence of private medical insurance (21.3% in comparison with a national average of 13%). There are clearly opportunities for the trust to expand its income from private patients. The trust already provides 18 private beds and generates £1.65m in annual income from this sector of the market." The South Buckinghamshire full business case reported that income from private patients was an integral part of the project.

Under the private finance initiative, trusts work on the assumption that they can generate external income by increasing private patient beds and admissions as a proportion of total beds and admissions (table 3). So crucial is this assumption that in Carlisle the number of private beds is currently being renegotiated, even though financing has been finalised. But under current legislation, the NHS must give priority to NHS patients and can therefore convert private NHS beds back for NHS care; this option may no longer be available under the private finance initiative.

Increasing clinical productivity

A trust can try to reduce unit costs by increasing the productivity of the clinical workforce. The full business cases show that the private finance initiative plans rely heavily on performance targets and efficiency measures such as throughput, length of stay, day case rates, and bed occupancy, which they openly acknowledge are "challenging." But instead of using national data these targets are derived from hypothetical norms.[27] In some cases planners take the application of these measures one stage further, deriving single composite measures based on all these efficiency measures and applying them across specialties and subspecialties. South Buckinghamshire, Greenwich, and Dartford trusts took the Tomlinson report for London, which suggested a hypothetical and unevaluated norm of 12.8 beds per 1000 acute finished consultant episodes, and adjusted it to increase productivity (decrease in beds per 1000 finished consultant episodes) by as much as 30% on current performance. Some trusts use targets taken from other private finance initiative hospitals, international comparisons, or the anonymised commercial CHKS (Caspe Healthcare Knowledge Systems) database,[28] which is used to provide data on the performance of "comparable peer groups." Comparability of the peer groups with the private finance initiative hospital in question in terms of population, case mix, and provision of health services is not established in any of the planning documents.

The plans, by concealing the true extent of the assumptions, presuppose truly heroic levels of staff productivity. Many of these performance measures take no account of the different work tempos of specialties such as elderly care or rehabilitation medicine. Nor do they acknowledge the distinctive and different needs of individual patients within specialties. The effect is to "dehumanise" the care process—assuming that a similar case mix and care process can be applied to all patients within a given specialty. In effect, the hospital becomes a factory for conveyor belt care.

Reducing the costs of the workforce

The most common way of balancing the books is to cut the workforce. The workforce plans for the new Edinburgh and North Durham hospitals under the private finance initiative show that the projected clinical staff budget will be 17% less than in 1996 for Edinburgh (table 4) and 22% less than in 1994-5 for North Durham (in cash terms).[29] In Edinburgh there will be 18% fewer staff; similarly in North Durham there will be 14% fewer qualified nursing staff. In both cases a greater proportion of nursing staff will be

Table 3 Private beds as proportion of all beds in a sample of private finance initiative (PFI) hospitals. Values are number of beds (% of 1996-7 total NHS beds)

Trust	Current private beds	Private beds under PFI
South Buckinghamshire	20 (2.7)	28 (5.2)
Carlisle	0	Under negotiation?
Norfolk and Norwich	18 (1.6)	20 (2.5)
Calderdale	0	20 (3.5)

Table 4 Staff numbers (whole time equivalents) and cash expenditure on staff at Edinburgh Royal Infirmary in 1996 and under private finance initiative plans

	Whole time equivalent staff			Staff costs		
Staff	No in 1996	No projected	% Change	1996 (£m)	Projected (£m)	% Change
Medical	544	499	–8.2	28.0	25.0	–17.0
Nursing	2144	1844	–14.0	40.0	29.0	–27.5
Clinical support	899	886	–1.4	16.5	15.0	–9.0
Administrative and clerical	802	556	–30.6	12.0	8.0	–33.0
Ancillary*	502	312	–38.0	Not stated	Not stated	Not stated
Total†	4891	4000	–18.2	96.5	77.0	–19.0

*Some ancillary staff will transfer to private finance initiative contractor. †Does not include ancillary staff.

unskilled: 37% (compared with 25% in 1996-7) in North Durham and 30% (compared with 21%) in Edinburgh.

The policy of cutting clinical labour to pay for the higher costs is fundamental to the private finance initiative. Table 5 shows how the cost of capital as a proportion of total income rises from 8% to 18% in Edinburgh Royal Infirmary and from 7% to 14% in North Durham. (Breakdown of availability payment calculations is shown on the *BMJ* website.) The increased costs of capital are partly offset by a reduction in the clinical staff budgets. A consultancy firm that advises government and trusts on the private finance initiative has estimated that "each million pounds of incremental private finance initiative capital costs anything from £100 000 to £170 000 a year, requiring the elimination of four to five jobs to pay for it. An incremental investment of 200 million requires 1000 job losses, which might be significantly greater than 25% of the work force and is probably only achievable by reducing the number of doctors and nurses, although often these job losses will not be realised within the hospital undertaking the development, but in the local healthcare market."[30]

Policy contradictions

The private finance initiative plans argue for a reduction in acute services and the dispersal and fragmentation of caseload into primary and community care services. But these services are labour intensive and overstretched, and they are already experiencing serious labour shortages. Indeed the parliamentary health select committee recently wrote: "The evidence we have received leads us to conclude that on current trends the projected increases in the number of nurses and other clinical staff fall well short of what is required to deal with current shortages and future developments in the NHS. We hope that recent government initiatives will reverse these trends."[31] The secretary of state for health has tried to stem rising waiting lists and bed shortages by promising to reopen 3000 beds—fewer than the number to be lost under the private finance initiative plans. He has also indicated that the initial findings of his department's national bed inquiry suggest that bed reductions have gone too far already.[32] The department has a policy of increasing medical staff by 7000 and nursing staff by 15 000 over the next three years to counteract problems of recruitment and retention.[33]

Cuts in clinical capacity are frequently justified with reference to flexible bed management techniques such as bed pools, generic beds, and swing beds. The claim that these techniques will increase efficiency is at odds with the current trend towards clinical subspecialisation, another justification for the centralisation and service rationalisation that the private finance initiative is intended to facilitate. It also has serious implications for the budgets for nursing and medical workforces: generic (multiuse) beds will require spare capacity in the workforce or increased use of a highly trained, flexible workforce. Workforce plans under the private finance initiative rely on smaller and less skilled workforces.

Plans also turn on the assumptions that service centralisation alleviates clinical staff shortages and promotes more efficient use of technology. They cite the Royal College of Surgeons' report, which argues for hospitals serving 500 000 population.[34] They ignore the Royal College of Physicians' report, which argues for district general hospitals serving 150 000-300 000 to meet the population needs for emergency medical services.[35-37]

NHS trusts have tended to claim that large reductions in costs will result from the centralisation of services, with net savings to NHS purchasers predicted on the basis of reductions in operating costs. In its outline business case Calderdale Healthcare projected a reduction of £7.0m in its total income requirement, £2.5m of which would be needed for reinvestment in community services. By the time the full business case was prepared the trust was claiming that under the private finance option there would be revenue savings of £13m—but with the rider that "once allowance has been made for the increased costs of the larger single site etc."[14] In fact the savings on operating costs were almost completely absorbed by the annual private finance costs of £14.25m, and the proposed savings to the purchaser became contingent on a further downsizing of the hospital, from 553 beds in the full business case to 400. The same pattern can be observed at other schemes. The outline business case for the North Durham scheme predicted cost reductions of between 6.5% and 8.1%; in the full

Table 5 Structure of hospital costs and expenditure on clinical staff in 1966-7 and under the private finance initiative

	Edinburgh Royal Infirmary		North Durham	
	1996-7	2003-4	1996-7	2001
Total income (£m)	158	145	59	59
Expenditure on clinical staff (£m) (% of total income)	84 (53)	70 (48)	31 (53)	28 (47)
Cost of capital* (£m) (% of total income)	12.6 (8)	26.6 (18)	4.4 (7)	8.5 (14)

*Including maintenance cost.

business case, an extra contribution of £1.5m a year was required from the health authority.[38] At Dartford, the outline business case claimed that "at no additional cost to commissioners, [the scheme] delivers vitally important … strategic objectives."[39] By the time the full business case was presented, the purchaser was obliged to make an additional commitment of £2m a year to the scheme. These extra commitments were in all cases in addition to subsidies allocated from the NHS capital budget.

Projected operating cost savings are thus absorbed by private finance initiative capital costs, and this has had knock-on effects for the planning of other services. Moreover, there remains a question mark over whether savings result from the centralisation of services on single sites. The review of evidence undertaken by the NHS Centre for Reviews and Dissemination states that "there is no compelling reason to believe that further concentration of hospital services will result in improved efficiency (through exploiting economies of scale) or lead to automatic improvements in the quality of outcomes. In assessing the potential effects of increased concentration on access and utilisation the implications for disadvantaged groups in particular should not be overlooked."[40] The quality of private finance initiative planning conflicts with governmental initiatives to improve the evidence base and standards and quality of clinical practice. Private finance initiative plans seem to have been absolved from these duties. There is no oversight of the planning process or the competencies of those managers, management consultants, and clinicians involved.

Conclusion

The way in which services are planned has major implications for both equity and efficiency in the NHS. The evidence from the business cases approved by the Department of Health indicates that the 32 hospitals being built under the private finance initiative have been planned not on the basis of healthcare needs but on the basis of local affordability and cash savings from the revenue budget. The planning process has effectively been reversed, with services being designed to fit predetermined reductions in capacity. The high costs of the private finance initiative entail major reduction in service provision, acute bed capacity, and clinical staffing. Justifying these reductions, it would seem, has become the main planning task.

Competing interests: None declared.

1 Gaffney D, Pollock AM, Price D, Shaoul J. NHS capital expenditure and the private finance initiative—expansion or contraction? *BMJ* 1999;319:48-51.
2 Department of Health. *Statistical bulletin: NHS hospital activity statistics. England 1987-8 to 1997-8.* London: Department of Health, 1998.
3 Aitken RK, Gabbitas P. Figures given for bed complement in Edinburgh were wrong. *BMJ* 1997;315:426.
4 Galbraith S. The public sector decides. *The [Glasgow] Herald* 1999 Feb 19:19.
5 Rhind G. Letter to the editor. *The [Glasgow] Herald* 1999 Feb 23:19.
6 NHS (England). *Summarised accounts 1996-97.* London: Stationery Office, 1998.
7 Shaoul J. Charging for capital in the NHS trusts: to improve efficiency? *Management Accounting Research* 1998;9:95-112.
8 Pollock AM., Gaffney DG. Capital charges: a tax on the NHS. *BMJ* 1998;317:157-8.
9 Gaffney D, Pollock AM. Pump-priming the PFI: why are privately financed hospital schemes being subsidized? *Public Money and Management* 1999 January-March:55-62.
10 Gaffney D, Pollock A, Price D, Shaoul J. PFI in the NHS—is there an economic case? *BMJ* 1999;319:116-9.
11 HM Treasury. *"The Green Book": appraisal and evaluation in central government.* London: HMSO, 1992.
12 NHS Management Executive. *Capital investment manual.* London: NHSME, 1994.
13 NHS Executive. *Capital investment manual. Business case guide.* London: HMSO, 1995.
14 Calderdale Healthcare NHS Trust. Full business case. (Available from the trust.)
15 Baroness Hayman. *House of Lords written answers (Hansard)* 1999 February 2:col 202-206, 474.
16 Dunnigan MG. Scotland needs a bed inquiry. *BMJ* 1998;318:668.
17 NHS (Scotland). *Lothian Health/BMA information issues: final report by ISD Scotland.* Edinburgh: NHS (Scotland) Information and Statistics Division, 1998.
18 Health Committee. *Department of Health expenditure 1999. Minutes of evidence, Thursday 20 May 1999.* London: Stationery Office, 1999.
19 Department of Health. *Bed availability for England financial year 1995-96.* London: DoH, 1996
20 Department of Health. *Bed availability and occupancy. England, financial year 1996-97.* London: DoH, 1997.
21 Department of Health. *Bed availability and occupancy. England, financial year 1997-98.* London: DoH, 1998.
22 Department of Health. *Ordinary and day case admissions. England, financial year 1995-96.* London: DoH, 1996.
23 Department of Health. *Ordinary and day case admissions. England financial year 1997-98.* London: DoH, 1998.
24 Beech R, Bristow A, Hudson M. *Analysing acute inpatient services: the development and application of utilisation review tools.* London: Department of Public Health Medicine, United Medical and Dental Schools, 1997.
25 Woodcock B. Shake-up in community health care signalled. *Eastern Daily Press* 1998 July 14:14, 16.
26 Gaffney D, Pollock AM. *Can the NHS afford the private finance initiative?* London: BMA, 1997.
27 Pollock A, Dunnigan M, Gaffney D, Macfarlane A, Majeed FA. What happens when the private sector plans hospital services for the NHS: three case studies under the private finance initiative. *BMJ* 1997;314:1266-71.
28 CHKS Ltd. *Acute care 1997/8: healthcare resource groups national statistics 1996/7.* London: Financial Times Healthcare, 1998.
29 Gaffney D, Pollock A. *Downsizing for the 21st century. A report to UNISON northern region on the North Durham acute hospitals PFI scheme.* London: UNISON, 1999.
30 Newchurch and Company. *PFI futures: capital investment after the white papers.* London: Newchurch, 1998.
31 Parliamentary Health Select Committee. *Future NHS staffing requirements. Third report.* Vol 1. London: Stationery Office, 1999.
32 Butler P. Forward with the revolution. *Health Service Journal* 1998;109:10-1.
33 Department of Health. "Nurses make a difference" recruitment campaign launched. Press release 1999/0059, 31 January 1999.
34 Royal College of Surgeons of England. *The provision of emergency surgical services—an organisational framework.* London: RCS, 1997.
35 Joint Working Party of the British Medical Association, The Royal College of Surgeons, The Royal College of Physicians. *Provision of general hospital services.* London: BMA, RCS, RCP, 1998.
36 Royal College of Physicians. *Future patterns of care by general and specialist physicians.* London: RCP, 1996.
37 Scottish Office, Department of Health. *Acute services review report.* Edinburgh: Stationery Office, 1998.
38 North Durham NHS Trust. Full business case. (Available from the trust.)
39 Dartford and Gravesham NHS Trust. Full business case. (Available from the trust.)
40 University of York Centre for Health Economics, York Health Economics Consortium, NHS Centre for Reviews and Dissemination. Concentration and choice in the provision of hospital services. York: University of York, 1997. (CRD report 8.)

Endpiece

Magic and medicine

Anyhow, magic as it was practised in Gagliano was harmless enough and the peasants considered it in no way to conflict with official medicine. The custom of prescribing some medicine for every illness, even when it is not necessary, is equivalent to magic anyhow, especially when the prescription is written, as it once was, in Latin or in indecipherable handwriting. Most prescriptions would be just as effective if they were not taken to the druggist, but were simply hung on a string around the patient's neck like an abracadabra.

Carlo Levi, *Christ stopped at Eboli*, 1946

Submitted by A L Wyman, retired physician, London