

## **Achieving improvement through quality: an evaluation of key factors in the implementation process**

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### **Achieving improvement through quality: an evaluation of key factors in the implementation process**

Quality, audit and standard setting are major issues on the present day nursing and health care agenda. Considerable time, energy and resources have been invested in developing and implementing a range of different quality and audit systems, yet there is limited evidence to date to suggest that they are having any significant impact in terms of changing practice and improving patient care. This paper will present the results of a study undertaken to evaluate the implementation of three of the most common nursing quality systems used in the United Kingdom: Monitor, Qualpacs and the dynamic standard setting system (DySSSy). In each case, the focus was on identifying key factors in the process of implementation that could predict positive programme outcomes — defined in terms of acceptance by clinical nursing staff and perceived impact on the quality of patient care. The study adopted a three-stage evaluation design, with three distinct levels of investigation and analysis, and utilized a range of descriptive and exploratory methods. In total, 14 sites implementing one of the three nursing quality systems were studied. Additional data, derived from individuals' experiences of implementing quality in nursing, were used to enhance and validate the findings. The results indicated a number of important system-related, contextual and practical issues of implementation. These were underpinned by two key factors, defined as ownership for quality and action to improve. However, most present day nursing quality programmes appear to be failing to embrace these two concepts simultaneously. The paper will conclude by discussing the implications of these findings for future developments in nursing and health care quality improvement.

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## INTRODUCTION

Present day health care is characterized by many changes, not least a surge of interest and activity in the field of quality and audit. In response to the pressure to introduce more formal quality evaluation, nursing, like other groups within the health service, has adopted a range of different approaches and quality systems. To date, little is known about the different systems in use, particularly in relation to how they are being implemented and with what effect. Given the increasing amount of time, effort and resources being directed towards the pursuit of quality, these are questions of concern to all those involved in health care; patients, practitioners and managers alike. They are also questions made more pertinent by the ever changing context of quality, and in particular the current drive towards clinical effectiveness, outcome measurement and developing collaborative, multiprofessional approaches to quality. In order to foster effective multiprofessional working and to improve outcomes through implementing a quality programme, one must first develop a clear understanding of the process of how quality systems operate in practice.

These questions form the background for the study to be described in this paper — a study undertaken between 1988 and 1992 to evaluate the implementation of quality systems in nursing (Harvey 1993a), specifically focusing on how systems are implemented in practice and with what effect, both from the perspective of nursing staff experiences and the effectiveness of the system as a means of improving patient care. Within the context of the research, the term 'quality system' refers to any specific approach or instrument that can be applied to evaluate quality. 'Quality programme' refers to the implementation of a quality system in practice.

The paper begins by outlining the background to the research and the study methods, before presenting the key findings and conclusions and discussing the implications of the research for future developments in nursing and health care quality.

## BACKGROUND TO THE STUDY

Despite the current level of interest and activity, quality in nursing is far from a new concept. There is a vast literature on the subject of nursing quality throughout the decades (Kitson & Harvey 1991), beginning with philosophical debate and discussion on the subject, and gradually moving to the development of evaluative criteria and systems against which quality could be compared.

Throughout these developments, a range of different terms and definitions have been adopted, for example standards, criteria, audit, quality assurance and quality improvement, to name just a few. Typically these definitions encompass the notion of a quality evaluation cycle,

which may be variously described as the quality assurance, quality improvement, standard setting or audit cycle. Whatever terminology is used, the cycle can generally be seen to comprise three distinct phases, namely: defining the level of quality to be aimed for (in the form of standards, criteria, guidelines or protocols); measuring and comparing existing practice against the definition; and taking action to improve quality where necessary.

Aside from the semantic differences in labelling the cycle, more fundamental differences can be identified in terms of how the cycle is approached, by whom, and at what level in the organization. In some evaluation approaches, the standards and criteria against which practice is compared are pre-defined, having been developed by researchers or experts in the field. These approaches are often referred to as 'off-the-shelf' or pre-formulated evaluation systems. Examples of these include Monitor (Goldstone *et al.* 1983), Qualpacs (Wandelt & Ager 1974), the Phaneuf audit (Phaneuf 1976) and the Slater nursing competency rating scale (Wandelt & Stewart 1975). By comparison, other methods incorporate the determination of standards and criteria as part of the cycle of quality evaluation at a clinical level and are typically referred to as practitioner-based quality systems, for example the unit-based approach (Schroeder & Maibusch 1984, Giebing 1987) and the dynamic standard setting system (Kitson 1989, Royal College of Nursing 1990).

## THE STUDY

Against the backdrop of different approaches to nursing quality, this study was concerned with evaluating the implementation of the most commonly applied nursing quality systems in the UK, with the aim of identifying key factors during the implementation process which determined the outcomes of the programme and could serve as benchmarks for future quality initiatives in health care. Within this context, success is defined on two key dimensions, namely: acceptance of the quality system by clinical staff; and perceived impact on the quality of patient care.

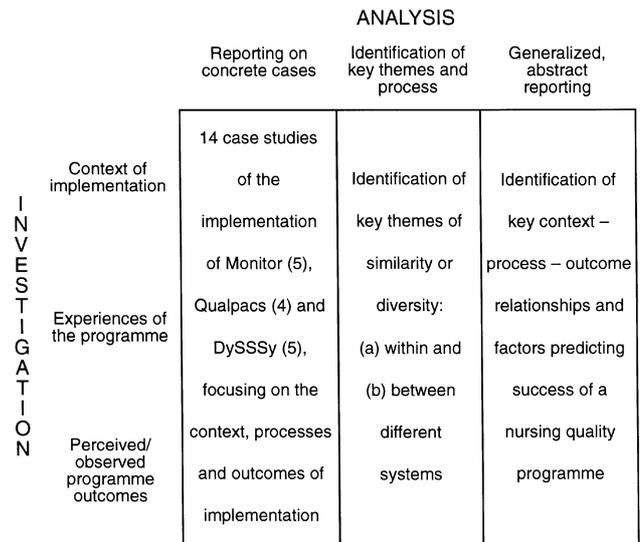
At the time of undertaking the study, three of the most commonly applied nursing quality systems in the UK were Monitor (General), a derivative of the American Rush-Medicus system (Goldstone *et al.* 1983), the quality patient care scale (Qualpacs) (Wandelt & Ager 1974) and the dynamic standard setting system (DySSSy) (Royal College of Nursing 1990). These were identified through two successive surveys undertaken in 1987 and 1988 (Kitson & Harvey 1987, 1988). Despite anecdotal reports in the literature describing the application of the different systems and pointing to evidence of both success and failure, little rigorous evaluation of the different systems in use and their effect had previously been undertaken (Lang & Clinton 1983, Giovannetti *et al.* 1986).

**The design**

Of the three systems identified, two (Monitor and Qualpacs) evaluate quality through the application of pre-formulated standards and criteria; the third system (DySSSy) represents a more practitioner-based approach, where standards and criteria are defined by practitioners as part of negotiating the quality cycle. In terms of study design, this required an evaluative methodology which could take account of the differences between the systems (see Table 1), but which could still compare them to generate some more general conclusions and recommendations.

This was achieved through a three-stage evaluation design, incorporating a range of descriptive and exploratory methods. At the first stage of the design, the focus was on deriving descriptive data from two separate evaluation studies (Harvey 1993b, Kitson *et al.* 1994) in order to present a series of 14 case studies on the implementation of each system in a number of different sites (five Monitor, four Qualpacs and five DySSSy).

The next stage of the design then involved undertaking comparative evaluation of the different systems. This took place within the framework of a structured evaluation matrix, collating and analysing data from the individual case studies. This matrix comprised three distinct levels of both investigation and analysis (see Figure 1). Within



**Figure 1** The evaluation matrix applied to analyse and compare data from individual case studies.

the investigation, the emphasis was on evaluating the context, experiences and outcomes of implementation (Weiss 1972), whilst in the analysis, the focus moved from reporting on specific cases, to identifying key themes and

**Table 1** Comparison of the three nursing quality systems studied (Monitor, Qualpacs and DySSSy) on key dimensions reflecting their philosophy, structure and application in practice

	Monitor	Qualpacs	DySSSy
Origin	Developed in UK, derived from American Rush-Medicus system.	Developed in USA, not anglicised. Derived from Slater Nursing Competency Rating Scale.	Developed in UK, as part of the Royal College of Nursing's quality programme.
Underlying framework	Underlying framework of nursing process and patient needs; focus on the process of care as care is in progress. Designed for use in acute medical and surgical wards.	Underpinned by two sets of values: beliefs concerning those activities which constitute acceptable nursing practice; the concept of professional judgement. Applicable to any nursing setting.	Based on theories of continuous quality improvement, viewing quality as a patient-centred, practitioner-led activity. Focus on problem-solving and topic-specific quality improvement. Applicable in any setting.
Structure	Master list of over 250 criteria, arranged into two main sections: Patient Monitor and Ward Monitor; Patient Monitor organized around nursing process. Each item rated on yes/no scale.	68 items arranged on six sub-scales. Fixed standard for comparison — care expected of a first level staff nurse. Each item rated on a five-point scale.	No pre-formulated standards or criteria. Based on a three-stage cycle of defining quality, measuring and comparing and taking action to improve. Cycle completed for individual topics.
Implementation in practice	Two assessors, patient sample of 3–5 patients per dependency group (1–4). Range of data collection methods. Final score out of 100%.	Two assessors, non-participant role. Observe care given to a sample of patients (5 or 15%); then indirect data collection from patient records. Final score out of 5.	Groups comprising 4–6 practitioners work with a trained facilitator to negotiate the quality cycle; meet approx. 1 hour every 2–4 weeks. Responsible for all stages of cycle.

finally to proposing the key success factors of implementation (Weiss & Rein 1969).

In the third and final stage of the design, an attempt was made to validate the findings by comparing them against both the researcher's own experiences within a separate 2-year case study and the experiences of 14 quality facilitators and co-ordinators involved in implementing quality systems in practice.

### Data collection and analysis

The methods of data collection and analysis employed were specific to the stages of the study design, although broadly involved the application of a range of qualitative approaches. Data relating to the implementation of the three systems were collected through interviewing and observing staff involved in the implementation process. This included ward sisters, staff nurses, enrolled nurses, nurse managers, quality co-ordinators and facilitators working in 14 different hospitals throughout England. Data were analysed using a process of content analysis to produce descriptive accounts of the implementation process within each of the 14 sites.

At the third stage of the design, there were two main sources of data. The first involved the researcher taking on the role of implementing a quality system (DySSSy) in a case study site over a 2-year period. During this time, concurrent data collection took place, using a range of data sources, including detailed field notes, a personal diary, unstructured interviews and informal feedback from clinical staff. The second approach involved undertaking unstructured interviews with 14 other facilitators involved in implementing quality systems in practice. In both cases, data were analysed qualitatively through a process of content analysis to produce a descriptive account of the facilitator role in quality improvement.

### FINDINGS

Analysis of the data revealed a number of sequentially important factors within the implementation process. These factors are described as system-related, context-related, practical and philosophical issues of implementation.

#### System-related factors

At a preliminary level of analysis, it is possible to distinguish some general characteristics of the systems themselves. For example, Monitor appears to be the system with the most uniform or controlled implementation process, and as such it is also the system that tends to be the most top-down or centrally controlled in the way it is implemented. Assessment is typically undertaken by external assessors and nursing staff are more likely to

experience feelings of anxiety associated with the process of implementation. They are also more likely to undertake some form of preparation prior to the assessment exercise taking place. It is important to note, however, that follow-up action on the results of assessment is consistently reported with the system.

By contrast, Qualpacs, although generally classified as a pre-formulated quality system in the same way as Monitor, appears to be more flexible. This is apparent in the greater diversity observed during the implementation process, this ranging from almost total practitioner or decentralized control to total management or centralized control. Compared to Monitor, Qualpacs generally appears to be a less threatening experience for nursing staff, who are less likely to undertake any preparation prior to the assessment. This may relate to the different methods of data collection employed by the two systems, Qualpacs relying largely on non-participation observation of nursing care. However, in terms of follow-up action, this is less evident with Qualpacs than with Monitor.

DySSSy is the most flexible of the quality systems studied, this reflecting its underlying philosophy and structure, for example in terms of the level of on-going practitioner participation and the absence of any pre-formulated standards and criteria. However, these factors, and in particular the reliance of the system on group processes and facilitation, result in both complexity and diversity during the implementation process. Unlike the other two quality systems, it appears that improvements in quality can take place prior to completion of the implementation process.

At a superficial level, these system-related factors can be used to draw crude distinctions between Monitor, Qualpacs and DySSSy. However, one of the most obvious features of the data is the diversity within the implementation process for all three systems. With each system, evidence of both success and failure is apparent and a range of both positive and negative experiences are reported. This suggests that any one quality system can be implemented in different ways with different effects. In turn, this points to the importance of a number of underlying context-related factors, irrespective of the quality system being implemented.

#### Context-related factors

Within all three of the quality systems studied, a strong link is evident between the context, experiences and outcomes of implementation. In other words, the way in which the system is implemented appears to affect both the nursing staff's experiences and the outcomes of the programme.

Context-related factors focus on how and why the quality system was implemented and include the following: reasons for implementing the system; the scale and formality of the implementation process; the role and func-

tion of programme implementers and facilitators; key groups targeted during implementation; and the level of feedback and action.

Generally speaking, the most successful quality programmes are those where the system is applied to support change and improvements in practice, rather than in response to some form of external directive. This appears most likely to occur when the programme is implemented and co-ordinated by individuals who are perceived as both approachable and credible by clinical staff. This typically involves support staff, with links at a clinical level, who can approach the implementation process on a less formal and relatively small-scale initially. With practitioner-based systems such as DySSSy, the facilitators play a crucial role, generally acting in a more interactive role than the programme co-ordinators working with a pre-formulated system.

However, the successful execution of the facilitator role is itself dependent on factors such as the individual's choice and commitment to take on the role, their position within the organization, prior knowledge and experience of quality in general and the specific quality system being implemented, the method of working with the group and the extent to which ownership is transferred to the group.

In order to promote acceptance of the quality programme, it is important that clinical staff are targeted during the implementation process, in relation to both acting as assessors and encouraging their involvement in the programme. Again, this determines the extent to which a sense of ownership for quality is devolved to all staff who influence the quality of care. However, with both of the two pre-formulated quality systems studied there was a general failure to target the quality programme to clinical staff below a ward sister level. With DySSSy, the representativeness of the standard setting group is a key factor, as is the level of communication from the group to all those who will be affected by the standard.

Feedback and subsequent action on the results emerges as one of the key factors determining how worthwhile the quality programme is judged to be. In the Monitor sample, action was more likely to occur when nurse managers were involved in the feedback of data to clinical staff. In the Qualpacs sample, follow-up action on the results of assessment, leading to subsequent perceived improvements in the quality of patient care, was less commonplace than with Monitor. With DySSSy, improvements in care may be identified prior to progressing through the entire quality improvement cycle. However, completion of the audit and action phases does provide a powerful motivating factor, in terms of consolidating improvements and ensuring continued commitment to the quality programme.

The influence of contextual factors such as those described above in determining how a quality programme works can be illustrated by examples from the three systems studied. For example, the sites that were apparently

most successful in implementing DySSSy had committed and enthusiastic facilitators with some previous experience of quality improvement. These facilitators were functioning in either clinical practice or support posts, the latter having a recognized responsibility for quality.

The groups were generally representative of the ward team and perceived the topic they were working on as highly relevant to their practice. Communication systems were established to provide information and attempts were made to involve as many people as possible in the quality programme, including temporary and untrained members of staff. Auditing and action on the results of audit had been initiated and the group were committed to the continued implementation of the quality system. This level of commitment was reflected by the level of organizational support for quality, to the extent that in both sites the quality system had been implemented on a wider basis throughout the organization.

By contrast, in the sites where implementation was less successful, strong organizational commitment and explicit support for this type of practitioner-based approach were lacking. The facilitators lacked any previous knowledge, experience or organizational responsibility for quality, and one in particular was mostly unconvinced as to the benefits of implementing the quality system. The standard setting groups when formed were not widely representative of the ward team and failed to establish clear lines of communication with their non-standard setting colleagues. Consequently, their activities remained isolated from mainstream practice and their progress through the quality improvement cycle was either incomplete or resulted in only limited action (see Table 2).

Similar diverse experiences can be observed within the sites implementing pre-formulated quality systems, particularly amongst the four sites working with Qualpacs. Here, the relationship between the context, experiences and outcomes of implementation is marked, as illustrated in Table 3. As the implementation process becomes less practitioner-focused and more centrally controlled, so staff experiences become increasingly negative and positive programme outcomes less obvious. Although less extreme, trends of a similar nature are also evident with the Monitor sample (see Table 4).

### **Practical issues in implementation**

Following on from these contextual factors, it is possible to identify a number of practical pointers which should help to guide a more successful implementation process.

In the early stages, it is important that staff at all levels of practice are informed about and prepared for the quality programme, this helping to create a sense of involvement and ease anxiety. Programme implementers and co-ordinators have an important role to play in terms of creating opportunities for staff to become involved, this

**Table 2** Summary of the relationship between the context of implementing DySSSy, nursing staff's experiences of the programme and programme outcomes

Site*	Context	Experiences	Outcomes
Dallas	Committed facilitators. Representative group. Leadership of sister. Involvement of others. Good communication. Completion of audit and action. Organizational support.	Staff keen. Committed to topic for improvement. High level of group trust. Devolved ownership of standard.	Positive audit results. Action implemented. Definite benefits for patients and nurses identified.
Delhi	One facilitator with experience. Representative group, but no leader. Involvement of others. Initial communication problems. Completion of audit and action. Organizational support.	Staff keen. Committed to topic. Cohesive team. Peaks and troughs of motivation and morale. Dependence on main facilitator. Standard used by all staff.	Positive audit results. Action implemented. Widespread improvements in patient care identified, along with benefits for students.
Dieppe	Committed facilitators. Representative group; staff nurse leader. Involvement of others. Good communication. Completion of audit and action. Organizational support.	Limited preparation; lack of confidence. Questions over relevance of topic. Difficulty making time for meetings. Standard used by all staff.	Positive audit results. Level of standard raised. No changes in practice of trained staff. Awareness-raising benefit for students.
Dordogne	Facilitators with little knowledge/experience. Non-representative group. Lack of leadership. Minimal involvement of others. Completion of audit by facilitator. Conflicting messages from the organization.	Difficulty motivating staff. Complexity of topic questioned. Difficulty making time for meetings. Increasing dependence on facilitators. Failure to devolve ownership of standard.	Audit on small sample; positive results. Limited action. Non-members perceiving little impact of standard.
Dublin	Facilitators lacking background knowledge. Non-representative group; initial lack of leadership. No external colleagues involved. Poor communication. Failure to complete. Organizational commitment unclear.	Group initially lacking direction and clarity of purpose. Branched off from topic. Low morale on ward. Conflict over proposed changes. Non-members not fully informed/involved.	No audit results. Group members positive about involvement. Identified improvements in patient care.

\*All of the case study sites are described using fictional place names.

being most likely to occur if the co-ordinators are working in support posts with direct links into clinical practice. Other approaches to increasing involvement and relieving anxiety include the use of clinically credible assessors, who can demonstrate an understanding of the ward situation, for example through a process of peer review. With systems such as DySSSy, the facilitators play a key role, both in terms of motivating and educating staff, and transferring the knowledge and skills for quality improvement. It is essential, therefore, that individuals selected to take on the facilitator role possess the necessary level of commitment, knowledge and skills.

With all quality systems, there is a need for constructive and meaningful feedback of data to all staff involved in influencing the quality of service. This implies all staff, both nursing and other disciplines, trained and untrained, permanent and temporary members of staff. Those quality programmes that target only particular groups of staff, for example ward sisters or staff nurses, are likely to be limited in terms of their impact and potential. Equally important is the need for support to implement action for quality improvement. Failure to act and complete the quality cycle is a major criticism of many existing quality programmes. The nature of data collected appears to influence the

**Table 3** Summary of the relationship between the context of implementing Qualpacs, nursing staff's experience of the programme and programme outcomes

Site*	Context	Experiences	Outcomes
Qatar	Informal introduction. Co-ordinated at HA level by support nurse. Peer review, opt in programme; controlled by ward sisters. Clinical staff assessors. Confidential feedback.	High level of ward sister involvement; less involvement for staff nurses. Generally positive about assessment. Only half implemented follow-up action.	Worthwhile. Supporting evidence that changes in practice are effective.
Quebec	HA implementation. Co-ordinated by senior nurses' group. Current request system for assessment. Senior nurses and ward sisters as assessors. Confidential feedback.	Generally positive. Some staff would have liked more involvement. Doubts about the request system in practice. Not all involved in action.	Mostly worthwhile. Some improvements in patient care identified.
Queensland	Top-down, HA implementation. Co-ordinated by district quality nurse. Attempts to involve clinical staff. Ward sister assessors. Feedback to staff and management. Nurse managers responsible for action.	Generally positive about assessment. Prolonged wait for feedback. Concern that results would go to management.	Generally worthwhile, although difficult to comment without feedback. Only those who had received feedback able to identify improvements in patient care.
Quito	One-off hospital level programme. Introduced by director of nursing services; co-ordinated by a senior nurse. Senior nurse assessors. Feedback via senior nurse manager to ward sisters.	Mostly negative experiences. Minimal involvement. Anxiety amongst staff nurses. Half not involved in changes at ward level. Perceived management failure to act.	Mixed feelings on usefulness of programme. Few improvements in patient care. Limited impact. Negative effect on staff morale.

\*All of the case study sites are described using fictional place names.

ease with which it can be interpreted and translated into action. Monitor, for example, because of its more formalized structure, produces action lists that can be interpreted with relative ease and used as the basis for implementing corrective action, although nurse managers appear to have a key role to play in supporting this process. With the other, less formalized quality systems, the interpretation of data appears less straightforward and the relationship between feedback of data and action is generally a more complex one.

### Philosophical issues in implementation

Underpinning the system-related, contextual and practical issues of implementation, two key factors can be identified which ultimately determine the philosophy and subsequent impact of the quality programme. These are defined in terms of ownership for quality and action to improve.

### Ownership for quality

Ownership for quality implies transferring a sense of quality to all staff who have some input into the quality of the service under consideration. In this sense, promoting ownership involves more than simply providing staff with information. Instead, it is about encouraging meaningful participation in the quality programme and giving staff a sense of control over the direction of the programme. From the findings of this study, it appears that this is the level of responsibility and involvement that clinical staff want to take on board.

As a concept, ownership can be seen to relate closely to what may be described as the 'human dimension' of quality, since it is concerned with creating a culture where quality can form an integral part of people's work within an organization where all employees are valued, respected and trusted. This in turn links to contextual factors, such as why a quality programme is implemented, how it is implemented and by whom. The more centrally controlled

**Table 4** Summary of the relationship between the context of implementing Monitor, nursing staff's experiences of the programme and programme outcomes

Site*	Context	Experiences	Outcomes
Madrid	Small-scale, informal implementation. Co-ordinated by quality support team. Ward preparation. Non-clinical assessors. Feedback to ward sister and manager. Action implemented by ward team.	Positively accepted and supported by the ward team.	Programme worthwhile. Definite improvements in patient care identified.
Melbourne	HA implementation; then devolvement to hospital level. Co-ordinated by senior support nurses. Selling exercise, plus ward preparation. Ward sister assessors. Feedback to ward sister and manager.	Mostly satisfied. Anxiety prior to assessment. Some negative experiences of feedback initially.	Programme worthwhile. Some improvements in patient care.
Miami	Implementation from district HA level. Led/co-ordinated by assistant chief nurse. High profile selling. Clinical nurse managers as assessors. Confidential feedback. Agreed action between assessors/ward staff.	Diverse feelings and experiences, ranging from positive to very negative, at all stages of implementation.	Worthwhile. Some improvements in patient care. Evidence that failure to act on results had caused frustration and loss of faith.
Montreal	One-off pilot study. Led/co-ordinated by nurse managers. Study days and ward preparation. Senior nurse assessors. Confidential feedback. Assessor involvement in action planning.	Varied experiences, dependent on level of preparation, view of assessors and experience of feedback. Evidence of inter-ward rivalry.	Worthwhile. Few improvements in patient care. Negative effect of feedback and bitterness amongst staff.
Munich	RHA decision to implement Monitor. Co-ordinated by HA senior nurse. Selling exercise. RHA staff and senior nurse as assessors. Confidential feedback. Assessor involvement in action planning.	Generally negative experience. Inadequate preparation. Questions over clinical credibility of assessors. Triviality and closed nature of feedback. Not all involved in action.	Mostly worthwhile. Few improvements in patient care. Low profile of quality. Negative effect on staff morale.

\*All of the case study sites are described using fictional place names.

and formal the programme, the less likely it is to target practitioners and devolve ownership for quality.

Generally speaking, ownership is more readily promoted by bottom-up approaches to implementation, notably the practitioner-based methods which, by virtue of their practitioner focus, are in a strong position to promote and cascade a sense of ownership for quality. Pre-formulated systems do display some limitations in this respect in that they rarely seem to devolve ownership beyond the ward sister level. However, even with the prac-

itioner-based approaches such as DySSSy, ownership is not a concept that is automatically or easily transmitted from one group to another. As evident from the cases described, both the facilitators and the standard setting group play a vital role in promoting and controlling the transfer of ownership.

#### *Action to improve*

Distinct from the theme of ownership is the issue of promoting action to improve quality. This relates clearly to

contextual factors such as the feedback of data and support, at both a practical and an organizational level, for action to improve quality. At an organizational level, ongoing leadership and support are essential to maintain the profile of quality and to ensure action for improvement on a continuous basis.

With the pre-formulated quality systems, a number of distinct groups contribute to this theme of promoting action to improve quality. These include the programme implementers/co-ordinators, the assessors and nurse managers working on the wards where assessment takes place. Programme implementers determine how data are utilized and with whom they are shared, and the level of organizational support for changes that are required. The assessors influence the process of feeding back data to practitioners, determining, for example, how constructively and critically this takes place. Nurse managers have a role to play in supporting action at the clinical level, a role that is enhanced when they are involved in the feedback and action planning stages of the quality cycle.

Within practitioner-based approaches such as DySSSy, there is some evidence that improvements begin to happen before completion of the quality cycle. However, there are observable benefits of completing the cycle in terms of sustaining change and quality improvement. In this respect, support from the facilitators, the leader of the ward team and the organization as a whole is essential.

#### *The relationship between ownership and action*

Unlike the concept of ownership, action does not appear to relate directly to bottom-up approaches to implementation. In fact, when the two pre-formulated quality systems are compared, action is more evident with the top-down implementation associated with Monitor. This might initially suggest an inverse relationship between ownership and action and raise the question of whether the more top-down quality systems promote action to improve more readily than bottom-up approaches. However, this proposed explanation is not supported by the Qualpacs examples, where the site with the most top-down implementation and the least practitioner ownership of quality did not report more follow-up action on the results of assessment.

Alternatively, therefore, it may be that the nature or type of data derived from the different quality systems is in itself an important factor determining the extent to which action can be initiated. As previously indicated, Monitor, because of its fairly rigid structure, produces the most objective data which can be interpreted and understood with comparative ease, although management action may be necessary to carry through the required actions. This may lead to some improvements taking place, although the overall level of practitioner ownership for quality may be relatively low.

By comparison, Qualpacs produces less objective data,

for although data are collected specific to set items on the rating scale, they are actually interpreted and rated on the basis of assessors' observations. This introduces a level of flexibility into the process of data collection and consequently data tend to be more process focused and less easy to interpret than the absolute scores of Monitor. In turn, the process of translating data into action becomes increasingly complex and practitioners are generally less likely to accept the feedback of results at face value. With DySSSy, yet more flexibility is evident in the process of data collection, analysis and interpretation, since there are no fixed rules determining what data are collected, when, from where and by whom.

Perhaps contrary to expectation then, there does not appear to be a direct relationship between ownership for quality and action to improve. If anything, it seems that a somewhat dichotomous relationship can exist between the two concepts. Some systems seem to be better at promoting ownership for quality, whilst others can generate action but without a strong sense of ownership. The questions that need further consideration are why this dichotomy emerges and how the gaps between ownership and action can be bridged. These were the types of issues considered in more detail in the final stage of the research.

#### **Comparing experiences of implementation**

Having identified what seemed to be key success factors influencing the implementation process, the final stage of the research attempted to validate the emerging findings by comparing them against more detailed experiences of implementation in practice. These experiential data served to reinforce the findings emerging from the earlier part of the study. They also provided further insights into how quality programmes develop and offered an explanation as to why the apparent dichotomy between ownership and action may exist.

The facilitators studied were mostly working in roles where they had initially focused on promoting ownership, particularly with systems such as DySSSy. Often the facilitator role was one that had evolved through a process of 'trial and error' and it typically involved starting implementation at a local level and then gradually moving to address wider organizational issues. This route did not appear to be particularly problematic in the early stages of implementation, as this is an important time for generating enthusiasm and building relationships to promote ownership.

However, having generated motivation and momentum, there is a strong need to be able to protect and support it, something which is very difficult without the required level of organizational commitment and support. That problems of this nature are a fairly common experience amongst the facilitators studied reflects the relative lack of knowledge about the role of facilitators in quality improve-

ment and the fact that most of the learning about the role to date has taken place on a trial and error basis.

Overall, the facilitators' experiences of quality reinforce the importance of both bottom-up ownership of quality and top-led support for action and change. In this respect, action has to be interpreted as a wide-ranging organizational concept, which is concerned both with local action on the results of assessment and more sustained action for the continued maintenance and development of the quality programme. To achieve this level of action, organizational support and leadership for quality must be present from the outset of the implementation process.

## DISCUSSION

Returning to the original question of what makes quality systems work, it appears that ownership for quality and action to improve are the two key factors influencing the successful implementation of nursing quality programmes. However, it is also apparent that most present day programmes are failing to address the two concepts equally, often emphasizing one to a greater extent than the other. Ownership is clearly promoted by the more bottom-up approaches to implementation, which often generate considerable motivation and enthusiasm amongst practitioners. However, this practitioner energy must be channelled and utilized in an effective and efficient way. It is in this respect that a meaningful and well-communicated strategy of action for quality improvement is essential. This requires data which can be interpreted and translated into action at the level of practice and, above all, explicit organizational commitment to support action for improvement. This implies a need for top-led management involvement and leadership of quality programmes. To date, however, this type of management involvement in nursing quality programmes has typically been associated with top-down approaches to implementation.

This illustrates the tendency within nursing quality to adopt linear models of implementation, which may be either top-down or bottom-up. Both of these approaches appear to be problematic or, at least, limited in their potential to improve quality. For example, with quality systems that emphasize ownership (such as DySSSy), implementation may start very firmly from the bottom of the organization and then encounter later difficulties securing the level of organizational commitment and support required to sustain the quality programme. Conversely, implementation of quality systems that begins in a top-down way can generate some short-term action, but at the expense of staff confidence and morale and the overall sense of ownership for quality.

In order to fulfil the true potential for improvement, the findings indicate a strong need to marry the concepts of ownership and action within nursing quality programmes.

They also highlight the vital role that programme co-ordinators and facilitators can play in this process. This will require more integrated quality programmes and approaches that target all levels of the organization in a more spontaneous and cohesive way, rather than simply proceeding with implementation in a linear approach, whether that is from the top of the organization downwards, or from the bottom of the organization upwards. From the evidence of this study, there are few examples to date where such flexible and innovative approaches to implementation are being employed. There are also indications that the facilitator or programme co-ordinator role is one that has developed in a mostly unstructured and uninformed way to date, this adding yet further complexity to the implementation process.

## CONCLUSIONS

In considering the findings of this study, in particular the need for more integrated, organization-wide approaches to quality, the results have implications on a number of levels. Within the field of nursing quality, they highlight a continued need to evaluate the range of quality systems being applied and to build on existing knowledge about the validity and reliability of systems such as Monitor, Senior Monitor, Qualpacs (Redfern & Norman 1994) and DySSSy (Kitson *et al.* 1994).

However, it is within the context of wider developments in health care quality that the findings hold perhaps their greatest significance. More than 5 years into the health service reforms, there is a clear focus on promoting clinical effectiveness in health care. This involves identifying best practice, for example through systematic review and the production of clinical guidelines, and then ensuring that best practice is actually implemented and evaluated, an activity that can be promoted through the medium of multiprofessional clinical audit (Haines & Jones 1994). Throughout this process, there is a clear need to focus on factors such as getting people to work together in teams and encouraging practitioners to change their practice. Consequently, issues relating to implementation can be seen to take on an even greater significance.

Within the context of the two key factors of ownership and action, ownership is an important consideration in terms of making change happen at the clinical level. This requires the creation of a culture which promotes and fosters change and improvements in practice, for example through enabling meaningful practitioner involvement and participation in quality, and through devolving control of clinical quality to the level of practice. However, this clinically led improvement and change must take place within a clear organizational strategy for action to improve quality, a strategy which must be explicitly led and supported from the top of the organization.

In order to embrace the two concepts of ownership and

action, the findings of this study clearly highlight the need to move away from linear, and often hierarchical, structures in the organization of quality programmes, structures which in some cases have been reinforced by the early developments in uni-professional audit. Instead, quality needs to be viewed as a dynamic and organic concept, located within a general context of organizational development and change (Jessee 1981, Luke & Boss 1981, Giovannetti *et al.* 1992). This has clear implications, both in relation to the continued development of collaborative approaches to clinical audit (Department of Health 1993a, 1993b), and in terms of the integration of clinical audit into the quality management structure of the organization as a whole.

Given the complexity of achieving such integration, facilitators may have a vital role to play in developing more organic approaches to quality, fulfilling a central role as catalyst and change agent, and promoting the necessary co-ordination, networking and support of quality improvement initiatives. However, the role is one that is relatively uncharted to date, particularly beyond the realms of nursing quality, and there is an obvious need for clearer information on facilitation generally, and in relation to specific factors, such as the selection, training and support requirements of the role.

As the science of quality in health care continues to develop, fundamental principles arising from the key concepts of ownership and action, for example team-work, facilitation, support and organizational commitment to quality improvement, will be crucial to ensuring that the implementation process is managed as efficiently and effectively as possible. Attention to getting this whole process of implementation right is crucial if we want to achieve our ultimate goal of ensuring that quality programmes in health care have a positive impact on patient outcomes and patient experiences of care.

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