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CLINICAL PLACEMENTS FOR STUDENT NURSES AND MIDWIVES: AN EVALUATION OF COSTS AND PRACTICES

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School of Health and Related Research

AN INTRODUCTION TO ScHARR

ScHARR, The School of Health and Related Research, is a large, multidisciplinary research centre located near the centre of Sheffield. It forms the northern arm of the Trent Institute for Health Services Research which also includes centres at Nottingham and Leicester Universities. The staff at the School are drawn from a wide range of disciplines and backgrounds, embracing epidemiology, health economics, management sciences, medical sociology, medical statistics, nursing research, operational research, primary care, psychology, information science and public health medicine. This broad base of skills, together with the School's close ties with local NHS Trusts and Health Authorities, makes it uniquely placed to conduct applied and methodological Health Services Research to the highest quality.

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The aims of ScHARR are:

- to conduct and promote within the University, Health Services Research (HSR), judged to be excellent both nationally and internationally;
- to deliver the highest standard of teaching in HSR and related subjects;
- to provide research and consultancy services in HSR to clients outside the University, particularly to NHS Trusts and Authorities but also to other public sector bodies and private organisations;
- to be an active and vigorous member of the Trent Institute for Health Services Research.

Professor Ron Akehurst, Chair of Executive Board

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Professor Akehurst's research interests include all aspects of health economics including obtaining, storing and using information on the cost-effectiveness of health interventions; as well as health services research targeted to improve the management and delivery of health services.

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ABSTRACT

The work outlined in this report was commissioned by the Sheffield and North Trent College of Nursing and Midwifery (now the School of Nursing and Midwifery of the University of Sheffield) to address issues in relation to the provision of clinical placements following the introduction of Project 2000.

The following main questions were posed:

- how effective and efficient was the current system for clinical placements?
- what would be the pros and cons of service providers charging for the provision of clinical placements?
- what mechanisms should be used by the College, and service providers, to ensure the quality of clinical placements?

Findings

The costs of clinical placements

Pre-registration nursing and midwifery students on clinical placement spend a substantial proportion of their time in activities of value to the service provider. The value to the service provider of the service contribution made by second- and third-year student nurses and midwives on ward-based clinical placements appears to outweigh the value of the time spent by qualified staff on their supervision and education. As the service contribution made by third-year nursing students on rostered placements was included in the Department of Health's formula for replacing traditional student nurses, it should not be regarded as a benefit to the service provider. Similarly, the time spent by qualified staff on the supervision and education of all pre-registration nursing and midwifery students, at least in ward-based placement areas, is included in baseline funding and, therefore, should not be regarded as a cost to the service

provider. On this basis, the mean benefit to the service provider of every hour that a second-year nursing student or second- or third-year midwifery student spends on a ward-based placement has been conservatively estimated as £3.46.

However, the financial implications for service providers of the presence of students in community-based placements differ from the implications in ward-based placements. The value to the service provider of the service contribution made by students on community-based clinical placements (in primary care or with community midwifery teams) is lower, at £2.29, because it cannot free staff time to the same extent as is possible on the wards. In addition, the Department of Health's formula does not take account of the implications of student supervision and education in areas which did not receive pre-registration students in significant numbers prior to the introduction of Project 2000. It therefore seems appropriate that, in such areas, the cost of staff time should be offset against the value to the service provider of student activities, resulting in a mean **cost** to the service provider of £0.48 for every hour that a student spends on a community-based placement. It has not been possible in the ScHARR study to determine whether the cost in staff time in these placement areas is actually translated into a reduction in the number or quality of patient contacts.

The data summarised above suggest that there is no case for introducing charging for ward-based placements. The argument in relation to community-based placements hinges upon the perceived value to the service provider of the qualitative benefits associated with the presence of students on placement. Other studies have suggested that these benefits are such as to outweigh the associated costs.

Because the presence of students on clinical placement is associated with both costs and benefits, it seems appropriate that efforts should be made, in relation to both ward-based and community-based placements, to ensure that students are distributed as evenly as possible between placement locations so that no

one location is unduly advantaged or disadvantaged by the number of students which it receives on placement.

Clinical placements involve some costs to the students, but these are difficult to quantify as they vary according to individual circumstances.

The quality of clinical placements

A revised audit system is proposed which is intended to:

- enable the pool of available placement areas to be extended

- retain the joint involvement of educational and clinical staff in the educational audit of placement areas

- draw upon student and staff views by means of short questionnaires designed to identify the educational effectiveness of clinical placements.

INTRODUCTION

The work outlined in this report was undertaken at the request of the Sheffield and North Trent College of Nursing and Midwifery (now the School of Nursing and Midwifery of the University of Sheffield).

The need for such work arose following the introduction of Project 2000 training for student nurses, which changed the role of the clinical placement in relation to the student's education. Pre-registration nurses in training, who had hitherto been employed by Health Authorities to provide care at the same time as they acquired their training, now became students on an educational contract in receipt of a bursary. At the same time, the introduction of the NHS internal market encouraged all providers to identify the cost implications of their activities, and raised questions regarding the cost of providing clinical placements for student nurses, a cost which had not previously been identified.

Concern had also been expressed following the introduction of Project 2000 regarding the ability of students who followed the new course to undertake their roles once qualified, and this led the College to seek to ensure that any deficiencies in the practice element of the training programme were identified and rectified.

The College recognised that the issue of clinical placements was complex and, for them, had a number of significant elements:

- the education provider incurred significant costs as allocating students to placements, and administering the audit of those placements, was complex and time-consuming

- there were also costs to service providers in relation to supervising, monitoring and assessing students on clinical placement, and taking part in educational audit

- there had been a move on the part of some service providers to charge the education provider for the provision of clinical placements

- the quality of placements was perceived as variable, and there had been considerable discussion regarding methods for auditing their quality.

The following main questions were therefore posed:

- how effective and efficient was the current system for clinical placements?

- what would be the pros and cons of service providers charging for the provision of clinical placements?

- what mechanisms should be used by the School of Nursing and Midwifery, and service providers, to ensure the quality of clinical placements?

These questions are addressed below.

PART I: HOW EFFECTIVE AND EFFICIENT IS THE CURRENT SYSTEM FOR CLINICAL PLACEMENTS? ASSESSING THE COST OF CLINICAL PLACEMENTS

A: OVERVIEW OF STUDY DESIGN AND FINDINGS OF DIARY EXERCISE

Abstract

The costs of clinical placements to the education provider, service providers and the students themselves are discussed in this section. Information on some of these costs could be assembled from routine data sources. A diary exercise was used to gather the information which was not readily available, and that exercise and its findings are outlined below.

Background

The costs which will be considered in this section are those which fall to the School of Nursing and Midwifery, NHS service providers and students. The costs borne by other agencies such as Social Services and independent organisations have been excluded.

Before this study was undertaken, little was known of the cost of clinical placements to the education and service providers. Some of the relevant costs could be fairly readily identified. So, the University's Finance Department was able to calculate the administrative cost to the service provider of clinical placements. These costs include the time spent on administration related to pre-registration clinical placements and their educational audit by School of Nursing and Midwifery administrative staff, the cost of the relevant software support and maintenance, and the cost of premises, utilities and personnel/finance department support for those administrative and teaching staff involved with pre-registration clinical placements. It was also possible to estimate the cost to the education provider of training service staff to undertake student supervision,

and to the service provider of releasing staff to attend the relevant courses (ENB courses 997 and 998).

However, other costs and benefits could not be so readily identified - in particular, the cost to the education provider of the time spent by link teachers on activities related to the clinical link; the value of student time spent in activities of value to the service provider; and the value of supervisor time lost to the service provider due to the presence of students in the placement area. The methods used in the current study to assess those costs is described below.

Link teachers

Methodology

In order to assess the amount of time spent by University of Sheffield School of Nursing and Midwifery staff in fulfilling the clinical link in relation to pre-registration placements, 118 link teachers who had been identified as primarily involved with pre-registration students were asked to take part in an activity analysis exercise for the four-week period commencing 6th November 1996. It is recognised that time spent by link teachers on the clinical link is subject to peaks and troughs related to the number of students on placement at any given time in the areas with which they link and upon the educational audit cycle. This period was believed to be typical in terms of the numbers of students on placement, and therefore also in terms of the level of link teacher activity related to the clinical link. It should also have been typical in terms of audit activity which is organised throughout North Trent on an annual cycle so as to spread the administrative workload evenly throughout the year. Therefore, although the pattern of placement-related activity recorded in the diary of any one link teacher might not have been typical for that individual, the diaries together should give a picture of a representative month.

The decision to involve all relevant link teachers rather than a sample, and to extend the exercise over four weeks, was taken at the advice of the link

teachers themselves, as they felt that the variations in their workload, both over time and from individual to individual, were such that neither a sample nor a shorter timescale would yield satisfactory data.

The link teachers were sent their diaries at their campus addresses, and at the same time were informed, as far as possible, which students in areas with which they linked were involved in the study. It was hoped that the link teachers would encourage the relevant students, and their mentors, to complete their diaries.

The categories of information used for the link teacher diary were as follows:

Activities related to clinical link - to include all activities relating to linkage with clinical placements, such as supporting pre-registration students on placement, assessing such students, supporting staff in areas which take such students on placement, relevant educational audit, subdivided into:

- planned student contact - visiting the placement area with the intention of seeing the student
- unplanned student contact - if the student contacted the link teacher about his or her placement either while the link teacher was in the placement area for another purpose, or elsewhere
- working with student - working alongside the student in the clinical area in activities related to patient care
- planned staff support - visiting the placement area with the intention of seeing the staff in relation to the placement
- unplanned staff support - if a member of staff contacted the link teacher about a placement either while the link teacher was in the placement area for another purpose, or elsewhere
- unaccompanied clinical activity - working clinically in activities related to patient care without a student present in any capacity
- preparation - any preparation undertaken in anticipation of planned student contact or staff support

- placement assessment - all time spent on the assessment of the progress and achievement of a student in a placement area with which the link teacher linked (including verification)
- educational audit - all time spent in relation to the educational audit of clinical placement areas
- other activity - any other activities associated with the clinical link eg administration, communication with personal tutors etc
- travel - all time spent travelling to those clinical areas with which the link teacher linked in order to carry out any of the activities listed above

Work activities unrelated to clinical link - to include all working activities not related to linkage with clinical placements.

84 link teachers (71% of the relevant group) completed the diary for all or part of the four-week period, a total of 1,261 working days (1,100 lecturer days and 161 senior lecturer days) in all. Characteristics of the group, and of respondents, were as shown in Tables 1 and 2:

Table 1: Characteristics of link teachers - gender

Sex	Respondents (n=84)	Non-respondents (n=34)
Male	21%	50%
Female	79%	50%

Table 2: Characteristics of link teachers - grade

Grade	Respondents n=84)	Non-respondents (n=34)
Lecturer	88%	82%
Senior Lecturer and above	12%	18%

Some respondents recorded only the time spent on activities related to the clinical link, and not that spent on other work-related activities. It was therefore not possible to identify the proportion of link teacher working time spent on the clinical link and, instead, the mean times spent on the various activities relating

to the clinical link have been calculated. In order to accommodate the fact that some of the respondents are part-time, this has been expressed in relation to the working day rather than the working week.

Findings

The average time spent by link teachers during the period of the diary exercise on activities related to the clinical link is summarised in Table 3:

Table 3: Average time spent by link teachers on activities related to the clinical link

	Lecturers	Senior Lecturers and above
Average time/working day spent on the clinical link	90 minutes	72 minutes

These figures are broadly in line with the Project 2000 assumption that link teachers spend 20% of their time in activities related to the clinical link.

The time spent on the clinical link can be broken down as shown in Table 4:

Table 4: Time spent by link teachers on the clinical link

	Mean time in minutes/working day		
Activity	Lecturers	Senior Lecturers and higher grades	All link teachers
Planned student contact	19	11	18
Unplanned student contact	6	1	5
Working with student	3	1	2
Planned staff support	13	11	12
Unplanned staff support	5	5	5
Unaccompanied clinical activity	3	0	3
Preparation	10	11	10
Placement assessment	2	3	2
Educational audit	5	8	6
Other activities	14	5	11
Travel	11	14	11
Total	**90**	**72**	**88**

(In this table, totals differ slightly from the sum of the individual figures owing to rounding to whole numbers.)

Students and their mentors

Methodology

An activity analysis exercise similar to that undertaken with link teachers was used to assess the contribution made by pre-registration student nurses and midwives on clinical placement to patient care and the qualified staff time lost to the service provider because of the presence of students on placement.

A sample of 270 2nd- and 3rd-year pre-registration nursing and midwifery students who would be on placement during the week commencing 6th November 1995 was asked to take part, together with their mentors, in an activity analysis exercise for that week. Of the students, 100 were third-years on rostered service, 37 were second-year branch students (almost all of whom were on placement in primary care), 91 were second-year Common Foundation Programme (CFP) students (the majority of whom were on ward-based or residential placements) and 42 were second- and third-year midwifery students (split between ward-based and community-based placements). They were on placement within all 14 NHS Trusts in North Trent, and in a number of general practices, independent and local authority sites. The students were contacted by mail at their home addresses; their mentors were contacted at work via the nurses in charge of the placement areas in which they worked.

Eleven of the student sample were not available to take part in the exercise. Six had left the course before the diary exercise was run, one was taking six months off, and one was on sick leave. Another two had already completed their placement by 6th November, another was not on placement in the area where it was believed that they would be, and could not be traced. A twelfth completed the diary from an unidentified placement area other than that originally

allocated. The mentor sample was thus effectively reduced by 12. However, response rates have been calculated in relation to the original sample.

The diaries used for the exercise were developed from those used by Follows[1] for a cost/benefit analysis of community nursing clinical placements in the North Western Region. They were modified following consultation with service and School of Nursing and Midwifery staff and students, and piloting by link teachers in Rotherham, and by students and mentors in the Royal Hallamshire, Northern General and Jessop Hospitals, Sheffield.

The categories of information used for the student diary were as follows:

Travel to and from placement - to include travel from home to placement base, and from placement base to home, but not travel undertaken as part of the placement activity (eg visiting patients in the community)

Patient-related activities - to include all activities relating to patient care, such as treatment of patient, patient assessment, record-keeping, case-conference/ liaison, dealing with relatives, teaching relatives/patient, subdivided into:

- directly supervised activity - activity undertaken whilst the student was being directly supervised by his/her mentor or another trained member of staff
- indirectly supervised activity - activity undertaken while the student's mentor or another trained member of staff was available but engaged in another activity
- working with mentor - assisting the mentor, or another trained member of staff, to perform an activity which required two people
- observation of activity - observing the mentor, or another trained member of staff, undertaking an activity. This also included time spent travelling as part of the placement activity (eg to visit patients)
- unsupervised activity - activity undertaken unsupervised by the mentor or another trained member of staff

Education-related activities - to include:

- mentor education - all education undertaken whilst with, or suggested by, the mentor, such as reading, preparation, equipment use and technique
- general education - all other activities relevant to student education, such as course lectures, tutorials, course work, library work, ward management issues
- placement assessment - all time spent on the assessment of the student's progress and achievement in the placement
- educational audit - all time spent completing the student education questionnaire, or undertaking any other activity connected with educational audit
- contact with teacher - any planned or unplanned contact with the link teacher or personal tutor

Other activities - to include all other activities undertaken whilst on placement, eg lunch and tea breaks.

The categories used in the mentor diary were similar to those used in the student diary, namely:

Patient-related activities - to include all activities relating to patient care, such as treatment of patient, patient assessment, record-keeping, case-conference/ liaison, dealing with relatives, teaching relatives/patient, subdivided into:

- direct supervision - if the student undertook an activity while being directly supervised by the mentor
- indirect supervision - if the student undertook an activity whilst the mentor was available but engaged in another activity
- working with student - if the student assisted the mentor to perform an activity which required two people
- student observation - if the mentor undertook an activity whilst being observed by the student. This also included time spent travelling as part of the placement activity (eg to visit patients)

- unaccompanied activity - if the mentor undertook an activity and did not have a student present in any capacity

Education-related activities - to include:

- student's education - all activities relevant to the student's education, such as case study, tutorials, equipment and technique demonstration, course work, preparation
- other education - all educational activities not related to the student's education, such as own education, own research projects, unrelated teaching
- placement assessment - all time spent on the assessment of the student's progress and achievement in the placement
- educational audit - all time spent completing the audit questionnaire, or undertaking any other activity connected with educational audit
- contact with link teacher - any planned or unplanned contact with the link teacher responsible for the clinical area which was directly or indirectly related to the student/s under the mentor's supervision

Other activities - to include all other activities undertaken whilst on duty, eg lunch and tea breaks.

125 students and 117 mentors completed activity analysis diaries. 123 student and 110 mentor diaries provided useful information, and the following analyses are based on the data which they contain. The quantitative data were supplemented by qualitative information obtained by separate focus group discussions with students and mentors, and from comments included in some student and mentor diaries.

The characteristics of the student sample and respondents are shown in Table 5:

Table 5: Characteristics of student sample - gender

Sex	Respondents (n=125)	Non-respondents (n=146)
Male	10%	12%
Female	90%	88%

The student response rate was 46% overall, ranging from 81% in second-year branch students to 29% in second-year CFP students. The overall mentor response rate was 43%, ranging from 68% of mentors of second-year branch students to 29% of mentors of midwifery students.

Table 6: Student and mentor response rate by student's stage of training

	Students		Mentors	
Student's stage of training	Respondents (n=125)	Non-respondents (n=145)	Respondents (n=117)	Non-respondents (n=153)
Rostered service (n=100)	42%	32%	42%	33%
2nd year branch students (n=37)	24%	5%	24%	6%
2nd year CFP students (n=91)	21%	45%	23%	42%
2nd and 3rd year midwifery students (n=42)	13%	18%	11%	19%
Total (n=270)	100%	100%	100%	100%

The students on rostered service were all in ward-based placements, as were a substantial majority of the CFP students. The majority of the second-year branch students were on placement in primary care, and the midwifery students were split between the wards and community midwifery teams.

The respondents were divided between ward-based and community-based placements (primary care, community midwifery etc) as shown in Table 7:

Table 7: Student and mentor response rate by type of placement

	Students		Mentors	
Type of placement	Respondents (n=125)	Non-respondents (n=145)	Respondents (n=117)	Non-respondents (n=153)
Ward-based placement (n=232)	78%	92%	79%	91%
Community-based placement (n=38)	22%	8%	21%	9%
Total	100%	100%	100%	100%

The response rate from community-based placements was substantially higher than that from ward-based placements, the student response rate being 68% from community-based placements as against 42% from ward-based placements, and the mentor response rate being 58% from community-based placements as against 40% from ward-based placements.

It is clear that ward-based placements are under-represented in the study in relation to both students and mentors. The higher response rate for both students and mentors in community settings is likely to be due to the fact that in these settings there were clear breaks between client visits which formed both a reminder and an opportunity to complete the diary for the preceding period. It is not apparent why the response rates from ward-based placements varied so that CFP students on such placements, and their mentors, were substantially less likely to complete the diary than students on rostered service and their mentors.

It can be conjectured that those placement areas where staff did not complete the diary were those which were particularly busy, and indeed this was explicitly stated in some cases. Under these circumstances, the volume of student-mentor contact may have been lower amongst non-responders than amongst those staff and students who responded. The study results are therefore likely

to overestimate rather than to underestimate the amount of time spent by staff across North Trent on the role of mentor.

The community return rates are more comparable than the ward rates to those obtained by Follows[1] in her study of community nursing, where the overall return rates were as follows:

student	80%
supervisor accompanied by student	89%
supervisor unaccompanied by student	84%
total	84%.

The grades of the mentors who took part in the exercise are shown in Table 8:

Table 8: Grades of mentors who completed diaries

Grade	Number	%
D	30	26%
E	49	42%
F	11	9%
G and H	23	20%
not known	4	3%
Total	117	100%

As the grades of those mentors who did not take part are not known, it is not possible to determine whether the mentors' response to the survey was in any way related to their grades.

The study was not designed to provide information relating to individual Trusts, and the numbers of students and mentors involved in the study in several Trusts were too small for such information to have any statistical validity.

Findings

The students whose diaries have been analysed kept a record of their activities for a median total time of 2,145 minutes (interquartile range 1,950-2,380 minutes). Those mentors whose diaries have been analysed did so for a median total time of 1,471 minutes (interquartile range 1,034-1,905 minutes). Because diaries were completed for differing lengths of time, it was necessary to look not at the total time spent on each activity but rather (with the exception of time spent by students in travel to and from the placement area) at the proportion of time spent on each activity in relation to the total time worked: it was felt that this would reflect a truer picture of student and mentor activity. Non-parametrical statistical significance tests which avoid any distributional assumptions about the data (eg Mann-Whitney U test, Kruskal-Wallis test) were used to test for differences between categories of respondent and placement.

The proportion of placement time spent by students in the various activity categories is shown in Table 9:

Table 9: Proportion of student time in the placement area spent in different activities

Activity	Students on rostered service	2nd-year branch students	2nd-year CFP students	2nd- and 3rd- year midwifery students	All students
Directly supervised	8%	11%	13%	6%	10%
Indirectly supervised	28%	11%	23%	43%	25%
Working with mentor	8%	14%	11%	7%	10%
Observation	5%	22%	11%	8%	11%
Unsupervised activity	32%	5%	13%	13%	19%
Mentor education	3%	7%	5%	5%	5%
General education	2%	12%	10%	5%	6%
Assessment	0*	1%	2%	1%	1%
Educational audit	2%	2%	1%	1%	2%
Contact with link teacher	0*	1%	1%	1%	1%
Other	10%	14%	10%	9%	11%
Total	100% (1712 hours)	100% (987 hours)	100% (688 hours)	100% (479 hours)	100% (3866 hours)

* asterisked zeros represent a value of less than half a percent.

(In this and other tables, columns may not total exactly 100% because of rounding to whole numbers.)

These activities can be aggregated into those activities related to patient care which are of value to the service provider (directly supervised, indirectly supervised and unsupervised activity and working with the mentor or another qualified member of staff), and education-related activities (mentor education, general education, assessment, educational audit and contact with the link teacher), as shown in Table 10:

Table 10: Proportion of student time spent on activities related to patient care and on education-related activities, by stage of training

Activity	Patient care	Education-related activities
Rostered service	76% (1306/1712 hours)	9% (147/1712 hours)
2nd-year branch	41% (409/987 hours)	22% (221/987 hours)
2nd-year CFP	60% (415/688 hours)	18% (126/688 hours)
2nd- and 3rd-year midwifery	70% (333/479 hours)	14% (65/479 hours)
Total	64% (2463/3866 hours)	14% (559/3866 hours)

The two aggregated categories do not account for the totality of student time as observation and other activities have been excluded from either heading.

The apparently low level of patient care provided by second-year branch students is probably related to the nature of the placements which they occupied at the time of the survey rather than to their stage of training. So, when the data are broken down into ward-based and community-based placements, the results are as shown in Table 11:

Table 11: Proportion of student time spent on activities related to patient care and on education-related activities, by type of placement

Activity	Patient care	Education-related activities
Ward-based	70% (2108/2998 hours)	12% (358/2998 hours)
Community-based	41% (355/868 hours)	23% (202/868 hours)

Students in ward-based placements recorded that they spent on average 70% of their time in activities related to patient care, compared with only 41% for those in community-based placements: this difference of around 29% of the time spent in the placement area is both substantial and statistically significant (95% CI 26% to 33%, P<0.0001). Students in ward-based placements spent around 11% less time in education-related activities than those in community-based placements (95% CI 14% to 8%, P=0.003).

White et al[2] found differences between the amounts of time students in the adult and mental health branches spent in different activities. In the current study, it was not possible to include sufficient students in the mental health and

child branches to allow comparisons to be made between the different branches.

The current study's findings are broadly comparable with those of a study carried out in Lincoln[3] which found that, over the entirety of the course, students in adult placements spent on average 43-62% of their placement time on direct care, although this contribution varied considerably from specialty to specialty. As the two studies differ in their construction, it is not possible to make detailed comparisons between the ScHARR and Lincoln studies.

The majority of students who took part in the ScHARR study completed the activity analysis in the early stages of their placement: 83% did so in the first, second or third week of the placement. Apart from the CFP students, who were in the third week of a four-week placement, most students who took part in the study were in the early stages of a placement of six weeks or more. It can therefore be argued that the ScHARR study may underestimate the proportion of student activity of value to the service provider, which could be expected to rise over the course of the placement. The mentor input, in terms of activities which have been assumed to represent a cost to the service provider, could be expected to decrease correspondingly in all relevant categories except placement assessment. So, Shalik[4] has estimated that the costs to the service unit of occupational students on a 12-week placement, although relatively high in the first few weeks, are generally recovered between the 3rd and 5th weeks. Benefits increase as the placement progresses, and Shalik therefore suggests that placements of less than six weeks are likely to have service cost implications.

As may be seen, students record a substantial proportion of their time as spent working under indirect supervision or unsupervised. Indirect supervision is clearly appropriate for students who are approaching the end of their course and will soon have to make the transition to qualified practitioner. However, although a positive student-oriented learning climate may increase students' confidence in soliciting help, guidance or information when practising under

indirect supervision, heavy reliance on indirect supervision carries with it the concern that, to seek help appropriately, the student must be aware of his or her lack of knowledge or skill. Even the most student-oriented climate is unhelpful to the indirectly-supervised student who "does not know", but "does not know he or she does not know"[5]. During early placements, students are unlikely to have the confidence and skill required to cope with indirect clinical supervision, yet students suggested, in the course of the ScHARR study, that it was in the first two years that students were likely to have the least opportunity to work alongside their mentors. It is not possible to either confirm or deny this statement on the basis of information gathered by the diary study, which does not differentiate between contact with the mentor and contact with other qualified members of staff. However, it does indicate that second-year CFP students in ward-based placements spend 23% of their time in indirectly supervised and 13% in unsupervised patient-related activity. These figures rise to 28% and 32% respectively for students on rostered service. Not surprisingly, as they become more experienced, the more senior students begin to resent direct supervision, whereas it is appreciated by more junior students[6].

The student diaries indicate an average contact with the link teacher of less than 1% of time spent in the placement area. However, the amount of student contact with the link teacher appears to be variable, as may be expected given the variation in the number of sites with which different teachers link. Students expressed in discussion the general view that they would like to spend more time with the link teacher as they value such contact when it is available to them, but perceive it as virtually non-existent in some areas. Some are hesitant to ring link teachers at home even though they have been told that they may do so, and would prefer the link teacher to be available in the placement area at a given time each week for the students to contact if they wanted. They would appreciate the opportunity which this would provide for them to have contact with the link teacher when they are not necessarily having problems.

The proportion of time spent on different activities by mentors on those days when they are in the placement area with their student is as shown in Table 12:

Table 12: Proportion of time spent by mentors in different activities, by student stage of training

Activity	Students on rostered service	2nd-year branch students	2nd-year CFP students	2nd- and 3rd- year midwifery students	All mentors
Direct supervision	9%	11%	13%	3%	10%
Indirect supervision	26%	12%	25%	43%	24%
Working with student	13%	7%	12%	11%	11%
Student observation	5%	24%	9%	2%	12%
Unaccompanied activity	26%	19%	16%	18%	21%
Student education	6%	9%	7%	5%	7%
Other education	2%	2%	3%	1%	2%
Assessment	1%	1%	3%	1%	1%
Educational audit	4%	1%	2%	0*	2%
Contact with link teacher	1%	0*	1%	0*	0*
Other	9%	12%	8%	16%	10%
Total	100% (1005 hours)	100% (839 hours)	100% (536 hours)	100% (319 hours)	100% (2698 hours)

* asterisked zeros represent a value of less than half a percent.

As may be seen, there is considerable agreement between the student and mentor data regarding the proportion of time spent in the major activities.

Like students, mentors would appreciate more contact with the link teacher, and many claimed in discussion that they rarely saw the link teacher for their placement area. Mentor diaries indicate an average contact with the link teacher of less than 1% of days when mentors are in the placement area with their students. Contact appeared to be lower in community-based than in ward-based placements, although this was not statistically significant.

Table 13: Proportion of mentor time spent in contact with the link teacher, by type of placement

	Proportion of mentor time spent in contact with the link teacher
Ward-based placement	0.5%
Community-based placement	0.4%

Mentors regretted the lack of continuity in link teachers in many areas caused by repeated reorganisations.

When summed across all students and mentors, both the proportion of student time spent in activities of value to the service provider and the proportion of mentor time spent on student-related activities which can be assumed to form a cost to the service provider (direct supervision, student education, placement assessment, educational audit and contact with the link teacher) vary according to the student's stage of training, as shown in Table 14:

Table 14: Proportion of student time in the placement area spent in activities of value to the service provider, and proportion of mentor time spent on student-related activities, by students' stage of training

Stage of training	Proportion of student time spent in activities of value to the service provider	Proportion of mentor time spent on student-related activities
Rostered service	76% (1306/1712 hours)	20% (199/1005 hours)
2nd-year branch	41% (409/987 hours)	23% (192/839 hours)
2nd-year CFP	60% (415/688 hours)	27% (145/536 hours)
2nd- and 3rd-year midwifery	70% (333/479 hours)	9% (28/319 hours)
Average	64% (2463/3866 hours)	21% (564/2698 hours)

The proportion of time spent in activities of value to the service provider by 2nd-year branch students differs substantially from that spent in those activities by other students ($P<0.0001$). The proportion of time spent by the mentors of midwifery students on student-related activities also differs substantially from the proportion of time spent in those activities by the mentors of other groups of students ($P<0.001$).

The figures are comparable with Walker and Cooper's findings[7] that, by the middle of a 12-week placement, supervisors estimated third-year occupational therapy students to spend 78.6% of their time fulfilling salaried staff roles. The corresponding figure for second-year students at the mid point of a 6-week placement was over 61%.

The apparently low proportion of time spent by second-year branch students in activities of value to the service provider appears to relate to the nature of the placements which they occupied at the time of the diary exercise, when the majority of them were in community-based placements (primary care etc) rather than in ward-based placements (see Table 15). It would seem unlikely that, in a ward setting, such students would spend less time in activities of value to the service provider than would a second-year CFP student.

Table 15: Proportion of student time spent on activities of value to the service provider, and proportion of mentor time spent on student-related activities, by type of placement

Type of placement	Proportion of student time spent in activities of value to the service provider	Proportion of mentor time spent on student-related activities
Ward-based placement	70% (2108/2998 hours)	20% (404/1981 hours)
Community-based placement (primary care, community midwifery etc)	41% (355/868 hours)	22% (160/717 hours)
Total	64% (2463/3866 hours)	21% (564/2698 hours)

As noted above, students in community-based placements recorded that they spent around 29% less time in activities of value to the service provider than did those in ward-based placements. However, the difference between the proportion of mentor time spent on student-related activities in the two settings is small (2% less in ward-based than in community-based placements; 95% CI 6% to 2%).

There is less scope in community-based placements for students to work unsupervised or with only indirect supervision, and students on such placements spend about 2% more of their time working under direct supervision

(95% CI 0% to 5%), and around 18% more observing their mentor (95% CI 15% to 21%), than do those on ward-based placements (see Table 16).

Table 16: Proportion of student time spent working under direct supervision, and observing the mentor, by type of placement

Type of placement	Proportion of student time spent working under direct supervision	Proportion of student time spent observing the mentor
Ward-based placement	9% (272/2998 hours)	7% (209/2998 hours)
Community-based placement	11% (98/868 hours)	25% (220/868 hours)
Total	10% (370/3886 hours)	11% (429/3886 hours)

As shown above, mentors were found to spend, on average, 21% of those days on which they were on duty with their students on the student-related activities which have been assumed to form a loss to the service provider. Walker and Cooper[7], studying clinical placements in occupational therapy, also identified that qualified staff spent 21% of their time in student-related activities. The majority of mentors (73%) who took part in the ScHARR diary exercise supervised one student, though 9% supervised two and 1% three; for 17%, this information was not recorded. Those mentors who supervised more than one student did not, on average, spend significantly more time on student-related activities than those who only supervised one.

The low proportion of time spent by the mentors of midwifery students in student-related activities (9% in comparison with an overall mean of 21%) is consistent with the perception of midwifery students that nurses provide better mentorship than do midwives (see Appendix 1).

Students are not generally able to work with their named mentors for all the time when they are on placement: opportunities to do so are reduced by conflicting shifts, and by the mentor's annual and study leave. The current study has shown that, in a total of 79 cases where both student and mentor are known to have completed the diary for the same week, the mentors were only present with their students in the placement area for 248 of a possible 324 student

placement days. This is despite the fact that, in some cases, the diary was completed for a week other than that commencing 6th November specifically to cover a week when the student and mentor were together in the placement area. It seems likely that, in the mentor's absence, other members of qualified staff take on the mentor's role in relation to supervision, but they may not do so in relation to educational activities unless it has been specifically agreed that the student should be attached to them in order to gain wider experience. However, this cannot be readily demonstrated from the data collected in the current study.

Conclusions

Link teachers were found to spend on average 88 minutes per working day on activities related to the clinical link; this figure was higher for lecturers (90 minutes) than for those at senior lecturer and higher grades (72 minutes).

Students in ward-based placements were found to spend on average 70% of their time in the placement area on activities related to patient care which were considered to be of value to the service provider, compared with only 41% for those in community-based placements. This reflects the fact that there is less scope in community-based placements than in ward-based placements for students to work unsupervised or with only indirect supervision. Students in community-based placements spent on average 23% of their time in the placement area on education-related activities, as opposed to 12% for students in ward-based placements.

The proportion of the time during which they were on duty with their students which mentors spent in student-related activities did not differ substantially between ward-based and community-based placements, averaging 20% in the former and 22% in the latter. However, mentors of midwifery students were found to spend a particularly low proportion of their time (9%) on student-related activities.

B: THE COST OF CLINICAL PLACEMENTS

Abstract

The total annual costs of clinical placements to the education and service provider may be calculated as follows:

cost to the education provider	**£1,456,900**
cost to the service provider	**an average of £0.48 for each hour a second- or third-year student spends in a community-based placement, but a gain of on average £3.46 for every hour a second-year nursing student or a second- or third-year midwifery student spends in a ward-based placement.**

Clinical placements may also involve a cost to the students, but this cost varies according to individual circumstances and is therefore not readily quantifiable.

Costs to the education provider

The costs of clinical placements to the education provider can be broken down into:

- administrative costs
- the cost of training service staff to undertake student supervision
- link teacher costs
- student-related costs.

The **administrative costs** include the time spent on administration related to pre-registration clinical placements and their educational audit by School of Nursing and Midwifery administrative staff, the cost of the relevant software support and maintenance, and the cost of premises, utilities and personnel/ finance department support for those administrative and teaching staff involved with pre-registration clinical placements. These costs have been calculated by the University's Finance Department.

The **cost to the education provider of training service provider staff to undertake student supervision** is the cost of that time spent by staff of the School of Nursing and Midwifery in providing ENB courses 997 and 998 ("Teaching, Supervising and Assessing in the Clinical Setting") for supervisors in midwifery and nursing respectively, together with the associated secretarial support and travel costs.

The **link teacher costs** include the cost of both staff time and travel associated with the clinical link. The cost of the relevant staff time was estimated on the basis of information obtained by the diary exercise, as described below.

Over the period of the diary exercise, the 84 link teachers who completed activity diaries spent 238 hours on activities related to the clinical link, the average per working day for those on lecturer grades being 90 minutes, and for those on senior lecturer and above 72 minutes. If these figures are extrapolated to cover non-respondents, and to cover the whole year, this amounts to a total of 34,280 hours.

The majority of link teachers on the lecturer grade are employed on the University academic "other related" salary scale 3, and the majority of those who are senior lecturers and above on the "other related" salary scale 4. Therefore, throughout this study, link teacher time has been costed with reference to these two scales. The top point of each scale, with on-costs, has been used as this is understood to reflect the current staffing position more accurately than would

the use of the midpoint. On this basis, the annual cost of this activity to the School of Nursing and Midwifery can be estimated as £714,100, as shown in Table 17:

Table 17: Estimated annual cost to the education provider of activity associated with the clinical link

	Estimated total link teacher time/year spent on the clinical link	Estimated total cost/year of link teacher time spent on the clinical link
Lecturers	30,060 hours	£619,800
Senior Lecturers and higher grades	4,220 hours	£94,370
Total	**34,280 hours**	**£714,100**

The total time spent on travel associated with the clinical link, and the cost of that time, may be estimated as follows:

Table 18: Estimated cost of time spent on travel

	Estimated total link teacher time/year spent on travel associated with the clinical link	Estimated total cost/year of link teacher time spent on travel associated with the clinical link
Lecturers	3,670 hours	£75,680
Senior Lecturers and higher grades	820 hours	£18,320
Total	**4,490 hours**	**£94,000**

This cost does not include travelling expenses. An estimated full year's travelling expenses in relation to the clinical link has been calculated on the basis of the costs incurred during the period of the study as £16,000.

The costs of premises and utilities, and of support staff (finance, library etc), relating to the time spent by link teachers in relation to the clinical link have been calculated as totalling £228,650.

The **student-related costs** include the costs to the education provider of student travel in relation to clinical placements, uniforms and medical

examinations (including hepatitis B immunisations). These have been calculated by the University's Finance and Estates Departments.

On this basis, the costs of pre-registration clinical placements to the education provider, at 1995/96 prices, were estimated to be as follows:

administrative costs	£102,900
costs of training service staff	£140,400
link teacher costs	£958,800
student-related costs	£254,800
total annual cost	**£1,456,900**

A breakdown of the administrative costs, the costs of training service provider staff, and student-related costs is contained in Appendix 2.

The Clothier Report[8] recommends that, before each student is allowed on placement, his or her general practitioner be asked to certify that there is nothing in the student's medical report which makes him or her unsuitable for clinical work. The implementation of this recommendation from March 1996 has increased the overall costs of clinical placements. However, this cost, and that of the associated police checks, is currently borne by the Regional Office of the Department of Health, and has not fallen to the education provider.

Costs to the service provider

The costs of clinical placements to the service provider, in terms of real resources, include:

- time spent by staff on the supervision of students, student education and educational audit, offset by the value of student time spent on patient care

- time spent by staff attending ENB courses 997 and 998.

In attempting to assess the value of both staff and student time, the following assumptions have been made:

- time spent by students working under direct supervision, indirect supervision or unsupervised, and working with a qualified member of staff, is assumed to be of value to the service provider and has been costed as the equivalent of a grade A nursing assistant, at the midpoint of the scale with on-costs (£5.58/hour). This is a conservative figure as it is understood that the education contract attributes to students on rostered service a value to the service provider between that of a C and D grade nurse

- time spent by the mentor in direct supervision, student education, placement assessment, educational audit and contact with the link teacher is assumed to form a loss to the service provider. Time spent in indirect supervision has not been included in the calculation as it was assumed that, in the absence of the student, the mentor would have had to have provided such supervision for another member of staff. As the majority of mentors who participated in the study in ward settings were grade E and the majority in community settings grade G, mentor time has been costed accordingly, at the midpoint of those scales (£9.53 an hour including on-costs for grade E and £12.57 an hour including on-costs for grade G).

The recognition that student time spent on patient care has a value to the service provider is not intended to deny either that students are supernumerary or that supernumerary status is essential to their education. However, the introduction of supernumerary status has meant that their value can be overlooked and may consequently be underestimated by the service provider.

As noted above, the ScHARR study indicates that, in broad terms, pre-registration students spend 64% of the total time in the placement area in activities of value to the service provider. This activity, if regarded as the equivalent of that of a grade A nursing assistant and costed at 64% of that nursing assistant's time (including on-costs), has a value to the service provider

of £3.57 an hour. Their mentors were found to spend on average 21% of those days on which they were on duty with their students on student-related activities assumed to form a loss to the service provider; this varied from 20% in ward-based placements to 22% in community-based placements.

In terms of real resources, therefore, it would appear that the cost or benefit to service providers of students on placement is as shown in Table 19:

Table 19: Cost/benefit to service providers of students on placement

Type of placement	Value of student time/hour spent in activities of value to the service provider	Value of mentor time/hour spent on student-related activities	Cost/benefit to service provider
Ward-based placement	£3.91	£1.91	+£2.00
Community-based placement	£2.29	£2.77	-£0.48

There is a substantial, and statistically significant, difference between ward-based and community-based placements in terms of the proportion of student time spent in activities of value to the service provider. However, there is no substantial or statistically significant difference in the proportion of mentor time spent on specific student-related activities in the two settings. The difference in the value of the mentor time spent on student-related activities in ward and community settings is due primarily to differences in the mentors' gradings.

If time spent by students on rostered service on activities of value to the service provider is costed at grade C, the benefit to the service provider is as shown in Table 20:

Table 20: Benefit to service provider of students in rostered placements

	Value of rostered student time/hour spent in activities of value to the service provider	Value of mentor time/hour spent on student-related activities for rostered students	Benefit to service provider
If student time costed at grade A	£4.24	£1.91	+£2.33
If student time costed at grade C	£5.72	£1.91	+£3.81

First-year CFP students were not included in the current study. The Lincoln study[9] found that CFP students in terms 1-3 were directly supervised for 33.2% of their time on placement, but that this fell to a mean of 13.2% in the fourth term. The greater part of this supervision was by a qualified nurse, but almost never by the student's identified mentor. The average contribution of CFP students to service was 21% of their placement time, although this ranged from 51% in areas relating to child health to 9% in mental health. The ScHARR study similarly found that second-year CFP students were directly supervised for 13% of their time in the placement area, and estimated their average service contribution as 60% of the time they spent in the placement area. The Lincoln data would thus suggest that, if costed at the equivalent of a grade A nursing assistant, using the assumptions made above, the average value of a CFP student on a ward-based placement to the service provider would be £1.17 an hour. The value of qualified staff time spent in direct supervision would range from £3.16 an hour in the first year to £1.26 an hour for the fourth term. It was not possible to ascertain from the Lincoln study the amount of time spent by qualified staff on student education, placement assessment, educational audit and contact with the link teacher in relation to CFP students, and therefore more detailed comparisons cannot be made with the ScHARR data.

As noted above, the response rate for ward-based placements was relatively low. It can be conjectured that responses were not forthcoming from areas which were particularly busy and where the time available for mentorship was consequently low. Indeed, this was explicitly stated in some cases. As a result,

the ScHARR study may underestimate the proportion of student time in such placements spent on activities of value to the service provider and overestimate the proportion of mentor time spent on student-related activities.

The costs and benefits of clinical placements to the service provider, as outlined above, rest upon the identification, by the ScHARR study, of real resources in terms of student and staff time. However, at the transition to Project 2000, the arrangements made for replacing the traditional student workforce assumed a specific contribution by Project 2000 students to the service provider; at the same time, the job descriptions of qualified staff continued to include student-related activities. Neither of these elements should therefore be included in a calculation of the costs and benefits to the service provider of clinical placements.

In brief, prior to the introduction of Project 2000, student nurses and midwives were NHS employees paid to make a direct contribution to patient care on hospital wards. Since its introduction, student nurses and direct-entry student midwives are no longer NHS employees, and undertake a more broadly-based course of preparation for nursing and midwifery intended to enable them to work flexibly and independently in both ward and community settings. Project 2000 student nurses are supernumerary for the greater part of their period of preparation, but make a service contribution in the form of *'a period which will not normally exceed 1000 hours of rostered service contribution and will normally take place in the third year of the programme'* [10].

The introduction of Project 2000 therefore had two major consequences of relevance to this study:

- the loss to the service provider of the service contribution made by traditional student and pupil nurses

- the increased emphasis on placements in community settings.

Staffing formulae

With the introduction of Project 2000, a formula had to be devised to enable the calculation of the staffing required to replace the traditional student workforce. Project 2000 demonstration districts, of which Sheffield was one, developed their own formulae, and the Department of Health subsequently developed a formula for use by non-demonstration districts, including the remainder of North Trent. The Department's formula[11] assumed that:

- traditional RGN students spent no more than 60% of their course on rostered placements, and RMN and RNMH students in the range of 30-40% of their course; EN pupils spent a maximum of 80% of their course on rostered placements

- Project 2000 students would be rostered for 20% of their 3-year course (or approximately 1,000 hours).

The formula then calculated the number of nurses required to replace the student workforce on the basis of the number of traditional nursing students

- plus 10% to cover staff holidays

- minus 20% (the "efficiency factor") on the assumption that replacement staff would be more efficient than students as they would not rotate from ward to ward

- plus an allowance for Project 2000 students on rostered service to be 20% less efficient than the traditional student nurse.

Funding would be made available for replacement staff on the assumption that they would be equally divided between grades A and D, although Health Authorities could determine the actual mix of staff employed within that costing boundary.

The formula applied only to nursing students as it was felt that replacement staffing for midwifery students was not necessary.

It was clearly intended that both the Sheffield and the Department of Health replacement formulae would produce a break-even situation. Neither formula made provision for the time spent by qualified staff in supervising and teaching Project 2000 students on placement because the teaching and supervision of traditional students formed an integral part of their job descriptions and were therefore already included in baseline funding. It was presumably felt that the amount of time spent on those activities would not change significantly following the introduction of Project 2000. Insufficient information is available about such activity prior to the introduction of Project 2000 to determine whether this assumption was in fact correct. However, even if the total amount of time spent by qualified staff on supervision and teaching remained unchanged following the introduction of Project 2000, the utilisation for clinical placements of areas which were not previously used for this purpose would impose upon them a burden which they had presumably not been funded and staffed to undertake[12].

The Sheffield formula[13] differed from that produced by the Department of Health in assuming that:

- traditional RGN students made an overall service contribution of 39.7%, taking into account an efficiency factor of 20% for second- and third-year students and of 85% for first-year students

- RMN students made a service contribution of 53%, taking into account a 20% efficiency factor

- RNMH students made a service contribution of 48%, taking into account a 20% efficiency factor.

The Sheffield formula was therefore less generous than the Department of Health formula in replacing RGN students, but substantially more generous in replacing RMN and RNMH students. In addition, it allowed 13% rather than 10% to cover staff holidays[13], and made funding available for replacement staff on the basis of an overall split of 21% grade E, 49% grade D and 30% grade A[14].

Some Trusts in North Trent were funded using the Sheffield, some using the Department of Health, replacement formula.

There has been much debate as to whether the Department's replacement formula was appropriate. Some have felt that the traditional students made a higher service contribution than allowed by the Department of Health: in 1985, the UKCC[15] estimated that students of mental health and mental handicap nursing were available to meet service requirements for on average 60% rather than a maximum of 40% of their course, but admitted that there was a trend towards such students spending more time in supernumerary status outside institutional settings. The National Audit Office[16] noted that two demonstration sites considered the actual level of service contribution from traditional students to be higher than that assumed by the Department of Health. On the other hand, a study undertaken in North Lincolnshire[17] calculated the actual service contribution made by traditional RGN students as 55.9%, and that made by RMN and RNMH students as 27.7% and 24.7% respectively.

Traditional nursing students also spent some time in placements in which they were supernumerary, but where they would nonetheless have made a contribution to service. The loss of such students, which was not addressed by the replacement formula, was particularly acutely felt in mental health, where in one unit RGN students on supernumerary placements typically formed 20% of the total ward staffing, and RMN students only 10%[18].

If, for the reasons outlined above, both the service contribution made by third-year students on rostered service and the time spent on student-related activities by mentors in ward-based placements are removed from the equation,

the ScHARR study indicates that the value to the service provider of second- and third-year students in unrostered ward-based placements averages £3.46 an hour, as shown in Table 21. The numbers of students in the three groups is such that there is no statistical difference between the three categories.

Table 21: Value to the service provider of students in unrostered ward-based placements

Stage of training	Proportion of student time spent in activities of value to the service provider (ward-based placements)	Value/hour to the service provider of that student time
2nd-year CFP	60% (415/688 hours)	£3.35
2nd-year branch	57% (167/292 hours)	£3.18
2nd- and 3rd-year midwifery	72% (220/306 hours)	£4.01
Average	62% (802/1286 hours)	£3.46

The Department of Health's replacement formula applied only to those locations which had had traditional nursing students on rostered placements. Traditional students spent less of their time in community settings than do Project 2000 students, and were supernumerary in those settings. It can therefore be argued that, in community-based placement areas, baseline funding either does not include an embedded element for the teaching and supervision of students, or does so at a level considerably lower than is currently appropriate. As noted earlier, the value of student time to the service provider is significantly lower in community-based placements than in ward-based placements. If the value of the mentor's time is taken into account, as seems appropriate, the presence of a second- or third-year student on placement may result in a loss to the service provider of £0.48 an hour (see Table 22).

Table 22: Cost to the service provider of students in unrostered community-based placements

Community-based placements	Proportion of relevant time	Value of time
Proportion of student time spent in activities of value to the service provider	41% (355/868 hours)	£2.29
Proportion of mentor time spent on student-related activities	22% (160/717 hours)	£2.77

The compromise introduction of rostered service, to cut costs, meant a loss of flexibility in relation to the original intention that supernumerary status would allow placements to be of variable types and lengths as required, and that practical settings could be analysed for the educational experience they provide[19]. The rigid application of the replacement formula in Sheffield, where funding was allocated on a one-off basis[14], is felt potentially to disadvantage some Trusts. It has also meant that rostered placements must be in the same units as originally agreed, and therefore in acute rather than community settings. It is understood that replacement monies have been distributed with the same inflexibility within units, so that rostered placements are limited to the same wards to which they were originally allocated because this is where the Trusts need their staffing contribution, whereas there is greater flexibility about the location of unrostered placements.

After the current project had commenced, it was suggested that quality issues relating to mentorship should also be considered. This work is summarised in Appendix 1.

The **cost to the service provider of staff attendance on ENB courses 997 and 998**, which last 17 days, if costed at the midpoint on the nursing scale with on-costs, ranges from £1,063 for a grade D nurse to £1,779 for a grade H. A total of 578 members of service provider staff attended this course in 1995/96. No record is kept of attenders' grades, but the minimum total cost to service providers, assuming all attenders to be on grade D, would be £614,400. If the composition of the group attending the course was the same as that of those mentors who completed the diary exercise, the total cost would rise to £712,300.

Costs to the student

The cost to the student of clinical placements is difficult to assess. Students are reimbursed for travel costs in excess of those they would incur in travelling from home to their base, and are provided free of charge with the uniforms which they require in the placement area. However, they can incur financial costs as a result of clinical placements, and these are associated with:

- travel
- childcare
- loss of weekend work.

Some students find a car almost essential when working shifts and making early starts or finishing late at night, but it is difficult to run a car on a bursary, and there is a perception that the mileage paid (23p/mile) does not fully cover the running costs. In addition, the cost of travel, whether by car or public transport, has first to be found before it is reimbursed, and this can itself pose problems.

Students with young children can also incur additional childcare costs when on placement, especially if they have to work shifts other than 9-5 or travel long distances: this is a particular problem for single parents and those whose partners work shifts or long or irregular hours. The hospital crèches are too expensive for students to use, and the University crèche, which is also expensive, cannot accommodate students who work shifts.

Childcare problems are compounded by the fact that students' holidays seldom coincide with school holidays.

Rostered service brings additional financial implications for those students who have relied on weekend jobs to supplement their bursary, as they have to give these up at this stage. For students with young children, childcare can be more

expensive at weekends and nights, and this is not compensated for by any allowance for working antisocial hours equivalent to that paid to service provider staff. Some service providers are felt to take advantage of this. On one campus, it was felt that students on rostered service were made to do more than their share of weekend work to reduce staffing costs. Indeed, these pressures may occasionally make themselves felt earlier in the course. A CFP student who met with inflexibility from a placement area which wanted her to work on Saturday although she had a Saturday job felt that she was being inappropriately used by the placement area to make up numbers, while on another site CFP students were not allowed to change their shifts unless they swapped with other students. However, CFP students are also aware of the potential benefits of working at weekends when they can spend more time with individual patients and see them in the context of their families. They may also receive more teaching on the ward at weekends if the workload is lighter than in the week.

There is also clearly a potential non-financial cost to students in relation to the time spent in travel to clinical placements, if this is greater than the time spent travelling to their base. The diary exercise has shown that the time spent travelling is very variable. The median value was found to be 60 minutes a day overall (60 minutes for students on ward-based placements, and 70 for those on community-based placements). However, this is likely to be an underestimate as a number of students entered their travel time to the placement but appear to have forgotten to enter the journey home. The range is wide, extending from a time too short to be recorded (presumably those students who live in hospital accommodation) to a student whose travel to and from the placement averaged 4.5 hours a day.

Conclusions

It is clear that the provision of clinical placements, and the administration of their audit, are expensive to the education provider. Such placements may also carry a cost to the service provider. In ward-based placements, this is clearly offset by the value of student time spent on patient care. In community-based placements, the cost to service providers is not offset in the same way partly because of the lower proportion of student time in such placements spent on activities related to patient care which are of value to the service provider, and partly because of the higher gradings of qualified staff in those areas which increase the cost to the service provider of the time spent by mentors in student-related activities.

The difference between the costs and benefits of clinical placements to the service provider in ward- and community-based placements is exacerbated by the fact that, in ward-based placements, it would appear that time spent by ward staff on student-related activities was included in baseline funding prior to the introduction of Project 2000, whereas this was not so in community-based placements.

The cost to students of clinical placements varies considerably according to their individual circumstances, but may be substantial.

PART II: WHAT ARE THE PROS AND CONS OF SERVICE PROVIDERS CHARGING FOR THE PROVISION OF CLINICAL PLACEMENTS?

Abstract

In terms of real resources, the value to the service provider of the service contribution made by second- and third-year student nurses and midwives on ward-based clinical placements appears to clearly outweigh the value of time spent by qualified staff on their supervision and education. The funding assumptions underlying the introduction of Project 2000 take into account both that staff time and the service contribution of students on rostered placement, but the current study shows that, in ward-based placements, second-year student nurses and second- and third-year student midwives also make a substantial service contribution.

The value to the service provider of the service contribution made by students in community-based clinical placements (in primary care or with community midwifery teams) is lower than that made by students in ward-based placements because it is not possible in these places to free staff time in the same way as on the wards. The value of the time spent by qualified staff on the supervision and education of students on such placements is higher than in ward-based placement areas largely because of the higher grading of the relevant staff, and therefore the presence of students in such placement areas appears to form a cost to the service provider. It has not been possible in the ScHARR study to determine whether this cost is translated into a reduction in patient contacts.

There seems no case for introducing charging for ward-based placements. The argument in relation to community-based placements hinges upon the perceived value to the service provider of the qualitative benefits associated with the presence of students on placement. Other studies have

suggested that these benefits are such as to outweigh the associated costs.

Because the presence of students on clinical placement is associated with both costs and benefits, it seems appropriate that efforts should be made in relation to both ward-based and community-based placements to ensure that placements are distributed as fairly as possible between locations so that no one location is unduly advantaged or disadvantaged by the number of students which it receives.

Background

In 1989, the Department of Health stated[20] that, because the incidence of pre-registration nurse training was uneven, could take place only in certain clinical environments and would distort pricing decisions if left to service providers alone, Regional Health Authorities should fund the full costs of all such training nett of the service contribution made by students. Funding should cover all aspects of training costs, including the costs of clinical placements. Although it was recognised that the service contribution of student nurses varied considerably from place to place, it was felt that this contribution should offset the cost of clinical placements.

More recently, the NHS Executive has emphasised[21] that all NHS organisations share the responsibility for the education and training of health care professionals, and has stated that

> *'it is NHS Executive policy that NHS bodies should not charge for clinical placements which form an integral part of non-medical education and training programmes'.*

It notes that the allocation of students to clinical areas brings other benefits additional to *'the overall objective of training sufficient health care professionals to meet the needs of the service'* [22], and further states that,

'aside from the overall objective of training sufficient health care professionals to meet the needs of the service, the allocation of students to clinical areas brings other benefits and distinguishes host bodies as dynamic organisations. Health care purchasers should recognise this important contribution and may wish to question the vitality of NHS bodies which fail to contribute their fair share to health care professional education[22].

Although the Department of Health emphasises the value of students to placement areas, it has not, in either of the above documents, quantified the costs or benefits of their presence to the host organisations. However, the introduction of the internal market has made service providers increasingly aware of such costs, whilst they may not be as acutely aware of the accompanying benefits.

The balance of costs and benefits is of some importance in this context because of two factors which are not recognised in the NHSE's comments, namely:

- the increased emphasis in current nurse training on community, as against hospital, placements may make it desirable to increase the proportion of clinical placements which are located outwith the NHS. However, this may prove difficult if they are felt to be a drain on the resources of the host organisation

- unless the provision of clinical placements can be demonstrated to be resource neutral, or financial adjustment is made to ensure that this effectively becomes the case, it is important that all service providers receive numbers of students on placement in proportion to their size.

Furthermore, it could be argued that payment for placements, if appropriate, would have the benefits of:

- increasing the range of placements available outwith, and indeed within, the NHS by providing an incentive to service providers to offer placements

- ensuring that service prices are not distorted because some units, clinical directorates or agencies carry heavier training burdens than others

- enabling the School of Nursing and Midwifery to build quality standards into contracts, stipulating that all placement areas, including those outwith the NHS, are subject to educational audit.

Moreover, if the balance of costs and benefits associated with clinical placements is such that it would be appropriate to pay non-NHS service providers for taking students on clinical placement, it could be argued that it is inequitable to refuse such payments to NHS service providers who might be financially disadvantaged in relation to non-NHS competitors.

However, information on the costs and benefits of student placements is required to determine whether payments for placements is appropriate or whether the balance of costs and benefits renders such payments unnecessary.

The costs and benefits of student placements to the service provider

As noted earlier, the ScHARR study has indicated that, in broad terms, second- and third-year nursing and midwifery students spend 64% of their time in the placement area in activities of value to the service provider. Their mentors spend, on average, 21% of the days on which they supervise students on placement in activities which take them away from their normal duties. If student time is costed at grade A, and mentor time at grade E, it would appear that, on average, the service provider benefits from the presence of students on placement, in terms of real resources, by approximately £1.57 an hour. The majority of the students and mentors who took part in the ScHARR study completed the activity analysis diary early in the student's placement. It could therefore be anticipated that, over the course of the placement, the proportion

of student activity of value to the service provider would increase and the loss of mentor time because of the student's need for direct supervision and educational activity would decrease proportionately. Because the demands of the assessment procedure are distributed unevenly over the course of the placement, the loss of mentor time to the service provider may, in fact, remain fairly constant throughout. However, the value of student time is likely to increase over the course of the placement, and the estimated benefit to the service provider is therefore felt to be a conservative estimate.

However, the situation is not as simple as this might suggest. The value of student time to the service provider varies according to the student's stage of training and, more substantially, according to whether the placement is in a ward or community setting. On average the service provider appears to benefit, in terms of real resources, by £2.00 for each hour the student spends in a ward-based placement. However, if the time spent by staff in supervising and supporting a student in a community-based placement would otherwise have been available to the service provider for other purposes, then the presence of the student in that placement area appears to cause an average loss of £0.48 to the service provider. The funding arrangements relating to the introduction of Project 2000 mean that the presence of third-year students on rostered placement cannot be regarded as a benefit to the service provider, and equally staff time spent on student-related activities in those areas which received students on placement prior to the introduction of Project 2000 cannot be considered a cost. The service provider then appears to benefit by on average £3.46 for every hour that a second-year nursing student or second-or third-year midwifery student spends in a ward-based placement, but still appears to sustain a loss of £0.48 for every hour that a student spends in a community-based placement area which did not receive students prior to Project 2000.

Not all of the costs and benefits to service providers of students on placement are financial. Several research projects[1,23,24,25] have identified a number of perceived qualitative benefits as accruing from clinical placements, of which the following are the most important:

- enhanced quality of care
- enhanced staff training and professional development
- enhanced recruitment and retention of staff
- improved staff morale/motivation/job satisfaction
- staff stimulated to update clinical knowledge and review their own practice
- enhanced agency/department status and prestige.

The principal costs which offset these benefits have been identified[1] as:

- a decrease in patient contacts or throughput or a reduction in time spent with patients
- payment of mentors on a higher grade
- increased staff stress
- the cost of training and updating mentors.

However, even these perceived costs of clinical placements are not entirely detrimental to the service provider. For instance, the skills staff gain from training courses related to mentorship have been identified as being transferable across a range of supervisory tasks[7]. The cost of mentorship and supervision of students by qualified staff members must therefore be offset against any perceived staff development benefits derived from such a role by the qualified staff members[26].

In addition, although it was not possible in the ScHARR study to determine whether the presence of students on placement has an adverse effect on patient throughput or on caseload/patient contact, other studies have suggested that their presence does not necessarily have any such effect[1,7,27]. Follows[28] found that, when District Nurses and Health visitors were accompanied by students on placement, the number of patients seen was reduced on average by two patients a day in the case of the Health Visitors, but not at all in the case of the District Nurses. The ENB[27] found that, of 897 community staff who had students placed with them, only 8.4% had reduced caseloads. In many cases, therefore, the service provider may not directly suffer the cost of having a student on a community-based placement in terms of loss of output by qualified staff, although it may suffer indirectly in terms of increased pressure on members of staff.

Such issues become complex when it is noted that the most important benefits attributed to clinical placements are quality issues, difficult to value in monetary terms, whereas the most important perceived costs to the service are easier to quantify in monetary terms. Hillestad and Hawken[24] have attempted to assess the relative value of intangible resources contributed by the education and service provider, and suggest that the exchange is equitable. Moreover, many of the elements contributed by the service provider which Hillestad and Hawken[24] regard as intangible, such as access to staff knowledge and skills, and feedback and evaluation, have already been costed in the current study as they can also be quantified in terms of time. When Follows[1] asked participants in a study of clinical placements in community nursing to weight the relevant costs and benefits, most felt that the benefits considerably outweighed the costs. However, as the identifiable benefits were primarily long-term quality issues, whereas the costs were generally quantifiable and short-term, Follows feared that short-term pressures might force some units to question their provision of placements. She therefore concluded that a system of reimbursement might be helpful in ensuring a continued supply of good quality placements.

The current study suggests that the balance of student clinical activity to the supervisors' input to training, in the case of ward-based placements, is unequivocally beneficial to the service provider. This is in line with Hawken and Hillestad's[23] calculation that student nurses in medical and surgical placements in the USA contribute significantly more than twice as much to the service agencies, in terms of the value of their contribution to patient care, as they receive from those agencies in terms of staff time and physical resources (additional supplies and classroom space). Although the students studied by Hillestad and Hawken were supernumerary, their service contribution freed staff time to provide more comprehensive care, participate in staff development activities or take part in such departmental activities as quality assurance. When qualitative benefits are taken into account, it would appear that the providers of such placements are currently getting at the least an "equitable deal" in relation to such placements. However, the ScHARR study suggests that the position is somewhat different in relation to community-based placements, where the student service contribution cannot free staff time in the same way as on the wards and where, because of this and because of the higher grade of the mentor, the financial balance is such as to disadvantage the service provider.

Clearly, therefore, whereas on financial grounds alone there seems no reason to introduce charging for ward-based clinical placements, this is not the case for community-based placements. Here, the position depends on the perceived balance of other, non-financial, costs and benefits, and also on the implications of the introduction of charging. It has been suggested[29] that it is undesirable to introduce such charging because the charging mechanisms are likely to be more costly than the charges themselves. The cost would have to be identified and removed from the unit budget to an intermediary (currently the Regional Health Office of the Department of Health, in future local consortia) who would transfer it to the education budget for payment back to the service provider. Such a process would only seem justifiable if clinical placements pose a significant cost to service providers, and are inequitably distributed, and also if that inequitable distribution is subject to short-term fluctuations that would make any other, more permanent, form of redistribution unworkable. Unless the

Department of Health were to make additional sums available to fund the charging mechanisms, which seems improbable, these administrative costs could be met at the cost of service provision. This would almost certainly be unacceptable to service providers. Alternatives would be to reduce the numbers of student places which are commissioned, or to achieve substantial efficiency savings on the part of education providers[7].

It has been argued that, whatever the relative costs and benefits of clinical training, such training is a societal responsibility and, as such, should be funded directly rather than through patient care costs. Conversely, it has been suggested that this approach is inappropriate, at least in relation to undergraduate and graduate medical education, because it assumes that education is a function which is "grafted on" to a standard hospital, whereas in fact it is an integral part of the mission of teaching hospitals. As such, it could not be eliminated without significantly altering the nature of the institution and its other areas of service[30].

In conclusion, there does not seem to be a case for charging for ward-based clinical placements. Such is the case, even if time spent on student supervision and education were not already included in baseline funding. This is because the value of student activity gained by the service provider in relation to such placements appears to outweigh the value of mentor time lost. The balance in the case of community-based placements appears to tilt in the opposite direction, and the argument then hinges upon the importance of the qualitative benefits of student placements to the service provider.

If charging is not introduced, quality standards could be established and ensured by accreditation rather than by charging mechanisms. The use of accreditation would have the advantage of highlighting the benefit rather than the cost to the service provider of student placements. It could potentially be combined with either the ENB approval process or with educational audit to form a means of quality assurance which would be more cost-effective than the use of contracting mechanisms.

Conclusions

The activity analysis exercise outlined in the previous sections has indicated that, in terms of real resources, the value to the service provider of the service contribution made by second- and third-year student nurses and midwives on ward-based clinical placements appears to outweigh the value of time spent by qualified staff on their supervision and education. The value of the service contribution made by students in community-based clinical placements is lower than that made by students in ward-based placements because they cannot free staff time in the same way as is possible on the wards. Because qualified staff in community-based placements are generally more highly graded than in ward-based placement areas, the value of the time they spend on student-related activities is higher and as a result the presence of students in such placement areas appears to form a cost to the service provider. It has not been possible in this study to determine whether this cost is translated into a reduction in patient contacts, but other studies suggest that such reductions are relatively unusual. In addition, other researches have indicated that the presence of students on clinical placement is associated with qualitative benefits which may offset any costs.

It is therefore argued that there seems no financial reason to introduce charging for ward-based clinical placements. In relation to community-based placements, the argument rests on the balance of non-financial costs and benefits. It is suggested that the introduction of charging for clinical placements would be undesirable as it would introduce an additional administrative expense. Instead, students should be distributed as evenly as possible between placement locations so that no one location is unduly advantaged or disadvantaged by the number of students which it receives.

PART III: WHAT MECHANISMS SHOULD BE USED BY EDUCATION AND SERVICE PROVIDERS TO ENSURE THE QUALITY OF CLINICAL PLACEMENTS?

Abstract

This section provides a brief review of the published literature on the educational effectiveness of clinical placements, and on educational audit. An audit system is then proposed for use in North Trent. This is intended to:

- **enable the pool of available placement areas to be extended**
- **retain the joint involvement of educational and clinical staff in the educational audit of placement areas**
- **draw upon student and staff views by means of short questionnaires designed to identify the educational effectiveness of clinical placements.**

Methodology

A literature review was undertaken to identify both the key characteristics of effective clinical placements and the most appropriate form for a quality assurance mechanism which would relate to those characteristics. The Project's Steering Group indicated which of the key characteristics they considered to be most important, and an audit mechanism is proposed which seeks to take account of their views.

Findings of research undertaken prior to the introduction of Project 2000

Research undertaken prior to the introduction of Project 2000 sought to identify the characteristics of a ward environment which nurse learners perceived to be

favourable to learning, and the qualities of ward sisters who created such favourable environments[31-35]. Only Lewin and Leach[33] attempted to validate learners' perceptions by assessing the nurse learners' standard of clinical performance at the beginning and end of their placements.

Orton[31] and Fretwell[32] found that ward environments which students perceived to be favourable to learning were characterised by teamwork and good communications between staff and students, an emphasis on learning (including formal teaching from a variety of teachers and informal learning opportunities), and patient-oriented care. Lewin and Leach[33] found that clinical learning areas rated as good by nurse learners differed significantly from those rated as poor in terms of the volume of demonstration and informal teaching provided by trained staff. They also found that those students whose clinical performance deteriorated over the course of the placement were less likely than those whose performance did not deteriorate to regard their trained staff as approachable, and also reported lower levels of supervision. However, the frequency of formal teaching sessions did not seem either to influence students' perceptions of a placement area or to affect students' standards of clinical performance.

Overall, therefore, a good clinical learning environment would seem to have a high level of teaching, with special emphasis on practical demonstrations, reinforced by high levels of supervision by trained staff. Trained staff in good learning areas are regarded as approachable by the students.

Certain characteristics of the ward itself clearly influence the available levels of teaching and supervision. Fretwell[32] emphasised the importance for a good learning environment of a workload which offered varied learning opportunities but which was not so high as to reduce teaching opportunities, and of a good ratio of registered staff to nurse learners. Lewin and Leach[33] found that those wards which students rated highly as learning environments characteristically had a more rapid patient turnover than the more lowly rated wards; patients on the highly-rated wards required less nursing care. Moreover, the highly-rated wards had fewer consultants, and fewer and shorter consultant and non-

consultant ward rounds, than the lower-rated wards. More time was spent on teaching and supervision by the trained staff on the higher-rated than on the lower-rated wards. Similarly, Smith[36,37] found that, of 12 wards, the one most highly rated by students as a learning environment had a workload which was described as "light", and staffing levels which were adequate. Lewin and Leach[33] also found that students whose performance had deteriorated over the course of a placement were more likely to have been placed on wards which were short-staffed and which had a more varied population in terms of the average number of diagnostic conditions presented by their patients.

Fretwell[32] considered that the ward sister created the ward learning environment, and found that wards which students considered good for learning were linked with sisters who were democratic and patient-oriented, and who saw student nurses as learners rather than as workers. Ogier[34] found that ward sisters with a pattern of verbal interaction that nurse learners perceived to be propitious to them characteristically had a leadership style which was approachable, nurse-learner oriented and sufficiently directive for the nature of the work. Lewin and Leach[33] found that ward sisters on those wards which students rated highly for learning were usually older, more experienced and had more nursing qualifications than those on the more lowly rated wards. They were also more likely to have formulated ward objectives and to have written them down for student nurses to consult, and they, and their trained staff, spent more time on teaching and supervision, and less on administration, than the sisters and staff in the lower rated wards.

Research subsequent to the introduction of Project 2000

Project 2000, with its emphasis on the nursing student as learner rather than worker, was intended to overcome a number of problems inherent in the previous system of nurse training. Not least among these was the difficulty of providing a balanced educational programme for students who also formed an important element of the workforce, and the failure of students to avail themselves of learning opportunities because they perceived themselves as

workers rather than learners. As yet, little research has been published which seeks to identify the characteristics of effective placements for Project 2000 students, but the results of major studies undertaken by Orton, Prowse and Millen[38,39] and by White, Riley, Davies and Twinn[40], are summarised below.

Orton, Prowse and Millen[38] found, by consulting over 700 students and service and education personnel, that a good ward learning climate was perceived as being characterised by:

- friendly supportive staff
- learning opportunities (including clinical opportunities, teaching sessions and good resource material)
- good staffing levels
- good teamwork
- a good mentor system
- high staff morale
- staff who were well informed in relation to the Diploma course.

Of these, the overall most important attribute was the presence of friendly supportive staff. They therefore concluded[39] that the key issue for a good ward learning climate was the presence of adequate numbers of approachable, knowledgeable and well-motivated staff.

White, Riley, Davies and Twinn[41] found that students in both CFP and branch placements valued the mentor relationship highly, and felt the nature of the relationship between the student and the mentor to be a key factor in determining the value of a placement. Students perceived "good" mentors as those who were available to them and who had a clear understanding of their own role and the student's role in the practice learning environment. Ideally, they would also have a sound knowledge and understanding of the theoretical aspects of the student's course. The student's need for the mentor was greatest early in the course and at the start of each new placement. Practitioners identified factors contributing to excellence in the practice area as:

- the appropriate use of student supernumerary status
- staff commitment to teaching

- students working regularly with their identified mentors
- link teachers who had close contact with the practice area
- well planned student learning experiences
- practitioners with sufficient time to spend with students
- a capacity to be supportive
- a good team spirit[42].

Link teachers identified as good learning environments for Project 2000 those where students were encouraged to adopt a questioning approach, and where the teaching was patient-centred and the learning student-centred[43].

Results of recent local investigations

Interviews were undertaken by ScHARR researchers with link teachers, learning environment managers, mentors and other ward staff, and with students at various stages of training. Those interviewed identified the importance to the creation of good learning environments of management attitudes to staffing levels, training and ward resources. This was considered to apply at both Trust Board and directorate level. It was felt that management attitudes can affect the quality of placements in the following ways:

- staffing levels determine the amount of time mentors and other staff can spend with students; they also affect staff morale

- training policies affect attitudes to the continuing education of staff, and staff attitudes to students and their learning needs

- the resources available to the ward determine whether there is a quiet room equipped with learning resources where students can study.

However, a senior sister or ward manager who is interested in education and supportive of students can affect the attitudes of all staff on her ward and mitigate the effect of lack of resources. In addition, it is believed that a good

relationship with the link teacher improves the learning environment and benefits staff and students. Even though students may not see the link teacher frequently, they can, if necessary, be reassured by telephone contact. Nursing students also value peer support and prefer not to be the only student on a placement.

Factors identified by the interviews as particularly important to the success of any placement include the presence of friendly and approachable staff who are willing to answer questions, and who value the work of students and do not regard them simply as an extra pair of hands. These factors are broadly linked with staffing levels, and some of those interviewed indicated that the student's supernumerary status could be jeopardised in short-staffed wards.

The student-mentor relationship was also identified as critical to the success of the placement, but assumed less importance where other members of the nursing team played a part in teaching students.

Within one hospital, a desire was expressed for early placements to include learning opportunities in the form of visits to other clinical areas because students' self-confidence was reduced when, on later placements, they were assumed to have a wider range of experience than was in fact the case.

Characteristics of effective clinical learning environments

In brief, the research outlined above identifies the following as characteristics of good clinical learning environments:

- friendly, approachable and supportive staff
- an effective mentorship system
- a variety of formal and informal learning opportunities

- a staff training policy which promotes a positive educational environment
- the availability of learning resources on the ward
- a suitable ward profile (including adequate staffing levels and skill mix in relation to patient profile)
- good orientation to the placement
- integration of theory and practice
- patient-centred care
- acceptance of the student as a learner rather than a worker, with respect for the student's supernumerary status
- adequate contact with the link teacher
- effective ward leadership and management
- regular student assessment.

Of these, the Project's Steering Group considered the following to be the most important:

- friendly, approachable and supportive staff (including the whole multi-disciplinary team, and in addition to the mentor)
- an effective mentorship system
- patient-centred care

- adequate contact with the link teacher

- effective ward leadership and management.

They should therefore be reflected in the proposed quality assurance mechanism.

It was felt that the five identified key characteristics could be taken to indicate the presence of the majority of the other characteristics of good clinical learning environments. Thus, friendly, approachable and supportive staff and an effective mentorship system together would ensure that supernumerary student status was respected. An effective mentorship system was felt to subsume a variety of learning opportunities, good orientation to the placement, integration of theory and practice and regular student assessment. Patient-centred care was felt to be closely linked with the integration of theory and practice.

A suitable ward profile (including adequate staffing levels and skill mix in relation to patient profile) would be ensured by satisfaction of the ENB criteria for placement areas.

The key characteristics of an effective educational audit tool

It is necessary next to identify the key characteristics of an effective educational audit tool to be used to assess clinical placements.

English National Board (ENB) Requirements

The ENB requires each college, department and institution of nursing, midwifery and health studies to conduct an annual institutional review, a report of which should be submitted to the Board. It further requires that, as part of each institution's annual review, *'an audit of practice placement areas ... be conducted at least annually*[44], and that the following aspects of the clinical

learning experience be surveyed[45] through questionnaire and summarised in the annual report to the Board:

- ethos of the placement
- organisation of care
- supervision and mentorship
- teaching programme and assessment
- research basis of care planning and delivery
- academic and professional qualifications of clinical staff
- staff development programme
- physical environment.

The Board puts forward[46], as an example of good practice, a range of questions which might be asked in a placement audit, and the sources of information which might be used to answer them. It states[47] that student feedback and performance data should form the central focus of the annual educational review, and that an action plan to remedy deficits acknowledged by staff and students should be constructed and subsequently evaluated.

Principles of educational audit

Much has been written about educational audit, both in general terms and with specific reference to clinical placements. The ENB's requirements embody many of the principles underlying educational audit.

In general terms, it has been stated[48] that the evaluation of nurse education should be

- planned
- systematic, addressing the issues it seeks to review in a structured and sequential fashion
- focused, so that those aspects of the learning experience which are the most important in determining learning outcomes are addressed, and critical areas and "difficult" dimensions are not ignored
- utilised, so that participants are confident that their comments will be heeded.

It is particularly important that any evaluation strategy should incorporate mechanisms for ensuring that agreed information can be acted upon: there is no point in undertaking evaluation when there is little or no possibility of subsequent action[48].

In addition, evaluation should ideally be cost-effective to undertake, using, and building on, current management information systems and evaluative tools. It should meet the needs of purchasers without duplicating information, and should involve grass roots development and ownership through sound leadership and empowerment[49].

Within these broad outlines, a number of choices must be made as to the nature of the evaluation process to be used, namely:

- whether it should focus primarily on structure, process or outcome, or on a combination of these
- whether it should be formative or summative

- whether it should be qualitative, quantitative or both
- whether it should be internal, external or mixed
- what method should be used to gather the required information
- from whom that information should be sought
- whether the same audit methodology should be used for all placements.

A little more will be said below about each of these choices as they relate to clinical placements.

Structure, process and outcome

Donabedian[50], writing about the evaluation of medical care, identified three approaches to the acquisition of information concerning the presence or absence of attributes that contribute to or define quality: structure, process and outcome. These approaches, which may also be applied to educational audit, have different advantages.

The evaluation of **structure** involves a review of items such as facilities, equipment, staff (their numbers, qualifications, organisation), policies and programme design and other relevant items such as, in the case of clinical placements, patients (their numbers, turnover and characteristics). The underlying assumption is that, when specified structural conditions are satisfied, a good experience is likely to follow[51]. The standards against which these structural elements are measured may be empirical (derived from actual practice) or normative (derived from a body of legitimate knowledge or values), but decisions have to be made regarding the level at which they should be set[52].

Process evaluation relates to the ways in which activities are organised and implemented. In the case of clinical placements, process evaluation would address items such as the identification and utilisation of learning opportunities, the organisation of patient care, the quality of staff relationships, the quality of mentorship and the level of supervision received by the student.

Outcome evaluation involves the measurement of the end results of an activity, in this case an educational experience. It does not give an insight into the nature of the strengths and deficiencies which might influence the outcomes[53]. Therefore, if the purpose of evaluation is to improve the educational quality of individual placement areas, outcome evaluation is likely to give little guidance as to where changes might need to be made.

Structure, process and outcome are generally not independent of each other. The ultimate test of the assumptions inherent in the use of structure and process in evaluation is the extent to which desired outcomes are achieved[51]. Some process elements which relate to social ethics and values, such as good interpersonal relationships, are valid independently of their contribution to outcomes[54], but, in general, evaluation is applied to those structure and process elements which are known or believed to lead to a good outcome. However, many factors may influence outcomes, and the interrelationships between those factors are poorly understood[55]. So, unless it is possible to establish a causal link between either structure or process elements and a specific outcome, the usefulness of structure and process elements as indicators of quality is limited[56].

Accreditation systems are normally based on the evaluation of structure, and this is perhaps the most important single factor in quality assurance. However, a well-rounded system of quality appraisal would probably include concurrent assessments of process and outcome[51,57]. The advantage of structural evaluation is that it deals with fairly concrete and accessible information. Unfortunately, the relationship between structure and process, or structure and outcome, is often not well established[58]. Thus, in relation to clinical learning, it seems reasonable to assume that, without adequate human and material

resources, neither the process nor the outcome of learning will be of the required quality[59], but in fact several studies appear to show that some structural elements, such as staff:student ratios or staffing levels in relation to workload, do not directly influence learning outcomes[60] or do so only to a minimal degree[61].

Process can be measured in terms of student satisfaction with a range of aspects of the educational experience. There is evidence to suggest that student satisfaction and outcome are closely linked. Student satisfaction is closely linked with a desire to learn, a favourable attitude towards studying, an understanding of fundamentals and a deep-level approach which leads to thorough understanding[62]. Teachers who receive favourable ratings from students appear to promote higher levels of student achievement on objective tests than those receiving less favourable ratings[63,64]. Moreover, even if students are wrong in believing an educational experience to be of little value, the consequent decline in motivation will make the judgment self-fulfilling[65].

Most of the evaluations of the clinical learning area which have been undertaken relate to process rather than outcome. So, Orton[31], Fretwell[32] and Ogier[34] purport to show a relationship between structural properties such as the qualities of the ward sister and process elements as measured by student ratings of the ward as a clinical learning environment. Reid[66] has argued that other factors may account for the observed phenomena: for example, the qualities demonstrated by the sisters of those wards which are highly rated as learning environments may be those qualities which a sister on a well-staffed ward has time to demonstrate. Reid's own study suggests[67] that staffing and workload do not differentiate wards which are "better" for learning from those which are "worse"; rather, wards which are "better" for learning appear to be distinguished by other structural elements, in particular older and more experienced ward staff and clinical teachers[68].

The audit tools developed by Orton[31], Fretwell[32] and Ogier[34] identify the existence of activities shown to enhance student learning, but they will not

necessarily permit the identification of those structure or process components which limit the successful outcome[69].

Learning has been defined in many ways, for instance as:

- *'a behavioural change and persistence of this change'*[70]

- *'the acquisition of habits, knowledge and attitudes'*[71]

- *'the full use of talents, capacities, potentialities etc'*[72].

Learning outcomes, therefore, appear less easy to measure than outcomes in relation to clinical care, making evaluation correspondingly more difficult. So, the influence of a specific educational experience, such as a given clinical placement, on a given student is difficult to measure as it will depend on **intrinsic**, personal, factors and **extrinsic** factors associated with both the learning climate and the range of learning opportunities available in the placement area. The clinical placement experience will also interact with the student's pre-existing knowledge and skills. Three different approaches have been suggested in an attempt to overcome these problems:

- the student's ability to demonstrate specific skills can be assessed on commencing and concluding the placement, and the progress achieved used as an indicator of the quality of the learning environment[73]

- the student may be asked to describe what can be done as a result of the specific experience[73], or for a perception of the extent to which agreed learning objectives have been achieved

- the volume of clinical teaching given, or practice acquired, in relation to certain specified objectives can be measured[74,75]

Several researchers have attempted to measure placement outcomes by assessing students' skills in relation to specific activities[33,76]. Such assessments are problematic in that they are very labour intensive especially as, if they are to form independent measures of placement outcomes, they should not be carried out by members of staff who work in that placement area. Moreover, even if a satisfactory procedure can be devised for assessing student performance, it can only realistically cover a small set of practical nursing items rather than the full range of learning experiences which the placement was intended to afford.

Alternatively, one may accept student perceptions of outcome in terms of the extent to which they feel that they have acquired new knowledge and skills or that their learning objectives have been achieved. This approach is probably acceptable provided that the learning objectives were made explicit on commencing the placement; otherwise, it has been shown that students tend to overvalue the learning of technical skills above general nursing care[77]. In addition, process items such as interpersonal relationships may lead to experiences being over or undervalued. Thus, an experiment has suggested that, by displaying enthusiasm and friendliness, a lecturer can increase student achievement as measured by multiple choice testing of the lecture content but can also lead them to overestimate the content covered in the lecture[78].

Finally, two studies have considered exposure to clinical teaching or relevant clinical experience as indicators of the quality of clinical learning. Jacka and Lewin[79] have argued that this is appropriate because clinical learning is directly proportional to the volume of clinical teaching received since:

- nursing students are motivated to learn from participation in a teaching episode

- nursing students can acquire a substantial amount of the basic knowledge and skills which they require from almost any competent trained member of staff

- a large volume of teaching will go hand in hand with a high frequency of teaching, and these together will lead to a high volume of learning because there will be sufficient repetition of learning experiences to avoid gaps which are detrimental to retention.

Reid measured the amount of relevant clinical practice a learner gained in relation to key objectives, and found this to vary considerably from ward to ward[80]. However, contrary to expectation, she found that quantity of practice did not correlate with quality of performance, which appeared to be affected by other, unidentified, factors[81].

The difficulty of designing an audit tool which will measure structure, process and outcome is illustrated by the fact that Spouse[82], whilst stating that an audit tool should measure all three aspects, in fact failed to design such a tool. She hoped to develop an audit tool which would test the validity of the hypothesis that, if clinical areas were able to meet set criteria, students would be able to incorporate theoretical concepts of patient care into everyday nursing practice. In the event, it proved too difficult to obtain accurate information about the effects of the clinical experience on the student's nursing practice[83], and the Clinical Learning Environment Audit Tool only audited structure and process components of the clinical environment[84].

It may be argued that a tool used to gather structural information as a basis for the accreditation of areas for clinical learning, and for negotiating and planning the most effective use of the learning opportunities which they provide, should be differentiated from a tool used to evaluate learning which takes place in those areas. It should be made explicit[85] whether the latter is intended to assess whether a particular clinical learning environment makes learning possible (process) or to measure the level of learning achieved (outcome).

Formative and summative evaluation

Formative evaluation deals with a process, providing feedback at intervals, whereas summative evaluation deals with a product, and is conducted only at the end of that process[86]. So, for example, formative evaluation can be used to develop and improve a piece of teaching (for instance, a course or textbook) until it is as effective as it can be. Summative evaluation can then be used to measure the effectiveness of that piece of teaching once it is fully developed and in regular use[87]. Formative evaluation is intended to be helpful and constructive to its subject, whereas summative evaluation, on its own, can inhibit development[88]. However, the boundary between formative and summative evaluation is not always clear-cut, and may relate to the intentions of the assessor rather than the form of the assessment: evaluation is formative if the intention is to improve on what is being assessed and summative if the purpose is to inform others about its quality[89]. Formative evaluation allows continuous assessment of the extent to which objectives and student needs are being met[86].

The evaluation of clinical placements can be regarded as formative rather than summative if its purpose is to improve the quality of the clinical learning experience available to students. However, it can be regarded as summative if the intention is to give each placement area a score, or series of scores, reflecting its effectiveness as a clinical learning area, to enable all such areas to be compared in an apparently objective manner. Evaluation which is summative in relation to an individual student can be seen as formative in relation to the life of the placement area. Some elements of clinical learning (especially outcomes expressed as the achievement of student objectives) cannot be measured until the end of the placement and thus require an approach which is summative from the point of view of the student involved. In contrast, the formative evaluation of students' learning experiences as they progress enables minor modifications to be made to structure and process to the benefit of current students, and diminishes any perception which such students may have of the futility of the terminal evaluation[48].

Qualitative and quantitative approaches

Educational audit may seek to gather quantitative or qualitative information, or a combination of the two.

Quantitative methods collect information in a way which enables numerical summation and statistical analysis. Such approaches have been criticised as restrictive, as they may not reveal important quality issues. In addition, Donabedian[51], writing of the audit of nursing care, highlights the following problems associated with assigning numerical scores to elements of care and cumulating them to an overall score:

- performance in one aspect may not be independent of performance in another aspect. In extreme cases, performance in one element may be so bad that it cannot be compensated for by excellence in other aspects, and the overall rating must be poor. This is less of a problem if it can be demonstrated that performance on the different components is highly interrelated[90]

- if the evaluation is composed of different components, it is difficult to defend the weightings attributed to these components, whether equal or unequal [51].

These comments also seem relevant to the use of quantitative methods in relation to educational audit.

The student nurse appraisal of placement (SNAP) tool[91] developed by Farrell and Coombes is an example of an almost wholly quantitative audit tool.

Qualitative methods seek to illuminate the educational experience by recording experiences and views not captured by quantitative methods. The potential volume of qualitative information is enormous; it is hard to collate, cannot be easily summated, and in addition has the potential for subjectivity. However, the

value of the information gained from interviews and discussions should outweigh these problems. Qualitative information becomes increasingly appropriate as nurse education becomes more student-centred[48].

Qualitative information is generally held to be more appropriate for formative evaluation, quantitative for summative evaluation[48]. Many evaluation strategies combine quantitative and qualitative methods in an attempt to overcome their individual shortcomings. A combined method used successfully by the Dorset School of Nursing[48] as an adjunct to other evaluation techniques requires students to brainstorm areas of satisfaction and dissatisfaction with an educational experience, and convert their comments into positive statements. All then indicate whether they agree or disagree with those statements, and the scores are summated to give an overall impression of areas of satisfaction and dissatisfaction. This method has the advantage of allowing the identification of elements which might not have been identified in a teacher-generated evaluation.

Method of gathering information

The information required for educational audit may be obtained by questionnaire, structured or unstructured interviews, participant or non-participant observation, self-reporting, critical incident techniques, reviews of documentation and group discussions[48] which may make use of a modified Delphi technique[92].

Questionnaires may combine quantitative and qualitative methods by using both closed questions which force a specific response and open or semi-open questions which allow the expression of opinion[48]. They may nonetheless unintentionally constrain respondents by channelling their thoughts in a particular direction. However, questionnaires are quick, efficient and cheap means of collecting data that are easy to analyse and the findings of which can be quickly reported[93]. The Council for National Academic Awards therefore recommended[94] student feedback obtained through questionnaires as the most

effective method of obtaining relevant data to inform institutional decision-making.

Student questionnaires relating to clinical placements may be completed either in the placement area or in the classroom. Students may feel inhibited in completing questionnaires in the placement area, where they may be read by clinical staff. Clifford[95] therefore advocates their completion on the students' first morning in the study block. So that the responses are not contaminated by added insights arising from the group discussion, this should be done before undertaking any formal discussion of their clinical experience. She recognises the ensuing need for sensitivity in returning the information gathered in the evaluation to clinical staff.

If the audit tool is intended to measure outcomes, participant or non-participant observation may be necessary. Such observation is labour intensive, and is likely to have an effect on the clinical practice of those being observed. The nature and extent of this effect, which may vary from person to person, is not clear. However, its existence has been demonstrated in a different context, in the effect of the presence of an observer on teachers' behaviour in the classroom[96].

The use of student journals, described by Burnard and Chapman[97] as a method of student self-evaluation, can also form the basis for formative evaluation focused on the extent to which the student achieves learning objectives and the problems which may be encountered in the process.

The Delphi technique permits a knowledgeable group of individuals to achieve consensus whilst avoiding potentially destructive group dynamic effects. A modified version suitable for use in the classroom has been used by Beech[92] to identify problems common to a number of placement areas in the same clinical specialty.

A number of methods may be combined in the evaluation of clinical placements, which may include, for example:

- a tool to measure a number of standards associated with structure and process

- a student questionnaire designed to measure process activities in relation to learning opportunities as seen by the students and to identify whether they feel they have met their learning objectives

- non-participant observation of the standard of clinical practice which students have achieved.

Internal, external or mixed evaluation

Evaluation may be internal or external: that is, it can be carried out by staff from inside or outside the area being evaluated. Internal assessment is prone to prejudices, oversights, misinterpretations and idiosyncrasies of standards[98]. The use of internal assessors for summative evaluations raises problems in terms of ensuring comparability of standards with similarly assessed areas or individuals, and in that it may distort the relationship between the assessor and the assessed[99], in this case perhaps the link teacher and the placement area staff.

External evaluation may facilitate uniformity of standards, especially if the number of assessors used is relatively small. It also has the advantage that it can facilitate exchange of ideas and good practices. Moreover, students may be less inhibited in talking to staff from outside the placement area[100]. In addition, there is some evidence that external auditors tend to be more critical than internal[51], and more guidance may be offered by relative strangers than by peers who are already well acquainted with those who are being evaluated[101]. Thus the use of staff from another training organisation to undertake peer evaluation may not only encourage the transmission of good practice from one school to another[102] but also increase the objectivity of the comments which are

made. However, care is needed when an external assessor is used to ensure that the assessment methods are relevant to the educational objectives, and are not distorted for the sake of administrative convenience[103].

Both internal and external evaluation can be effective, and a "mixed" audit may combine the advantages of both[51].

Whose views should be sought?

The views of various interested parties - students, qualified nursing staff, support workers, staff of the School of Nursing, clinical managers - may be sought in evaluating clinical placements. Both Shailer[104] and Spouse[105] emphasise the importance of involving clinical managers and qualified nursing staff to impart a sense of sharing in the audit itself and the construction of a subsequent action plan, and to reduce the gulf between educational expectations and service reality.

Educational evaluation may include self evaluation, peer evaluation and evaluation by students: a comprehensive evaluation strategy would include all three[48]. In the context of clinical placements, this translates into:

- self evaluation by clinical and teaching staff attached to the placement area, in particular the mentor and the link teacher

- peer evaluation by clinical and teaching staff attached to a different placement area, perhaps in a different Trust

- evaluation by students on placement in the area.

Self evaluation for mentors and link teachers could focus on whether they are clinically and professionally up to date.

Peer evaluation is more likely to be objective than self-evaluation, which can tend to under- or over-estimate both strengths and weaknesses[106]. Peer evaluation can take the form of facilitated self-review, observation and feedback on a colleague's supervisory practice[48] or facilitated discussion groups for mentors similar to those described for students by Burnard and Chapman[107]. As peer evaluation is more generous than student evaluation, objective criteria should be developed if it is to be used[108].

Student evaluation is probably the method most commonly used to evaluate teaching and learning experiences. Clinically-based learning experiences are more difficult to evaluate than formal learning sessions[48]. The relationship between teaching and learning is not simple, and distinctively different environments provide conditions for effective learning to take place. However, some approaches to teaching and assessment provide the conditions for a desire to learn, a favourable attitude to learning, and a deep-level approach which leads to understanding of the fundamentals; others do the opposite. As stated earlier, research has demonstrated[62] a strong connection between the perceived characteristics of a teaching-learning environment and the quality of learning which takes place within it, indicating that student perceptions form a valid measure of quality. Moreover, only students have the necessary degree of naiveté about the subject being taught to judge whether the learning experience responds to their level of understanding; however, they may lack the information to judge the validity or accuracy of course content, and their rejection of certain content elements as irrelevant or useless may be erroneous[109]. Thus, in some circumstances, students' perceptions may form a more accurate reflection of their own limitations or learning difficulties than of the quality of the learning environment. Therefore, radical remedial action should not necessarily be undertaken in response to feedback from one or two students. However, when many students consistently report negatively on an aspect of teaching or supervisory performance, further reflection and action are legitimate[48].

The results of student assessments should not be used to measure the quality of student learning: they are bound up with the characteristics of the learning

environment which is being evaluated[62]. However, where both individual modules and the final result are classed, the reliability of the assessment methods used for any one module can be estimated by comparing the grades which students receive for that module with their final grade[110].

Rowntree has observed[111], in relation to student assessment, that self, peer and teacher assessments can only be combined in a summative assessment system if the outcome is not a grade or a label but a profile in which conflicting assessments can be highlighted rather than ironed out. The same would seem to be true of self, peer and student evaluations of clinical placements.

Should the same audit tool be used for all placements?

It is questionable whether it is either possible or desirable to use the same audit tool for all placements, whether based in hospital or community settings. Bell and Bennett[112] have stressed the need for an audit tool appropriate for community placements which would redirect attention from the placement environment to the individual or team, and would

- examine how contemporary nursing and health care theories underpin care delivery

- identify the educational requirements for qualified staff to meet their own professional development needs and support the curriculum

- examine how practitioners provide an experience which fulfils the curriculum requirements and creates a learning environment conducive to student need

- monitor tutorial staff input to the development and support of community practitioners and students.

This audit tool would complement the student's end of module evaluation on the value of the placement as a learning environment.

Similarly, Spouse[113] has suggested that, as community care staff work as independent practitioners, audit may be more appropriately undertaken on the basis of a teaching profile such as that developed by Gibbs[114] for lecturers in further and higher education, using a set of professionally agreed criteria. Such a profile, which includes structural elements, might include:

- relevant professional biographical details
- personal philosophy
- evidence of continuing education (journals regularly read, courses and conferences attended)
- information which may routinely be sent to students regarding placement area, transport, routine, mode of dress, operational policies
- examples of care plans in current use
- strategies used for facilitating learning, and resources available
- copies of relevant student project work

(profile adapted from the work of Spouse and Gibbs).

Other factors apart from different types of placement area may suggest the need for more than one audit tool. Reid[115] found that the needs of nursing students vary according to their stage of training, such that it might be difficult for any one audit tool adequately to reflect their different needs. It could therefore be argued that any placement area which is used for students at different stages in their training should be subject to different structural and

process/outcome evaluations relating to the particular requirements of each group of students.

Agreement of standards

Whatever method of evaluation is used, it is necessary to agree the criteria and standards which then become operational definitions of quality. In practice, the extent to which these are made explicit varies[51] but, the more explicit they are, the less scope there is for misinterpretation[116]. The identification of clear guidelines as to what is to be assessed, and the criteria to be used, makes for greater objectivity and thus increased reliability in the audit tool. Standards based on professionally agreed values which are agreed to be important and achievable enjoy more credibility and acceptability than those derived from a theoretical base constructed by experts. The audit tool should clearly state the means of assessing the extent to which those standards have been achieved[116]. It may be desirable to select a few specific dimensions for evaluation rather than attempting a broader evaluation of unspecified dimensions; one or more previously defined activity within each dimension may be used to characterise performance for that dimension as a whole[117].

Practical considerations

It was important that any system of educational audit developed for use by the University of Sheffield School of Nursing and Midwifery should be as easy as possible to use, and should not be disproportionately time-consuming. It should present the information collected in a way which was clear and easily assimilated, should be reliable and should form a mutually acceptable basis for discussions between ward staff and senior management. It should also provide placement office staff with the information they required in a succinct and timely fashion.

The tool should also address the five key criteria of an effective placement selected by the Project's Steering Group on the basis of the literature review summarised above, namely:

- patient-centred care
- friendly, approachable and supportive staff
- an effective mentorship system
- adequate contact with the link teacher
- effective ward leadership and management.

To ensure reliability, it was desirable to use questions which had already been validated by other researchers.

Summary of key points in relation to educational audit

Key points which arise from a review of the literature relating to educational audit are as follows:

- structural elements such as staff and patient numbers, and staff qualifications and experience, are important in determining the suitability of a clinical area to provide clinical experience for student nurses and midwives, and the number of students which that area can accommodate at any one time
- these elements may also make a clinical area more suitable for a student at one stage of training than at another

- evaluation can seek to address issues such as the extent to which students are able to utilise the learning opportunities offered by the placement area, the quality of mentorship and supervision they receive, and the learning outcomes they achieve

- student perceptions of outcome may be accepted, or other, apparently more objective, methods of outcome measurement may be sought to replace or supplement them

- educational audit may be more objective if undertaken or facilitated by service and educational staff who are not attached to the placement area, perhaps from another Trust

- standards will be more uniform if evaluation is undertaken by a relatively small number of external assessors

- one audit tool may not be suitable for all placement areas, or for students at all stages of training

- an audit tool which seeks to identify strengths and weaknesses is likely to be more detailed than one which seeks only to attribute a numeric score or scores to a placement area

- the criteria and standards which form the definitions of quality should have the greatest possible credibility, and should be made explicit.

A proposed audit system

The audit system proposed below follows as closely as possible the system developed for the Sheffield and North Trent College of Nursing and Midwifery[118]. That system was widely used to audit clinical placement areas within Sheffield and North Trent, and was therefore familiar to local educational and service

staff. It was, moreover, considered to be beneficial in fostering collaboration between the School of Nursing and Midwifery and the placement areas. Modifications have been made to that system following consultation with relevant parties, in particular the University of Sheffield School of Nursing and Midwifery's Placement Department, in an attempt to ensure that the proposed system meets their needs. In addition, new audit questionnaires are proposed in Appendices 6, 8 and 9 which reflect the key criteria of an effective placement area agreed by the Steering Group.

It will be noted that the proposed system does not address all the key points summarised above. In particular, it is suggested that:

- student perceptions of outcome should be accepted, as it is felt that the resource implications of alternative or supplementary methods of outcome measurement would be disproportionate in relation to their possible advantages

- the objectivity and uniformity which might be gained by the use of external assessors would be outweighed by the benefits of joint audit by the relevant link teacher and learning environment manager or, in community-based placements, the team leader or mentor

- in the interests of simplicity, the same audit tool should be used for all placement areas and for students at all stages of training.

The proposed audit system has the following components:

1. a **placement summary form** (see Appendix 3), which should be reviewed, and if necessary updated, quarterly.

   The Placement Department, in liaison with service providers and relevant academic staff, should identify potential new placement areas. The relevant Head of Department should then identify for each such area a member of the

academic staff of the School of Nursing and Midwifery who will complete the placement summary form for that area.

In relation to existing placement areas, the Placement Department should notify the link teacher for each placement area when the placement summary form should be reviewed. Alternate reviews would most conveniently be done at the same time as the six-monthly evaluation of the clinical learning environment (see section 3 below). If the relevant information has changed, the link teacher should submit a revised placement summary form to the Placement Department. If no such changes have yet taken place but are anticipated in the next three months, the nature of these anticipated changes should be indicated.

Any changes to the student allocation should be agreed by the appropriate course leader in consultation with the relevant academic and service personnel.

2. a **placement profile** (see Appendix 4). When a decision is made to use a potential placement area for student placements, the relevant Head of Department will allocate a link teacher. The link teacher and learning environment manager (or, in the case of community-based placements, the team leader or mentor) will then complete the placement profile. Thereafter, and for existing placement areas, the profile should be revised annually by the link teacher and learning environment manager or team leader/mentor in each placement area.

3. a **six-monthly evaluation of the quality of the clinical learning environment**, based on student questionnaires (see Appendix 5). The student questionnaires, which should be anonymous, would be completed in the placement area after the student's assessment for that placement has been completed. All student questionnaires should be collated six-monthly by the link teacher and learning environment manager or team leader/mentor together, the student evaluation summary form completed (see Appendix 6)

and a brief narrative written summarising the state of the placement area at that time, with an indication of any problems or areas of excellence; this report should not name individuals. The learning environment manager or team leader/mentor would be responsible for the confidentiality and safe custody of all questionnaires, and for their destruction after collation.

The appropriate clinical manager should be informed when students do not complete the questionnaire for an area of their responsibility. If the number of student questionnaires completed is deemed by the link teacher to be insufficient to inform the six-monthly assessment, the link teacher should seek further information, eg by reviewing the learning journals of some or all of the students who were on placement in the area during the three-month period. If either the questionnaires or the learning journals indicate the existence of problems whose nature is not clear, the link teacher should interview staff and students as appropriate, either individually or by facilitating separate staff and student discussion groups; the student group should include students who have been to the relevant placement area in recent months.

The link teacher should take account of the results of the six-monthly evaluation when completing the placement summary form.

4. an **annual audit** should be held by the link teacher and learning environment manager or team leader/mentor. They should review the information contained in the placement profile, the student, staff and link teacher questionnaires (see Appendices 7 and 8 for the staff and link teacher questionnaires, which should be completed annually) and the six-monthly evaluation reports against the criteria set out in the audit tool (see Appendix 9), and should review progress in relation to any action arising from previous evaluations or audits. They should then write a short report highlighting any problems or areas of excellence; this report should not name individuals.

As a result of the audit, the placement area may be granted approval for one year. If the area has failed, either fully or in part, to meet any of the set criteria, conditional approval may be granted whilst any recommendations are acted on. Alternatively, approval may be withdrawn or withheld until recommendations have been acted on. The audit should be repeated:

- within three months if the area has only been granted conditional approval;

- whenever circumstances in the placement area have changed significantly (eg changes in the nature of the clinical experience offered, or in key personnel); or

- when the learning environment manager/team leader or link teacher feels that a reaudit is desirable.

If the learning environment manager/team leader and link teacher feel unable to grant the placement area either full or conditional approval, the Dean of the School of Nursing and the relevant Director of Nursing Services should be informed. The placement area's status will be reconsidered following submission of evidence that action has been taken to remedy the problems which led to the withdrawal or withholding of approval.

It is assumed that policy statements and audits relating to quality of care and health and safety in the placement area may be consulted for audit purposes.

Both the six-monthly evaluation and the annual audit should include provision for recording and monitoring remedial action undertaken following the identification of a problem, and for disseminating information on identified examples of good practice.

Progress against action plans arising from the six-monthly evaluations and annual audit should be reviewed by the link teacher and learning environment

manager/team leader at their six-monthly evaluation meetings, and modifications made to the action plan as necessary.

The learning environment manager/team leader and link teacher together should give ward staff feedback on the six-monthly evaluations and annual audit within five working days of those reviews.

Archive copies of the six-monthly and annual summary reports for the current year should be held in the Placement Department. Copies should also be held in the relevant placement area and should be copied to the clinical manager responsible for the area and the Head of Department in whose area of responsibility the placement area falls. The clinical manager may wish to draw particular problems or areas of excellence to the attention of the Trust Management Board. The reports should be readily accessible to interested parties either in, or on request from, the placement area and the Placement Department.

The Placement Department should monitor the summaries from each placement area to identify major issues of concern and trigger appropriate action if these have not already been addressed by the learning environment manager/team leader and link teacher.

It should be the responsibility of the Placement Department to:

- liaise with service providers and academic staff to identify potential new placement areas, and issue the placement summary form for such areas to identified members of the academic staff of the School of Nursing and Midwifery for completion

- remind the link teacher, with at least one month's notice, when the quarterly reviews, six-monthly evaluations and annual audits for their areas of responsibility are due.

It should be the responsibility of the link teacher to:

- negotiate and agree, at least two weeks in advance, a date and time for the quarterly review, six-monthly evaluation and annual audit

- inform the Placement Department, the clinical manager of the placement area and the relevant academic Head of Department of the date and time of the review, evaluation or audit

- negotiate and agree the date and time of the post-evaluation and post-audit feedback to placement area staff

- send copies of the placement summary form and evaluation or audit report, and any action plan, to the Placement Department, relevant clinical manager and academic head of department within one week of the review, evaluation or audit meeting.

It should be the responsibility of both the link teacher and the learning environment manager/team leader to:

- inform the Placement Department immediately of all ward and other placement area closures.

The student, staff and link teacher questionnaires

Questions 1, 2, 4, 10, 12, 14, 16, 17, 18 and 20 of the proposed student questionnaire have been drawn from the research-based audit tool (the Ward Learning Climate Indicators) developed by Orton, Prowse and Millen for use to assess the quality of the learning climate in institutional placements[38], and questions 3 and 11 have been adapted from that source. Questions 6, 8, 13 and 15 are based on questions used in the North Staffordshire College of Nursing and Midwifery's Student Evaluation of Practice Placements[119], question 5 on the University of Luton's Clinical Learning Environment Audit[120], question 9

on the South Bank University School of Paediatric Nursing and Child Health's Learning Environment Audit Tool[121], question 7 on Redwood College of Health Studies' Audit of the Learning Environment Practical Placement Areas[122] and question 19 on the Birmingham and Solihull College of Nursing and Midwifery's Educational Audit of Clinical Training Placements[123].

The questions in the proposed staff questionnaire are derived from those in the student questionnaire with the exception of questions 19 and 20, which are based on questions from Chester College of Higher Education's Placement Audit (Education)[124], question 21 which is based on a question from the Audit Tool of the Frances Harrison College of Healthcare (now the European Institute of Health and Medical Sciences of the University of Surrey)[125], and question 23, which is drawn from Orton, Prowse and Millen's Ward Learning Climate Indicators[38].

The questions in the link teacher questionnaire are derived from those in the student and staff questionnaires.

While much use has been made of Orton, Prowse and Millen's Ward Learning Climate Indicators in developing the proposed questionnaires, it was not felt appropriate to recommend the use of those Indicators in their original form because they were felt to be too long in their entirety (at 55 questions) for use for routine audit purposes, and because they did not fully address the key issues identified by the Steering Group, in particular in relation to the link teacher. However, Orton, Prowse and Millen themselves reduced the Indicators to their published length from an original list of 67 questions[126], implying that each question had been validated for independent use.

Conclusions

It was recommended that the proposed audit system should be empirically tested by the University of Sheffield School of Nursing and Midwifery at the earliest opportunity, and that the possibility be considered of using computer

technology in analysing the data gathered using the questionnaires. The audit system is currently being piloted.

APPENDIX 1

MENTORSHIP

ENB Circular 1987/28/MAT stipulates that each student must have a named supervisor or mentor in each practical placement, and that *'qualified staff must pursue a pattern of duty hours which will render them available as a mentor'*.

The duties of the mentor have been defined as:

- to be informed, and to inform others, of contemporary nursing practice in order to bridge the gap between educational programmes and the reality of the workplace;

- to individualise the learning process to suit students' individual needs; and

- to act as teacher and assessor[127].

In other words, the mentor is intended to provide support to the student in the clinical area, to act as a role model, to facilitate the student's clinical learning experiences on the placement, to undertake clinical teaching, to supervise the student's work so as to ensure the quality of care and the safety of all concerned, and to assess the student's practice on that placement.

Research has indicated[128] that, although the mentor system is beneficial to learners, the benefits of the system are related to the number of occasions on which the mentor and mentee work together, especially in the earlier stages of the course: third-year students feel that they do not need to spend as much time with their mentors as do first- and second-year students. Opportunities for students and their mentors to work together are reduced by conflicting shifts, and by the mentor's annual and study leave.

During the course of the current study, separate focus groups were held with students and mentors in which they could express their views on mentorship and other aspects of clinical placements. In addition, some students and mentors who took part in the diary exercise provided written comments to accompany their diaries. Students expressed the following views:

- students do not get enough time with their mentor

- students often do not get much opportunity to work alongside their mentor until they are on rostered placement, although they feel that consistent mentorship is more important earlier in the course. Some students perceive that this is because there are too many students on the wards, with the result that there is not enough mentorship except for the more senior students

- only one student should be attached to each mentor

- community-based placements are particularly successful because the student is placed with the individual mentor rather than the placement area, and therefore the mentorship is consistent, and also because the opportunities to talk in transit allow community-based placements to be a better learning experience than ward-based placements

- students often do not spend their first day on a new placement with the mentor, undergoing orientation to the placement, although this is essential to the success of the placement

- qualified staff are confused about what students at each level should be able to do; one group of students suggested that the ward and the student should receive clear written guidelines about what students can do at each stage

- staff shortages lead to over-reliance on students which could be dangerous.

Some students felt that mentors did not always realise how important their role was in producing a safe practitioner. Mentors did not always explain what they were doing or why, and students could feel too vulnerable to ask for an explanation for fear of being labelled a trouble-maker. As a result, they could then go through their training with large gaps in their knowledge, without always being aware of what they had missed.

One group also felt that some students who had failed a placement might have passed with continuity of mentorship. They perceived placement area staff as not caring whether students passed or failed.

Midwifery students felt that nurses were better at mentoring than midwives because they were more friendly and willing to share information. The tendency for midwives not to take breaks meant that they were less approachable than nurses.

Mentors in turn felt that they often did not have time to mentor to the level which they would like as there were too many other demands on their time. They wanted to mentor well. However, they felt that they would be better able to fulfil their role if:

- student numbers were related to staffing levels. They felt that the cuts in staffing levels in recent years had not been reflected in reductions in student numbers, and therefore that they were not able to give individual students as much attention as they would like

- students were more flexible about working with members of staff other than their own mentor, or were prepared to work different shifts and some weekends so that they could work with their mentor, rather than expecting to work nine to five Monday to Friday.

Students agreed that it was not necessarily a problem if mentor and student shifts did not coincide, as long as the mentor arranged for someone else to take

on the mentoring role in their absence. Some mentors were good at doing this, others not.

Mentors also felt that they would be assisted in fulfilling their role if:

- the peaks and troughs in the student allocation to the wards were evened out, as a steady flow would motivate staff without exhausting them

- more personal tutors talked to ward staff in advance of the placement about individual students, their level of experience (both in general and in relation to specific procedures relevant to the placement area) and their particular needs in terms of learning styles and relevant personal circumstances

- students were more thoroughly prepared for their placements so that they were clear as to what was expected of them and what they hoped to achieve on the placement

- mentors received more training and preparation in relation to student assessment as they considered the assessment process to be difficult for both staff and students to understand

- the assessment booklet was simplified and shortened by the elimination of repetition; a specimen completed booklet would be appreciated as a guide

- management made time available for assessment, which currently tended to be squeezed into breaks

- link teachers communicated more with the wards - for instance, informing the students in advance when they intended to teach them on the ward, as they might have other activities planned.

Both students and mentors felt that students could benefit from more practical demonstrations and opportunities to practise skills before they went on placement.

The diary exercise has indicated that students spend a substantial amount of their time on placement in their mentors' absence. In some cases an explanation was provided to indicate that the student's learning did not suffer as a result. So, one student on placement with a district nurse explained that, on the mentor's day off, she had worked with another district nurse, and on another day when she had not worked with her mentor she had paid organised visits to two different specialist clinics. Another stated *'I have only worked 2 days out of this week with my mentor because I arranged visits with other departments for the other 2 working days'.* In other cases, however, the separation may not be for the student's benefit, when the mentor is on leave, on a course or on an opposite shift.

In many cases the mentor, although present in the placement area, did not work directly alongside the student. Some students who took part in the diary exercise pointed out that, although their diary might indicate little direct supervision, they felt adequately supported. One student on a community placement, whose diary showed no direct supervision for three out of the five days, stated

> *'This was a community placement so I was working alongside my mentor during home visits, clinics and parentcraft sessions. Thus, although mostly working "independently" my mentor or another community midwife was always with me, advising and helping, as appropriate'.*

In another case, a mentor who had not recorded any direct supervision stated that the student in question, being

> *'a senior student ... performs her activities under indirect supervision. At the beginning of each day we discuss her cases and the relevant management. We update regularly throughout the day, and I am always available for any queries. At the end of*

each day we set aside time to discuss the day's activities and evaluate, and modify if necessary, the management of cases. This time of day is also spent discussing and completing records. The student's aims and objectives are discussed at the beginning of the placement, and progress is monitored throughout, and discussion and evaluation at the end of the allocation.'

Another third-year student, whose work was very largely indirectly supervised, stated that

'My mentor is usually in charge of the ward but she is always available should I be unfamiliar with a procedure and is there to assist me should I require help. I am usually allocated a number of clients to care for and I go to her for guidance when necessary .....She allows me to practise in my own style and does not try to influence me with her way of thinking all the time which I appreciate. There is always a qualified member of staff to whom I can go for help if I should need it. They are aware of my limitations which I appreciate and most of them do not try to "take over" the care of the clients that I am looking after.'

A third-year student stated that, although all four days on the ward had been spent in unsupervised activity, *'no activities required supervision'*. However, another third-year student who recorded only 1.6% of her time as spent working under direct supervision stated that *'On the whole, I do not feel that I have adequate mentorship cover'*; the level of direct supervision received by this student was low, but the proportion of time spent working under indirect supervision and in unsupervised activity, at 24% and 30% respectively, were below average for the stage of training. A second-year CFP student recorded a shortcoming of the system when she noted

'3rd week of placement, have been allocated a mentor who is on maternity leave, so I work with any member of staff on the same shift as me each day'.

A third-year student stated that

> *'This is an excellent placement regarding mentorship. Unfortunately this has not always been so in my previous placements. Overall I feel mentorship has been disappointing throughout the course.'*

It is difficult to know how much weight to attribute to such comments when most students and mentors did not include any comment in their diaries. However, focus groups held with students indicated that, although they generally found mentorship to be acceptable, they felt that there was an element of chance in whether it would be so, and considered the key factor in this to be the individual mentor rather than the placement area. The quality of mentorship was recognised to fall when staffing levels were low, reducing the scope for appropriate supervision, and students could be left too much alone if their mentor was not present or if they had a poor relationship with their mentor. They recognised that it was difficult for the mentor to strike a balance between giving them too much and too little responsibility.

Mentorship is more than just an educational issue: it also has a managerial aspect. This is well expressed by a student who took part in the study:

> *'I only worked with my mentor (of the week; third of placement) on this last day .... For the earlier part of the week I asked whoever was working with me on a shift to keep an eye on me. Although I have enjoyed this placement and on a general level I have felt encouraged and supported by the staff on the ward, I do feel that my contribution to the workload of the ward could be more consistent and of better quality if initially whoever was my mentor had the time and space in which to teach me. This is not a criticism of my mentors. The three I have had in this four week placement have been supportive and good teachers when they have had the opportunity to be so. However, it is often too busy and their workload too great for me to learn as much as I could.*

The staffing levels could be better and I wonder whether enough consideration is given to the role of mentoring when working out the workload of a ward and staffing requirements. It is in the Trust's interest to provide itself with competent staff who practise safely once qualified. Students need mentors who have time for them. I don't want to be one more stressor in an overloaded environment - when your mentor is very busy it is too easy not to ask the question on your mind and then not have an opportunity to ask it again. I hope you will be able to include this concern I (and many other students) have about mentorship.'

White et al[129] suggest that, as a corollary of student supernumerary status, which means that the student cannot be counted on to provide a predictable contribution to service provision, service staff cannot be counted on to provide predictable educational support to students. In areas where staffing levels are low, Project 2000 students are therefore sometimes regarded as burdensome, and learning opportunities are reduced and occasionally lost. The issues highlighted in this Appendix may be seen as congruent with this view.

APPENDIX 2

Administrative Costs of Clinical Placements, Cost of Training Service Staff and Student-related Costs

The costs have been calculated for the 1995/96 academic year. All salary costs include the employer's contributions, and have been inflated to include pay awards due in 1996.

A Administrative Costs

1. Time spent on the administration and audit of pre-registration clinical placements by staff directly involved in this activity:

4.29 WTE staff	**£57,722**

2. Cost of premises and utilities relating to placement department staff:

Premises	£24,290
Consumables	£1,930
Total	**£26,220**

3. Information system charges:

Software support and maintenance	£6,000
1 WTE University grade 3 clerical staff	£13,000
Total	**£19,000**

B Cost of training service provider staff

The cost of training service provider staff for mentorship (ie the staff costs of organising and running ENB Courses 997/998, including the travel costs of the relevant members of staff) are as follows:

4 WTE lecturers	£134,000
0.47 WTE clerical and secretarial support	£6,400
Total	**£140,400**

C Link teacher costs

1. Time spent on linkage in relation to pre-registration clinical placements:

£714,100

2. Travel costs in relation to the clinical link:

£16,000

3. Cost of premises and utilities relating to time spent by link teachers in relation to the clinical link:

Premises	£118,900
Consumables	£9,450
Total	**£128,350**

4. Cost of support staff, eg finance, library, administration etc, relating to time spent by link teachers in relation to the clinical link:

£100,300

D Student-related costs

1. Travel costs **£150,000**

As it was not possible to differentiate between travel relating to clinical and non-clinical placements, this figure includes all student travel costs reimbursed by the University, the greater part of which is likely to be attributable to clinical placements.

2. Uniforms and badges

Uniforms	£44,224
Badges	£3,320
Total	**£47,544**

3. The costs of Occupational Health services for pre-registration student nurses and midwives are currently being negotiated. However, the probable costs can be summarised as follows, assuming an annual intake of 545 students:

cost of initial medical screening and hepatitis B immunisation, at a one-off charge of £60/student	£32,700
cost of ongoing Occupational Health support, at an annual charge of £15/student	£24,530
Total	**£57,230**

APPENDIX 3

PLACEMENT SUMMARY FORM

Location

Address

Name of placement area

Type of placement / experience available (eg medical, surgical, paediatric etc)

Clinical Nurse Manager

Learning Environment Manager/Team Leader

LEM/Team Leader's telephone extension

Qualified nursing staff in the placement area (numbers only):

Grade	Number
D	
E	
F	
G	
Other (please specify)	

RECOMMENDATIONS

Acceptable for student placements YES NO

Placements to continue pending agreed action by:

Recommended maximum number of students:

Type of student	Stage of training or specific course	Maximum number
Advanced Diploma/CFP		
Advanced Diploma/Branch (supernumerary) (please state which branch)		
Rostered (please state which branch)		
Post-registration (please specify)		
Maximum number of students at any one time		

1. Issues

2. Changes from previous review

3. Action agreed

Date of next review:

Date:

APPENDIX 4

PLACEMENT PROFILE

Location

Address

Name of placement area

Type of placement / experience (eg medical, surgical, paediatric etc)

Date of audit

Date of previous audit

Name of Learning Environment Manager/Team Leader

Name of Link Teacher

RECOMMENDATIONS

Acceptable for student placements YES NO

Placements to continue pending agreed action by:

Recommended maximum number of students:

Type of student	Stage of training or specific course	Maximum number
CFP		
Branch (supernumerary) (please state which branch)		
Rostered (please state which branch)		
Post-registration (please specify)		

Date of next audit:

Summary report and action plan sent to:

Date:

Number of students allocated to area in past 12 months:

Number of student questionnaires completed in past 12 months:

1. Patient-client profile

Age range
Gender
Types of patients/clients
Bed numbers and occupancy or caseload or throughput over previous 12 months
Range of care activities undertaken
Availability of service (eg 24-hour care, day ward etc)
Shift pattern

2. Placement staff profile

Agreed funded establishment	numbers in post	name and grade	number of hours worked	date commenced in current post	professional qualifications with dates obtained	other courses/ qualifications with dates obtained	areas of professional interest

Use of agency/bank staff:
Please comment:

Other professions contributing to the multidisciplinary team:

3. Teaching staff profile

Name of link teacher:

Contact point:

Summary of professional experience

Other teacher(s) providing input

Name of teacher	Contact point	Nature of input

4. Student allocation

Type of student	stage of training and/or specific course	maximum number of students of each type which the area can take at any one time	maximum number of students of each type agreed at previous audit	if maximum number of students currently proposed differs from that previously agreed, state authority for change (eg course leader)	if maximum number of students currently proposed differs from that previously agreed, state reason for change	any other comments
CFP						
Branch (supernumerary) (please state which branch)						
Rostered (please state which branch)						
Post-registration (please specify)						

5. Learning environment

Name of learning environment manager/team leader:

Does the placement area have a written nursing care policy which is readily available to students?

If yes, please attach

If no, please summarise the area's nursing care policy below, under the following headings:

Philosophy of care

Model of care used

Method of care delivery

Learning opportunities available on the placement
Please specify

Innovative practices/research activities

Quality assurance systems in use:

Institutional policy relating to staff education:

Is there a designated budget to meet the continuing education needs of qualified staff? please give details

Have all trained staff undergone appraisal in the past year?

Are there plans to make changes to the placement area in the next three months such as would affect student allocations? If so, please give details:

Signature of Learning Environment Manager/Team Leader:

Signature of Link Teacher:

Date:

ANNUAL SUMMARY

Name of Ward/Placement

Location

Date of Summary

Recommendations	Actioned By	Target Dates

Learning Environment Manager/Team Leader

Signature:

Date:

Link Teacher Signature:

Date:

APPENDIX 5

STUDENT PLACEMENT EVALUATION QUESTIONNAIRE

This anonymous questionnaire is part of a continuous audit of clinical placements for pre-registration nursing and midwifery students. The aim is to develop and maintain learning environments which provide a high quality experience to students. To do this, we need students to give an honest evaluation of their experiences on placement.

Please complete the questionnaire on your last day of the placement, by answering the following questions, and make any further comments you wish in the spaces provided. Then seal it in the attached envelope and place it in the internal post. It will be treated with strict confidentiality. Thank you.

Name of placement area:

Course:

Intake date:

Length of placement:

Date:

1. Did staff follow the ward/department stated pattern of care (eg primary/team nursing/midwifery)?	always usually seldom never	[ ] [ ] [ ] [ ]
2. Did staff incorporate relevant research in their practice?	frequently sometimes seldom never	[ ] [ ] [ ] [ ]
3. Were you allocated a named mentor on your first day?	yes no	[ ] [ ]
4. Did you have the same named mentor throughout this placement?	yes no	[ ] [ ]
5. Did your mentor set aside adequate time on your first day to orient you to the clinical area?	yes no	[ ] [ ]
6. During the first week, did you and your mentor discuss and set your learning objectives for the placement?	yes no	[ ] [ ]

7.	Did you have the opportunity to work three shifts a week with your mentor?	yes no	[ ] [ ]
8.	When you were not on duty with your mentor, were you sure which qualified nurse was supervising you?	always usually seldom never	[ ] [ ] [ ] [ ]
9.	On this placement, did you feel that you had to take on responsibilities beyond your level of competence without appropriate teaching/ supervision from trained staff? if yes, please give examples	yes no	[ ] [ ]
10.	Did you have an end of placement/final assessment with your mentor? If not, why not?	yes no	[ ] [ ]
11.	How well did your mentor help you to link theory to practice on this placement?	very well quite well not very well not well at all	[ ] [ ] [ ] [ ]
12.	How helpful was your mentor in enabling you to achieve your learning objectives?	very helpful quite helpful not very helpful not helpful at all	[ ] [ ] [ ] [ ]
13.	Was the experience available in the placement area appropriate to allow you to achieve the majority of your learning objectives?	yes no	[ ] [ ]

14. Did you have enough opportunity to participate in nursing/midwifery activities?	always	[ ]
	usually	[ ]
	seldom	[ ]
	never	[ ]
15. Was the placement long enough to allow you to achieve your learning objectives? If not, how long would you have liked?	yes	[ ]
	no	[ ]
16. Were staff approachable and supportive to you?	very supportive	[ ]
	quite supportive	[ ]
	not very supportive	[ ]
	not at all supportive	[ ]
17. Were staff well informed about your course?	very well informed	[ ]
	quite well informed	[ ]
	not very well informed	[ ]
	not at all informed	[ ]
18. In this placement, did you have adequate contact with the link teacher?	very adequate	[ ]
	quite adequate	[ ]
	not very adequate	[ ]
	not at all adequate	[ ]
19. Did the link teacher assist you with the assessment process?	yes	[ ]
	no	[ ]
20. Did you have a clear understanding of your role in this placement area?	very clear	[ ]
	quite clear	[ ]
	not very clear	[ ]
	not clear at all	[ ]

Please note any positive aspects of this placement experience:

Please note any negative aspects of this placement experience:

Any other comments:

APPENDIX 6

SUMMARY OF STUDENT EVALUATION OF PLACEMENT EXPERIENCE

The following is a summary of the results from the student evaluation forms collected over the past 3 month period.

Location:

Address:

Placement area:

Date of last summary:

Date of present summary:

Number of students who have been on placement in this area since the last summary:

Number of student questionnaires completed since the last summary:

Name of link teacher collating summary:

Name of learning environment manager/team leader collating summary:

Over the past 3 month period, what percentage of students:

		Comments
1.	felt that staff followed the ward/ department stated pattern of care (eg primary/team nursing/midwifery) % always % usually % seldom % never	
2.	felt that staff incorporated relevant research in their practice % frequently % sometimes % seldom % never	
3.	were allocated a named mentor on their first day % yes % no	
4.	had the same named mentor throughout the placement % yes % no	
5.	felt that their mentor set aside adequate time on their first day to orient them to the clinical area % yes % no	

6.	discussed and set learning objectives for the placement with their mentor during their first week % yes % no	
7.	had the opportunity to work three shifts a week with their mentor % yes % no	
8.	were sure, when they were not on duty with their mentor, which qualified nurse was supervising them % always % usually % seldom % never	
9.	felt that they had to take on responsibilities beyond their level of competence without appropriate teaching/supervision from trained staff % yes % no	
10	had an end of placement/final assessment with their mentor % yes % no	

11.	felt that their mentor helped them in linking theory to practice % very well % quite well % not very well % not well at all	
12.	felt that their mentor was helpful in enabling them to achieve their learning outcomes % very helpful % quite helpful % not very helpful % not helpful at all	
13.	found the experience available in the placement area appropriate to allow them to achieve the majority of their learning objectives % yes % no	
14.	felt they had enough opportunity to participate in nursing/midwifery activities % always % usually % seldom % never	

15.	felt that the placement was long enough to allow them to achieve their learning objectives % yes % no	
16.	felt that staff were approachable and supportive % very supportive % quite supportive % not very supportive % not supportive at all	
17.	felt that staff were well informed about their course % very well informed % quite well informed % not very well informed % not at all informed	
18.	had adequate contact with the link teacher % very adequate % quite adequate % not very adequate % not at all adequate	

19.	were assisted with the assessment process by the link teacher % yes % no	
20.	had a clear understanding of their role in the placement area % very clear % quite clear % not very clear % not at all clear	

Summary of comments and overview of situation:

APPENDIX 7

STAFF EVALUATION QUESTIONNAIRE

This questionnaire is part of the audit of clinical placements for pre-registration nursing and midwifery students. The aim is to develop and maintain learning environments which provide a high quality experience to students. Your contribution to the placement evaluation process is valued, and will be taken into account when auditing the overall experience available on this placement. Please complete this questionnaire by answering the following questions, and make any further comments you wish in the spaces provided.

Thank you

Name:

Grade:

Post:

Placement area:

1.	Do staff in this placement area follow the ward/department stated pattern of care (eg primary/team nursing/midwifery)?	always usually seldom never	[ ] [ ] [ ] [ ]
2.	Do you incorporate relevant research in your practice?	frequently sometimes seldom never	[ ] [ ] [ ] [ ]
3.	Are students allocated a named mentor on their first day?	always usually seldom never	[ ] [ ] [ ] [ ]
4.	Do students have the same named mentor throughout their placement?	always usually seldom never	[ ] [ ] [ ] [ ]
5.	Do students spend adequate time with their mentor on their first day to orient them to the clinical area?	always usually seldom never	[ ] [ ] [ ] [ ]

6.	As a mentor, do you discuss and set learning objectives for the placement with your student in the student's first week?	always usually seldom never	[ ] [ ] [ ] [ ]
7.	Do you have the opportunity to work three shifts a week with students to whom you act as mentor?	always usually seldom never	[ ] [ ] [ ] [ ]
8.	Do you think that students in this placement area have to take on responsibilities beyond their level of competence without appropriate teaching/supervision from trained staff? if you answer 'always' or 'usually', please give examples	always usually seldom never	[ ] [ ] [ ] [ ]
9.	Do students have an end of placement/final assessment with you as mentor? If not, why not?	always usually seldom never	[ ] [ ] [ ] [ ]
10.	How well do you help students to link theory to practice on this placement?	very well quite well not very well not well at all	[ ] [ ] [ ] [ ]
11.	As a mentor, how helpful are you in enabling students to achieve their learning objectives?	very helpful quite helpful not very helpful not helpful at all	[ ] [ ] [ ] [ ]
12.	Is the experience available in the placement area appropriate to allow students to achieve the majority of their learning objectives?	always usually seldom never	[ ] [ ] [ ] [ ]

13.	Do you think students have enough opportunity to participate in nursing/midwifery activities in this placement	always usually seldom never	[ ] [ ] [ ] [ ]
14.	Are placements in this area long enough to allow students to achieve their learning objectives? If not, how long do you think they should be?	always usually seldom never	[ ] [ ] [ ] [ ]
15.	How approachable and supportive are you of students?	very supportive quite supportive not very supportive not at all supportive	[ ] [ ] [ ] [ ]
16.	How well informed are you about the Diploma/Advanced Diploma course?	very well informed quite well informed not very well informed not at all informed	[ ] [ ] [ ] [ ]
17.	In this placement area, do students have adequate contact with the link teacher?	very adequate quite adequate not very adequate not at all adequate	[ ] [ ] [ ] [ ]
18.	Do you have adequate contact with the link teacher?	very adequate quite adequate not very adequate not at all adequate	[ ] [ ] [ ] [ ]
19.	Does the link teacher attend ward and unit meetings?	regularly occasionally seldom never	[ ] [ ] [ ] [ ]

20.	Does the link teacher act as a resource to staff in educational developments occurring in the clinical area?	often occasionally seldom never	[ ] [ ] [ ] [ ]
21.	Is an up-to-date written statement of learning outcomes for each module available in the placement area?	yes no	[ ] [ ]
22.	Does the link teacher assist you with the student assessment process?	always usually seldom never	[ ] [ ] [ ] [ ]
23.	How would you assess the relationship between staff and the link teacher in this placement area?	very good quite good not very good not good at all	[ ] [ ] [ ] [ ]
24.	Do students have a clear understanding of their role in this placement area?	very clear quite clear not very clear not clear at all	[ ] [ ] [ ] [ ]

Comments:

Signed:

Date:

APPENDIX 8

LINK TEACHER EVALUATION QUESTIONNAIRE

Name:

Post:

Placement area:

1.	In your opinion, do staff in this placement area follow the ward/department stated pattern of care (eg primary/team nursing/midwifery)?	always usually seldom never	[ ] [ ] [ ] [ ]
2.	In your opinion, do staff in this placement area incorporate relevant research in their practice?	frequently sometimes seldom never	[ ] [ ] [ ] [ ]
3.	Do you think that students in this placement area have to take on responsibilities beyond their level of competence without appropriate teaching/supervision from trained staff? if you answer 'always' or 'usually', please give examples	always usually seldom never	[ ] [ ] [ ] [ ]
4.	Do students have an end of placement/final assessment with their mentor? If not, why not?	always usually seldom never	[ ] [ ] [ ] [ ]
5.	How well do students succeed in linking theory to practice on this placement?	very well quite well not very well not well at all	[ ] [ ] [ ] [ ]

6.	How helpful do you think the mentors in this placement area are in enabling students to achieve their learning objectives?	very helpful quite helpful not very helpful not helpful at all	[ ] [ ] [ ] [ ]
7.	Is the experience available in this placement area appropriate to allow students to achieve the majority of their learning objectives?	always usually seldom never	[ ] [ ] [ ] [ ]
8.	Do you think students have enough opportunity to participate in nursing/midwifery activities in this placement area?	always usually seldom never	[ ] [ ] [ ] [ ]
9.	Are placements in this area long enough to allow students to achieve their learning objectives?	always usually seldom never	[ ] [ ] [ ] [ ]
10.	How would you assess the relationship between staff and students in this placement area?	very good quite good not very good not good at all	[ ] [ ] [ ] [ ]
11.	How well informed do you consider staff in this placement area to be about the Diploma/Advanced Diploma course?	very well informed quite well informed not very well informed not at all informed	[ ] [ ] [ ] [ ]
12.	Do you have adequate contact with students in this placement area?	very adequate quite adequate not very adequate not at all adequate	[ ] [ ] [ ] [ ]
13.	Do you have adequate contact with staff in this placement area?	very adequate quite adequate not very adequate not at all adequate	[ ] [ ] [ ] [ ]

14.	Do you attend ward and unit meetings?	regularly	[ ]
		occasionally	[ ]
		seldom	[ ]
		never	[ ]
15.	Do you act as a resource to staff in educational developments occurring in this placement area?	often	[ ]
		occasionally	[ ]
		seldom	[ ]
		never	[ ]
16.	Is an up-to-date written statement of learning outcomes for each module available in the placement area?	yes	[ ]
		no	[ ]
17.	Do you assist mentors with the student assessment process?	always	[ ]
		usually	[ ]
		seldom	[ ]
		never	[ ]
18.	How would you assess the relationship between yourself and staff in this placement area?	very good	[ ]
		quite good	[ ]
		not very good	[ ]
		not good at all	[ ]
19.	Do students have a clear understanding of their role in this placement area?	very clear	[ ]
		quite clear	[ ]
		not very clear	[ ]
		not clear at all	[ ]

Comments:

Signed:

Date:

APPENDIX 9

QUALITY STATEMENTS AND CRITERIA MEASURES

AREA OF ENQUIRY 1. THE CARING CLIMATE

Quality Statement

Individualised care/support is based on a systematic problem-solving approach reflecting contemporary practices, supported by research and/or theory

CRITERIA MEASURES	SOURCES OF INFORMATION	FREQUENCY OF REVIEW	ACHIEVED
1.1 There is a philosophy of care which places value on preserving dignity and respecting cultural and religious beliefs	Placement Profile Learning Environment Manager/ Team Leader	Annually	Yes / No
1.2 The philosophy of care is reflected in everyday practice	Staff Questionnaire Student Questionnaire Relevant audit systems	Annually Review each allocation; collate quarterly Annually	Always Usually Sometimes Never
1.3 The documented plan of care/ support shows evidence of an individualised systematic approach	Documented Plans of Care/Support	Quarterly	Always Usually Sometimes Never

1.4 The plan of care/support reflects the model in use	Documented Plans of Care/Support	Quarterly	Always Usually Sometimes Never
1.5 Staff explain to students the theory behind practice	Staff Questionnaire Student Questionnaire	Annually Review each allocation; collate quarterly	Always Usually Sometimes Never
1.6 Staff are involved in: a) innovative practice b) research activities	Placement Profile	Annually	Always Usually Sometimes Never

AREA OF ENQUIRY 2. THE PHYSICAL ENVIRONMENT

Quality Statement

The care/support reflects optimum use of the physical environment

CRITERIA MEASURES	SOURCES OF INFORMATION	FREQUENCY OF REVIEW	ACHIEVED
2.1 The philosophy of care is reflected in the physical environment in respect of privacy, confidentiality and safety	Direct observation of environment by the link teacher and Learning Environment Manager/Team Leader Relevant Audit systems	Annually Annually	Yes / No

AREA OF ENQUIRY 3. THE SOCIAL ENVIRONMENT

Quality Statement

There is open and honest communication within the learning environment so that individual contributions are valued and respected

CRITERIA MEASURES	SOURCES OF INFORMATION	FREQUENCY OF REVIEW	ACHIEVED
3.1 The communication systems in operation are effective	Student Questionnaire Staff Questionnaire	Review each allocation; collate quarterly Annually	Always Usually Sometimes Never

AREA OF ENQUIRY 4. LEARNING RESOURCES

Quality Statement

Each teaching/learning environment should seek to facilitate study time and provide access to appropriate learning resources for staff and students

CRITERIA MEASURES	SOURCES OF INFORMATION	FREQUENCY OF REVIEW	ACHIEVED
4.1 The placement has a designated study area	View the Study Area	Annually	Yes / No
4.2 A range of learning resources is provided	View the learning resources	Annually	Yes / No

AREA OF ENQUIRY 5. PLACEMENT SUPERVISOR ROLE

Quality Statement

1. A professional partnership between student, supervisor and link teacher will enable learning opportunities to be negotiated which meet the required outcomes of the curriculum

CRITERIA MEASURES	SOURCES OF INFORMATION	FREQUENCY OF REVIEW	ACHIEVED
5.1.1 Learning opportunities are identified which reflect the curriculum intention	Placement Profile Student Questionnaires	Annually Review each allocation; collate quarterly	Always Usually Sometimes Never
5.1.2 Mechanisms exist which enable named supervisors (or appropriate deputies) and students to communicate prior to the placement	Learning Environment Manager/Team Leader	Annually	Always Usually Sometimes Never
5.1.3 There are professional development opportunities for supervisors	Placement Profile	Annually	Yes / No

Quality Statement

2. The students' practical progress and achievement is monitored and assessed

CRITERIA MEASURES	SOURCES OF INFORMATION	FREQUENCY OF REVIEW	ACHIEVED
5.2.1 The procedure for documenting students' progress and achievement is followed	Staff Questionnaire Student Questionnaire Link Teacher Questionnaire	Annually Review each allocation; collate quarterly Annually	Always Usually Sometimes Never
5.2.2 There is opportunity to discuss assessment issues	Staff Questionnaire Student Questionnaire Link Teacher Questionnaire	Annually Review each allocation; collate quarterly Annually	Always Usually Sometimes Never
5.2.3 Students' learning needs are met	Staff Questionnaire Student Questionnaire Link Teacher Questionnaire	Annually Review each allocation; collate quarterly Annually	Always Usually Sometimes Never
5.2.4 The quality and amount of support meets students' needs	Staff Questionnaire Student Questionnaire Link Teacher Questionnaire	Annually Review each allocation; collate quarterly Annually	Always Usually Sometimes Never

AREA OF ENQUIRY 6. MANAGEMENT OF THE LEARNING ENVIRONMENT

Quality Statement

The Learning Environment Manager/Team Leader will be responsible for the overall learning environment, planning and co-ordinating learning experiences in order to enhance the integration of theory to practice

CRITERIA MEASURES	SOURCES OF INFORMATION	FREQUENCY OF REVIEW	ACHIEVED
6.1 There is a named Learning Environment Manager/Team Leader	Placement Profile	Annually	Yes / No
6.2 The Learning Environment Manager/Team Leader has the opportunity to pursue personal and professional development	Placement Profile	Annually	Yes / No
6.3 Duty rotas take into account the need for the student to be supervised	Rotas Student Questionnaire Staff Questionnaire	Annually End of allocation; collate quarterly Annually	Always Usually Sometimes Never

AREA OF ENQUIRY 7. LINK TEACHER'S ROLE

Quality Statement

The Link Teacher liaises with placement staff in order to ensure effective implementation of the curriculum

CRITERIA MEASURES	SOURCES OF INFORMATION	FREQUENCY OF REVIEW	ACHIEVED
7.1 Liaison between the link teacher and placement staff takes place	Staff Questionnaire Link Teacher Questionnaire	Annually	Always Usually Sometimes Never
7.2 The Link Teacher provides a summary of his/her professional experience	Placement Profile	Annually	Yes / No
7.3 The Link Teacher acts as a resource to assist in the development of educational programmes	Staff Questionnaire	Annually	Always Usually Sometimes Never
7.4 The Link Teacher supports and guides supervisors and the LEM/Team Leader in the student assessment process	Staff Questionnaire	Annually	Always Usually Sometimes Never
7.5 The Link Teacher/Personal Tutor provides support and guidance for students	Student Questionnaire	Review each allocation; collate quarterly	Always Usually Sometimes Never

ACTION PLAN

PROBLEM/NEED	ACTION	DESIRED OUTCOME	TO BE ACHIEVED BY (DATE)	EVALUATION

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