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The Future Structure of Nurse Education:

An Appraisal of Policy Options at the Local Level

by

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THE FUTURE STRUCTURE OF NURSE EDUCATION
AN APPRAISAL OF POLICY OPTIONS AT THE LOCAL LEVEL

BY

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ABSTRACT

This paper describes the evaluation of investment options in nurse human capital and examines how managers can identify the costs and benefits of alternative arrangements. The study followed a request from four health districts on Humberside (East Yorkshire, Grimsby, Hull and Scunthorpe) where managers wished, following proposals from Yorkshire RHA, to make more effective use of resources for nurse training in face of a reduced supply of manpower and pressures to improve the quality of nurse training. The appraisal was carried out in consultation with nurse teachers, managers and the ENB.

A framework of objectives and constraints was established within which options could be assessed. These included educational objectives, such as whether an option made it easier to develop post basic courses and to manage manpower constraints such as the retention of basic RGN education in the 3 districts where it was currently carried out. The educational criteria also covered curriculum development, the sharing of resources with universities and polytechnics and career attractions for teaching staff. Options were also assessed in relation to their timing, ease of implementation, flexibility and cost.

Four detailed options were assessed and the third, that of establishing a jointly funded and organised college responsible for all nurse training across all four authorities, attained the highest score. This option involved the maintenance of self-contained basic, general nurse training circuits where they exist at present and will permit the development of post basic education. The study identifies significant incentives for co-operation between districts and outline a plan for the

creation of a new College. The College would operate on a contractual basis offering courses which the health authorities would take up and pay for on an annual or bi-annual full cost basis. The College would also be able to sell courses to an outside market for example on occupational health on Humberside and it would aim to mobilize both NHS and other resources and to compete with outside educational bodies.

There has been much discussion of change at the national level in nurse education. This paper examines how changes such as Project 2000 can be managed at the local level to ensure a more effective use of scarce resources. It provides a methodology for similar studies in other nurse labour markets.

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I INTRODUCTION

It has long been recognised that ensuring a sufficient supply of nurses over the next 15 years is one of the major challenges facing health service managers.

On the supply side, demographic changes imply that the size of the cohort of 18 year olds with appropriate entry qualifications is likely to fall by 22 per cent by 1992 (Waite and Hutt (1986)). The implementation of Project 2000 is expected to lead to fewer trainees, each of whom will make a reduced work contribution. Health districts will have to recruit additional staff not only to make up for normal wastage and retirement but also to replace the student nursing contribution (UKCC, (1987)). In addition, the phasing out of training for enrolled nursing has already started in many areas with concomitant effects on availability of these staff (Price Waterhouse, (1987)).

On the demand side, a number of general trends in the nature of health care delivery combine to produce a significant effect. In the acute sector increasing workloads, involving greater use of technology, will place greater demands on highly skilled nurses who, following the implementation of the new grading structure will cost relatively more. (Review Body, (1988)). There is also increased demand from services outside the acute sector. In particular, the changing nature of care for those with mental illness and mental handicap has led to changes in the demand for nursing skills which will continue through the 1990s (Bosanquet and Gerard (1985)). Finally, the rapid growth of the private sector in the form of nursing homes is having a significant impact on the ability of health districts to attract and retain nursing staff (Gray, Normand and Currie (1988)).

The most optimistic forecasts for nursing manpower assume that numbers might increase by half a percent a year but the combined effect of all these changes is likely to invalidate such forecasts. (Price Waterhouse (1987)). To maintain staffing levels, detailed targets have been proposed by the UKCC for improving retention and return by qualified nurses (Royal College of Nursing (1988)) but increases in the pressure of workload may make it difficult to raise the numbers returning to the general hospitals. In fact more realistic targets may be to stop retention levels and return rates from worsening significantly.

The central problem will be how to use the limited supply of nursing hours as effectively as possible. Like many other employers, the NHS is likely to be faced with shortages of qualified manpower. A nursing workforce which is likely to be no larger than the present one, and possibly even smaller, will have to meet increasing and more diverse demands. Such a pattern of change points towards the need to reappraise the level of investment in post-basic and in-service training required to meet changing circumstances.

The decision about the level and nature of investment in human capital, in terms of post and inservice training, is one which rests with general managers and requires a positive but critical response which reflects the tactics of other employers faces with shortages of qualified manpower.

The process of option appraisal has concentrated mainly on projects for extending physical capital. Yet the investments made by the NHS in human capital and training are possibly more significant in affecting the

quality of care. This paper describes how the option appraisal process could be used to assess alternative investment strategies for training. Managers will be seeking to identify the benefits from training more actively than in the past. This study identifies a number of approaches to the problem of how best to meet the challenges of increasing competition in both the demand for and supply of nurse training and nurse manpower.

The appraisal study that follows showed that the development of in-service and post basic training was the most important immediate issue facing the four districts on Humberside and that short-term changes were possible which could make much more effective use of resources. There has been little attention to the design of an organisational framework for nurse training and for health training which would create conditions for better use of resources. The issues which emerged during this local option appraisal are of wider interest and may assist districts in dealing with the organisational and educational issues recently raised by the English National Board, (ENB (ENB 1988)). Most discussion of nurse training has concentrated on long term changes at the national level. This paper looks at the options and the issues which are going to be dealt with locally, long before the decisions at national level have worked themselves through.

II INVESTING IN NURSING MANPOWER: A CASE STUDY ON HUMBERSIDE

Introduction

In response to the recognition by the Yorkshire Regional Health Authority of a need to rationalise nurse education to make better use of educational resources, the four health authorities on Humberside (East Yorkshire, Grimsby, Hull and Scunthorpe) set up a "cluster" group of officers in 1987 to develop a plan. Work was undertaken to investigate how to meet this need whilst maintaining the highest possible quality of nurse education in the county.

The Humberside Cluster Group has undertaken detailed work comparing the strategic demand for trained nurses in general, mental illness and mental handicap with planned learner intakes. The results of this work are summarised in Table 1 and compared to the current stock of qualified nurse manpower.

**Table 1: Nursing Manpower Current Numbers and Projections:
Humberside 1988-1993**

	Hull		East Yorkshire		Grimsby		Scunthorpe	
	1988	1993	1988	1993	1988	1993	1988	1993
Total Registered	901	979	469	614	571	645	455	548
Total Enrolled	462	462	351	311	210	130	250	273
Total Qualified	1363	1441	820	925	781	775	705	821

Overall these districts intended to have an increase of 8 per cent in trained nursing manpower over the next 5 years. However, such projections were made before the effects of changes in supply and demand could be fully appreciated. The Health Authorities wished to develop a training strategy which would help them to use the more limited supply of nursing hours available as effectively as possible.

The key to achieving this objective was seen to be greater cooperation in the organisation and delivery of nurse training, and in particular post basic and in service training. Consequently, the terms of reference for this study were to build on the base provided by the Cluster Group's work so far and identify the best course of action for achieving the unification of nurse education in Humberside, taking full account of any relevant interim and long term objectives identified.

The approach adopted was to consult widely in order to obtain and reflect consensus on the key issues. A Reference Group, comprising a representative from each of the four districts involved, was formed to act as technical mentors, to organise support to the study from within their own districts and to report to the Cluster Group on progress. This group met on several occasions to receive and discuss papers prepared during the study period.

Formal discussions took place with senior staff at each of the three Schools of Nursing, Hull/East Yorkshire, Grimsby and Scunthorpe and also with the English National Board at York. In addition, informal discussions took place with members of the Cluster group and Reference Group, representatives of the Educational Advisory Group and others. All these discussions were structured to service two common purposes. Firstly, to

elicit clear statements about the objectives of nurse education in Humberside so that alternative courses of action could be compared explicitly in terms of achievement of objectives. Secondly, to identify what alternative courses of action ('options') were available for bringing about the unification of nurse education in Humberside and make explicit any constraints on these alternatives.

Objectives, Constraints and Criteria

In seeking to identify the best course of action for achieving the unification of nurse education in Humberside, a number of options were considered, each with its associated cost implications. The choice of a preferred option cannot be adequately made on the basis of cost alone. Important qualitative issues, which may not be quantifiable let alone convertible into money equivalents, must be brought into the equation and set alongside costs.

Within the option appraisal process, the method used for the systematic and explicit consideration of qualitative differences between options is to compare their performance against an agreed set of criteria. The first task is to determine a set of criteria which will allow the relative performance of options to be assessed. These criteria must give a comprehensive picture of performance but be mutually exclusive to prevent double counting.

A review of the Cluster Group's stated objectives for nurse education on Humberside suggested that the following should be regarded as binding constraints which all options must meet:

- i retain basic RGN education, in the 3 districts, where it was currently carried out.
- ii basic training for RMN/RMNH will be provided from a central college facility with clinical experience being gained in all 4 authorities.
- iii in the long run, a Humberside College of Health Studies will be established with local training facilities in each authority.

Other Cluster Group objectives were also to be regarded as relevant criteria for comparing the performance of options:

- i the degree to which the joint development of post basic courses is facilitated and access to these courses is opened to all nurses in Humberside.
- ii the degree to which joint discussion between schools on curriculum development is facilitated.
- iii the degree to which a joint approach by the schools on access to the resources of universities, polytechnics and Government training programmes is facilitated.
- iv the degree to which a joint approach by the schools on attracting teaching staff is facilitated.

In addition to these objectives it was soon clear that certain manpower issues, concerned both with quantity and quality, would be of great importance. In general terms, the manpower objective was seen as

that of minimising the potential gap between supply and demand in all locations and for all types of nursing. This general objective may be broken down into the following sub objectives:

- i Ensuring sufficient capacity for training
- ii Ensuring adequate numbers of suitable and motivated applicants
- iii Minimising losses during training
- iv Maximising pass rates
- v Maximising retention

How well a given option performs against these objectives was likely to be determined by what it offers in terms of factors such as accessibility, quantity and quality of training resources (facilities and staff), and range of training opportunities. Table 1 summarises the quantity and quality factors, and relationships considered to be influential in determining the manpower performance of options.

Finally any option was assessed on the basis of the following elements:

Timing - on the basis that options which meet our objectives sooner rather than later will be preferred.

Ease of implementation - on the basis that some options may result in far greater disruption of existing activities than others.

Flexibility - on the basis that some options may produce an educational organisation less capable of responding positively to changes in external factors such as the

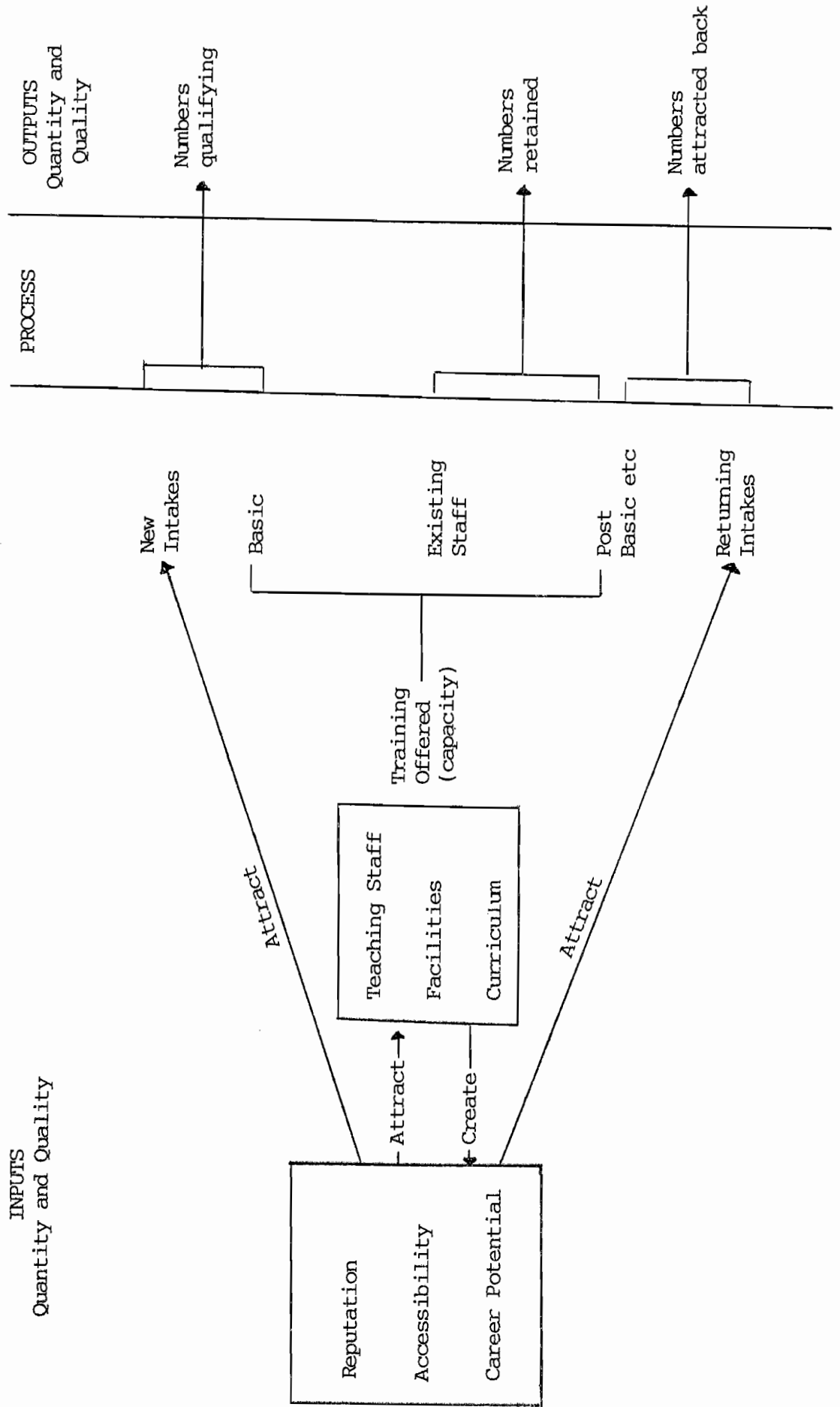
outcome of Project 2000 and the introduction of flexible grading outcomes.

Costs - on the basis that a decision to pursue a particular option will depend on not only how well it achieves the objectives set out above but also how much it costs. The option chosen would be that which offers the greatest 'benefits', in terms of achieving the objectives, at an "acceptable" cost.

In seeking to determine a method for assessing the relative performance of options, a number of constraints and criteria have been identified. To these must be added the constraints imposed by the English National Board's (ENB) criteria as set out in Circular 1988/13/APS which must be met to ensure that continued approval is not placed in jeopardy. Most fundamental of the ENB criteria, for the purposes of this report, are those relating to the future size of Training Institutions within the National Health Service, in terms of the learner population, and the number of branches which each must offer to be approved. Broadly, these criteria are the minimum learner population should normally be 300 and a minimum of 2 branches (normally 3) leading to an initial registerable qualification should be offered.

Table 2 summarises the constraints and criteria used in assessing the performance of options for bringing about the unification of nurse education in Humberside.

FIGURE 1: QUANTITY AND QUALITY ISSUES IN NURSE EDUCATION



**Table 2: Constraints and Criteria for Assessing the Performance
of Options for Humberside Nurse Training**

CONSTRAINTS ON OPTIONS

- 1 Retain basic RGN education in all three districts.
 - 2 Basic training for RMN/RNMH to be provided from a central college facility with clinical experience being gained in all four authorities.
 - 3 In the long run, establish a Humberside College of Health Studies with local training facilities in each of the four districts.
 - 4 Meet the ENB criteria for continued approval as laid down in Circular 1988/13/APS.
-

CRITERIA FOR COMPARING OPTIONS

- 1 Cluster Group objectives
 - 2 Quantity and quality
 - 3 Timing
 - 4 Ease of implementation
 - 5 Flexibility
 - 6 Cost to districts
-

Options for Nurse Education

Discussions with local staff and the ENB revealed a considerable degree of consensus about not only the options for developing the concept of a Humberside College of Health Studies into a practical reality but also the relative importance of different areas of nurse education in the immediate future.

Training for Mental Illness and General Nursing are of much greater and more immediate importance in practical terms than the other areas, not least in terms of sheer numbers involved and the potential manpower shortages in these areas. It is recognised that the best solution for nurse education on Humberside is very likely to be determined by the needs of these two groups. While other areas of nurse education are important to specific services, they are unlikely to be the critical, determining factor in a decision geared to the needs of the next three years.

Continuing education will be of increasing importance, not only to improve recruitment and retention but also through its vital complementary role to the needs of basic training. Further investment in continuing education is seen to be one of the few avenues open to exploitation in the continuing effort to get sufficient numbers of nurses trained to meet future needs in mental illness.

With regard to RMN training, the only realistic option is to develop an all district strategy on the basis of the existing Hull course. A major part of this strategy will be a reappraisal of continuing education needs and the constraints imposed by lack of suitable clinical placements.

It is in this context that four main alternatives were defined:

Option One - formally establish a forum for exchanging information about, and co-ordinating, the education activities of the four districts on Humberside.

This option would revolve around a regular meeting of an advisory or consultative group for Humberside as a whole. The main function of this group would be to exchange information. It would not have resources of its own in terms of staff and a budget. It would represent a commitment to develop the present contacts on a regular basis. It would concentrate mainly on post basic and in-service education.

The main job of the advisory group would be co-ordinate and encourage the development of such training. In essence it would be there to give some support to local initiatives. Its role here could develop into something more than general encouragement. It could help with the planning and recruitment for such courses. The administrative support to the group might be given by each school of nursing in turn, on an annual basis.

The advisory group could also help in developing training for the RMN by exchanging information on possible clinical placements and on the nomination of students. It could encourage the development of post basic courses and conversion courses. Its existence would make it possible for districts to assess particular 'trades' as part of a more permanent relationship and it would provide a mechanism for reviewing the terms of such trades and for arriving at consensus.

This kind of relationship in effect already exists between Grimsby and Scunthorpe. The aims of Option 1 would be to achieve the potential gains

from bringing the larger resources of Hull into play, thus providing the opportunity for more local shared initiatives to develop. The record of Grimsby and Scunthorpe indicates that such initiatives will start coming forward once the basic relationship has been established. There is a willingness by teaching staff to develop such courses and an interest from 'customers' attending them.

Option Two - establish a jointly funded and organised, continuing education college responsible for post basic and in-service nurse training across all four districts.

The four Authorities would agree to set up a college covering post basic and in-service training. The full time staff of this College would have a permanent base, possibly in a district South of the Humber. The College would have its own Director and budget drawn from the four authorities. It would also be able to add to income through course fees. It would have a Director and staff who would include nurse educators currently concerned in each separate district with post basic and in-service education. The Authorities would enter into a three year agreement to provide the budget for the College and it would have a three year 'corporate plan' showing aims in terms of courses, clients and locations. Such a College would have clear identity in terms of premises, a Director, its own attached staff, and a contract with health authorities setting out aims, programmes and a budget. The budget should allow for buying in of some time from staff involved in basic training.

Option Three - establish a jointly funded and organised college responsible for all nurse training across all four authorities but maintaining self contained basic, general nurse training circuits in Grimsby, Hull and Scunthorpe.

The following functions would be organised on a fully integrated basis (ie. as if on a single authority basis):

- management and staff structure (with locally based staff for basic general nurse training only)
- staff personnel function
- all activities relating to development of courses
- the administration of local efforts to recruit students
- budgets and the finance function
- the co-ordination of local efforts to recruit students
- the organisation of post basic courses
- the co-ordination of locally based in-service training
- examinations

The following would be largely based at a local level:

- recruitment of students to basic training
- personnel function relating to students on basic training
- daily organisation of basic training
- assessment of local requirements for continuing education

In this option, although post basic education would be organised on a fully integrated basis, it would be expected that in order to make best use of staff time and skills, and available facilities, some post basic courses for the whole of Humberside would be run in each of the four districts.

Option Four - establish a jointly funded and organised college responsible for all nurse training across all four districts with fully

integrated training circuits.

This option would operate in the same way as Option Three except that all aspects of basic training (recruitment, personnel function and organisation) would be carried out as if on a single authority basis from a single, central administrative base.

Assessing the Options

Option One

As it stands, this option would only satisfy the first of the four constraints identified as binding on all options. As such it must be rejected as a possible solution though it could be seen as a first step towards establishing a college.

Option Two

This option would only satisfy the first and third of the four constraints identified as binding on all options. Again it must be rejected as a possible solution, though as with Option One, it could be seen as an interim step towards a full collegiate arrangement.

Option Three

This option has the potential to satisfy all the constraints identified as binding on all options. This includes the criteria set out by the ENB under the headings of 'Organisational Feasibility', 'Educational Desirability', 'Legal Possibility' and 'Financial Acceptability'.

With regard to its performance against criteria, Option Three would clearly meet all the Cluster Group objectives. Evidence of the potential gains from co-operation on continuing education is provided by the recent experience of Grimsby and Scunthorpe with the 998 and 923 courses. The 900 (901) Family Planning course has also run successfully on a Humberside basis since the Area Health Authority era. More co-operation on continuing education, which brought the relatively greater resources of Hull into play, would undoubtedly afford more staff a wider range of training opportunities. At present individual districts' efforts to expand post basic education are constrained by the non-viability of courses because of small numbers of students, the high set up costs of courses and the difficulties of getting staff released from normal duties to attend. Multi district post basic education would make more courses available by increasing numbers of students, spread the fixed costs of establishing courses over larger numbers and make attendance easier by offering courses more often.

Option Three would also offer the following gains in terms of quantity and quality of manpower:

- better continuing education will contribute to improved recruitment and retention of qualified staff
- greater integration of staff will increase the scope for specialisation and/or interdisciplinary gains from exchange of ideas
- greater peer review of training staff will improve standards
- fully integrated staff structure will enhance opportunities for staff career development and be more attractive to potential recruits
- maintain local accessibility to basic training

These gains would be offset by the following disadvantages:

- some dilution of local nurse training school identity leading to a reduced sense of ownership and professional responsibility
- some increase in the travelling time of some teaching staff.

Implementation of Option Three would require greater planning than either Options One or Two and consequently would take longer to achieve completely, though it is attainable well within the three to five years suggested by the ENB. Some benefits of integration would be available in a relatively short period of time.

Option Three would not be expected to produce any additional difficulties for the Humberside districts in responding to changes in external factors such as the outcome of Project 2000 and the introduction of flexible grading structures.

The effect of Option Three on costs of nurse education can only be estimated on the basis of detailed plans for the future organisation of the college. Some savings in administrative costs would be expected as a result of the centralisation of the personnel and finance functions though these would be partly offset by increased travel costs for staff. As indicated above, post basic education would be expected to offer better value for money through the exploitation of economies of scale, which will arise from spreading the substantial fixed costs of setting up courses across more than one district and over a larger number of trainees attending the course.

Option Four

Option Four also has the potential to satisfy all four constraints identified as binding all options.

Its performance against the criteria would mirror that of Option Three except for the effects of requiring students, and possibly staff, to move between health authorities on either a daily or block residential basis. This will have the following disadvantages:

- costs of organising and providing transport and residential accommodation
- time costs to individuals will discourage recruitment particularly of more mature students with family responsibilities
- time costs to individuals will lead to an increased number of drop outs from courses
- loss of local identity will dilute labour force link with individual authority's hospitals. This may have an adverse effect on post qualification retention.
- loss of local organisation base may adversely affect tutor-student relationship with detrimental effects on retention and pass rates
- increase in travel costs of teaching staff.

The Preferred Option

The value of adopting the option appraisal approach for this type of decision process is well illustrated in this case. The discipline exerted in eliciting clear statements about the objectives of nurse education on Humberside makes it clear why the nature of the choice as to the best course of action is very limited.

Constraints exist which eliminate those options (ie 1 and 2) which in the immediate future do not lead to the genuine integration of training resources on Humberside. Even if Option 2 were to be seen as a first phase towards full integration, it would in the interim bring an unhelpful division between the organisation of basic and post basic training which would have been very difficult to work in practice.

Both Options 3 and 4 meet the constraints identified and point to some immediate and substantial benefits in terms of access to post basic and inservice education. The differences between these two options lie in their respective organisation of basic training. The full integration of basic training under Option 4 will pose considerable logistical problems, involve additional costs and have adverse effects in terms of recruitment and retention of not only trainees but also training staff.

Implementation

In practical terms, the college solution proposed for Humberside is capable of implementation within the three to five years required by the English National Board. In the first instance the implementation will be carried forward by a Supervisory board, comprising two officers from each of the four districts. The Board will appoint a Director Designate and together they will prepare a three year operational programme for establishing the college.

A key issue in the implementation is the development of appropriate financing and budget systems between the participating districts. The financing of basic training will continue to be met from central funding

through the Education Advisory Group for Yorkshire Region. Implementation only requires the amalgamation of existing budgets though it is recognised that some pump priming funds for the Director's post will be required which could at least partly be offset against future indicative savings on administration and management.

Arrangements for post basic and inservice training require more thought since the districts will wish to retain the essential features of the existing situation. These are a guaranteed minimum level of service from any committed expenditure and control over the total level of spending and the type of training to be bought with the funds made available. However it is not difficult to envisage a financing arrangement, which would achieved this objective, based on the principle of the 'internal market'. Districts would all commit core funding, at an agreed level, to establish post basic, clinical tutor posts in the new college. All training required by a District would then be "bought" on a contract basis from the College and paid for by either a charge against the core funding or, if this was fully spent, by discretionary funding.

In such a system, as now, Districts would only buy the training they wanted, while recognising that a core commitment was required to guarantee a minimum level of service. The added advantage of the system, which establishes the roles of purchasing agent (the Districts) and providers of services (the College) more explicitly than at present, is to provide the incentives to allocate resources to post basic and inservice training more efficiently. In particular, the College, which will effectively be competing with other training institutions to provide training to Districts, will have the incentive to be more efficient and responsive to Districts' needs.

III CONCLUSIONS

All Districts face the problems of securing adequate numbers of trained nursing staff and reviewing the contribution and organisation of nurse education. ENB guidelines will force some Districts into joint arrangements but these should be evaluated carefully in the light of local labour market characteristics. The need for amalgamations immediately throws up the prospect of conflict of interest, particularly when it is to be achieved through the closure of smaller schools. In the case of Humberside, where the centres of population for the districts are separated by significant distances, the closure of local nurse training facilities would undermine efforts to recruit both student nurses and mature re-entrants from the local labour force. In these circumstances the ENB policy on minimum size of schools clearly conflicts with the objective of minimising the potential shortfall in numbers of trained nurses.

The solution determined for Humberside overcomes this conflict by establishing a jointly funded and organised college, responsible for all nurse training across all four Districts, but maintaining self contained, basic general nurse training circuits in each one. Although post basic education would be organised on a fully integrated basis, it would be expected that to make best use of existing resources, some courses for the whole of Humberside would be provided from each of the four districts.

The advantages of joint arrangements can be gained without necessarily losing local training. Discussion about joint arrangements for nurse education also offer the opportunity to consider ways of making the 'market' for post basic and inservice training more responsive. In the context of dwindling supply of new recruits, efforts to attract former

staff back and retain existing staff will require a reassessment of needs for post basic education in nursing. Redefining the relationship between the Districts as purchasing agents and the College as (one of many) suppliers of education services provides the incentives necessary to meet this challenge.

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