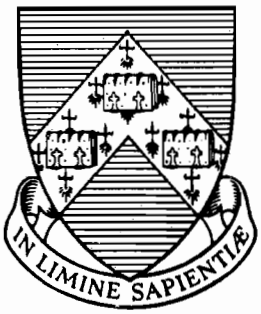

UNIVERSITY
OF YORK

CENTRE FOR HEALTH ECONOMICS

DHSS Health Economics Research Programme

Contractual Arrangements for Geriatric Care in Private Nursing Homes

by

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January, 1985

DISCUSSION PAPER 4

CONTENTS

ABSTRACT

This paper is concerned with the provision of long-stay care for the elderly in a district Health Authority. The major alternative forms of care compared are NHS long-stay hospital and the use of "contract beds" in private nursing homes. "Contract beds" are beds occupied by NHS patients and paid for by the Health Authority. The study was based on one Authority which had the greatest provision of contracted beds throughout England.

This study shows that for this locality the average costs of caring for people by contracting-out arrangements are approximately 33% below the costs of the local long-stay hospital even allowing for the fact that patients in the long-stay hospital are on the whole more dependent than those in contract beds. The study also reports the general professional controversy which surrounds the definition and measurement of standards of care in long-stay facilities for the care of the elderly, but, since it is only a pilot study, does not contain any evidence of the effects of different forms or standards of care on changes in the state of health of patients.

The general tentative conclusions of the study are that the existing rather crude evidence suggests that the provision of care in contract beds is an efficient alternative to long-stay hospital care.

I Introduction to the Provision of Contracting-out Arrangements for the Care of the Elderly in the Study Area

In common with many areas on the south coast the study Authority has a large percentage (31%) of its population of 232,767 over pensionable age. Presently there are 338 beds in NHS hospitals and 64 beds are purchased from private nursing homes under the arrangements for the contracting-out to the private sector of patient services. As explained in Section III below these beds are occupied by NHS patients and the nursing home owners are reimbursed at a weekly fee per bed agreed in negotiation with the health Authority.

The main purpose of this paper is to make an initial assessment of the relative efficiency of the use of contract beds compared with the expansion of provision in the NHS hospital sector. Section II below is concerned with reporting the general views of professional staff involved in the care of the elderly in the district on the relative merits and drawbacks of using the private sector to provide for the care of the elderly. The opinions of professional staff in the NHS sector were collected in informal interviews with Nurses, Occupational Therapists, Physiotherapists and Consultants in Geriatric Medicine. The opinions of people in the private sector were collected from Nursing Home Owners, Matrons and Sisters-in-charge. Section III is concerned with the relative costs of care of the two forms of provision. Since costs in long-stay facilities are closely related to nursing costs (for example nursing costs for 54% of the costs of the long-stay hospital in the authority) and nursing establishments tend to be fixed according to the dependency of patients receiving care, an attempt is made to adjust the cost comparison in accordance with the higher dependency profile of the population in the long-stay hospital.

The distribution of dependency in the different forms of care was ascertained from an assessment schedule (see Appendix 1) completed with the help of nursing staff who were familiar with a patient's ability to carry out the activities of daily living. The dependency distribution of patients in nursing homes was estimated from a sample of 16 homes of which 10 produced 47 of the 64 beds contracted out to the private sector. Full details of the measurement of dependency are given in Section III.

Section IV sets out some tentative conclusions of the study.

II The Advantages and Disadvantages of Contracting-Out Patient Services for the Care of the Elderly in the Study Area

This section is concerned with the relative merits and drawbacks of providing for the care of the elderly by contracting out patient services to private nursing homes compared with expanding NHS hospital care. These differing opinions were collected from professional staff working in the NHS and private sector. Since the nature of this study has meant that so much reliance has had to be placed on subjective professional opinion the section concludes by setting out the models of long-stay geriatric care developed in a study of quality of care in the different localities of hospital, local authority residential homes and nursing homes (Wade, Sawyer and Bell, 1983) and attempts to place the geriatric care in the study area within these models.

(a) Advantages of Private Nursing Home Care

(i) More "homely" care in small units

The advantages of private nursing home care depend very much on one's preference for being cared for in small units where most of the day is passed alone or in the company of one other person compared with being nursed in 20-30 bed wards with "night" and "day" areas or rooms spent in the company of many different types of people. In fact, many people prefer the privacy of single rooms in nursing homes where they can bring in their own furniture, TV sets and personal effects as is witnessed by the people's willingness to pay increased charges for single rooms in the private sector. Secondly, many people with single or shared rooms in homes which had communal sitting rooms preferred to stay in their own rooms. Much of this is, of course, personal taste and preference and would need to be the subject of a much more detailed research than could be carried out in a pilot study. However, it can be said here that the existence of these contracted arrangements provides a choice in NHS long-stay care for the elderly which is rare in most health districts in this country at present.

(ii) Geographical spread

Concentration of long-stay facilities on one hospital site will inconvenience some people since a proportion of the population always finds some difficulty in travelling to the hospital. The dispersed provision of long-term care in small units makes it

easier to place patients near to their relatives, although this advantage may depend sometimes on the randomness of vacancies arising in homes near to the houses of a patient's relatives.

(iii) Cost advantages

The average cost of a contracted out bed was £60 per week (33%) below the average cost of the long-stay hospital for the financial year ending March 31st, 1983. This is quite a striking difference and it was consequently considered that it was worthy of more detailed examination which is set out below in Section III. This cost difference continued to hold throughout 1984.

(b) Disadvantages of Private Nursing Home Care

(i) Lack of remedial or rehabilitation facilities

The major disadvantages of nursing home care expressed by nearly every member of staff was the lack of suitable physiotherapy or occupational therapy facilities and the costs of providing a district-wide service to encompass the contracted-out patients. During the first survey in September 1983 it was the view of Nursing Home Staff that few patients were likely to benefit from such therapies. In addition when occupational or diversional therapy had been made available, it had been rejected by the patients. However, one home visited provided a regular morning diversional therapy session and had been complimented by the visiting inspectorial team on the way in which it was organised and the high level of patient participation. In other homes during the second survey in June 1984 several staff said that they would welcome cooperation with the NHS is providing remedial facilities.

(ii) Use of small units

Most contracted-out beds were provided in single or two-bedded rooms. Some staff of the authority thought that this did not encourage patients to talk to each other and could in some circumstances lead to patients losing communication skills. It would be particularly unfortunate if a two bed room was shared by people who could not or were not able to get on with each other. Again this disadvantage was not accepted by the Nursing Home Staff who realised the potential problem, tried to match patients so that

they would be able to relate to each other and were happy to transfer people who particularly wished to move rooms.

(iii) Standards of care

Complaints had been received by consultants of the care provided in some nursing homes. Nursing homes are inspected twice per year and standards can be checked at these visits. However, it was thought that such visits were not in themselves guarantees of successful implementation of standards. If, on the other hand the authority received persistent complaints about a particular nursing home, it was in a position to cancel its contractual arrangements and given the number of beds available in private nursing homes (719) it would be possible to find other more suitable accommodation.

(iv) Lack of continuity of care

Unlike patients who are transferred from acute beds to long-stay hospital accommodation, patients who are transferred to nursing home care come under the care of their general practitioner and not the specialist consultant in geriatric medicine. Although there are no complaints about the availability of general practitioners or their willingness to visit and treat nursing home patients, the consultant geriatrician is able to give specialist advice and is familiar with the patient's condition following assessment and treatment in the acute geriatric ward. Transfer to a nursing home breaks this continuity of care, although health authorities have the option to allow a Consultant in Geriatric Medicine to continue the treatment of his patients in private nursing homes.

(v) Attitude of relatives

Relatives' permission is sought before any patient is transferred to nursing home care. In some cases relatives insist that the patient be cared for in hospital. Obviously, stories of poor standards of care are spread around the district and they affect attitudes. Although the adverse conditions may not be in the homes with contracted beds, there is a tendency for this anecdotal evidence to condemn all homes rather than those which are the subject of complaint.

(vi) "Unacceptable" patients

Nursing staff in the long-stay hospitals and officers in charge of nursing homes identified certain types of patients who were found to be unacceptable for nursing home care. In the main these are people who need two or three nurses to help with the major self-care activities and are usually male, heavy in weight, high in dependency and probably of unhelpful or aggressive disposition. This problem also relates to the size of the nursing homes because with 20-30 residents they have approximately 5 nursing staff on the main shifts and if three staff are needed for one patient regularly or for lengthy periods of time, very few staff are available to help with the other residents.

In fact, this problem nicely highlights the partnership which has developed between the public and private sector. The two consultants in Geriatric Medicine undertake with the nursing home to take back into hospital any patient in a contract bed who becomes too difficult to handle. This gives the nursing home staff the confidence to take highly dependent people and thereby to provide a good alternative to long-stay hospital care.

(vii) Expenditure on contract beds is preventing the expansion of NHS facilities

Some beds in one hospital are not occupied because of lack of finance. Some of the staff in the Health Authority thought that those beds should be opened and a corresponding reduction be made in the number of beds contracted out, because the hospital could provide a better standard of care at less cost (see page 20).

(viii) Fears of vulnerability

As previously stated patients are not admitted to contract beds unless permission has been given by both patients and relatives. Strong feeling was expressed by staff in the district that public sector provision was essential for "the most vulnerable elderly".

(c) General Problems on Comparing Nursing Home and Long-stay Hospital Care

As can be seen from arguments presented above there are many different opinions about standards of long stay geriatric care especially in terms of the immediate physical environment and standards of nursing care. Recently there

has been an attempt to pull these standards together in the form of different models of care (Wade, Sawyer and Bell, 1983). These authors thought that a "positive environment for the elderly" would:

i) be domestic or homely
ii) foster social interaction
iii) provide opportunities for choice
iv) give recognition to the adult status of the elderly
v) provide opportunities for the elderly to undertake activities which are salient to their lives
vi) feature participation and consultation in the care regime by the elderly themselves

The first of these criteria relates to physical environment, the other criteria are concerned with the organisation of care. The organisational criteria were then used to describe four different models for care as follows:

Person Centred

Supportive Model	Protective Model
Consultation	Consultation
Patient/resident committee	Limited choice
Choice	Little or no involvement of visitors/volunteers
Salience	No outings
Involvement of visitors/ volunteers	Provision of diversional activities
Outings/activities suggested by the elderly themselves	Therapeutic input
Therapeutic input	
Unrestricted visiting	

Open ---------- Closed

Controlled Model	Restrained Model
Emphasis on routine	Emphasis on routine
Lack of choice	Lack of choice
Activities/outings organised by staff/volunteers	Restricted visiting
Unrestricted visiting	Non-involvement of relatives/ visitors in the care regime
Little therapeutic input	No outings
	Little therapeutic input

Task Centred

1. The Supportive Model

The supportive model of care is characterised by consultation and involvement of the elderly in the care regime. Adult status is accorded through maximising both the physical and mental independence of the elderly. There is thorough involvement of visitors including relatives, volunteers, and children, and breaking down of barriers between the institution and the wider community. Patient/resident motivation is intrinsic to activities since these activities are seen as relevant to their lives. Suggestions for activities/outings are made by the elderly themselves, possible through patient/resident committees.

2. The Protective Model

The protective model of care is characterised by some degree of choice and consultation but there is an undue emphasis on safety which serves to constrict activities to those considered suitable by staff, thus denying adult status to the elderly in their care. There is little or no attempt to involve visitors/relatives in the care regime and there is little or no contact with the wider community. Diversional activities are provided by the staff and motivation is extrinsic to activities.

3. The Controlled Model

Under the controlled model of care the patient is subordinate to the care regime. Choice is circumscribed by staff, who arrange all activities and outings. There is open visiting but attitudes to visitors are related to their possible contribution to routine.

4. The Restrained Model

The restrained model of care operates purely for the convenience of care staff. Patients/residents are deprived of choice, there is restricted visiting and little therapeutic input whether through the provision of diversional activities or physiotherapy. The elderly are 'batch processed'.

As far as it is possible to say from a short study, both long-stay hospital and nursing home care conform most closely to the "Protective Model" although there were some exceptions. For example, the hospital and some nursing homes arranged outings for patients and the voluntary workers in the society of the friends of the hospital are involved in decision-making about the hospital building's and equipment fund-raising and improving the contact of patients with the wider community. Some nursing homes used volunteers to

provide diversional therapy or to provide personal help (e.g. book-reading) to residents, but generally there was little "therapeutic input" available.

Probably both sectors were hampered in moving towards the "Supportive Model" by the large proportion of patients who were unable to make choices for themselves because brain damage or senile dementia greatly restricted the amount of information they could cope with or impaired their abilities to communicate with staff or other patients. There was also a considerable division of nursing opinion about how many patients were unable to choose what was best for them. In the long-stay hospital and in some nursing homes, patients were encouraged to be as mobile as possible, even if this meant that two nurses had to help a patient to walk. In some nursing homes patients were allowed to choose whether to walk or to be wheeled in a wheelchair when they wished to move from one location to another within the home. Some matrons and sisters-in-charge felt that the patients should be allowed to make this choice since it produced a more comfortable and homely form of care, but others thought that this was a failure to accept nursing responsibility and was not in the best interests of the patients. Nursing staff who encouraged mobility also thought that the motives of the other school of thought were less related to providing more homely care than to reducing staff workloads since it is often much quicker to carry out tasks for patients than to encourage them to do things for themselves.

Thus there is a considerable divergence of opinion about standards of care and on such matters as what constitutes an appropriate environment or the ability of elderly patients to make choices about care regimes. For this type of study it is very difficult to pronounce that one form of care is of a better quality than another. For some patients the long-stay hospital may be the best and only choice available, but for a considerable number of other patients either location would be more or less equally satisfactory. In these cases the efficiency argument turns very much on the related costs of care and the next section takes up this discussion.

III Costs and Patient Dependency in the Nursing Home Sector and NHS Long-stay Hospital Provision

(a) The Samples

The nursing home sample was drawn from the nursing homes with contracting out arrangements with the NHS and homes with private beds only. It comprised 10 homes out of a total of 13 providing contract beds and those homes provided 47 (73%) of the 64 beds contracted out. There are 6 homes in the sample not providing contract beds so that the total number of private beds covered is 268 (41%) of the 655 non-contract beds in the district. The hospital included in the sample is a 110-bed long-stay hospital.

(b) Relative Costs of Care

(i) Nursing home costs

The basis of paying for contract beds has changed recently. Before the financial year beginning April 1st, 1983, nursing homes were reimbursed on the basis of their average cost per patient week for each patient week provided in a contract bed. Since April 1983 this basis has changed to a negotiated weekly fee per bed, irrespective of its use and the effect of the change in arrangements is shown in Table 1 below which sets out the previous and present fees for all homes with contract beds.

Table 1 - NURSING HOME COSTS 1982-83 and 1983-84

Home	No. of beds	No. of contract beds	Cost per patient week 1982-83 £	Cost per patient week 1983-84 £
A *	20	4	105	105
B *	28	8	165	125
C *	18	7	155	120
D	23	5	161	120
E *	18	2	126	120
F *	25	6	109	100
G	17	4	105	115
G *	33	7	141	110
I *	30	3	59	65
J *	23	7	167	129
K	26	4	77	95
L *	13	1	93	95
M *	22	6	102	112
	296	64		
			Average for all homes 120	109
			Average for homes in the study 122	108

* Included in the sample survey

(ii) Costs of private and contract beds

The costs of most private beds are now in excess of the costs of contract beds for the homes in this sample as indicated in Table 2 below:

Table 2 - COSTS OF PRIVATE AND CONTRACT BEDS IN NURSING HOMES (1982-83)

Home	Private Cost Range £ per week	Contract bed cost £ per week
A	100 - 135	105
B	115 - 168	125
C	105 - 145	120
E	120 - 160	120
F	115 - 120	100
H	120 - 150	110
I	45 - 110	65
J	138 - 175	129
L	90 - 115	95
M	110 - 116	112

The prices vary according to the location and size of the room and the number of people sharing. Maximum prices are usually for large, ground floor single rooms. In most homes private patients pay for incontinence pads and for personal toilet requisites. The costs of drugs for nursing home patients will usually be met from the Family Practitioner Committee budget except for those patients who retain a general practitioner on a private basis. In the main the nursing home owners have accepted this reduction in their fees because the health authority pays for the bed irrespective of its use and, therefore, guarantees a certain income per year for that bed. However, this was the first year that the owners have experienced this new basis and, although fees agreed for 1984-85 have increased by only 5%, it is always uncertain how long these prices will prevail. In effect there are several forces at work, some acting to drive up nursing home fees, others acting as checks to such an increase.

There are four main factors likely to cause an upward pressure on prices. The first of these is the decision of the local town planning authority to block any further increase in the number of

nursing homes in the district. This will naturally limit the supply at a time when demand, through demographic change, is bound to be increasing.

Secondly, several nursing home owners were concerned about the difficulty they were experiencing in recruiting suitable nursing staff. They recognised in particular that the supply of qualified nursing staff was very limited and that offers of higher wages were unlikely to increase the supply of labour to the whole sector but could well lead to higher costs and therefore higher fees. Of course, if demand for nursing home places does increase there will be greater incentives for individual homes to bid for the available labour through higher wages and to charge higher fees.

Thirdly, there was growing concern in the district on the effect of recent changes in Social Security Regulations which meant that the local limit for patients being cared for in nursing homes was set at £130 per week. In certain circumstances where homes are not charging up to the local limit, the owners could claim additional allowances such as attendance allowance which moves the total sum received to around £150 - 160 per week. Although the local limit can be paid only to people eligible to receive supplementary benefit, owners are more likely in the future to favour the admission of this type of person than to reserve "contract beds".

Fourthly, there is the problem of the formation of cartels and of price-fixing. At present there is no evidence of oligopolistic behaviour in price fixing and the printed list of homes and their prices (which was available to all people seeking a place in a nursing home) indicates that competition was still strong amongst the existing homes.

There are a number of competitive forces countervailing the pressures to increase prices. One major factor is that presently there appears to be an excess supply of nursing home beds. The surveys in September 1983 and June 1984 showed evidence of approximately 17% vacant places in the 16 homes recorded in the survey. Of course, this may be a temporary factor since occupancy rates may vary considerably over time.

Secondly, the nursing home "industry" comprises many small "firms" which would make it difficult to form price rings. In this year's negotiations one nursing home attempted to raise prices above the amount that the health authority was wishing to pay for its contract beds. When no compromise could be reached, the patients were transferred to another nursing home at a price agreeable to the authority.

Thirdly, it may well be possible for the health authority to provide a reserve margin of long-stay beds in a hospital so that it can cope quickly with breakdowns in price negotiations and owners' requests in these instances to move patients to alternative accommodation. Such capacity is available in the district as set out on page 20 below.

Fourthly, the owners gain some advantage in the contract arrangements since they guarantee a weekly income for the whole financial year.

Thus, there is a balance of factors at work on current prices of nursing home places. Presently, the balance appears to be working in favour of competition, but it is by no means certain how long this condition will prevail.

(iii) Costs of long-stay hospital care for the elderly

The costs of the long stay hospital for 1982-83 are set out in Table 3 below:

Table 3 - COSTS OF THE LONG-STAY HOSPITAL ACCOMMODATION IN THE STUDY AREA 1982-83

	£ per in-patient week	% of total
Medical Staff	6.37	(3.5)
Nursing Staff	97.86	(54.1)
Pharmacy	2.73	(1.5)
Other patient care services (equipment and para-medical staff)	4.83	(2.7)
Sub-Total Direct Patient Care	111.79	(61.8)
Catering - Patients	14.14	(7.8)
Domestic/Cleaning	14.00	(7.7)
Estate Management	20.79	(11.5)
Administration	5.81	(3.2)
Other general services	14.84	(8.2)
Sub-Total General Services	69.58	(38.5)
Gross cost per patient week	181.37	
less direct credits -	0.56	
Total cost per patient week	180.81	

It will be noted that the costs of the long-stay unit contain items which nursing homes do not have to purchase, notably pharmacy costs. However, hospital costs are current costs and contain no allowance for capital depreciation, whereas nursing home fees have to take this item into account. It may also be argued that patients in hospital are more dependent than those in nusring homes. Consequently a survey of dependency was carried out for patients in the different forms of care to check this argument.

(c) Measuring Dependency

Two measures of dependency were used in this small-scale study of the nursing homes and the long-stay hospital. The first of these was the Guttman Scale successfully developed for a previous project on Alternative Patterns of Care for the Elderly and applied to people living at home, in Part III local authority residential care and long-stay geriatric hospitals. (Wright, Cairms and Snell, 1981). The second scale was the Crichton Royal Behavioural Scale as used in the South Manchester study of the care of elderly severely mentally infirm people (Evans, et. al. 1981). The information on dependency was gathered from the nursing records at the hospital and in the nursing homes with considerable assistance from the ward sisters and proprietors of nursing homes who are all very familiar with the patients' abilities to undertake the relevant activities of daily living. The assessment schedule is attached as appendix 1. The Crichton Royal Scale is a straightforward scale as set out in Appendix 2. Guttman scales are more complex in their derivation but quite simple in practice. The main purpose of such a scale is to set out a predicted order of disability which affects a large proportion of the population being studied. For example, the scale used for hospital patients followed this order:

i) Unable to bath without help from another person
ii) Unable to walk outdoors without help from another person
iii) Unable to undress without help from another person
iv) Unable to dress " " " " "
v) Unable to get in or out of bed without help from another person
vi) Unable to get into or out of a chair without help from another person
vii) Unable to wash hands and face without help from another person
viii) Unable to feed without help from another person (if food is cut up)

The scale is a cumulative order of disability in that it shows the order in which functional abilities are lost over time for a substantial proportion of a given population. Thus if a person is classified as being on point 5 of the scale, he or she is not able to get into or out of bed, or dress or undress, or walk outdoors or bath without help from another person. Since the scale is derived from a statistical procedure, not everyone will conform exactly to the order predicted by the scale, for example some people may be able to dress but be unable to get out of bed. These people are usually termed "non-scale" types and are treated as special categories. As a check on the Guttman Scaling results, tabulations are also set out for the number of disabilities people in the sample suffered out of the 11 listed in question 1 of the assessment schedule.

The purpose of the dependency comparisons is to examine how the distribution of dependency affects staffing requirements in the different forms of care. It does not particularly reflect whether one form of care is indicated for a particular patient.

(d) The Distribution of Dependency

The proportion of people in various states of dependency in hospital, in private nursing homes in "contract" beds and in private nursing homes in "private" beds using these methods of measurement are set out in Tables 4-6 below.

Table 4 - GUTTMAN SCALE DEPENDENCY

Guttman Scale Points	Hospital %	Contract %	Private %
0	0	0	9.2
1	3.2	2.2	12.1
2	2.1	4.3	12.9
3	0	0	1.7
4	3.2	4.3	9.6
5	0	2.2	2.1
6	31.6)	54.3)	16.7)
7	32.6) 91.6	19.6) 86.9	16.3) 52.6
8	27.4)	13.0)	19.6)
	n = 95	n = 46	n = 240
	(non-scale = 8.7%)	(non-scale = 2.1%)	(non-scale = 10.4%)

Table 5 - DEPENDENCY BY NO. OF DISABILITIES

No. of Disabilities	Hospital %		Contract %		Private %	
4 or less	4.8		6.3		39.1	
5	1.9		2.1		5.6	
6	2.9		4.3		3.4	
7	2.9)		4.3)		3.7)	
8	8.7)		23.4)		10.8)	
9	25.0)	90.4	29.8)		10.4)	
10	28.8)		17.0)		9.7)	
11	25.0)		12.8)		17.2)	
	n = 104		n = 47		n = 268	

Table 6 - DEPENDENCY BY CRICHTON ROYAL SCALE

Score	Hospital %		Contract %		Private %	
0 - 5	3.8		4.3		26.1	
6 - 10	7.7		17.0		17.2	
11 - 15	29.8)		25.6)		23.5)	
16 - 20	26.0)		27.7)		19.4)	
21 - 25	17.3)	88.5	14.9)	78.8	10.1)	56.7
26 _ 30	9.6)		10.6)		3.3)	
More than 30	5.8)		0)		0.4	
	n = 104		n = 47		n = 268	

These figures show that the long-stay hospital has by far the heaviest work load in terms of the relative dependency of patients, 60% of patients are on the last two points of the Guttman Scale (i.e. cannot do any of the listed activities or can feed if the food is cut up for them) when "non-scale" types are excluded. The simple counting of disabilities reinforces this picture since 53.8% have 10 or 11 disabilities in the list contained in question 1 of the assessment schedule. In comparison, the patients in contract beds are mostly (74%) on point 6 (able to feed if food is cut up and wash hands and face) and point 7 (able to feed if food is cut up) and 29.8% have 10 or 11 disabilities. On the whole patients in private beds are the least dependent.

The addition of a behavioural dimension as set out in the Crichton Royal Scale slightly modifies these comparisons but it will be noticed that only 11% of hospital patients score less than 10 points compared with 21.3% in contract beds and 43.3% in private beds.

(e) Standardising the Cost Comparisons

In comparing the cost of the long-stay hospital unit with the private nursing homes some allowance has to be made for the very high dependency rating of the patients in the hospital wards. Unfortunately, this is a very difficult cost to quantify but a crude attempt is set out below. In addition allowances have to be made for costs included in hospitals (e.g. drug costs) and excluded in the other sector or those excluded in the hospital sector (e.g. depreciation of capital costs) but included in the other.

The nursing establishment at the long-stay hospital is 83 full-time equivalent for 110 beds. The 110 beds generate 38,229 patient days (95% of total bed days available) at a nursing cost of £13.98 per patient day at a total cost of 534,441 per year. The nurse patient ratio is 1:1.33, but if patients were nearer the dependency status of those in contract beds in nursing homes it would be possible to increase the number of patients per nurse. The cost for looking after 64 patients at different nurse:patient ratios could be calculated as follows, assuming 95% bed occupancy yields 22,192 patient days.

(1) Ratio	(2) No. of F.T.E. Nurses	(3) Proportion of present establishment	(4) * Estimated Total Annual Cost	(5) Estimated Cost per patient week £
1:1.4	46	46/83	296,196	93.43
1:1.5	43	43/83	276,879	87.33
1:1.6	40	40/83	257,561	81.24
1:1.7	38	38/83	244,684	77.18
1:1.8	36	36/83	231,805	73.11
1:1.9	34	34/83	218,927	69.06
1:2.0	32	32/83	206,049	64.99

* The total in Column 4 is £534,441 x fraction in column (3)

It is, of course, difficult to say what the nurse:patient ratio would be for this hypothetical example but it is likely to be within the bounds of 1:2 and 1:1.5. Thus we might crudely estimate that the extra dependency of the long-stay hospital patient imposes an extra £10-20 per patient week on the current average cost figure.

Thus, if we allow for £20 per patient week to cover the increased cost of caring for very dependent people, and reduced hospital costs by the £2.73

per patient week for pharmacy expenses but add £22 for depreciation costs,* the average cost of hospital provision is still well above the average cost of the contract beds. In the present financial year hospital costs will increase while the fees paid by the health authority will decrease, thereby widening the gap between the two sets of costs.

It is possible, however, as stated in Section II that the provision of some extra hospital beds may be achieved at a cost below present nursing home fees.

(f) Expansion of Hospital Care of Substitution of Hospital for Contract Beds

The Health Authority is at present unable to staff some 18 beds in one hospital which would be suitable for geriatric care. These beds could be opened for the marginal cost of providing the appropriate level of nursing care plus possible increases in catering costs, pharmacy costs and other minor items of general services expenses. If the level of nursing care were 13 staff (6 qualified, 7 auxiliary) giving a nurse:patient ratio of 1:1.38, the extra nursing cost would be about £82,00 p.a. at current salary and employment overhead rates or about £88 per patient week. Catering and other variable costs might add another £15-17 per patient week which means that the expansion could be achieved at a marginal cost of £103-105 per patient week which is below the average weekly fee paid for a contract bed.

* based on the figure for costs of providing accommodation for geriatric care from existing NHS buildings used in Alternative Patterns of Care for the elderly: i.e. price in 1977 = £12 per bed per week - construction costs have risen by 116/140% = 82.85% according to the March, 1983 costs of construction index published in the Housing and Construction Statistics.

IV Some Tentative Conclusions

As far as is possible to tell from a very quick and crude study, the nursing homes in the study area are providing an efficient alternative to hospital care for the elderly although the following qualifications have to be made

(a) The nursing homes have no resources for providing occupational therapy or physiotherapy, although they would welcome a community based service if provided by the NHS.

(b) Although homes are inspected and required to provide adequate physical standards, it is very difficult to define and maintain standards of nursing care. These standards are likely to vary between nursing homes, but those homes which provide contract beds usually provide satisfactory standards of care. Otherwise the health authority would not continue to use them.

(c) Nursing homes find it difficult to accept certain types of patient e.g. heavy, highly dependent male patients.

(d) The homes accept patients on the understanding that if they are unable to provide the appropriate care, the Consultant in Geriatric Medicine will find a hospital bed for the patients concerned. In these instances the nursing homes are acting as a complement to the public provision.

(e) Care in the nursing home is generally provided in double or other small (3 or 4 bed) rooms. This appears to be unsatisfactory according to some professional opinion since it may cause difficulties when the people sharing the room are uncommunicative or find it difficult to relate to each other. However, it is also claimed that this type of care provided patients with more privacy than large hospital wards and that it is possible to "match" patients for the purposes of sharing rooms.

(f) It is difficult to know how long the current levels of weekly fees for "contract beds" will prevail. Although at present there appears to be some excess supply of beds in the private nursing home sector which tends to encourage competitive pricing policies, there are other factors such as the increasing number of elderly people who may need long-term nursing care and changes in the Social Security Regulations

which will make it difficult to hold to the existing set of prices relative to the NHS long-stay hospital sector.

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Appendix 1

DEPENDENCY ITEMS

1. Is the person dependent on help from another person to carry out the following activities

   (a) Get in or out of bed
   (b) Sit in or get out of a chair
   (c) Use the toilet
   (d) Dress
   (e) Undress
   (f) Wash hands and face
   (g) Bath or wash all over
   (h) Walk along a level surface
   (i) Walk outdoors
   (j) Feed - without any help
   (k) Feed - if food is cut up.

2. Is the person usually continent

   (a) Urine : night
   day
   (b) Faeces: night
   day

3. Memory

   (a) Complete
   (b) Occasionally forgetful
   (c) Short-term loss
   (d) Short and long-term loss

4. Orientation

   (a) Complete
   (b) Oriented in ward/home, identifies people correctly
   (c) Misidentifies but can find way about
   (d) Cannot find way about e.g. to bed or toilet
   (e) Completely lost

5. Communication

(a) Always clear
(b) Can indicate most needs
(c) Cannot understand simple information
(d) Cannot understand simple information and cannot indicate needs
(e) No effective contact

6. Co-operation

(a) Actively co-operative
(b) Positively co-operative
(c) Requires frequent encouragement
(d) Rejects assistance
(e) Completely resistive or withdrawn

7. Restlessness

(a) None
(b) Intermittent
(c) Persistent - day or night
(d) Persistent - day and night
(e) Constant

Appendix 2

Modified Crichton Royal Behavioural Rating Scale

Dimension		Score
A) MOBILITY	Fully ambulant including stairs	0
	Usually independent	1
	Walks with supervision	2
	Walks with aids or under careful supervision	3
	Bedfast or chairfast	4
B) ORIENTATION	Complete	0
	Orientated in ward, identifies persons correctly	1
	Misidentifies persons but can find way about	2
	Cannot find way to bed or toilet without assistance	3
	Completely lost	4

C) COMMUNICATION	Always clear, retains information	0
	Can indicate needs, understands simple verbal directions, can deal with simple information	1
	Understands simple information, cannot indicate needs	2
	Cannot understand information, retains some expressive ability	3
	No effective contact	4
D) CO-OPERATION	Actively co-operative	0
	Passively co-operative	1
	Requires frequent encouragement of persuasion	2
	Rejects assistance, shows independent but ill-directed activity	3
	Completely resistive or withdrawn	4
E) RESTLESSNESS	None	0
	Intermittent	1
	Persistent by day	2
	Ditto, with frequent nocturnal restlessness	3
	Constant	4
F) DRESSING	Correct	0
	Imperfect but adequate	1
	Adequate with minimum of supervision	2
	Inadequate unless continually supervised	3
	Unable to dress or retain clothing	4
G) FEEDING	Correct, unaided at appropriate times	0
	Adequate, with minimum supervision	1
	Inadequate unless continually supervised	2
	Constant	3
H) CONTINENCE	Full control	0
	Occasional accidents at night unless toileted	1
	Continent by day only if regularly toileted	2
	Urinary incontinence in spite of regular toileting	3
	Regular or frequent double incontinence	4

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Acknowledgements

He would like to acknowledge the financial support of the Department of Health and Social Security.

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