

AN EVALUATION OF TOTAL QUALITY  
MANAGEMENT PROJECTS IN THE  
NATIONAL HEALTH SERVICE

A thesis submitted for the degree of Doctor of Philosophy

by

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This thesis sets out to account for the relative failure of Total Quality Management (TQM) experiments installed in the NHS between 1990 and 1994. In the study, only two NHS pilot sites in a large sample of hospitals and community services were found to have made significant progress on implementing TQM. Whilst most of these TQM sites made more progress on structured quality improvement than a group of non-TQM NHS quasi-controls, all were outperformed by two commercial TQM companies in the sample. The analysis is based on 850 semi-structured interviews carried out with a wide range of staff as well as documentary analysis, non-participant observation, and feedback workshops at selected sites. In accounting for the results, the thesis tests eight propositions about the application of rationalistic private sector models of change to a complex public sector organisation like the NHS. The analysis demonstrates the limitations of such approaches when they are not adapted to take account of the technical, systemic and behavioural differences between the two sectors. It can also be said that funding for the NHS experiments, whilst substantial, was an order of magnitude lower than that in the commercial companies. Similarly, support both centrally and locally in the NHS was not sufficient to provide for rigorous pre-planning and monitoring of progress. Numerous other changes being made at the same time were mostly incompatible with TQM principles and hindered progress on coherent change. Leadership commitment to, and understanding of, TQM was much weaker in the NHS than in the commercial companies. The requirement to move towards collective, user-defined, measures of quality met with opposition from staff groups who were used to their own individualistic and professional conceptions of quality. This led to NHS TQM sites being unable to demonstrate the organisation-wide changes that are said to be hallmarks of TQM.

## EXPLANATORY NOTE

The initial research on which this evaluation is based was undertaken for the Department of Health by a research team from the Centre for the Evaluation of Public Policy and Practice at Brunel University. Thus, there was some collaboration on aspects of the research between the author and the two other members of the team, Professor Maurice Kogan and Mary Henkel. This note describes the extent of that collaboration.

The author directed the research project and worked full-time on it for three years. He designed the interview schedules, the computer analyses and the progress rating tools described in the thesis as well. He also undertook 80% of the fieldwork.

In the thesis, the author is wholly responsible for the work on models of organisational development, the analysis of the literature, and the reports of fieldwork. Prior joint work by the research team on alternative models of quality assurance has been excluded. Any remaining joint analysis that appears in the thesis is referenced in the text. This principally concerns the definition of modes of quality – *technical*, *systemic* and *generic* – jointly developed by the three researchers.

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## Chapter 1 – Introduction

This thesis evaluates the results of Total Quality Management experiments funded by the Department of Health and undertaken between 1990 and 1994 in a sample of 31 hospitals and community services in eight District Health Authorities throughout England. A detailed discussion of TQM is undertaken in Chapter 3 but it may be summarised here as *'an integrated, corporately-led programme of organisational change designed to engender and sustain a culture of continuous improvement based on customer-oriented definitions of quality'*<sup>1</sup>.

The Department of Health's initiative provided a test of the nature of quality and the extent to which it can be shown to enable organisational and professional change. It also enabled an analysis of the extent to which particular forms of quality improvement are transferable between private and public sector organisations given their different structures, systems, and value bases.

### ***Data collection and evaluative criteria***

The progress of TQM implementation at the NHS TQM pilot sites was compared with progress at two commercial companies that were implementing TQM and four NHS sites which, whilst pursuing various quality initiatives, were not implementing TQM. Sites were evaluated using criteria derived principally from an analysis of the literature on TQM. These criteria were supplemented by others derived from the objectives set for themselves by the sites even if these were not, strictly speaking, TQM objectives.

The main source of data consisted of semi-structured one-to-one interviews of about one hour's duration with a broad range of staff at each site. In all, 750 interviews were carried out at the NHS sites and a further 100 at the commercial locations. The main NHS TQM sites were visited three times and the quasi-controls twice at yearly intervals during the experiments. Contemporaneous notes were taken, written up and analysed using a computer-based text analysis package. A large amount of documentary material was also gathered and analysed. Data

from these two sources were augmented by some limited non-participant observation and from feedback workshops at selected sites.

### ***Accounting for the results***

The detailed empirical data for each of the three sub-samples are presented in Chapters 5-7 and analysed on an inter- and intra-group basis in Chapters 8 and 9. There was clear evidence of quality improvement at all locations and two, in particular, made substantial progress in implementing most of the elements of TQM. However, when measured against rigorous TQM criteria, no NHS TQM site demonstrated the range and depth of changes one would expect from a sustained three-year TQM programme. These changes would include integrated, corporate-wide, measured, customer-driven quality improvements, supported by staff at all levels and in all disciplines. By this test, one would have to say that the experiments were a relative failure.

How then is one to account for the results? This thesis sets out to test a series of propositions that attempt to explain both the overall failure of the experiments and the variation in performance within and between sites. The propositions are divided into three areas – the nature of the NHS including characteristics of structural and social organisation, and the required services; the design of the change process; and installation of different quality improvement approaches.

### ***The origins of TQM and the nature of the NHS***

Although TQM had its origins in the manufacturing sector, it has made a successful transition to a range of private-sector service industries. This transition has been achieved by developing new models of TQM to account for the essential differences between the two sectors.<sup>2 3 4 5</sup> However, these models have been developed to improve the quality of commercial products and services and have not had the same opportunity for rigorous testing in an organisation like the NHS with its diverse range of welfare-based services. For TQM to be successfully installed in the NHS it would have to be able to take account of the specific nature of the organisation and its wider environment.

***The first proposition is that the NHS TQM pilots that made the most progress in implementing TQM would be those whose approaches to TQM had been adapted to encompass the diversity of services provided by the NHS.***

For example, one could hypothesise that TQM would find it easiest to make an impact on relatively straightforward clinical services where there was good agreement about how best to design, deliver, and evaluate the services. In contrast it would have the most difficulty in making the transfer to services where the phenomena were not well understood, or where there was substantive disagreement about how the services should be delivered, or what would constitute appropriate measures of quality.

In order to secure wholesale commitment to a single model of TQM and a common definition of quality, most models of TQM rely on strong and unified managerial leadership. In the commercial world, managerial hierarchies are the norm and it is easier to mandate change through accepted top-down policies and practices. Typically, TQM has been most successful in private sector organisations where there is a history of corporate planning and proactive management in a competitive profit-driven environment.

The NHS, in contrast, is an organisation shaped predominantly by professionalism, specialisation and individual conceptualisations of service. It has a tradition of decision-making based on negotiating consensus between issue-specific, multi-disciplinary groups of administrators and autonomous professionals. The process of change is often diffuse rather than explicitly top-down or bottom up. Although the NHS reforms from the 1960s were designed to strengthen general management and inject an element of competition, many staff in the NHS continue to take an explicit welfare-oriented and non-competitive stance to service provision.

***A second proposition is that it would be difficult to establish TQM in the NHS through traditional TQM approaches that depend on rationalistic views of organisational change and that are based in large measure upon a single, customer-driven, definition of quality. A multi-modal, mixed model allowing***

*for sensitivity to the intrinsic characteristics of the organisation could be inferred to be more effective.*

A similar point can be made about organisational structures. Most commercial organisations have relatively simple and straightforward structures where, although there are different levels and functions, it is clear who has accountabilities within accepted definitions of quality. Some hospitals have, by commercial standards, exceptionally varied and complex structures. One hospital in the NHS TQM sample had over 30 directorates that ranged from physiotherapy through imaging services to nuclear medicine – each with its own culture, knowledge base, technical language, and sense of priorities.

*The third proposition is that the problems of providing an integrated structure for managing quality are magnified in the NHS with its complex structures and more diffuse ways of operating.*

It is possible to distinguish between those disciplines with a high degree of technical content (technicity) where there are well-defined processes and agreed units of judgement, and those disciplines with weakly-framed procedures characterised by low technicity, multiple and contested knowledge assumptions, and individual units of judgement.

*The fourth proposition is that the degree of technicity affects the way TQM-type initiatives are accepted by staff in different disciplines.*

One could hypothesise, for example, that departments with a high degree of specialisation and technical content would base their judgements of quality primarily on their own professionally derived technical and professional definitions. The question would then be whether this would work against installation of organisation-wide definitions based on customer perceptions.

In contrast, it could be that a non-technical area such as customer relations would have little by way of systematic knowledge or methods on which to rely. In this case, quality criteria would consist of more general appeals to common sense notions of

consumer satisfaction leading to universal rather than esoteric or specialist formulations. As they became more sophisticated in their use of technical quality improvement models (for example Statistical Process Control) they might find themselves in a position to challenge accepted notions of quality held by the traditional professional groupings.

### *The design of the change process*

It is clear that in choosing to conduct experiments with TQM, which follows structured pre-planned sequences of implementation, the Department of Health took a rationalistic view of policy analysis and formulation. They assumed that pre-planning, setting of objectives and pre-determined sequences of change would work.

***The fifth proposition is that rationalistic models of change, of which TQM is a prime example, are less suited to public sector organisations such as the NHS. Primarily this is because of the severe social and medical problems to be faced; complex and diffuse organisational structures and cultures; multiple stakeholders with conflicting views about both means and ends; and difficulties in establishing agreed measures of performance, particularly around clinical outcomes.***

***The sixth proposition is that where rationalistic approaches are chosen, their implementations are weakened when the planning models and planners' roles are not consistent with a rationalistic approach or when there is little or no determined follow-through on plans.***

### *Installation of different quality improvement approaches*

The mode of installation is also of prime concern and there are several ways that the required changes might be brought about. As described in Chapter 2, some of the key formulations include:



- bottom-up, top-down structures
- forward mapping, backward mapping
- normative re-educative, coercive techniques

There are many different quality improvement approaches. Most forms of TQM, particularly those of Crosby<sup>6</sup>, Deming<sup>7</sup>, and Juran<sup>8</sup> are distinctly top-down and forward mapping in formulation. In this study, two experimental sites followed Crosby or Crosby-like approaches but others pursued more generic models designed by management consultancy companies (see Chapter 5). Deming, a major force in the quality movement for over 50 years, had surprisingly little support in the early stages of the pilot projects but several places re-launched their initiatives using his ideas after failures with other models. Some approaches followed explicit bottom-up quality circle-like schemes but never reached the comprehensive organisation-wide commitment to a single approach claimed for TQM.

***The seventh proposition is that quality improvement schemes are most effective when they follow design and installation phases based on a helical sequence of unambiguous top-down commitment and genuine bottom-up engagement with staff, and a planned mixture of forward and backward mapping.***

Most TQM programmes stress the need for greater focus on the customer – going as far as to require that there should be a single definition of quality based on the customers’ perceptions of their requirements. In some schemes, and certainly in public sector adaptations, there is a requirement to move further, from customer focus to customer ‘empowerment’<sup>9</sup>.

***The eighth proposition is that there is a potential contradiction in as much as TQM is required to generate empowerment of users so that they can contribute to its design and evaluation but, to contribute, the users have understand TQM’s increasingly sophisticated language and technicity.***

Turning now to the next two chapters, Chapter 2 analyses general models of change and Chapter 3 looks in more detail at the origins of TQM and its migration from manufacturing through commercial service organisations to the NHS. Taken together, they provide a framework for comparing progress on installation in the three samples – NHS TQM sites, NHS non-TQM sites and the two commercial organisations – in Chapter 8. The analyses also allow for an in-depth look at the variability in the progress made at the NHS TQM sites (Chapter 9).

## **Chapter 2 – Conceptualising Organisational Change**

### ***Introduction***

One of the propositions in Chapter 1 was that the Department of Health's choice of TQM reflected a rationalistic view of organisational change and that this choice would have specific consequences given the nature of the NHS and the services it provides. This chapter reviews some of the relevant analyses of organisational change. It demonstrates that a pre-programmed implementation such as orthodox TQM, in theory at least, would be less suitable for an organisation such as the NHS unless it was modified to take account of the organisation's specific characteristics.

This chapter also examines some of the more important issues of planning and the planner's role. This is particularly important given the establishment within TQM of quality manager and facilitator posts where the individuals may play a number of different roles from manager through systems' designer to planner or change agent.

### ***The nature of social problems***

Social problems are complex and notoriously resistant to change, even where they have been exhaustively researched and careful planning has preceded the formulation of economic and social policies. In this sense it was always going to be difficult for the Department of Health to make an impact on some of the more complex areas of service provision – even had they been able to ensure that the requisite pre-planning took place at the experimental sites.

One of the main difficulties is the level at which any analysis of the problem is to be carried out. For the policy maker, it may be tempting to conceptualise the problem as one where the issues are obvious, short-term, and concrete, and for which there are clear explanations and ready remedies. However, as Rittel<sup>10</sup> points out one can distinguish between what he has called 'tame' and 'wicked' problems. Tame problems are relatively easily formulated; they can be tested true or false with good agreement; there is a sense of finality in that the end-point of an experiment is clear; and they can usually be abstracted from the environment and solved by simulation.

The 'wicked' variety, on the other hand cannot be so easily stated, since the solutions and problems are inextricably linked; the end point is ambiguous and open-ended; there is little agreement about appropriate criteria for analysing the problem or judging success; and the problem may not be capable of replication – it may allow only a 'one-shot' *in situ* attempt at rectification. Rittel's heuristic device is helpful because it points to the difficulties in gaining agreement about the depth and breadth of social problems and selecting appropriate models and methods for intervention. It also demonstrates that as the level of analysis goes deeper, so there is increasing uncertainty and ambiguity. In this sense, as Rein<sup>11</sup> has put it, one might expect to find that implementation of organisational change is little more than the continuation of political processes in another arena. It may be that the Department of Health underestimated the political consequences of attempting to introduce Total Quality Management in the NHS.

In the main, TQM assumes that most problems are of the tame variety. The leaders of commercial organisations, who have a mandate to affect change, are usually clear about the problem. It will invariably have to do with the cost, range, or quality of its products or services. This will be amply evident through goods being returned for re-work, warranty claims, customer complaints, and possibly loss of sales or market share. It will be fairly simple to analyse and quantify the problem. Appropriate systemic changes will be relatively easy to formulate in organisational terms, although individual behaviour of employees may well be more difficult to change.

However, many of the problems faced by the NHS are a good deal more complex. Some psychological and physiological conditions are not at all well understood and methods of treatment are contested. Applying orthodox TQM in these circumstances would clearly be difficult. Defining the criteria for judging successful treatment might be different for different groups, particularly those with different professional backgrounds; for those at different levels in the organisation and those on opposite sides of the point of delivery. Redesigning systems and processes to ensure consistency and reliability in outputs would be problematic, as would the TQM requirement to secure a single definition of quality and employ common methods of measurement in evaluating effectiveness.

## ***Modes of Planning***

The complexity of the problem is only one of a number of important situational parameters that would affect the design and planning of an intervention. A second parameter would be the certainty of the theory that underpinned the problem analysis and the relationship between the analysis and subsequent choice of policy or policies. In addition, three other parameters have been considered as important by Berman<sup>12</sup> – the potential for conflict over the policy's goals and means; the structure of the institution's setting; and the stability of the environment

Berman suggests that one can see two ideal-typical planning approaches. *Programmed* implementation entails a rigorously designed and specified implementation, in which one would assume that the problem analysis was correct, the plan sound, and any changes thereafter would be minor and predictable. Any problems that occurred during implementation would be seen as caused by ambiguity in, or conflict about, goals; or too many actors with over-lapping authority; or implementer resistance or ineffectualness. These are, therefore, thought to be best countered by specifying formal, detailed programme objectives; employing clear organisational structures with documented roles and authorities; and prescribing standards for outputs, complete with standard operating procedures. This description resonates with the prescriptive approaches to TQM specified by some of its best-known advocates Crosby<sup>13</sup> Juran<sup>14</sup> and Deming<sup>15</sup>.

The second approach, *adaptive* implementation, would assume that the implementation would help to clarify the problem situation and the policies designed to ameliorate it. There would only be minimal plans for implementation but much effort would have gone into securing agreement on the rules governing opportunities for multiple stakeholders to bargain and compromise on changes during implementation. It would be fully expected that policies and plans would change in the light of experience. Where problems arose in the implementation, they would be expected to come from rigid and over-specified goals; not involving the implementers in the decision-making process; and excessive control of implementers (front-line providers). A summary of the two policy situations is shown in Table 2.1 below.

Table 2.1: Types of Policy Situations (from Berman P, 1980, op. cit.)

<i>Situational Parameters</i>	<i>Situational Type</i>	
	<i>Structured</i>	<i>Unstructured</i>
<i>Scope of change</i>	Incremental	major
<i>Certainty of Technology or Theory</i>	certain within risk	uncertain
<i>Conflict over goals and means</i>	low conflict	high conflict
<i>Structure of Institutional setting</i>	tightly coupled	loosely coupled
<i>Stability of the environment</i>	Stable	unstable

To this list, one might add Rittel's distinction – a *programmed* implementation might suit 'tame' problems whereas the hypothesis would be that the more complex 'wicked' kind would need a more *adaptive* approach. A similar point could be made about modes of evaluation. Whilst a summative evaluation might suit a programmed implementation, it would probably not be sufficient for the managers of an adaptive implementation since they would be specifically looking to inform policy formulation and implementation by feedback to the implementers.

Analysis of the NHS on these five parameters would have favoured an adaptive implementation. The NHS consisted at that time of loosely coupled largely autonomous units, both at a macro and micro level. It was a period of momentous change and there was a high degree of uncertainty, about the changes generally, and about the TQM methodology in particular. As far as scope was concerned, major changes were certainly envisaged and one could reasonably have expected conflict between the staff, particularly professional staff, and local managers about both the philosophy and the implementation of TQM.

Berman offers this analysis as a heuristic device and, in reality, a combination of both programmed and adaptive approaches might normally be the best option. However, Berman points out that the important thing is that one should be clear about *what* one is doing and *why* and, further, carefully match the choice of implementation strategy to the situational context. Indeed, it might be necessary to frame an implementation as a programmed one and then switch to an adaptive one or vice versa. The switch could be in terms of the way the implementation was conceptualised at different organisational levels, for example giving more latitude to

one level than another, or starting with one variety and switching to the other as an implementation progressed<sup>16</sup>. This requires a well-developed understanding of the problem under analysis, as well as the culture and systems of the responding organisation.

This thesis argues that this is precisely what did not happen at most NHS TQM sites. The implementation strategies were, in the main, an unplanned mixture of programmed and adaptive. For example, much was made in the early days (both at the Department of Health and at pilot sites) of the virtues of TQM including its pre-planned sequence of implementation, but then most sites failed to follow this rigorously and floundered when problems developed later in the implementation. Further, as Chapter 5 of this thesis will show, the detailed organisational analysis that must precede a programmed evaluation only took place at two out of 31 sites. There was insufficient understanding by managers and front-line staff about why and how TQM was to be implemented. This, in turn, meant that when programmed implementations began to break down, a switch to adaptive implementations was too difficult, although some sites did make determined efforts to re-launch TQM after initial failures.

### ***Planning and the Planner's role***

Evidence for Berman's heuristic is forthcoming in analyses by other authors of the role of the planner. For example, research in the NHS on planning roles has identified five distinct styles that planners may adopt in response to different kinds of problem.<sup>17</sup> They are reordered in Table 2.2 on a continuum from Remote/Technical, to Involved/Political:

Table 2.2: Rathwell's five planner types re-ordered by technical v. political approach

<i>Platonist</i>	<i>Apparatchik</i>	<i>Facilitator/ Orchestrator</i>	<i>Advocate</i>	<i>Fixer/ Activist</i>
Planner who plans for the ideal organisational response	by-the-book administrator who adheres to the rules and regulations	supporter of planning but as a broker-mediator	acts as lobbyist by bridging the gap between clients and the organisation	Politician advancing own agenda

This continuum will be important later, when the response of different organisational groupings to the TQM initiative is examined. One could have predicted, for example, that non-clinical service managers would have preferred a systematised and formal organisational planning process, whereas those with more direct client contact would have valued a more individualised and adaptive model of planning. As will be shown, there was some evidence for this hypothesis but it did not entirely hold true because of confounding factors in the ways different medical groups responded. Before examining the issue of professionalism, it is helpful to link the narrower concept of planning roles with the wider organisational literature on organisational change.

Influential commentators on organisational change have identified different styles adopted by the main actors in change programmes. These styles can be also organised rather crudely, but nevertheless instructively, along a similar continuum which could be labelled Professional/Expert at one end and Agents of Social Control at the other (Table 2.3):

Table 2.3: Organisational analysts' definition of styles from the technical to the political

<i>Professional Expert</i>		←—————→					<i>Agent of Social Control</i>	
SCHON'S <sup>18</sup> Technical Expert  BAILEY'S <sup>19</sup> professional expert	ACKOFF <sup>20</sup> , BENISON AND CASSON <sup>22</sup> planning for the ideal organisation	SCHON'S competent technician working for a managerial professional and BAILEY'S planner as a mere technician	SYSTEMS SCHOOL, but including CHECK-LAND'S <sup>23</sup> soft systems approach	SCHON'S Reflective Practitioner style, surfacing conflict and negotiating joint meanings	NADER <sup>24</sup> and the Consumerist school	BAILEY'S Agent of social control; LIPSKY'S <sup>25</sup> Street-level Bureaucrat; NEWMAN <sup>26</sup> , designing out crime; GOODMAN'S <sup>27</sup> : notion of soft cops		
			ROWBOTTOM <sup>28</sup> : Social analytic tradition of non-judgemental analysis and feedback					

As is shown in later chapters, many of these styles were to be adopted by people both at the centre and at pilot sites during the experiments. Analysis of how, and



why, these styles were adopted is helpful in understanding why the experiments turned out in the way they did.

### ***Links to other theories and models of change***

In Berman's approach, and in the work of Rathwell and others, there are echoes of other much debated topics – top-down compliance versus bottom-up involvement; backward versus forward mapping<sup>29</sup>; normative versus coercive strategies<sup>30</sup>; rational analysis versus muddling through<sup>31 32</sup>; scientific management versus organisational development; and the role of socio-technology in organisational change<sup>33</sup>. Two themes run through all these concepts. The first is the part to be played by those charged with implementing initiatives and the second is the matter of rationality in planning, structuring and implementing the changes.

### ***Roles and role relationships***

The position taken here, following Beer et al<sup>34</sup> and Macdonald<sup>35</sup>, is that systems and structures (especially authority and accountability structures) drive behaviour though, of course, there is a feedback loop of behaviour back into new planning. But exhorting people to change their behaviour in the absence of changes to structures and systems is thought to be a singularly ineffective way to get change to occur<sup>36</sup> and this proved to be a major issue in changing perceptions of quality in the NHS.

The top-down, bottom-up debate emerged in earlier discussions about the NHS and the issue of centre-periphery models versus periphery-centre models in Hunter's treatment of the relationships between the central government and health authorities.<sup>37</sup> At the same time as Hunter was arguing the merits of each approach one could see, in the political context, a fundamental paradox being enacted as the Conservative Government sought to empower the consumer at the expense of service providers by strengthening rather than weakening the arm of central Government – first in the way it dealt with the Trades Unions, then with the teachers and later, the medical profession. Klein<sup>38</sup> sees this as a transformation of

the Welfare State into what he calls the Regulatory State with a shift from the government as provider of services to regulator of the services provided by others.

There is a similar paradox in orthodox TQM programmes where a strict methodology of top-down control is intended to secure increased participation by those at the base. In the case of the NHS projects, there were also opposite examples (see Chapter 5) where isolated bottom-up initiatives were started by committed enthusiasts but the lack of a top-down mandate, coupled with inappropriate structures and systems, led to a lack of resources and poor interdepartmental integration. It might be more appropriate to put in place an iterative process in which the top formulates policy and plans for implementation only after it secures a joint agenda with those working at the base. This, however, requires that agreement with the base can be reached – no easy task when one has a loosely coupled organisation with a workforce dominated by many different interest groups, some with strong professional orientations.

Important insights can be gained from examining the relationship between the culture of the organisation and its purpose. The fit between the two is a function of the organisation's socio-technology.<sup>39</sup> The relevance to the NHS is direct. The dominant culture has been that of the health service practitioner prescribing for, and treating, the individual patient as a unique set of problems to be solved. Professionalism is based on casework and is primarily individualistic, whereas planning and organisation are intrinsically collectivist. TQM, however, seeks to promote collective definitions of quality and common systems of measuring and improving upon existing levels of quality.

In a related shift one sees a move away from the altruistic but paternalistic relationship between professional and client, towards one which is less unilateral with the client as an equal partner in determining his or her own care. This shift is well explicated by Schon's contrast between the professional in a technical expert role and a role grounded in reflective practice. Jones and Joss<sup>40</sup> have argued that there are four modes of professionalism – the two further ones being the practising professional (exemplified in policing or nursing), and the managerial. These different modes are in constant tension and organisational change provides the

opportunity for one group or another to advance its cause. TQM gave an opportunity to managers to make a claim for some scientific basis to an otherwise generalist occupation and, at the same time, question the relevance of technical expert models as appropriate approaches for improving service delivery. Further, TQM, where the accent is on processes and outputs rather than inputs, questions input models of professionalism based on possession of esoteric knowledge, and seeks to emphasise definitions of professionalism based on outputs (in the form of competence).

### ***Professionalism and values***

Important determinants of behaviour in organisations, especially at a time of change, are the value bases of different occupational groups. Tension, and the possibility of conflict, lie in alternative goals and different loyalties based on those values. Young has described the relationship between values, beliefs, and perceptions in a hierarchical relationship from the most fundamental to the most transient – the overall total subjective experience being what he has called an individual's 'assumptive world'<sup>41 42</sup>. Kogan, too, has sought to differentiate between fundamental values, more akin to beliefs that inform action, and instrumental values that may be articulated in decision-making. The latter values may not be coherent or consistent over time – a point that is germane to the following discussion of rationality and the planning process.<sup>43</sup>

### ***Rationality in planning***

Berman's distinction between programmed implementation (which assumes that rational planning is possible) and adaptive implementation has already been discussed. A classic distinction has also been drawn by Braybrooke and Lindblom between synoptic planning and 'the science of muddling through'.<sup>44</sup> Synoptic planning assumes that it is possible and desirable to make a wholesale determination of the problem and then plan – along rational lines – a programmed implementation of pre-formulated objectives. The logic is deductive in as much as it is thought possible to deduce individual requirements from broad statements about the world at large. The contrasting position is that, at best, one can only lay outline plans for

the short-term and then muddle through in a disjointed and incremental way. Here the logic is inductive: the implementers react to changes in the environment as internal and external factors come into play and induce from an analysis of those factors, the broader policy requirements. Again, the alternatives are framed as polar opposites when actually a middle course could be steered. However, the conception is useful because it warns us (and this is relevant to TQM) to guard against pre-programmed implementations which do not give sufficient attention to the complexities of (constantly shifting) organisational and external variables.

Wolman<sup>45</sup> supports the notion of rational implementation, but argues that the quality of formulation and conceptualisation is as important, if not more important, than the implementation itself. Although the distinction between formulation of policy and its implementation is an artificial one in practice, it is worth focusing on the former since implementations are often blamed for subsequent problems when the real causes lie earlier in the design process. This idea is well to the fore in successful TQM programmes where it is not unusual to find the organisation spending up to a year in the analysis of the problem situation and formulating a change programme. However, a good deal more time is spent on analysis of customer needs and technical issues of production or service delivery, than in analysing the political problems of implementing the required changes.

In a setting such as the NHS, it may be that more attention needs to be given to the political bargaining process. Organisations are coalitions of individuals whose groupings may have different values, needs and goals from one another and these, in turn, may be different from the goals of the organisation. In this sort of context the insights provided by analysts with a sharper human resource or political focus may be more helpful to an understanding of the successes and failures of TQM programmes<sup>46 47</sup>. The importance of symbols, too, has been underestimated in explanations of organisational change. People in organisations manage uncertainty and ambiguity by constructing symbols to give meaning to, and reduce uncertainty. They develop metaphors, rituals and ceremonies to render organisational life less confusing.<sup>48</sup> Symbols are also powerful reinforcers of behaviour.<sup>49</sup>

### ***The process of policy formulation***

Two important variables in formulating policy have already been discussed – the locus of control, as suggested in the top-down, bottom-up formulation, and the requirement to take account of internal politics. Both these approaches, however, are relatively static. They could be determined at a single point in the formulation process. There is another crucial question clearly articulated by Elmore<sup>50</sup>. Should one basically follow the traditional process of having the policy-makers at the top of the organisation decide policy which is then ‘cascaded’ downwards and forwards through the organisation in what Elmore calls *forward mapping*? Or should one start with what Elmore called *backward mapping* – that is starting at the base with definition of requirement at the individual provider-client interface, and then working backwards and upwards through the organisation, developing the implications for service provision at each succeeding level, until policy is refined and confirmed at the top? Each methodology has its advantages and disadvantages for one wants to secure both commitment to behavioural change at the base, and a mandate for change from the top (plus the necessary new or redirected resources, as well as supporting structures and systems).

It is possible to conceive of a mixed model in which the top (which will have the final authority to mandate change) first outlines a broad philosophy based on a strategic assessment of the external environment at that level. This outline would be discussed at each succeeding lower level, the potential consequences identified and appropriate changes negotiated before the reaction of significant interest groups makes it way back to the top. The relevance to TQM is direct because one of the important principles of TQM is to re-orient services towards customer-defined criteria for quality. By implication, this would require a backward mapping exercise. But it would not be confined to the traditional definition of problems and requirements by professionals at the base. Rather, the views of users (and other stakeholders, including purchasers) would have to be collected, synthesised and fed back into a backward mapping exercise.

### ***Summary of the position so far***

The proposition set out at the beginning of this chapter was that by setting out to implement Total Quality Management in the NHS the Department of Health explicitly embarked on a rational, and in the main, pre-programmed implementation.

Pre-programmed implementations, particularly as exemplified by TQM, may be more suitable for organisations that are tightly coupled, relatively stable, and where there is low conflict. Rational planning models, top-down control, and forward mapping may also be acceptable methods for designing and implementing change in such organisations. However, where the potential for conflict is high – as in loosely coupled organisations with a wide range of different staff groups, including a substantial professional component, and where there are multiple external stakeholders with very different needs and perceptions – then it might be advisable to give a good deal more attention to an understanding of political bargaining; to normative re-educative techniques rather than coercive strategies; and to backward mapping and bottom-up modes of change.

In implementing TQM, the NHS did take some of these formulations into account (either consciously or intuitively) and some of the more impressive advances in what was otherwise a disappointing experiment can be directly attributed to an appreciation of the distinctions drawn above. The opposite was also true: where there were failures, they could invariably be traced back to a lack of understanding of these formulations.

A more detailed analysis of the relevance of these concepts must await presentation of the empirical data but, first, in the next chapter, the particular conceptualisations of quality that underpin the principles and implementation strategies of TQM are reviewed.

## **Chapter 3 – Concepts of Quality and Improvement**

### ***Introduction***

This review of the literature on quality begins by analysing different definitions of quality and demonstrates that defining quality in the context of public services is a complex, multi-dimensional issue. The review contrasts this analysis with how the issue of defining quality is handled within typical quality improvement programmes including TQM.

### ***Personal versus Organisational Concepts of Quality***

Understanding the different ways people define quality is central to understanding how they will take to the organisational imposition of a single definition of quality. Some groups of NHS staff found it difficult to accept what they said was a conceptually naive attempt to reduce the complex issue of quality to a single, customer-oriented definition (a requirement in orthodox TQM programmes).

Quality may mean the same thing to all people and, at different times, different things to the same person. It can be context-free in some situations yet directly context-dependent in others. It can refer to the intrinsic nature of a good or service, or to its purpose. It can refer to different chronological stages of production or delivery, from the design stage through to the ultimate impact on users and other stakeholders. It can be applied with different meanings at different levels of organisational complexity from direct delivery in an individual episode, through to strategic planning for services to a whole community. It can be confined to professional or technical definitions or thrown open to multiple (and often competing) views of different stakeholders.

Popular concepts of quality often refer to intrinsic features of a product or service but organisational definitions now increasingly link quality of a product or service to its intended use. Hence a product or service must be ‘fit for (the intended) purpose’<sup>51</sup>; or demonstrate ‘conformance to requirements’<sup>52</sup>; or achieve quality by reference to the ‘totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs’<sup>53</sup>.

Historically, commercial organisations have tended to use narrowly focused definitions – for example to emphasise the over-riding importance of the customer as purchaser<sup>54</sup>, but over-simplification has been criticised more frequently in recent years. Taguchi<sup>55</sup>, for example, has argued that the total cost of a product, including its impact on the environment, should be costed over its full life – for example pollution caused by the design and operation of car engine, or the decommissioning of refrigerators – thus going well beyond the individual purchaser. Understandably, manufacturers have not rushed to adopt this definition.

### *Manufacturing versus service quality*

Systemic attempts to improve quality had their origins in private sector manufacturing, and models developed in that context were later imported relatively unchanged into private sector service companies. However, proponents of these approaches came to realise that the two sectors were markedly different. One of the most influential distinctions was that the quality of a service could be seen as having three defining characteristics: *intangibility*, *heterogeneity*, and *inseparability*.<sup>56</sup>

*Intangibility* arises from a sense in which the features that might be used to define service quality are more difficult to define, measure and evaluate. It is often not possible to prescribe, in any detail, the required process since it will depend on the individual needs of each user. Indeed the process is made more complicated by the joint efforts of both provider and user to fashion a quality process through their interactions – what some authors have termed *co-production*<sup>57</sup>. The pre-specified quantitative measures of a product's characteristics, such as conformance to design or manufacturing specifications of durability and reliability, give way to qualitative service-delivery measures such as trustworthiness, honesty, confidentiality, courtesy, helpfulness, kindness and technical competence.<sup>58 59</sup>

Such aspects are difficult to define and measure. For example, in the course of developing a patient-oriented audit tool, it was found that 92% of a sample of patients said it was important to them that “staff believe what I say”<sup>60</sup> – a difficult matter to measure. Further, whilst specific quality criteria may be salient for some users, the same criteria may be of little significance for other users in the same



situations. In interviews with clients at ante natal clinics<sup>61</sup>, where the women were not prompted for their views on specific criteria, a significant number of idiosyncratic quality concerns were raised by some women because of their highly personal expectations or experiences – issues that could hardly have been predicted in advance.

*Heterogeneity* highlights the contrast between the requirement in manufacturing to minimise process variation and, in service-delivery, to maximise variation in order to respond uniquely to widely different customer demands<sup>62</sup>. Proponents of TQM have argued that there is no dichotomy.<sup>63 64</sup>

But it is argued here that these analyses fail to distinguish adequately between the requirements of work at two different organisational levels – *situational response* and *systematic service provision*<sup>65</sup> – and to put in place audit mechanisms which review both levels and, as importantly, the relationship between them.

Situational response, as the name implies, requires that individual responses be fashioned to meet the needs of each individual case. This in turn implies permitting wide (though not unfettered) variation. Systematic service provision, on the other hand, entails ensuring that sufficient people, equipment, and materials, are available to meet changes in aggregated demand. Here, reducing variation may help to ensure that the resources required to deal with individual cases are provided in a consistent fashion, but may do little to ensure consistency in individual cases.

The term *inseparability* is used to describe the fact that production and consumption of the service usually occur at the same time, whereas in the case of manufacturing they are normally separated in time. In the former case, the quality may only be observable during the course of interactions between the provider and the user whereas products are normally available for inspection later.

Further, as outlined above, the quality of the service is crucially dependent on the contribution of users to the interactions between themselves and the providers – nowhere more so than in health care. For example, in a study of maternity services, a pregnant woman who had extreme difficulty in reading even simple instructions

misunderstood advice given to her about her pregnancy because of an over-reliance on written communication. Her reluctance to admit to the difficulty misled staff into believing that she did understand their advice, and the problem only became known when she was interviewed by researchers.<sup>66</sup>

It has been argued that this distinction can be minimised by being more innovative and persistent in specifying the main features of both process and outcome. This should make it possible to measure and evaluate at least on a sample basis. Providers in the public sector could not then argue that private sector models were inappropriate.<sup>67</sup>

The role of the recipient in determining a service's effectiveness is probably more important in services which are designed to change the state of the user by acting *on* them rather than just *for* them. In relation to education, for example, it has been argued that service is not just "for a customer but (is) an ongoing process of transformation of the participant..." (author's emphasis)<sup>68</sup> thus leading to the idea of *transformational* quality.

This is relevant to aspects of health care, for example when catering for people with psychiatric disorders or learning disabilities. The notion of transformation is at the heart of value-added approaches to evaluating the effectiveness of both education<sup>69</sup> and health care, and adds a further dimension to the complexity of designing and evaluating quality improvement programmes.

### *Who defines the quality?*

Use of the word quality as a qualifier is rarely neutral. Describing an attribute of a product, or experience of a service, implies a personal judgement – one that may well be at variance with the judgement or experience of another. Since the early 1980s, obtaining the customers' requirements and using them to define quality, has been an increasingly common feature in the commercial sector. It was held to be an essential part of surviving in an increasingly competitive environment.<sup>70</sup> The fact that the same issue continues to concern the NHS is evident in much of the trade

press and in pronouncements at the highest levels. As the Chief Executive of the NHS noted recently:

*“Giving greater voice and influence to users of NHS services and their carers (as required by the 1997/8 Priorities and Planning Guidance) .... is an area where there is a clear gap between rhetoric and reality ... An adaptable NHS cannot tackle this issue by proclaiming that public expectations are too high.”*<sup>71</sup>

However, responding to individual concerns in both private and public services is more difficult than it looks at first sight. As Rosander<sup>72</sup>, has argued, customers behave as if they were in a sample of one – implying that “there is no mean, no variance and no distribution” making it difficult to fashion responses which meet unusual or idiosyncratic needs. He observes that commercial companies respond to this problem by niche marketing or offering “packages”, only one or two aspects of which might meet a person’s needs. This, he argues, reduces choice and may lead to failing to meet needs.

In health care, the increasing focus on analysis of aggregated quantitative data may obscure serious but statistically insignificant shortcomings in service provision. In a study of chiropody patients<sup>73</sup>, a substantial proportion of the sample expressed satisfaction with a wide range of quality criteria. However, this predominantly quantitative analysis disguised the fact that a small number of patients had difficulty in walking because of the length that their toenails grew between visits. The service, designed to meet the needs of the majority in as cost-effective way as possible, appeared to have been at the expense of a minority who had the misfortune to have faster than average nail growth.

It is also not safe to assume that most customers can define their requirements in respects of improvements to products or services. They will certainly be able to voice dissatisfaction with some aspects of a current offering but may not know that anything better is technically or professionally feasible. They may be starved of the information they need to make informed choices.<sup>74</sup> In the commercial sector it may not be in the interests of a company to offer a product or service that is radically

better than the competition. It is more normal for companies to seek to gain marginal, as opposed to outright, competitive advantage over their competitors and this may not lead to the best possible deal for the customer.

Given the common commercial definition of quality as “delighting the customer by continually meeting and improving upon agreed requirements”<sup>75</sup>, it is not surprising to find authors urging commercial sector organisations to stay ahead of the customer by identifying solutions and *then* looking for problems to apply them to<sup>76</sup>, or by identifying products and services the customer doesn’t yet know he or she needs.<sup>77</sup>

A different problem affects the new NHS with its internal market. As the money does not yet fully ‘follow the patient’, the incentive may be to deliberately avoid making improvements which will lead to better services, since attracting more patients will mean increased variable costs – expenditure that a cash-limited purchaser may well not be able to fund<sup>78</sup>. Thus, for reasons that are different to the commercial sector, one also would expect NHS providers to try to maintain marginal competitive advantage in order to secure contracts without, necessarily, offering patients the best possible service.

### *Multiple-factor models of quality*

So far, most of the definitions of quality discussed have been based on, or at least have emphasised, a single factor – for example the locus of the criteria (e.g. intrinsic v extrinsic) or the source of the definition (provider- or customer-led definitions). However, more complete accounts of quality in the public sector literature tend towards multiple factor models.

One of the earliest, and most influential multiple factor models was that of Donabedian<sup>79 80 81</sup> who argued that the assessment of quality must take into account the attributes of the setting of health care provision including: human and financial resources, facilities, organisation of those resources, and methods for evaluation and monitoring (Structure); what is actually done in giving and receiving care, including both practitioners’ and the patients’ contributions (Process); and changes in the

health status of patients as well as improvements in their understanding and their satisfaction (Outcome).

However, for Donabedian, process would appear to be more important than outcome, at least in one situation. He writes:

*“Even if the actual consequences of care in any given instance prove to be disastrous, quality must be judged as good if care, at the time it was given, conformed to the practice that could have been expected to achieve the best results”*<sup>82</sup>

Steffen<sup>83</sup> makes a similar point:

*“I locate quality in the capacity to achieve a goal (the outcome) rather than in the outcome itself. Thus the capacity to achieve a goal may have been inherent in the medical care given but, for various reasons, this capacity was blocked and the goal was not achieved. Still quality care was given.”*

Williamson<sup>84</sup>, however, argues that this view cannot any longer be sustained:

*“If we are to progress we must have better outcome measures than those presently available. It is clear we must have some condition-specific clinical outcomes against which to measure success, not merely the absence of mortality or morbidity. In addition though, we must try to develop an understanding of the patients' psychological and social functioning, their general level of well-being and their perceived health status. We no longer accept the defence ‘the operation was successful but the patient died’; in future we have to reject the plea ‘we did everything possible but the patient is still complaining about this and that’”*.

A further influential model of quality in health care has been proposed by Maxwell<sup>85</sup>. This, too, seeks to broaden the criteria by which one might judge quality, away from narrow manufacturing or process-oriented models. He argues that there are six dimensions – access to a service, relevance to need (for the whole

community), effectiveness (for individual patients), equity (fairness), social acceptability, and efficiency and economy. These dimensions have been helpful in taking stock of services at a macro-level, but they have proved less helpful in defining pragmatic aspects at operational levels.<sup>86 87</sup>

Ovretveit has developed a system for improving the quality of health care based on three dimensions of quality, each recognising the part played by different stakeholders – *professional*, *client* and *management* quality<sup>88</sup>. *Professional* quality is based on ‘professionals’ views of whether professionally-assessed needs have been met using correct techniques; *client* quality is whether or not direct beneficiaries feel they get what they want from services; and *management* quality is ensuring that services are delivered in a resource-efficient way.

Joss *et al* have proposed a definition of quality which distinguishes three modes of quality – *technical*, *systemic* and *generic* quality<sup>89</sup>. *Technical* quality is concerned with the technical-professional content of work within a given area; *systemic* quality refers to the quality of systems and processes that operate across the boundaries between areas of work; and *generic* quality refers to those aspects of quality which involve inter-personal relationships including standards of civility, punctuality and respect for the worth of others.

A similar approach has been put forward by Morgan and Murgatroyd<sup>90</sup>, in which quality would have three components – interpersonal, procedures (including environment and process), and technical/professional. These components differ in some important respects from Joss *et al*. In particular Morgan and Murgatroyd argue (following Donabedian) that environmental issues are part of their ‘third leg’ of procedures and processes, whereas Joss *et al* would see the environment as a matter which could have a bearing on all three components depending on the context.

It should be noted that Ovretveit’s and Joss *et al*’s approaches have different consequences for, for example, the involvement of users in defining and evaluating services. The former suggests that professionals would define quality in technical matters, managers would hold sway on issues of efficiency and effectiveness, and

clients' views would be uppermost when personal needs were the issue. However, Joss *et al* would look for opportunities for all stakeholders to be involved in defining and evaluating quality in all areas (see Table 3.1).

Table 3.1: Involvement of different stakeholders in defining quality under Ovretveit's and Joss *et al*'s approaches

Ovretveit's categories	Joss et al categories		
	Generic	Technical	Systemic
<b>Client</b>	<p><b>[Ovretveit: clients determine quality criteria for these issues]</b></p> <p>Very high involvement possible both on individual basis and when represented by informed user groups</p>	<p>Only marginal involvement as individual users but moderate when informed user group particularly if specially constituted to involve outside experts</p>	<p>Moderate involvement possible when represented by informed user groups</p>
<b>Professional</b>	<p>Potentially very high involvement but stereotype is of low involvement – e.g. 'arrogance' of consultants and different specialties denigrating one another</p>	<p><b>[Ovretveit: professionals determine quality criteria on technical matters]</b></p> <p>Obviously very high involvement within specialties but requires a good deal of work to establish multi-professional systems – e.g. for audit</p>	<p>High involvement within specialties; now also high at cross-functional level since doctors increasingly head up Directorates</p>
<b>Management</b>	<p>Very high involvement – particularly in setting the culture and context for maximising the potential of all to contribute to service development</p>	<p>Low involvement but should be invited to attend and/or receive feedback on process and implications for strategic planning and resource management</p>	<p><b>[Ovretveit: managers determine quality criteria on systemic issues]</b></p> <p>Very high involvement at all levels. However, the qualitative differences in nature of work at each level should be spelled out and associated with appropriate performance indicators</p>

## ***Systemic approaches to quality improvement***

This section reviews the origins of structured approaches to quality improvement in manufacturing enterprises from the early days of Quality Control, through Quality Assurance, to its present day conception as TQM. These manufacturing models are then contrasted with more recent work on service quality in the private sector and with quality improvement concepts in the NHS. The analysis in this section provides the background to the selection of criteria used to evaluate TQM in the NHS – the focus of the next chapter.

### *Quality improvement systems in the manufacturing sector*

Concerns with quality have been expressed since goods were first made and services delivered. However, the responses to problems of poor quality in manufacturing have shifted dramatically in the last one hundred years or so. These shifts may be seen as responses to changes in production processes brought about by: industrialisation; increased specialisation; automation and computerisation; increased complexity of products (with a consequent rise in the proportion of bought-in components); and the application of scientific methods of management.

One of the results of these shifts was a decline in the number of skilled workers who were responsible for a complete production process and an increase in employment of unskilled and semi-skilled workers carrying out high volume repetitive tasks in narrow areas of production. The sense of individual ownership of quality for the final product proved difficult to maintain.

One of the early responses was the introduction of formal quality control systems (QC). This may be traced back to the early 1920's with the use of control charts and Statistical Process Control by Shewhart at Bell Telephone Laboratories<sup>91</sup>. QC was an attempt to move from inspection processes that were designed to remove faulty products after production and before distribution, to controls aimed at increasing the percentage of good products being manufactured. The Shewhart problem-solving cycle of 'plan-do-check-act' still forms the basis of most QC and QA systems today<sup>92</sup>.



As Crosby has argued<sup>93</sup>, a whole culture developed in which manufacturers accepted the inevitability of errors occurring in production processes. It was quite common to find that industrial producers would allow a certain percentage of defective goods to go out to customers. The exact percentage was viewed as a trade off between increased costs of assuring perfection, and increased levels of customer dissatisfaction. Indeed the practice was known well enough for it to have its own acronym – AQL (Acceptable Quality Levels). Reworking of rejected products became a way of life, with a consequent rise in related cost areas such as inventory.

After the Second World War, a shift in emphasis began to take place from quality control to quality assurance (QA). The result was increased attention to pre-production planning where everything possible was done systematically to design out error in every stage of a production process. It became clear that most causes for error could be attributed to earlier and earlier stages in the process. In fact, there is now a whole new field of statistical research devoted to off-line quality management.<sup>94</sup>

The ‘quality revolution’ is held to have taken place in Japan from the early 1950's onwards. The people credited with driving this revolution were Deming and Juran<sup>95</sup>. Deming's approach proved particularly attractive to the Japanese. His early work depended largely on identifying the causes of variation in production processes and systematically reducing variation using a range of statistical diagnostic tools. Although this still forms a substantial part of his approach, it is the development of a quality culture through motivating and developing the people that, it could be argued, has added the TQM dimension<sup>96</sup>.

The early statistical processes, with their narrow focus on detection, were broadened to encompass prevention. It is important to note, too, that this shift to QA (first tested out in Japan by Deming and Juran) contained appreciable elements of worker empowerment, since the workers were expected to make a major contribution to identifying the causes of variation, and planning basic changes in working practice to reduce the variation.

As QA widened in scope, it became clear that there were severe limitations in the extent to which any group of workers could influence change. The first limitation was that the early problem-solving teams were mainly intra-departmental and often uni-disciplinary. Since production processes spanned inter-departmental boundaries, the production workers found that they had little influence on engineering, materials, personnel and so on. Second, it was found that the overwhelming majority of significant improvements required changes in policy or cross-functional practice that were the province of middle and senior managers<sup>97</sup>. It has been estimated that 94% of all faults are designed into the system, and will thus be continuously repeated, whilst a front-line worker can only influence some 6%.<sup>98</sup>

This resulted in extending accountability for QA vertically within organisations and, more recently, to extend the process of QA laterally to external suppliers. The vertical extension led to QA initiatives becoming increasingly corporate and top-down in outlook. Quality statements began to appear in mission statements, and quality plans featured as part of the normal business planning process.

Paralleling these internal developments were changes in perceptions about the importance of the consumer. Until the 1950's, definitions of quality tended to revolve around what experts thought the customer wanted, or should or could have. Within companies, major decisions about new products were made on the advice of experts in research and development departments or marketing specialists. Quality standards were defined by experts in costing, by production technologists and by guidance from national bodies such as the British Standards Institute.<sup>99</sup>

With the rise in consumerism, particularly in the USA, and the famous safety 'debates' between Ralph Nader and major car manufacturers<sup>100</sup>, attention switched to how far consumers had a voice in product specification and development. Several consumer organisations were established on this side of the Atlantic, most notably the Consumers' Association in 1957 and the National Consumers' Council in 1975. Consumer groups began to badger companies for more information about their products, and the practice of carrying out comparative tests of products from different producers became more common.

This pressure led to increasing competition in the market place. There was a boom in market surveys as companies rushed to find out what their customers wanted. In order better to track and respond to changes in consumer demand, many organisations were urged to restructure in order to push accountability ‘down the line’, reduce the number of hierarchical levels, and empower front-line staff by involving them in decision-making<sup>101</sup>.

There is little to suggest, however, that there was an equal rush by companies to empower their customers. If customers were satisfied, whether through ignorance of the less desirable features of a product, or because they were not aware of better alternatives, then this was often seen as sufficient. In so far as the consumers could exercise choice, it was their purchasing power which provided the real check. Whether consumers can effect the design and delivery of care in the absence of the checks offered by economic choice is an issue dealt with under *The Health Sector*, below.

### **Total Quality Management – general definitions and features**

#### *What then is TQM?*

Given the large amount of literature on quality issues, there are surprisingly few definitions of TQM. Crosby<sup>102</sup>, for example, argues that the word quality should have no qualifiers. He feels that quality ‘control’ and quality ‘assurance’ help to disguise a simple message that ‘every time you see the word “quality”, read conformance to requirements’. Quality management is ‘.. a systematic way of guaranteeing that organised activities happen the way they are planned. It is a management discipline concerned with preventing problems from occurring by creating the attitudes and controls that make prevention possible.’

Collard<sup>103</sup> takes a similar approach – ‘(TQM is).. zero defects in the products and services of an organisation. It is about quality in all aspects of company operations and, perhaps even more important, it is about doing things right first time – which adds nothing to the cost of a company's product or services.’

Oakland<sup>104</sup> stresses the organisation-wide involvement – TQM ‘.. is an approach to improving the effectiveness and flexibility of a business as a whole. It is essentially a way of organising and involving the whole organisation, every department, every activity, every single person at every level. For an organisation to be truly effective, every part of it must work properly together, recognising that every person and every activity affects, and in turn is affected by, others’. Deming says quality is ‘a predictable degree of uniformity and dependability, at low cost and suited to the market’ (quoted in Oakland 1989), but does not discuss TQM per se.

Macdonald and Piggott<sup>105</sup> argue that ‘Quality management is not a fixed body of truths, but a process that is evolving and will take different forms to meet the needs of individual companies.’ Many authors emphasise the proactive elements of TQM – Atkinson,<sup>106</sup> for example, says ‘TQM is a preventive strategy replacing rework, fire-fighting and crisis management with planning, co-ordination and control.... (TQM) is the umbrella under which a great number of quality initiatives can be managed.’

As suggested in Chapter 1, the commonalities of TQM can be summarised as, ‘an integrated, corporately-led programme of organisational change designed to engender and sustain a culture of continuous improvement based on customer-oriented definitions of quality’<sup>107</sup>. The idea of small, incremental improvements is a corner stone of TQM philosophy that sets it apart from Business Process Re-engineering with its ‘discontinuous thinking’, ‘all or nothing’ approach to organisational change.<sup>108</sup> In this connection it is interesting to note that there is apparently no industrial equivalent of the word *quality* in Japan – rather they use the word *kaizen* to mean continuous improvement by all staff at all times<sup>109</sup>.

The generality of definitions and the way they overlap is, to a lesser extent, characteristic of the definitions of quality, QC, and QA. Confusingly, there are also hypothesised intermediate points between QA and TQM – for example, Total Quality Control (TQC). Analysis of TQC in the literature shows it to be QA but including a longer-term perspective involving all processes, including suppliers. Although customer specifications are mentioned, the main drive appears to be to meet technical and design specifications. Armstrong<sup>110</sup> sees the differences as ‘Organising quality in’ and ‘Cost reduction and conformity to specifications through

continual improvement' (TQC) as opposed to 'Managing quality in' and 'Habitually and competitively meeting customer requirements' (TQM).

Foster and Whittle<sup>111</sup> suggest that one may see a natural progression from QC through QA and TQC to TQM – on the grounds of increasing proactive concern for designing quality in, rather than inspecting it out, and also in terms of increasing comprehensiveness, particularly in regard to the involvement of non-production processes. However, the British Standards Institute see QC and QA as complementary in their quality spiral (see for example BS 5750, Section 0.1, 1987), suggesting that they may profitably coexist rather than having a policy of replacing one with the other.

Analysis of the literature suggests that conceptual models of TQM take little account of other theoretical and conceptual work carried out in areas such as understanding organisations, or the modelling of processes of organisational change. For example, one influential model of TQM<sup>112</sup>, argues for wide-scale culture change from a belief in the inherent nature of error, to a philosophy of zero defects. Training and dedicated leadership exhort staff to change; simple problem-solving tools are provided, and there is a detailed, if generic implementation sequence. However, little advice is offered about how one actually secures culture change in different organisations. (One exception is Atkinson<sup>113</sup>, who has incorporated Handy's four-culture model in a discussion about how to secure successful culture change in support of TQM.)

Most models of TQM have been built from the ground up through a mixture of empirical observation and research and the trial-and-error experience of many quality managers and consultants over the last 40 years. A high proportion of this work has been based on manufacturing companies – relatively little has been developed for the service sector until the last 10 years or so. The literature is dominated by three or four particularly influential authors commonly referred to as TQM 'gurus'.

How one achieves such status is not clear, but the word signals that much of the writing is evangelistic in tone – indeed those who were trained by Deming, or who

were otherwise close to him, were known as 'Deming's Disciples'. There are also half a dozen lesser gurus, some who are relatively recent pretenders to guru status and a whole host of management consultancy-led approaches that have borrowed to a greater or lesser extent from the major gurus.

Whilst there is considerable agreement about the general philosophy, there are differences in some areas which have led to bitter exchanges between authors. Macdonald and Piggott<sup>114</sup> cite an article in the August 1986 edition of *Fortune* magazine in which Juran is quoted as saying *I do not regard Crosby as an expert in the field of quality .... he is an expert in public relations. He is a combination of P.T. Barnum and Pied Piper.*' (p 97).

The table in Appendix 2 sets out the main steps in each author's methodology. They all emphasise the need for top management commitment in what are all basically top-led programmes. They also all stress worker involvement and setting up systematic efforts to detect and correct errors. Here Deming and Juran differ from Crosby. They are both statisticians with a concern for the issue of statistical variation. Deming, in particular insists that one must first understand the nature of variation in a process before making changes. All the authors reinforce the need for continuous effort and the length of time needed to build up a culture of continuous improvement.

Below is a summary of some of the main features of the most popular approaches:

### *Corporate planning*

There seems to be good agreement that one of the biggest differences between TQM and other quality initiatives is the production of a medium- to long-term organisation-wide corporate plan. This must specify the quality dimensions of future strategy by way of a mission statement, goals, objectives and action plans that have an explicit quality orientation. In the most successful TQM companies, it is said that there is no separation of quality planning and business planning – 'customer desires and business goals, growth and strategies are inseparable'.<sup>115</sup> The accent is on top-down corporate planning that is increasingly fed by bottom-up

information and organisational change as the implementation develops. The planning is synoptic rather than incremental, in the sense that there is a comprehensive planning process for all departments and all levels which are integrated upwards into a corporate plan.

Models of quality appear to be a mixture of forward and backward mapping<sup>116</sup>. Initially, the accent appears to be on forward mapping as the top of the organisation cascades, in a rather prescriptive way, the instructions for setting up the quality system. The form and function of quality improvement groups, for example, is set by the top, though the membership of those groups may be decided at the base. Once structures and systems are in place, the top increasingly encourages the base to backward map by starting with definitions of the external customers' requirements and tracking these back through internal processes to establish customer-supplier chains.

### *Staff commitment*

Commitment by all staff to culture change based on continuous quality improvement (CQI) is seen to be essential. This must be demonstrated both by personal commitment and by production of policies and plans that are seen to be consistent with TQM philosophy. CQI must be observable in the systems and processes of senior and middle management (for example in the work of the Board or planning departments) not just in their exhortations to front line staff. Gaining commitment is seen as primarily a matter for comprehensive training and education throughout the organisation.

Dedicated and committed leadership is clearly an import ingredient for organisation-wide change. Peters<sup>117</sup> has argued for several years that the major determinant of a successful TQM implementation is the single-minded obsession of the Chief Executive and other senior managers with issues of quality. The use of words such as 'single minded' and 'obsessive' reflect the zeal that is held to be required for successful implementations in some American TQM initiatives. It is almost pathological in its intensity and the language has not been readily compatible with the value base of managers and clinicians in the UK NHS<sup>118</sup>.

### *The TQM culture*

TQM is designed to produce a culture that actively encourages the breaking down of inter-departmental and inter-disciplinary barriers in order to improve communication and encourage joint approaches to solving problems. For example, Ford and IBM both say that they wasted years before realising that most quality improvement opportunities lie outside the natural work group<sup>119</sup>. Breaking down barriers between different departments has proved to be a good deal more difficult than the authors of different TQM approaches would have predicted.

One of the consequences of formally turning the spotlight on processes where there are weaknesses may be to exacerbate inter-departmental differences which, in the past, have lain dormant, or which have been accommodated by negotiation. This phenomenon has been serious enough for Neuhauser<sup>120</sup> to liken it to 'tribal warfare'. One of the reasons for developing the notion of 'internal customers' was to try to break down strong divisions between different departments.<sup>121</sup>

An important feature of the TQM culture is said to be the involvement of everyone in the organisation in continuous quality improvement, not just those working in specialist quality assurance roles. The notion of continuous improvement is important and standard setting is therefore supposed to be a dynamic process. This distinction is important because it was later to cause tensions at TQM sites between the TQM requirement for dynamic continuous improvement approaches and the traditional models of standard setting employed by nurses.

### *Structures*

Almost all models recommend the appointment of a TQM specialist. This person is variously named a co-ordinator, facilitator or manager. These terms are applied loosely and the exact role relationships are far from clear. Generally, the post is seen as middle management or senior management in level, with direct access to the Chief Executive or equivalent.

The extent to which there are further posts and groups established varies from model to model. At one extreme, the responsibility for promoting and achieving



quality improvements is left entirely in the hands of the existing hierarchies, be they managerial or based on other role relationships. Similarly, issues of quality and proposals for action will be generated within, and be the responsibility of, existing teams, committees and other groupings.

At the other end of the spectrum, a full TQM shadow structure parallels existing ones. In this case, one might expect to find a Quality Steering Group (QSG) made up of senior and middle managers who may well also meet in other management group settings. Below the QSG there will be Quality Improvement Teams, typically made up of middle managers, supervisors and their staff.

There will often also be departmental-level TQM facilitators (who are also middle managers) facilitating quality circles or other front line groups outside their own departments. In all these cases, staff may be members of management-led teams in other working contexts. Where elaborate shadow meetings' structures are set up, it is generally expected that these are only temporary and that they will somehow wither away when normal line-managers are fully committed to, and skilled in, TQM philosophy and methods.

The difficulties of installing separate structures in ways that do not undermine existing line-management chains are more difficult. There are many references in the literature to the difficulties for middle managers in TQM programmes.<sup>122</sup> They often perceive themselves to be under threat because of the empowerment of their staff, and because those staff may well be working in quality groups which are facilitated by other line managers. It is not unusual to hear of quality groups, particularly quality circles, where the managers of such staff can only attend by invitation.

It should be noted that quality circles are not generally recommended unless they are put in place as part of a much wider TQM process and only after middle-management commitment to TQM has been secured. This is based on observations that they cannot make anything other than marginal changes without committed middle and senior managers, particularly when inter-departmental co-operation is required. The Japanese pour scorn on British attempts to introduce

quality circles as typical short-term responses to the need to involve workers in problem solving.<sup>123</sup>

Important too, is Deming's<sup>124</sup> observation that some 94% of all faults are designed into the system, and will thus be continuously repeated, whilst a worker can only influence some 6%. This is supported by Rosander<sup>125</sup> who has analysed the kind of process improvements that come from quality circles and shows that, in the main, they are trivial in comparison to the major systems and process issues facing organisations.

Whilst this may be true of manufacturing, and also of the pre-delivery processes in a service organisation, one would expect that those involved in the actual encounter with users would have considerably more discretion in how the end-service is fashioned. However, where problems occur because of lack of co-operation between different disciplines or departments, then the extent to which individual groups of staff from any one department can effect changes in the whole process is still likely to be limited.

### *Process Improvement*

A major part of the TQM philosophy concerns a commitment to the idea of internal customers and internal customer chains. In several TQM models there is then an elaborate exercise of explicitly stating requirements between supplier and customers so that all parties to a particular stage in a process are clear about what is required and what is to be delivered.

In other models, this process is more muted, but the result is still the same: inter- and intra-departmental groups systematically examine the processes under their control and identify areas for improvement. This is usually accompanied by standard or target setting which should be a dynamic process. 'Problems' are identified, analysed and prioritised. Action plans are drawn up, implemented and monitored.

The extent to which agendas for action should be driven by managers or by front-line team members is far from clear. On the one hand, quality improvement activity must fit in with the general strategic thrust provided by corporate and departmental plans; on the other, front-line staff 'are the ones who know what the problems are' and therefore must be 'empowered' to contribute to the agenda-setting process in some way.

Ways of handling this dichotomy do not appear, from the literature, to be described in any detail. Often this is because of a lack of clarity about the roles of middle managers in translating corporate plans into real output at the base. It can also be exacerbated by a lack of clarity about the relationship between quality staff and operational managers.

### *Monitoring the levels and cost of quality*

An important part of TQM is the stress on monitoring and evaluation. Staff at all levels are supposed to be equipped with substantial skills in systematic data collection, analysis and evaluation, though this is biased towards quantitative statistical methods. The emphasis on Costs of Quality (also cost of non-conformance) varies, though it is considered an important variable. Whilst Crosby<sup>126</sup> argues 'quality is free', in the sense that it is always cheaper to do something right first time, Deming and Juran are more cautious, with Juran arguing that there is an optimum trade off between the failure, appraisal and prevention aspects of quality.<sup>127</sup>

How different authorities handle the issue of errors is also different. A distinction is often drawn between errors and defects. The argument goes that people make mistakes all the time. However, if they inspect the work intelligently, make good the mistakes, and (most importantly) trace and eliminate the causes, then the opportunity for defects to occur is reduced. In this sense, a defect is an uncorrected error. Correcting errors, though, is costly – hence the continuous exhortation to 'get it right first time'. Crosby<sup>128</sup> argues that the performance standard must be zero defects. He is adamant that 'There is absolutely no reason for having errors or defects in any product or service'.

Deming and Juran are critical of this standard, particularly as the general exhortation is often aimed at junior staff who have little control over most of the factors that lead to defects in work. Deming<sup>129</sup> points to the natural variation in all processes. The key for him is the use of intelligently selected and designed statistical techniques to identify and reduce variation.

Macdonald and Piggott<sup>130</sup> argue that the standard is to '*delight the customer by continuously meeting and improving upon agreed requirements*'. This suggests that if the customer specifies an acceptable level of error, then this is the standard, though one should always be seeking to improve upon it. They argue that the elimination of defects is no longer the driving force behind quality and that it is insufficient, on its own, to maintain competitive advantage. Even where the technical quality of a product is defect free, ways can still be found continually to improve upon service elements connected with its presentation, distribution, after-sales service and so on.

### *Valuing all staff*

One of the goals of TQM is to re-emphasise how important staff are in the quality improvement process. Prior to the TQM experiments there was some evidence to suggest that many staff in the NHS felt that they were undervalued<sup>131</sup>. However, the assumption in TQM is that staff will be remotivated if they are empowered to have a hand in CQI and then rewarded for their efforts. Further, since TQM emphasises the importance of every link in internal customer chains, all staff, including those traditionally seen as of lower importance or status, will have their contributions brought to notice and explicitly valued. Recognition is a significant step in Crosby's 14 steps – see Appendix 2.

### *Training and Education*

All TQM programmes stress the importance of training in securing commitment and behaviour change towards CQI. Many programmes that fail during implementation are thought to have done so because of a lack of resources being invested in training. (Of course, TQM may also fail because organisations have

assumed that training on its own would be sufficient, when actually fundamental action is usually required in reshaping structures and systems as well as training.)

The amounts of training prescribed vary, but all are well above what most organisations normally spend on training, particularly for front-line staff. Oakland<sup>132</sup> recommends at least 8-20 hours for top/senior management, 20-70 hours for middle management, 30-40 hours for first line supervisors and 'detailed training' for the rest. The Chief Executive and the other four top leaders of the Wallace Company (a Houston based industrial distributor) each underwent 200 hours of intensive training on the methods and philosophy of CQI. In another example, at the time the NHS projects were underway, Corning Inc's objective was to have everyone of their 30,000 employees, in 58 locations around the world, spending 5% of their work time in education and training.<sup>133</sup> Even this falls far short of Japan. It is claimed that Japanese employees spend, on average, 22 days of company time per year in education and training, *with an additional 22 days of their own time in further training* (emphasis added).<sup>134</sup>

### ***From manufacturing to private sector service industries***

In the main, the private sector service industries were slow off the mark in getting into TQM when compared to manufacturing. Indeed, when they did begin to engage with the issue of quality, much work focused around modifying concepts of QC and QA from the manufacturing sector and applying them to services. This was often supported by customer relations awareness training for staff, in recognition of the importance of customer contact. However, as described earlier, research in service quality over the last ten years or so has demonstrated a number of differences between the nature of manufacturing and that of the service industries. These have been sufficient to suggest that the transferability of unmodified manufacturing models of TQM to the private sector services may be limited.

Furthermore, the percentage of people who work directly in service provision as opposed to manufacturing is steadily increasing. US census figures showed that in the 80's it was around 75% and, as Deming<sup>135</sup> points out, this is an underestimate,

since it does not include those staff in manufacturing organisations who are actually employed in service-provision aspects of their businesses.

Recognition of some of the differences between product and service arenas has led, in the last ten years or so, to a rapid increase in the search for alternative models of service quality – models that would help understand the issues at the conceptual, design, implementation, and evaluation stages. Much of this work is still at an early stage of development but appears to offer promising alternatives to the application of manufacturing models of quality.

Chase and Bowen<sup>136</sup> have suggested that these research efforts are based on three basic theories. The first is *attribute theory* that assumes that service quality is primarily dependent on the attributes of the service-delivery system. In this case, management has considerable control over the processes of ensuring quality, and models drawn from the world of manufacturing (Crosby, Juran and Deming) may be applied for that purpose.

The second approach, *customer satisfaction* theory, is very different in that it assumes that service quality is defined with reference to the customer's perceptions of what constitutes quality, with this, in turn, being dependent on the match or mismatch between the customer's expectations and his or her actual experience of the service<sup>137</sup>. It is important to note that in this model, the absolute level of a given service is not the determinant of quality. Rather it is the congruence (or lack of) between the customer's prior expectations, and his or her perceptions of the actual service received.

The third approach, *interaction* theory<sup>138</sup>, emphasises the importance of the customer-employee service encounter itself. This approach emphasises the idea of co-production<sup>139</sup> and the need to enhance the output end of the input-process-output model.

As work continues in this rapidly expanding field, models that are more elaborate are being developed which overlap the three categories above. From the early work by Gronroos<sup>140</sup> on the relationship between functional quality (how the customer

gets the service) and outcome quality (what the customer gets), researchers have looked at comprehensive blueprinting of processes<sup>141</sup>, expanded marketing models<sup>142</sup> and culture-related models which take issues such as value structures and the referent groups of a target customer population into account.<sup>143</sup> It is likely that further developments in this field will lead to very different models of TQM from those currently relying on models originally developed for manufacturing industries.

## ***The Health Sector***

### *The background to the TQM experiments*

Although the NHS has been in constant evolution since the 1940's, the advent of the 1979 Conservative Government marked the start of a sustained campaign of public sector reform, with the NHS destined to see some of the most radical changes. The Government set out to curb public expenditure and health care, with its sizeable budget, was an obvious early candidate. The Government's initial response, based on the report of the Griffith's enquiry, was to institute a programme of organisational reform designed to replace the multidisciplinary consensus decision-making apparatus with a general management structure; to institute a focus on service-users' views of whether or not the NHS was meeting its service objectives; and to create a shift from *ex post* to *ex ante* evaluation of performance through the setting of precise objectives and measuring of both clinical and economic outputs (NHS Management Enquiry 1983)<sup>144</sup>.

A number of further reforms followed. The introduction of general management was reinforced by the Resource Management Initiative – a change that was specifically aimed at bringing doctors into the management arena and making them more accountable for the financial consequences of exercising professional judgements<sup>145</sup>. A further important development, explicated in the *Working for Patients* White Paper, and legislated for in the 1990 NHS and Community Care Act, was the construction of a purchaser-provider split including the creation of NHS Trusts and GP fundholders – the intention being to inject an element of competition into gaining contracts and make both purchasers and providers more cost-conscious.

Alongside what were predominantly efficiency-based initiatives there were also determined efforts to put more emphasis on formal, structured quality improvement. In 1989, *Working for Patients* set out the requirement for mandatory medical audit. It was quickly followed by a Department of Health circular on quality assurance to all regional general managers which addressed the issue of quality of care; sensitivity to the needs of customers; and systematic, comprehensive and continuous quality review<sup>146</sup>.

As will be seen below, these are essential features of Total Quality Management programmes. In 1988/89, a small but influential group of enthusiastic TQM supporters at the Department of Health succeeded in convincing ministers that the main processes and outcomes of TQM were similar to those sought by the Government. The parallels are summarised in Table 3.2 below.

Table 3.2: A comparison of NHS Reforms and TQM Principles

<i>NHS changes</i>	<i>TQM Principles</i>
Strengthening top management and involving doctors in management of services	Implementing corporate approaches to planning, especially planning for quality and movement towards common definitions of quality
Providing greater value for money	Striving for continuous improvement through systematic measurement
Developing stronger patient focus, including providing more information and more choice	Putting the customer at the centre of process improvement, thereby leading to customer-oriented definitions of quality

### *Changing definitions of quality*

In the light of these changes, TQM might be seen as a set of ideas whose time had come. However, there was (and still is) a major struggle going on between the dominant pre-1980's culture and more recent attempts to shift towards a managerialist and consumer-oriented culture. Pfeffer and Coote<sup>147</sup> in an analysis of the changing nature of QA in welfare services identify four quite different approaches. They point out that, chronologically, there have been developments



through four separate concepts of quality and quality improvement since the turn of the century – see Table 3.3 below.

Table 3.3: Concepts of Quality adapted from Pfeffer and Coote (1991)

<b>General Approach</b>	<b>Key Features and Issues</b>
<i>Traditional approach</i>	Quality is conceived as exclusiveness, prestige and positional advantage; by definition, most people would not have access to this quality.
<i>Expert approach</i>	Specifications of a product or service are defined by scientists and other experts or professionals; quality is linked to fitness for purpose; there is a rational and analytic evaluation of outcomes, but professional viewpoints are narrow and participation by users is lacking.
<i>Managerial/ excellence approach</i>	Quality is defined by customer satisfaction in a competitive environment; hierarchical organisations are flattened and staff empowered to be more responsive to customer needs; customers may express satisfaction with existing services but may be unaware of alternatives – they are mainly passive participants in the process of service definition; tests of opinion are mostly post hoc.
<i>Consumerist approach</i>	Active participation by customers in shaping services through their purchasing behaviour; the issues here are exit v. voice – Hirschman (1970); little in way of a role for non-consumers; it ignores complex roles of people as citizens. This approach tends to increase power of exit rather than giving them a voice. In the NHS context it may also push less efficient/effective providers into a spiral of decline rather than improve performance.
<i>Democratic approach</i>	A need for equality based on fitness for purpose (expert/scientific), responsiveness (excellence), empowerment (consumerist) PLUS involvement of staff, public participation (whether consumers or not), enforceable rights, open management.

They argue that none of the first four models meets the broader welfare goals of equity and responsiveness and they call for a new, democratic model. This would recognise the differences between commercial and welfare transactions, and the multiple roles played by different stakeholders. It would also require very different kinds of managers. They would need the skills to manage decentralised units with devolved powers, including budgetary management; a blend of technical, professional and management expertise; and openness to consumer empowerment rather than consumer focus.

Whilst public sector clients may be empowered by increasing the opportunities for them to have a voice, they have hitherto had little or no power of exit.<sup>148</sup> Indeed exercising the exit option may profit individuals as consumers, but may be harmful if one takes into account their wider roles as citizens and members of their communities. For example, where a service is over-subscribed, the providers might be grateful for 'one less in the queue' as it were – in this case, exercising the option of exit has unintended effects. In some situations, voice may be more important than exit.

This links to the notion of post-bureaucratic management<sup>149</sup> and has led to discussion about a 'New Public Management'. Common features are said to include greater transparency in resource allocation; disaggregating into executive-type agencies; purchaser-provider splits and quasi-market mechanisms; changes to less permanent and performance-related personnel contracts; increasing emphasis on customer-oriented standards of service quality.<sup>150</sup> Certainly, smaller self-contained units with flat organisational structures, containing a high proportion of professional staff, working in self-managed teams, may well be increasingly common in the new world of purchaser-provider contracting. The relationships between these groups and consumer-driven quality form an important part of more recent literature (see for example Gaster<sup>151</sup>).

The requirement for a whole new range of management skills and a change in the value systems of both managers and professional staff has been of central concern to training and personnel professionals in the NHS since the Griffiths' reforms were first mooted.<sup>152</sup> Distinguishing the pre- and post-Griffiths cultures, Harrison et al<sup>153</sup> summarise the older culture as one where:

- the organisation was not unitary and where management was not the major influence;
- the organisation was largely reactive in nature with little in the way of formal forward-planning, (though there have been attempts to install complex planning machinery from 1974 onwards);

- the pattern of change was incremental and at the margins, with the value of the status quo largely unquestioned; and
- the organisation was producer-oriented rather than consumer-oriented.

The early 1980's saw a stream of Government initiatives aimed at securing a paradigm shift within the public sector services generally – greater concern with value for money (VFM), devolvement of responsibility to local levels, and attempts to shift from administration of inputs to accountability for managing process and outputs. Concurrent with these moves were calls for more responsiveness to consumers' views and the provision of greater choice.

Considerable support for these views was provided by the Griffiths' Report (1983)<sup>154</sup>. The report pointed to some of the weaknesses of consensus management; to the lack of accountability, particularly for proactive planning and securing change; to the fact that there was little real and continuous evaluation of performance with regard to both efficiency and effectiveness. It also suggested that the NHS was too far from its consumers.

Less strongly voiced were considerable concerns behind the scenes about the escalating costs of 'high tech.' health care and a growing elderly population which consumed a disproportionate amount of social welfare resources if not direct health-related resources. As Stoll has argued<sup>155</sup>, "*... the ready availability of high-tech procedures makes it difficult for today's physician not to 'do something' in terminal cases, even though he suspects that active treatment is useless or may do even more harm than good.*" Difficulties in resourcing that demand will be exacerbated by staff recruitment and retention problems caused by the demographic trough (see for example Tuckman and Blackburn<sup>156</sup>).

These resource concerns are significant because they were largely avoided in discussions within the NHS when TQM was being considered, although they were common enough in discussions about NHS funding in general. Indeed there have been strong moves to decouple quality from efficiency. If they are connected at all, it is in the context of value for money (VFM). In contrast, advocates of TQM argue

that there is gross waste in both production and service organisations – claims of anything from 20%-40% of operating costs being held to be directly or indirectly attributed to unnecessary waste<sup>157 158</sup>. There is less evidence available for the public service sector (but see Koch<sup>159</sup> and Joss<sup>160</sup> on studies in the NHS which show that similar savings are possible).

The concern within TQM is with unnecessary costs incurred through errors, not cost improvement programmes that make cuts across the board on the grounds of economy alone. While managers might have to make the political decision to distance themselves from the latter in order to gain co-operation of clinicians,<sup>161</sup> they cannot ignore the former if they are serious about implementing TQM.

Early NHS documentation on Quality Assurance programmes, for example the NHS Chief Executive's first major letter to regional general managers on quality,<sup>162</sup> made little or no mention of the savings that could be generated through the introduction of QA programmes. The letter speaks about the importance Ministers attach to '*..(the) quality of care and the provision of a service which is sensitive to the needs of its customers..*' (par. 1). To this end they wanted each district health authority '*.. to ensure that its units develop systematic, comprehensive and continuous quality review programmes*' (par. 2). The focus would be on medical audit, the Waiting List Initiative, and quality review mechanisms in every unit (par. 3), with four specific initial areas for quality improvement – appointment systems, information to patients, hospital waiting and reception areas, and customer satisfaction surveys.

In other, more recent statements, quality is coupled with VFM and identifying consumers' needs, rather than with scope for explicit reductions in wastage<sup>163 164</sup>. Decoupling issues of quality from the need to make more efficient use of resources gave TQM research sites the freedom to reverse normal priorities inherent in manufacturing models of TQM when they were introduced. Normally, TQM is implemented with the express purpose of reducing error and waste when meeting customer demands.

Of importance here is that the applicability of manufacturing models of QA to the public health sector may be significantly reduced when the priorities are reversed,

since the main rationale in manufacturing is for a major focus on elimination of waste in production processes. In contrast, manufacturing models provide relatively little advice about how to design mechanisms for improving the staff-customer encounter, for empowering the user, or for improving access or equity.

### ***Other quality initiatives***

When any organisation decides to introduce TQM, it will be faced with the issue of how to integrate on-going initiatives (quality or otherwise) with the main thrust of TQM. Indeed, one of the major problems is to bring in a more co-ordinated and customer-oriented approach to quality improvement without denying or denigrating existing improvement effort. The NHS, with an enviable record of quality improvements (mainly, it has to be said, technical in nature) would be no exception.

A study in 1989, when the first of the TQM experiments were just starting, identified 1478 separate specific quality initiatives under way at that time in 116 health districts in England and Wales.<sup>165</sup> The extent to which so many initiatives could be integrated into a comprehensive and co-ordinated TQM approach was always going to be difficult and this issue is discussed further in the concluding chapters. However, a brief outline is given below of some of the main changes being introduced by different groups within the NHS at the time TQM was under consideration.

### ***Resource Management Initiative***

An important development introduced from 1986 onwards was the Resource Management Initiative (RMI). This was designed to *'enable the NHS to give a better service to its patients by helping clinicians and other managers to make more informed judgements about how the resources they control can be used to maximum effect'* (NHS Management Board Bulletin August 1988). The RMI process has many of the features of a TQM initiative. It requires commitment of personnel; devolution of authority; multi-disciplinary collaboration; managerial support; and an implementation strategy<sup>166</sup>. Where RMI is weakest in TQM terms is the extent to which internal and external customers are built into the process of development and review.

### *Medical audit*

Medical audit was another important part of the Government's drive for quality assurance (QA). It was defined as the '*systematic, critical analysis of the quality of medical care, including the procedures used for diagnosis and treatment, the use of resources, and the resulting outcome and quality of life for the patient*'<sup>167</sup>. The test of an audit system, generally, is if it can be comprehensive enough to take account of the contributions of all participants to a total patient episode (including the patient) and if it can be transparent enough to command widespread support from all stakeholders to the process.

In the NHS, medical audit has traditionally been very much a doctor-driven process of peer review and most guides to the process assume that this is appropriate<sup>168</sup>. Patients and other staff play little part (though there have been encouraging moves more recently with the introduction of clinical audit).<sup>169</sup> In the US, by contrast, medical audit is a much more transparent affair, driven, in part, by the more competitive health care market<sup>170</sup>. Further, it is regulatory not just educational in purpose<sup>171</sup>. Unless audit serves a regulatory function it will only be weakly compatible with TQM since the latter is, essentially, about continuous improvement of processes not just of personal skills. Who should be involved in medical audit is much more than a debate about the best way to improve practice – it is also a fundamental debate about who controls the doctors.<sup>172</sup>

### *Nursing audit*

Nursing audit pre-dated the introduction of TQM and was one area where models of audit, and the used of well-tested tools (Monitor, Phaneuf, Qualpacs etc.) were already in place in many hospitals and community services. However, these fell well short of the requirements of TQM, particularly in respect of the need for continuous monitoring, dynamic standard setting and user-involvement. That said, nursing audit led to a number of important quality improvements and accounted for a substantial proportion of the initiatives identified by Dalley and Carr-Hill<sup>173</sup>. Therapy audits have also become increasingly common and have been subjected to a comprehensive evaluation<sup>174</sup>.

### *Integrated audit*

For audits to fit within the broad principles of TQM one would expect to find combinations of different forms that, together, provided a comprehensive and integrated measure of performance. How far the NHS still had to go in 1991 is encapsulated in Williamson's<sup>175</sup> definition of three forms of audit – *professional* audit (which includes evaluation of services provided for a disorder which depend on the exercise of medical judgement and the judgement of other professionals); *clinical* audit where there is an evaluation of other elements of services provided in relation to a disorder, but which does not rely on the exercise of professional judgement; and finally *service* audit which relates to aspects of the case unrelated to the disorder.

These would seem to be arbitrary distinctions which serve no useful purpose save, perhaps, freeing doctors from the need to allow non-professionals into their audits, and from the obligation to take an interest in the results of other audits. For example, presentation and service of food on the ward would, presumably fit into Williamson's third category. But if the quality of the presentation meant the difference between a patient, who had a diminished appetite as a result of surgery, eating or refusing the food, then in no useful sense could the quality of the food be said to be unconnected to the disorder.

### *Standard setting*

Standard setting has been an integral part of nursing practice for many years but it, too, may be said to be incompatible with the principles of TQM. This is not to say that the practice has not made valuable contributions to quality improvement activity. In the main, though, standard setting has the same weaknesses (from a TQM perspective) as many other quality improvement practices. There are important exceptions that are discussed later in chapter 5, but a general critique would be that most efforts are:

- uni-disciplinary;
- often confined to single departments, particularly nursing;
- not integrated with corporate planning;

- unconnected with the general strategic thrust on quality;
- a tendency to be static rather than dynamic;
- focused on only a narrow set of standards rather than the whole field of possible process improvement;
- only weakly related to users' views or concerns.

### *British Standard 5750 and ISO 9004:2*

Further examples of quality improvement initiatives are BS 5750 and its international equivalent ISO 9004:2. These are registration processes in which documented QA systems are inspected and validated by inspectors from the British Standards Institute. The strength of these systems lies in the need to define quality standards, to document procedures and processes for achieving them, and to monitor standards<sup>176</sup>.

However, registration for either standard is underpinned by different concepts and models to TQM. It says little about the viability of an organisation (it could go to the wall the day after certification). Nor would it say much about the appropriateness of a particular process in terms of meeting, for example, Maxwell's criteria of access and equity (unless the organisation decided that it should, in which case they would have to have QA systems in place to demonstrate that these criteria could be assured). BS 5750, on its own, is seen by many to be incompatible with TQM because of its lack of focus on the end user. Both 5750 and ISO 9000 standards have come in for increasingly strident criticism in recent years.<sup>177</sup> Whereas it would once have been considered the first step on the road to TQM, few would now agree.<sup>178</sup> The particular problems of BS 5750 for the NHS are reported on in chapter 5.

### *Benchmarking*

Benchmarking is another tool which is being used with increasing frequency in the public sector – for example, the Department of Health has set up a series of benchmarking seminars for senior managers for the purpose of encouraging the practice. The basic idea is straightforward enough, though execution is a good deal



more difficult. Identify a specific aspect of your business – be it a product, a service, or a part of a particular process – and evaluate it against the best in your own business area or in another company which may have comparable characteristics (known as functional benchmarking)

Like most other modern quality improvement techniques it has its origins in the private sector. Whilst it has had a long, and not always honourable history (industrial espionage is the covert form) benchmarking grew rapidly with the publication of studies of the Xerox experience<sup>179</sup> and various ‘how to do it’ guides<sup>180</sup>. When Xerox began benchmarking in 1984 they tracked 14 different product and process issues. These have grown in number to some 240 and involve benchmarking in a range of diverse business such as American Express for invoicing practice, Mary Kay Cosmetics for stock control, and Florida Power & Light for their quality systems<sup>181</sup>.

As Pollitt has pointed out,<sup>182</sup> its usefulness to the public sector may be more limited because organisations do not usually have the same freedom to change practice as their commercial counter-parts. Legislation and Government regulation may mean that the management of the organisation may not be able to change it even if it wished to do so. This distinguishes between two important dimensions of public accountability – political and managerial. Managerial sense might argue for a change but political will might not be forthcoming. However, the principle of measuring oneself against other purchasers or providers in the search for best practice is in keeping with the general principles of TQM.

### *Business Process Reengineering*

Business Process Reengineering (BPRE or BPR) is yet another approach to organisational development and quality improvement. It claims to be radically different from TQM or other previous approaches. Hammer and Champy, for example, claim that 14 other previous approaches to business improvement including Management By Objectives, zero-based budgeting, quality circles, and matrix management, amount to nothing more than faddish ideas.<sup>183</sup>

Their definition of BPRE is *'fundamentally rethinking and radically redesigning business improvement processes to achieve dramatic improvements in critical contemporary measures of performance such as cost, quality service and speed.'*<sup>184</sup>

They differentiate BPRE from TQM because the former is said to be an all-or-nothing approach to process improvement rather than incremental, and require inductive not deductive thinking. There are parallels, however, in that the organisation needs to break down barriers between different departments and functions by conceiving of work as longer processes which require process engineering rather than departmental or functional re-engineering.

One of the most comprehensive and advanced applications in the UK is Post Office Counters, whose experience of TQM and BPRE is reported in Chapter 7. BPRE is also being trialled at hospitals in Leicester and London, the latter being evaluated by a team from Brunel University.

### **Summary**

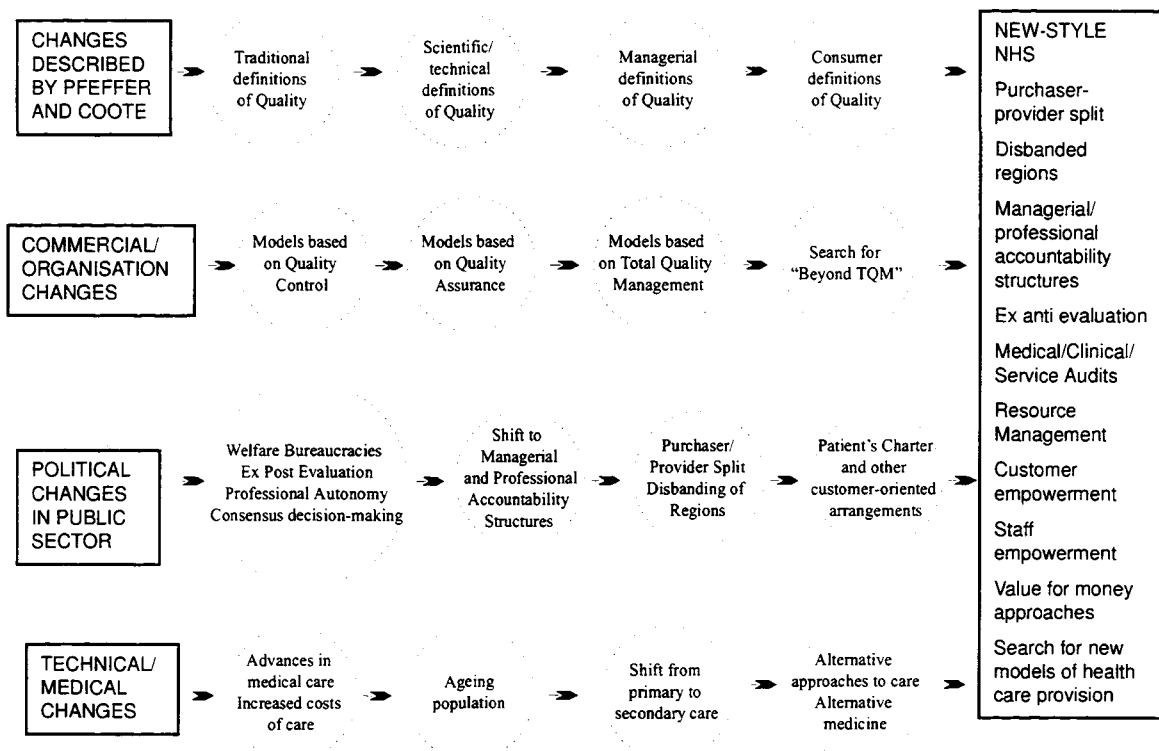
This review of the literature has charted several important trends in the development of thinking about quality in both public and private sectors. The historical changes described by Pfeffer and Coote in Table 3.3 above have taken place within the context of substantial political, social and technical changes in society. The NHS has responded by modifying policy and practice in the light of these changes. Some of the main pressures on it to change are shown in Figure 3.1 below.

These have combined in complex ways that defy detailed causal analysis. However, general trends can be observed and it is important to be aware of these when analysing current perceptions of quality in the "new-style" NHS.

In most cases, the general trend in the public sector has been one of a move from definitions of quality held by professional, technical or political groups, that are either narrow and technical or vague and intuitive, towards documented definitions based on a complex mixture of stakeholders' views. This move has led to a search

for more holistic models that might allow for multiple perceptions of needs and wants. In the case of the NHS, the driving force included technical and financial concerns about the rising costs of providing advanced medical care to an increasingly ageing population.

Figure 3.1: Trends in the development of concepts of quality



One approach, amongst many adopted by Conservative governments, was to push through reforms focused on providing value for money through increased efficiency and wider consumer choice. Models of TQM in the private sector, where the accent was also on customer-driven quality improvement, seemed a natural addition to that change process. However, as this review has shown, a detailed understanding of the literature on models of change in general, and TQM in particular, would have given some cause for concern at the outset of the TQM experiments.

First, the literature shows that models of systematic quality improvement have their origins in the manufacturing sector, and are principally concerned with improving the quality of products through a focus on the systemic aspects of production

processes. Although manufacturing models of TQM have been adapted for the private service sector, they may only be appropriate for improving 'pre-service' delivery processes and may fail when it comes to the actual service encounter. A whole new field of research has been initiated in response to this gap, but the service quality models provided had not been tested in the public sector health care field.

Second, many contrary definitions of quality abound in the literature and definitions in the health arena are particularly hotly contested. There are few analytical or comprehensive definitions of TQM. It tends to be defined by a catalogue of characteristics that are held to be essential for its implementation. Further, the focus on a single definition of quality that was explicitly centred on the 'customers' definition of quality was always going to be a difficult idea to sell to the professional-dominated NHS.

Third, many TQM studies talk about the need to empower consumers but this review has shown that most TQM developments have actually centred on customer focus as opposed to empowerment. At the outset of the NHS TQM experiments, there was little evidence to suggest that any TQM programmes in either the public or the private sector had resulted in consumer empowerment.

Fourth, a wide range of other quality improvement initiatives have been, and continue to be, implemented at the same time as TQM but few, if any, meet the principles of TQM. Prior to the TQM experiments, little work had been carried out on how to integrate managerial and professional perspectives on quality improvement or on how to re-orient other quality improvement initiatives so that they were more in keeping with the principles behind TQM. As TQM falls out of favour for failing to deliver the improvements critics of the NHS wanted, attention has now moved on to yet more initiatives such as benchmarking and business process reengineering. There is little evidence that these organisational change models will be any more successful than their predecessors in generating wide-scale and integrated organisational change.

Finally, and crucially for this thesis, analysis of the literature on TQM shows that the design and implementation of TQM programmes have drawn little on the broader organisational literature. Although models of TQM are largely generic in the sense that their proponents apply them to a wide range of different organisations, they are particularly thin on how to operationalise TQM in different organisational cultures. A combination of exhortation, 'education' and a few simple diagnostic tools are expected to bring about widespread organisational change. Where this has happened, for example in some commercial companies, analyses of the process are weak. The literature search has produced no good studies on the failures of TQM in specific organisations, but there have been general reviews of why TQM programmes fail <sup>185</sup>. These reasons, alone, should have given the NHS pause for thought before embarking on what was an expensive and time consuming exercise.

The evidence in support of these points will be set out in later chapters after a description of the methodology used for the data collection and analysis.

## **Chapter 4 – Research Design and Methodology**

### ***Introduction***

The data on which this thesis is based were collected between 1990 and 1993 as part of an evaluation of the implementation of Total Quality Management (TQM) at a sample of NHS demonstration sites in eight district health authorities. Progress at the NHS TQM sites was also compared with two other samples – two commercial sector TQM organisations that were installing TQM, and four NHS sites where TQM was not being installed but at which there were various forms of systematic quality improvement being trialled.

### ***Research design***

#### ***Issues faced at the outset***

There are many difficulties in carrying out evaluation of change in major institutions. Partly, this is the result of the sheer complexity of large institutions. Also, as the literature review in the previous chapter set out, there is much complexity to be found in the design and installation of change programmes, particularly those such as TQM which are designed to produce major changes to the culture, structure, systems and behaviour of staff across entire organisations.

The design of an evaluation must therefore take account of a large number of different variables, accepting that it will be difficult to disentangle causality in many instances. The literature also revealed that a change programme will inevitably take place alongside many other initiatives that will be part of normal organisational development in any large organisation. Some of these projects will be designed to improve service quality, but still be incompatible with the principles of TQM (for example BS 5750). Others may be working in direct opposition to the requirements of TQM as in the case of across-the-board cost-reduction programmes.

The research design sought to mitigate some of these difficulties by having three groups of sites in the research sample. The first two groups were both made up of

NHS sites (acute units or community services). In the first group were sites that were trialling TQM, whilst the second contained sites that were not implementing TQM, although they were carrying out various activities designed to improve quality. In this way, it was hoped to identify the ‘added value’ of TQM when set alongside more general quality improvement activity. It was hypothesised that there would be considerable difficulty in implementing what were basically commercial models of quality improvement in the NHS and therefore a third sample was added – two commercial companies that were implementing TQM.

Unfortunately, site selection could not occur in as rigorous way as one might like – even by the standards of a typical large-scale evaluation. The Department of Health, which was funding the TQM experiments, had called for bids for funds prior to the start of the evaluation – indeed some successful bidders had already started their work. This had several important consequences for the research design. First, not all sites would be starting at the same time (an important consideration for any design based on a time series). Second, it meant that the sites applying for the money were, de facto, a self-selected group that might be already more motivated to engage in TQM-based change than the average NHS site. If this was so, then any successes might not be transferable to other locations.

A third issue was that the Department of Health also wanted the NHS sample to include nine sites in three groups of three – a group thought to be doing ‘well’, a group that had yet to start on their TQM programmes and a group that was not planning to introduce TQM. Misgivings about this sampling method were later proved right when it became clear that two out of the three in the first group turned out to be excellent performers on paper (documentation being an important feature of TQM) but to be doing less well when one got to grips with what was actually going on at the sites.

A further difficulty, which had more impact on the later stages of the research, was the pace of organisational change in the NHS over this time – particularly structural change. The decision to base the sample of NHS TQM sites on nine authorities

seemed sound at the outset of the study, given that it had been expected that a single model of TQM would be introduced to all the locations in each authority. However, within months of the evaluation starting, the purchaser-provider split and the proliferation of new trusts meant that different forms of TQM were being selected at trust-level and, in some cases, trusts did not implement TQM at all. In order to get reasonable coverage of the different quality improvement approaches it was necessary to expand the original sample to 31 separate locations within eight authorities (access to the ninth not being secured at the outset) –see Appendix 3.

### ***Choice of criteria for measuring impact***

The substantive content of the evaluation was designed to focus on eight main areas:

- a) the objectives of TQM as expressed by different levels of participation in the project, including national, regional, district, unit and practitioner levels;
- b) the models of change implicit in the different TQM projects and their assumptions about the future working of NHS systems;
- c) the changes in objectives observed as TQM projects got underway;
- d) the process of implementation, to include its conceptualisation by the main actors, the way in which it was being put into effect, and the extent to which implementation had slipped from the original objectives;
- e) the training assumptions implicit in TQM objectives and the procedures adopted. This analysis was to include reference to the extent to which TQM assumptions and procedures had been incorporated in all training programmes, including non-TQM events;
- f) the mechanisms for monitoring and feeding back effects of TQM;



- g) patterns of evaluation including a study of the evaluations set up by the sites themselves and the movement from evaluation to planned implementation;
- h) the costs, money and other resources of TQM.

Preliminary analysis of some of the bids for funding showed that there would be considerable variation in sites' interpretation of TQM. This meant problems in deciding on the criteria for evaluation. It would have been possible either to have a very loose interpretation of TQM, thus covering all of the project proposals, or insist on using criteria that would reflect TQM as it was understood in the commercial sector. In the event, both aspects were covered – setting criteria that would test a site's progress against its own objectives (however far removed these might be from 'orthodox' TQM) as well as more explicit TQM objectives. The latter were developed from an analysis of mainstream literature on TQM (of necessity mainly from the private sector) and on the technical briefing note that was made available by the Department of Health to any site that requested it at the outset of the TQM experiments.

It was never clear how many sites had actually asked for the technical note or if they had seen it. Analysis of the sites' submissions for the first round of funding suggested that either few of them had seen the note or else that they had ignored it in preparing their submissions. Apart from those sites that had already started using management consultants, few initial proposals showed much in the way of the detail of TQM.

The criteria used for the evaluation are outlined in the following paragraphs. There are some criteria that reflect general issues surrounding TQM and there are some that focus on the specific sequences and activities that form part of an implementation.

As far as the use of the terms 'outputs' and 'outcomes' were concerned, outcomes were taken to be of broader significance than outputs and more than the result of an input-process-output chain. Thus, outcomes were held to be observable from of all

three stages. For example, the stating of objectives, whether it is clear and cogent or in muddled fashion, is an outcome of TQM effort. The processes by which different forms of quality assurance are installed and implemented may produce greater 'empowerment' at the operational base and some enfeebling of the authority of middle management. These, too, are organisational outcomes of TQM.

A second important point is the issue of changes in clinical outcomes. In the original discussions with the Department of Health they rightly offered the thought that while the costs and inputs of TQM might be stated with reasonable clarity (although opportunity costs are always fugitive entities), discernible outcomes in the form of, say, lower mortality and morbidity rates could hardly be determined in any exercise of this kind. The factors affecting such outcomes would be far too complex for it to be possible to make any kind of factorial analysis of the extent to which TQM contributed to them. Such intermediate outputs as patient satisfaction, however, or assumptions about performance made by a sufficiently wide number of stakeholders in the process, would still be significant.

Before setting the evaluative criteria, it is helpful to outline some of the main changes that a site installing TQM might be seeking to achieve. These are based on what might be expected in a typical implementation, although this is not seeking to be prescriptive by suggesting a particular evaluative format. A discussion follows about some of the outcomes that might be created by TQM – particularly those that a demonstration site might consider important indicators of progress. These site-specific outcomes have been augmented by further criteria framed by the evaluators.

### *Models and sequences of TQM implementation*

Most models of TQM call for fairly strict chronological sequences of activities that are intended to secure outcomes from the input, process and output stages. The sequence might typically consist of a diagnostic phase, a pre-planning phase, then a period of education and training, followed by three further implementation phases – process improvement, monitoring and evaluation and finally the development of a 'quality culture'. (In Deming's model, the process improvement phase is itself split

into three distinct stages – a requirement to ‘bring processes under control’ by documenting them; then to measure variation in processes; and finally to make informed and planned changes.<sup>186</sup>) The main stages are described below.

### Diagnostic phase

One may think of this as the first part of preparing the necessary inputs for the implementation. It will include a review of current issues of quality, availability of resources, and staff and users’ views of the current services.

### Preparation and planning phase

Further elements of the input stage concern clarification of the purposes of the organisation as well as designing an appropriate corporate planning system for quality. Senior management will normally develop a mission statement for the organisation, often with an expanded set of value statements and associated objectives. These will be explicitly quality oriented and will be accompanied by targets and action plans.

If the process is to be coherent and consistent, it will have to cover the way that the organisation plans to integrate and reorient existing quality initiatives so that these are consistent with the corporate aims of TQM. If the organisation elects for a separate TQM structure, then a TQM facilitator, coordinator, or manager will be appointed and a cross-functional Quality Steering Group or Forum of some kind will be established at or just below Board level. If the organisation elects to keep accountability for implementation entirely or primarily within existing managerial and non-managerial relationships then this will be made explicit.

At this point, or before, there will often be a communication exercise with front-line staff about the mission statements and the values/objectives. It is rare, though, for this exercise to be developed bottom up, or for it to be genuinely consultative. There will quite likely be some more general publicity about the impending TQM initiative – for example through in-house newsletters and team-briefing exercises.

Finally an implementation plan will be refined and the input stage will be complete. The organisation will then move into a planned implementation sequence. This consists of education and training followed by formation of process improvement groups. Analysis of TQM literature suggests that the implementation phase is intended to set in motion a number of steps towards the development of an organisation-wide culture of continuous improvement. It can be seen from Table 4.1 below that the process may stall at any point along that road. This means that even where TQM may be judged to have failed, in that the end goal has not been achieved, there may still be some long-lasting benefits.

Table 4.1: Outcomes from the processes of a TQM implementation

PROCESS OUTCOMES	RESULT IF OUTCOME IS NOT ACHIEVED
Awareness of TQM programme	TQM will be a non-starter
Understanding of TQM	Staff may well be aware without understanding
Commitment to TQM	Staff may understand without being committed
Acquisition of problem-analysis and measurement tools	Staff may be committed without having the skills to change
Appropriate individual changes are applied to problems as a result of proper data collection and analysis	Staff may be committed and skilled but not engage in behaviour change. Change may also be based on unreliable information
Cross-functional process improvement takes place through negotiating agreed requirements within customer-supplier chains.	Change may only take place within small processes and then break down because of poor interfaces with other significant departments/functions
Desired change takes place on organisation-wide basis	May only take place in some lead departments
Continuous improvement is sustained and becomes a way of life at all levels – the so-called quality culture	TQM will always be a time-limited project, not ‘forever’

## Education and training

Education (for attitude change) and training (in process improvement tools and techniques) are seen to be the main mechanisms for achieving organisation-wide involvement. The process normally involves workshop-style events for multi-disciplinary and multi-level groups carried out by teams of facilitators made up of a combination of trained trainers and managers. There are a number of variations, however, including the use of outside consultants and trainers.

The length, style, and materials may also differ significantly. The type of event may range from highly staged external two-day customer relations courses, through to in-house two-hour weekly workshops spread over many weeks. Whatever training model is followed, the programme is supposed to build commitment to continuous improvement and provide participants with the tools to enable them to put that commitment into action within their own areas of work. This may not all happen at once – some training may be staggered, with shorter awareness exercises at the start of an implementation being followed up some time later by longer skills workshops.

## Process improvement

Participants returning to the work place from training become involved in exercises to identify and prioritise ‘problems’ that require action. At this point, the kind of TQM model being pursued means that processes may vary a good deal. For example, one site may pursue a uni-disciplinary arrangement of quality circles with a distinct bottom-up feel to agenda setting. Another may elect to set up multi-disciplinary Process Improvement Teams where agendas are more likely to be set by middle and senior management. There may also be combinations of these arrangements. It should be stressed here that these references are to the orthodox or ideal-typical approaches to TQM which were the starting point for this evaluation – not necessarily those one would advocate as a method for installing TQM in the NHS.

Whatever the process, the following outcomes are sought:

- a) A greater appreciation of what the customers of a particular process want – this would include both internal and external customers where appropriate.
- b) A clear definition communicated to one's suppliers about requisite quality – again this may start with internal suppliers but it will normally extend later to include external suppliers.
- c) An analysis of the systems and processes which are directly under the control of each person in the chain in order to answer two questions:
  - i. Does the product or service meet the customers' requirements (or is it fit for the purpose, if based on Juran or BS 5750)?
  - ii. Is the process cost-effective in the sense of eliminating waste, getting it right first time, and making optimum use of resources?

### Monitoring and evaluation

Once agreement is reached about the requisite quality for each stage of a process, a system is developed and implemented for measuring changes in performance against criteria set by the customer's requirements. This is part of what should become, in time, a greatly enhanced information system.

At some stage, the organisation carries out an evaluation of where it stands *vis a vis* the quality states and objectives stated at the outset. Performance is reviewed critically and openly using agreed criteria.

## The development of a quality culture

The culture moves towards open learning, and dynamic self-correction. There are markedly reduced internal and external barriers to communication and joint working, with common understandings about quality, and a commitment to continuous improvement. By identifying the importance of each supplier and customer in each process chain, there is a re-evaluation of the worth of staff and final customers. This leads to empowerment of both, and increasing importance being attached to the role both can play in the formulation and delivery of services. The constant emphasis on getting it right first time leads to reductions in waste and improvements in the quality of services provided to internal and external customers.

## *The expected outcomes of a TQM implementation*

Although the exact features of an implementation might vary, one might expect to be able to observe a generalised set of changes as the implementation proceeds. However, there are difficulties in deciding the exact level of analysis. On the one hand, one could take a macro-level view of services as Maxwell has done<sup>187</sup> and consider the exercise as one gigantic input-process-output affair. On the other, one could follow the classic approaches of Crosby<sup>188</sup> and others by taking the smallest stages of individual processes and examining the extent to which the principles of TQM had penetrated there. For the purposes of this evaluation, the site samples and subsequent interview schedules were designed to secure the views of a diagonal slice throughout the organisation.

## *Criteria for the evaluation*

The criteria for the evaluation are listed below, following the earlier distinction between inputs, processes, outputs and outcomes.

## Outcomes of changes in inputs

Context, conceptualisation and programme objective outcomes:

- a) an improved understanding by staff at the site of the context faced by the Department of Health and its rationale for introducing TQM
- b) benchmarks derived from an analysis of the context facing the site – in particular, the existing quality states and concepts of quality at that time; and the nature and extent of data collected on staff and customer views
- c) the resulting objectives of TQM as expressed within projects
- d) an understanding about different models of organisational change and of available models of TQM; construction of a coherent model
- e) the development of mission statements, value statements, aims, goals, objectives, targets and plans that were consistent with stated aims of TQM and that were internally consistent and coherent
- f) strategies for securing staff commitment, development and behavioural change

In addition, there was a more general interest in:

- g) the rationale behind the Department's choice of TQM as a vehicle for change
- h) the resulting objectives of TQM as established by the Department of Health
- i) what models of change were implicit in the different projects and their assumptions about future working of NHS systems

### **Outcomes from a review of structure**

One might have expected a TQM site to develop a structure that promoted:



- a) the opportunity for corporate decision-making, especially about quality issues
- b) a reduction in barriers between different functions and occupational groups
- c) improved vertical and lateral communication
- d) explicit vertical and lateral accountability for quality issues throughout the organisation, with an integration of responsibility for quality in management and professional roles

### **Outcomes from a review of resource requirements**

The following were held to be four important areas of resourcing:

- a) sufficient resources for the training of all staff (including top management) in order that they were committed to a philosophy of continuous improvement and had the skills to implement it
- b) resources for the development of high quality information for process improvement purposes
- c) skilled resources to provide technical and practical support for monitoring and evaluation activity
- d) the extent to which sites had been able to cost the implementation of TQM and, if so, whether this could be set against identifiable savings made through process improvement.

### **Outcomes of changes in systems and processes**

The following might be outcomes from changes to, and realignment of, systems and processes:

- a) corporate, functional and departmental level planning for quality improvement
- b) multi-disciplinary activity to improve selected processes
- c) continuous monitoring of performance in all processes
- d) recognition and reward for all staff for their efforts to improve quality in their own areas of work
- e) empowerment of staff and customers to contribute to service-planning, development, delivery and evaluation
- f) enhancement of the quality and availability of information required for process improvement purposes
- g) a sufficient level of training to enable all staff to contribute to continuous improvement within their own processes
- h) establishment of realistic but comprehensive systems for performance review
- i) development of criteria, processes and procedures for evaluation of their projects
- j) integration of previous and new initiatives with TQM

Again, more generally, data were to be collected on:

- k) the extent to which the implementation had been put into effect and whether, and by how much, it had slipped from original objectives

- l) the extent to which TQM arrangements displayed a good level of logic inasmuch as defined activities were well related to the aims attempted
- m) the quality of needs analysis, its relationship to research analysis, service delivery, and its capacity to incorporate the end-users perceptions of their requirements
- n) the training assumptions implicit in TQM objectives, the procedures adopted, and the extent to which TQM had percolated non-TQM training programmes

### Outcomes of changes in outputs

These might have been some of the more important outcomes to result from changed outputs:

- a) a committed senior management team that was determined to secure continuous quality improvement
- b) an organisation-wide quality planning system which had achieved a common understanding about definitions of quality and the need for continuous improvement within a given model of TQM
- c) improved information systems which provided both internal and external customers with the information they needed to contribute to service-planning, development, delivery and evaluation
- d) empowered consumers who were enabled and encouraged to contribute to improvement in services
- e) empowered staff who had the commitment and skills to contribute to continuous improvement

- f) evidence of reductions in multi-disciplinary barriers and more cooperative multi-disciplinary working
- g) documented improvements having been achieved in a range of targeted processes
- h) identifiable savings in wastage through getting it right first time and more cost-effective use of resources
- i) increases in internal customer satisfaction with services received within internal customer chains
- j) positive changes in health status of patients; their perception of the quality of information received, and their general satisfaction with the total episode
- k) a reorientation of services offered, on the basis of a more developed understanding of the needs of consumers and other interested stakeholders.

More general issues included the following:

- l) the extent to which the senior management team, if committed to TQM, had managed to sustain respect for the range of professional values
- m) changes that might have occurred in organisational and professional cultures. These would include changes in priorities between different values, shifts from individualistic professional aims towards more holistic aims evincing concern for the whole enterprise in which individuals had a place
- n) changes which might have taken place in assumptions about service delivery in terms of impact on users (internal and external).

- o) the impact of TQM on inter-agency working and on working between different disciplines within the health service
- p) the capacity of the whole organisation to learn from the TQM initiatives, internal and external. The creation and use of networks for diffusion and learning

### ***The scope of the project***

At the time this study was being planned, there were 17 TQM demonstration sites that were already receiving funds from the first round of Department of Health funding and 15 were expected to continue on Department of Health grants. A sixteenth was to continue without further funding, and a further seven were to be added to this number. It was agreed that the evaluation team would seek access to a total of nine of these TQM sites.

In the event, access could not be secured to one of the proposed NHS TQM authorities but work continued with the remaining eight. These were Bolton, Doncaster, Liverpool, Merton & Sutton, Southeast Staffordshire, Trafford, Winchester and Worthing. All were either already putting some aspects of TQM in place or were planning to do so in that funding year (1990/1).

The selection was made with several criteria in mind. There was a need to maintain national coverage as well as reflect a range of urban and rural authorities. It was also important to have as broad a range of models and types of TQM as possible. The third factor was the rate of progress being made at demonstration sites. Our sample was intended to include some sites that the Department felt were furthest ahead as well as some that were seen to be making less progress. The fieldwork began with this group in May 1991.

The non-TQM NHS sites were chosen during the autumn of 1991 from a longer list identified by of the Department of Health as covering a range of project and site types. The final list was made up of Norfolk and Norwich Hospitals, Cambridge

Community Services, Portsmouth Hospitals, and Stoke Manville Hospital. The choice was designed to reflect a range of different sites that, while not pursuing TQM, were developing different approaches to quality improvement. These were seen at the outset to range from little more than the Patient's Charter, through to more structured forms of Quality Assurance. The inclusion of a non-TQM community service organisation was also seen to be important. Fieldwork began at these sites in February and March 1992.

Following analysis of commercial companies undertaking TQM, it was decided to approach only two, and access was secured to Post Office Counters and Thames Water Utilities to track their TQM implementations. Both organisations were progressively emerging from the public sector and facing increasing competition in their respective markets. Both believed that they faced the need to change their existing cultures, structures, systems and processes, to meet changing demands. The top-down 'revolutionary' implementation of a single management consultancy-driven approach to TQM at Counters, contrasted well with the more 'evolutionary' multiple approach being adopted by Thames Water.

## **Methods**

The original proposal was to set up a time series analysis in which a period of intensive fieldwork would take place each year for three years at the research sites. This would enable base-line measures to be made at the outset and then trends to be monitored over a sufficiently long period for the main effects of TQM to become apparent. As it turned out, the need to make an immediate start at those sites where TQM was already underway, and the delay in work starting at the 'control' sites, meant that three sets of visits were achieved only at the main TQM sites. The rest were visited twice over two years but they were informally monitored during the last six months of the project.

The proliferation of trusts following their own brands of quality improvement also meant that resources for the study were stretched thin once all the TQM and non-TQM sites came on stream. It was also obvious that three sites that had originally

claimed to be implementing TQM were in fact pursuing narrower but nevertheless important agendas. These were focused on:

- an attempt by one site to implement BS 5750 in three clinical areas of community services;
- attempts being made at another site to merge two very different TQM approaches following a decision to bring two hospitals under a single management team; and
- what appeared to be important differences in approach to TQM at the only site to carry out full diagnostic surveys prior to starting TQM.

Permission was sought from the Department of Health to make these sites the subject of less intensive ‘thematic’ study for the rest of the evaluation. This was agreed, but unfortunately, the authority that was implementing BS 5750 felt unable to host the fieldwork in the summer of 1993 because the 5750 projects were about to be inspected by BS 5750 auditors. An offer was made to return later in 1993 but this could not take place before the final report was completed. Therefore, the analysis in subsequent chapters only refers to fieldwork at this location during 1992.

### *Data gathering*

A range of data gathering tools were reviewed when the study was being planned. Although participant and non-participant observation were used to a limited extent (mainly at training and dissemination events) they were discarded as the main technique because of their time-consuming nature and the length of time the researcher would need to be on site to set up sufficient trust with working groups.

The use of questionnaires was also considered but, again, was not pursued except for a limited study of training provision. It was felt that the controversial nature of the TQM projects and the need to be able to probe respondents’ views ruled this method out. There was also a surfeit of questionnaires being used at the time in the

NHS, partly as a result of other research studies and partly because the implementation of patient-focused service improvements entailed a lot of data gathering by hospitals and community services.

In the end, semi-structured interviewing was employed as the main tool. This made it possible to maintain some consistency across levels of organisation, function, and type of quality programme, whilst still allowing opportunities for individual lines of questioning to be pursued<sup>189</sup>. This technique was supplemented by analysis of documentation, monitoring by telephone and observation of relevant meetings and other events.

Each interview sample was designed to secure a diagonal slice through the organisation from Chief Executive to front-line staff across as wide a range of functions and departments as could be achieved within 20 to 30 interviews per site. The precise samples achieved for each round of fieldwork are reported in detail in Chapters 5-7. Overall, some 850 interviews were carried out between 1991 and 1993. The interview notes, site reports and interim project reports for the Department of Health ran to nearly 4000 pages of typed text.

None of the samples was drawn at random, since significant named individuals – for example quality facilitators and managers – had to be part of the sample. Interviewees were nominated by the sites themselves based on a briefing from the researcher. Since as wide a range of views as possible was required, the sites were asked to put together, for consideration, a vertical cross-section of staff who would cover the spectrum from enthusiasm through to scepticism.

Analysis of the first sample in 1991 suggested that the sample included a fair cross-section, though it is not possible to say whether the proportions of each category were representative of the site as a whole. The range of understanding about TQM in 1991 was equally wide. The sample contained facilitators and others with considerable knowledge about TQM, but it also contained a substantial number of people who had not had any training and who were extremely vague about TQM.



This suggested that the sites had done their best to ensure a cross-section of both knowledge and opinion.

In order to strengthen the selection process respondents were asked at the end of each interview in 1991 to suggest two or three other people whom they thought should be interviewed – again based on a cross-section of opinion. This enabled further interviews to be scheduled if it was thought necessary. This group could also be used as in cases where some of those proposed in the original lists were unable to attend. It was also possible to call on this group in the following year when new lists were put together.

Subsequent rounds of interviews also suggested that, largely, a representative sample of staff continued to be seen, as far as views about TQM were concerned. However, as discussed in Chapter 5, the samples were more variable when it came to levels of staff in terms of their roles. At some sites only senior and middle managers were seen whereas elsewhere the main body of the sample consisted of junior staff. The number of doctors was also variable across the sites and generally low. However, when one looks at the sample overall (see Chapter 5, Table 5.1) it can be seen that people were seen from at all levels and most functions across the sites.

### *Conduct and analysis of the interviews*

Apart from exploratory meetings at the sites to negotiate access, nearly all the interviews were carried out on a one-to-one basis by three researchers.<sup>1</sup> Each interview lasted approximately an hour although some ran to nearly two hours. Respondents were guaranteed anonymity. Interviews were carried out using a semi-structured interview schedule designed to secure a broad range of respondents' views (see Appendix 4).

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<sup>1</sup> Approximately 20% of the interviews were carried by two other members of the research team, Maurice Kogan and Mary Henkel. Overall accountability for the study was the author's as project director.

Topic areas for the first round of fieldwork covered the respondents' recollections of the context within which they, personally, became involved in TQM; the quality states and concepts of quality at that time, and what they understood of the model of TQM being followed at their site, including arrangements for supporting structures and processes. The interviewees' opinions were also sought on the benefits and disbenefits of TQM to date, as well as on issues of evaluation and monitoring. More detail on the questions and the methods at each site are considered later.

Not all questions were asked of each respondent. For example, if respondents had arrived at the site after the start of TQM, they would not be asked their views on issues prior to the start. Where respondents had a specific responsibility for a particular dimension of quality or a particular initiative, then more of the interview was spent on that aspect. The semi-structured schedule also allowed supplementary questions to be asked where they were relevant.

The questionnaires were modified slightly each year to allow for new research themes or to reflect emerging concerns at the sites. However, sufficient questions were kept constant in order to ensure that trends could be established and validated. Changes in individual perceptions could also be tracked over time since, at the NHS TQM sites for example, 77% of the interviewees were interviewed in both 1991 and 1992, and 60% were interviewed in three consecutive years.

### *Analysis of interviews*

Contemporaneous notes were taken during interviews and written up afterwards. These were typed up and analysed using Textbase Alpha, a computer-based free-text analysis package. As the name suggests, this software allows text-based data to be analysed in a number of different ways. In this study it was first used to collate all the answers to each question in an interview schedule into a single document. This enabled a rapid comparison of the answers of all interviewees at a single site to the same question. It also allowed the data to be reorganised by different categories for

comparison purposes – for example, managers versus clinicians, or acute unit versus community services.

The programme does this by coding all the text between the start and finish of any blocks of text which are not indented when typed up in a standard word processor document. Thus, by indenting everything except a question number, the programme can identify individual blocks of text and move them around. A typical example is given below. The individual responses are from three respondents in answer to the question ‘How would you define quality in the context of your work?’

Q6. ‘I think it is about treating people the way I would want to be treated if I was in here (as a patient).’

Q6. ‘It’s meeting the standards we have set for our ward. There are six so far but they haven’t been audited yet.’

Q6. ‘I think you have to find out what patients want and then try to give them what they want. The problem is that most of the time they don’t know what they want. Anyway, if you haven’t got the resources you can’t do quality, can you? Everything is just down to money these days.’

Once the data are in this form, it is possible to code them in more detail. Thus, in the third response, one can code individual words or phrases (of any length) and assign codes based on any analytic frame. The frame can be modified as the analysis proceeds. In this example, there are several different concepts of quality involved in a single response:

*you have to find out what patients want and then try to give them what they want*  
(coded as the concept of identifying and meeting users’ requirements)

*if you haven’t got the resources you can’t do quality? Everything is just down to money these days* (the idea that quality of service was directly related to availability of resources was a common theme in our first round of interviews)

The second example in the three at Q6, above, refers both to quality being 'meeting standards' and to the fact that there is an audit tool in place on a ward. Responses like this can be coded more than once for different analytic frames.

Three sets of analytic frames were used in this study. The first was based simply on the questions in the first interview schedule, covering definitions of quality; understanding of TQM; extent of organisational provision; perceived benefits and so on. However, more complex frames were developed and tested in the later stages of the research. At the end of the first year, more detailed analysis using a second frame produced 11 factors which were held to predict significant TQM movement (see Appendix 5). Although these were modified slightly in the next two years, they turned out to be remarkably robust predictors. A third, more ambitious set of frames, was developed at the end of the first year for testing in subsequent years.

Coding in this way also enabled observations to be drawn about changes over time. For example, the concept of quality being the extent to which a service-provider 'meets users' requirements' was much more common at TQM sites after three years than it was at the outset. Similarly, there was a shift from the idea that a quality service was mainly or entirely dependent on available resources, to a more mixed picture where a significant number of interviewees were beginning to acknowledge that effective use of resources was as important as the absolute quantity.

### *Other sources of data – documentation and meetings*

A large amount of documentary material was collected and analysed manually to supplement computer analysis of the interviews. The material included corporate plans covering issues of quality, examples of contracts, job descriptions, local evaluations of individual quality initiatives, training materials, agendas and minutes of quality meetings, and local briefing documents on quality. Some important meetings and training events were also attended. The Department of Health held a series of dissemination seminars where groups of demonstration sites got together to exchange ideas and experiences and these were also attended. Workshops were

held by the author for the NHS TQM sites at the end of the second year. The main results of the interim reports were presented to a group of staff from the sites and feedback was gathered as part of the evaluation.

Efforts were made to keep in touch with sites in between annual rounds of fieldwork, but this was limited by two factors. The first was the unanticipated move to trust status by so many of the sites. This had the effect of increasing the sample from the original figure of eight health authorities to 31 separate provider units – all of which were pursuing different arrangements for quality improvement.

The second limitation had more to do with the chosen style of evaluation. At the outset of the study, it was decided that there was sufficient support available to the field in the form of TQM consultancy and other action research activity. However, much of this advice and support was often partisan in nature and was taking the need for TQM in the NHS as given, at a time when some objective and critical questions about the value of TQM still needed to be asked.

Consequently, it was decided that a summative evaluation would be the most appropriate form. This style depended on collecting data in the normal way but only results of the analysis were fed back – no recommendations or suggestions for change were made. Whilst this enabled a longer term, more objective evaluation, to be carried out, it limited the range and frequency of involvement with the research sites. It also proved difficult at times to maintain good relations while discouraging too close a contact.

Although the evaluation was summative, it inevitably had effects on the field. Some questions posed by the researchers encouraged reflection by interviewees who often spontaneously remarked that the discussion had ‘set them thinking’. The interim reports, too, had discernible effects at some sites. At one, for example, the chapter on evaluative criteria in an early report caused one quality manager to turn the criteria into a questionnaire for managers to use in assessing the progress in their departments.

At another (non-TQM) site, management consultants extensively quoted the results in the same report about the benefits of TQM and the impediments to change in an organisational audit they carried out. Elsewhere the reports had only limited effects. In particular, it had been expected that they would encourage sites to engage in more evaluation but this did not prove to be the case. In part this reflected the lack of local skilled staff who could design and carry out evaluations of this kind.

### *Validating the data*

A related issue concerned the extent to which interview data could be validated. As with all evaluative projects that largely rely upon witness evidence, there is the problem of 'truth'. It was already evident after the first round of interviews that there were many different perspectives of similar events, and many gaps between the perceptions of those taking part in the same processes. This was due partly to the fact that respondents were being invited to re-construct history, by asking them their views up to a year after significant incidents might have occurred.

Traditionally, researchers strengthen the interview process in a number of ways. In the main these consist of triangulation by, for example, using several data collection methods, or within the interview process itself by using different combinations of interviewers, subjecting interviews to peer review, repeat interviewing and so on. In this study, a number of measures were taken to provide for an element of triangulation:

- a) At least two, and in some cases, three interviewers interviewed at each site. They interviewed separately and only compared notes after interviews had been completed for each site.
- b) One interviewer from each site then analysed the data and wrote an interim site report which was then scrutinised by the other team members.

- c) Where points of disagreement about facts became apparent (either through our own or respondents' recollections), these were checked with additional people at the sites.
- d) All interviewees were guaranteed anonymity and this encouraged many interviewees to be candid about their views.
- e) In 750 one-hour, one-to-one interviews were carried out with a broad cross-section of staff in different districts and parts of districts, in very different organisations within districts, and in virtually the whole range of occupations within the health service. A further 100 interviews were carried out in the commercial organisations
- f) 77% of the respondents interviewed in 1991 were re-interviewed in 1992. 60% of interviewees were interviewed in all three years of the research. Prior to repeat interviews the previous year's notes were re-read, both to refresh interviewers' memories and to enable them to check out how consistent and reliable interviewees' views were from one year to the next.
- g) Interview data were also compared to documentation being produced by the sites.
- h) Two workshops were held for relevant staff from the NHS research sites after the second round of data collection. These events were used to disseminate the findings so far and to ensure, as far as was possible, that a valid picture of overall progress had been developed. Presentations of some essential findings were also given at two national conferences on TQM in the NHS and a general response was sought to the identification of factors predicting movement at sites.

The following chapters present the results of this fieldwork. The results have been collated by main sample groups – Chapter 5 on the NHS TQM sites, Chapter 6 on the NHS non-TQM sites, and Chapter 7 on the commercial companies' experience. Chapter 8 then draws comparisons between the three groups in the sample.



## **Chapter 5 – Fieldwork at NHS TQM Demonstration Sites**

### ***Introduction***

This chapter begins with a brief description of the NHS demonstration sites that made up the NHS TQM sample. Methodological issues that were specific to the NHS sites are then discussed and the final interview samples are analysed. Since the sites were assured of anonymity at the outset of the project, the results of the fieldwork are not identifiable by actual locations. Finally, the main body of the fieldwork conducted over the last three years is presented.

### ***Description of the NHS Sites***

Some of the important features of each site are discussed first and then some of the major changes that have occurred at each site since the beginning of the project are summarised. (The non-TQM NHS sites are described later in Chapter 6).

### ***Bolton***

Bolton Health Authority consisted of a major acute unit, Bolton General Hospital, a second, smaller unit, Bolton Royal Infirmary, and several more hospitals, including Hulton and Fall Birch. At the outset of the project, they were all directly managed units (DMUs). Soon after the start, they were merged into a single unit under a single management team. There was a capital programme under way to close the Royal Infirmary and centralise all services on the General Hospital site by 1996/7.

Bolton continued to be directly managed throughout its first year, and, although the two sites were merged into one unit, different approaches to TQM continued at the two sites. The smaller unit continued with the Personalising the Services Initiative (PSI) whilst the larger unit pursued a more classic top-down TQM programme. A quality assurance manager was appointed full time at the major acute unit but the PSI programme continued to be facilitated, part time, by a clinical psychologist.

Towards the end of 1992 it was clear that the unit was going to apply for trust status though the situation was complicated by the fact that the merger between the two hospitals was now also to include a merger with the community services. In addition, the unit moved to a directorate structure of nine major specialty directorates, with community services being the tenth directorate, and there were six further directorates for support services.

During 1993, the decision to merge with community services was reversed and it was decided to proceed with two separate trust applications. It was also decided to re-launch the TQM programme with the use of external management consultants. In the meantime medical engineering had secured BS 5750 registration and it was intended that the whole of the estates department would go for registration as well. During 1993 the quality manager was made redundant and was not replaced.

### *Doncaster*

This site was a first wave NHS trust consisting of two main hospital locations. The first was a large acute unit, Doncaster Royal Infirmary (DRI) in Doncaster. It was an 800-bed hospital serving a population of 289,000. The second was a smaller unit, the Montagu, some 15 miles away. It had 160 beds and served a population of some 80,000. The Montagu used to fall within the Rotherham DHA, before being merged with the DRI. There were four other small hospitals and a community services unit but they were not part of the trust. Whereas DRI provided a full range of acute services, Montagu only had three wards and an A & E unit which tended to take less serious cases. Doncaster received funding in the Department of Health 1989/90 funding round.

The main acute unit moved early on to a clinical directorate structure but Montagu, the smaller community hospital, elected to become a geographic directorate. Both sites implemented TQM based directly on Crosby's approach, although there was bottom-up PSI-type model was in operation at the Montagu before the start of the Crosby approach. When the site failed to secure funding for the second year of TQM, it was unable to continue paying for training materials and consultancy from

the management consultants who were assisting with the implementation of Crosby's approach. The site then began in the second year to develop its own training materials and techniques.

Significant changes took place during 1993. All the sites were combined under one management team working from the main acute unit and this affected the TQM project. The main change was that the single quality improvement team dealing with quality issues at the Montagu, which had remained a geographic directorate, was broken up. The members of the Montagu directorate were reallocated to quality improvement teams that were to cover both sites and operate out of the main acute unit.

### *Liverpool*

The provider units within Liverpool Health Authority all secured trust status before, or during the first year of the project. The LHA, which once employed some 400 people, was reduced to 40 staff. The providers represented a wide range of differently organised units with an equally wide range of facilities in different states of repair. Royal Liverpool University Hospital Trust, for example, was a major multi-storey university-based teaching hospital in the centre of Liverpool. Built some ten years ago, it had suffered from some fundamental weaknesses in design from the outset. In contrast, the newer parts of Alder Hey Children's Hospital and Community Services Trust, and the brand new Cardiothoracic Centre (CTC) had impressive new facilities. Both offered supra-regional cardiac services.

The fourth unit, Broad Green, was somewhere in between in terms of its buildings and was more conventional in its layout, being a large site with very mixed stock. At the start of the project, it had recently merged with two-day hospitals for the elderly. It had close links with the cardiothoracic centre. The start date for the DoH initiative was in 1990. Only the Alder Hey project was funded by the Department of Health. It was intended that the other sites would share in Alder Hey's progress by networking between quality facilitators at each site.

During 1992, considerable attention was paid by several of the trusts to the issue of organisational structure and the management of non-clinical support services. In one trust a wide range of services were subjected either to compulsory competitive tendering or to some form of market testing. In another trust, work was undertaken on reviewing the structure with a view to flattening the hierarchy. Later in the year, two trusts also reviewed their TQM programmes in the light of stronger acceptance of Deming's philosophy. The cardiothoracic centre began a top-down implementation of Deming's approach and Broad Green, too, carried out a series of training events based on the same philosophy.

There were further major changes during 1993. It was decided that the accident and emergency facility at one of the larger acute units would close and the work should be transferred to other hospitals. This obviously led to a marked reduction in the number of medical and surgical beds – replaced by elderly rehabilitation beds and elective surgery cases. There were also changes in internal structures designed to reduce the number of directorates in some of the hospitals. One hospital, in particular, was looking at the possibility of 'super-directorates' whilst another had reduced nine clinical directorates to four business units.

### *Merton & Sutton*

This was one of the places in the sample where TQM was being pursued at both district and unit level. The main unit was a large trust hospital, St Helier, but other hospitals were being brought into the programme. TQM was also being implemented in the Schools of Nursing and in the major private contractor employed by the trust. Community services, which included a large residential hospital for those with learning disabilities, were also pursuing its own quality assurance arrangements. Planning for TQM just pre-dated the Department of Health initiative and the large acute unit trust was funded by the Department in the 1990/91 round.

The implementation of a Crosby-style TQM programme at St Helier continued throughout 1992 with a major training programme for managers, and then latterly,

for front line staff in individual work groups. The community services unit had also continued with its quality assurance/TQM programme and had become a trust during this period. An increasing number of the features of the TQM programme at St Helier were also finding their way into community services implementation. During 1993 the hospital underwent a King's Fund organisational audit and continued to advance a major patient-focused care initiative. A revised five-year plan had been produced which specifically attempted to integrate all the Department of Health initiatives using TQM as the integrating framework.

### *South East Staffs*

This authority was spread over a wide geographic area, containing two acute general hospitals, together with a number of small community hospitals and an 800-bed psychiatric hospital, scheduled for closure by 1995. The timing of the closure was not altogether in the authority's hands with over half the patients coming from two neighbouring authorities – Walsall (the majority) and North Warwickshire. At the outset of the TQM project the authority had been divided into four units – two acute units, a community unit and a mental health unit. The number of provider units was reduced to two when the authority took up the purchaser/provider split.

The beginnings of QA in the authority predated the TQM initiative by several years. The UGM at Tamworth and Lichfield, for example, had produced a unit quality assurance strategy document by 1989. The unit had also produced, and was using, a QA ward audit tool. The rest of the district went down a different route. It pooled resources to develop a programme of training that would support managers charged with implementation of QA (since broadened into a full management programme). The purpose of the original bid to the Department of Health was to develop this approach further and test its transferability to other organisations. This was to be accompanied, and part funded, by the sale of the manuals and other material.

A number of reorganisations took place at senior management levels in 1992. The reorganisation in 1991 had produced one large acute unit that included the merging of five small community hospitals as part of an intended trust application for 1993.

The community services had become a trust combining community and mental health services. In 1992 it was decided that the five small community hospitals would be de-coupled from the acute unit which would precede to trust status on its own. The five small hospitals would become, in the longer term, part of the community services trust. Since this was going to take some 18 months, it was agreed that the Community Services Trust would act as the managing agent of the hospitals on behalf of the health authority. A further potential move was the possibility of a merger between South East Staffs and Mid Staffs health authorities.

It was also decided to pursue pilot projects for BS 5750 in a number of clinical areas following successful installation in several hotel service areas. In addition, the community services began the implementation of BS 5750 in speech therapy, chiropody and community dentistry.

### *Trafford*

Trafford was created as a separate district in 1974. A DGM was appointed in 1984 with a brief to balance the books within three months. This was achieved but with reductions in staffing levels and in the range of acute services. The district was surrounded by three large teaching districts and perceived itself to be under threat from them. It was decided that if they were to compete with other units, they would have to offer exceptionally high quality 'bread and butter' services to the local community, through well-developed relationships with GPs.

The General Hospital was a relatively small unit – less than 500 beds. A large proportion of its patients came from the outpatients department at a small hospital some miles away. There was also a psychiatric hospital in an ex-workhouse that was due to close. There were several other small hospitals for the elderly. Whilst the north of the district appeared well served and capable of holding its 'market share', the south was seen as an area where a lot of business was lost. The authority started its TQM programme in January 1990. It had already decided to embark on TQM prior to the DoH initiative.

The major change during 1992 was the introduction of clinical directorates that coincided with application for trust status. It was intended to go for a combined community and hospital provider trust although the unit was by no means clear at the stage of the 1993 interviews whether this application would be successful. This uncertainty had delayed the restructuring of community services.

Further changes to the trust application occurred in 1993. Originally, community services were going to become a trust in their own right and when this was turned down, they intended to make a combined application with another local community service. The TQM programme had also changed direction. It had first been developed as a comprehensive quality assurance programme based strongly on a dynamic system of standard setting. However, during 1993, more interest was shown in the Deming model. This had led to staff in three directorates being trained in the philosophy. An increasing amount of work began to be undertaken between the quality department and clinicians. In particular, this led to cooperation on identifying and monitoring process variation.

### *Winchester*

The Winchester group consisted of a district general hospital and three community hospitals organised in a community unit with three sector managers. One of the community hospitals applied for trust status in 1991. This was another of the districts in the sample where a quality initiative was being applied to district head quarters as well as the main operational units. The initiative had begun as 'Leadership for Quality' in 1989 and secured Department of Health funding in the 1989/90 round.

Winchester was later than other sites in implementing the purchaser/provider split. However, in 1992 a major structural split took place within the district. At this point the variation in approaches to TQM between the different hospitals and services increased and the research team's focus switched to interviews in the provider units. A major event that also occurred in 1992 was a visit to America by senior managers and clinicians to meet Don Berwick, an American doctor who had

become a strong supporter of TQM.<sup>190</sup> This led to an increased awareness of the importance of systematic process improvement.

The twelve months from May 1992 to May 1993 saw unsuccessful applications for trust status by two units. This led to a major restructuring which was still in progress at the time of the final fieldwork in 1993. It was intended that the acute and community clinical services would be integrated within five clinical divisions. A new chief executive was appointed to oversee the new trust application. The director of quality was made redundant and his role taken over by a new director of nursing. Other staff with quality responsibilities also left at this time.

### *Worthing*

At the outset of the TQM experiments, all the sites were within Worthing District Health Authority. One group now belongs to the Priority Care Trust. It includes three locations, Swandean Hospital a long-stay hospital for the elderly (due for closure), Zachery Hospital and Shoreham Health Centre. The other major unit where interviews were conducted, was Worthing and Southlands Hospital, which applied for trust status in 1994.

The authority was interesting because it commenced TQM by initiating five substantial quality projects rather than installing TQM on a site-wide basis. Funding was first received from the Department of Health in the 1989/90 allocation. However, the origins of TQM could be found a good deal earlier, with a major programme of management change entitled *The Worthing Way*. It was this initiative which was modified and extended to incorporate TQM. The authority had had a long-standing relationship with a management consultant who was advising two other authorities in the sample – one a TQM site and one a non-TQM location.

### *Range of Sites*

Between them, these eight authorities offered a reasonable range of locations, and distribution of facilities through units and organisational structures. It was possible



to observe the effects of all but two units applying for and then operating as trusts. At the outset, however, it could be said that the sample was unrepresentative of the wider set of TQM pilot demonstration sites in two respects. The first was that only one of the authorities contained a teaching hospital, although many of the districts were closely associated with teaching hospitals and provided regional or national specialist clinical facilities.

The second issue was the fact that the Deming model of TQM was not initially being followed in any of our sample districts. However, in 1993, three large acute units in different authorities elected to make fresh starts using Deming's approach. It was possible, therefore, to see at least the early stages of a Deming implementation.

As results of the fieldwork described later in this chapter will show, the sample spanned the full range, from a reasonably comprehensive and thorough implementation of TQM at one site, through to almost no movement at all at several others.

### *Methodology*

The basic methodology was outlined in Chapter 4. This section give details of the interview sample from which the empirical data for the NHS TQM sites were drawn.

#### **The respondents**

The samples at each site varied both within and across the three years of fieldwork. Detailed instructions on drawing the samples were given to each site, but it was not possible to stratify samples or randomise them as rigorously as one would have wished. Overall, however, the sample did reflect a wide diversity of level, age, experience, role and opinion. Table 5.1 below gives a breakdown of the interviewees for each site by role. It also shows the number who were re-interviewed over the three years.

At some sites, there was little or no access to medical staff and at others, hardly any senior managers were interviewed. However, this was balanced elsewhere where a majority of senior managers but few junior staff were seen. The scarcity of medical participation in the study is perhaps an empirical finding in its own right.

Whilst one might have expected the sites to put forward staff with the most positive views of TQM, this was clearly not the case. Many staff were overtly critical of both the concepts of TQM and the way in which it was being implemented. There were also many who, just as clearly, knew little or nothing about the subject. When the data from all the sites are taken together it is possible to see consistent themes emerging, notwithstanding the different approaches being taken at sites or the different ways that samples were drawn.

Table 5.1: Interviews conducted at NHS TQM sites

ROLES	1991	1992	% of '92 interviewed from 1991	1993	% of '93 interviewed from 1992	TOTALS
Admin management <sup>1</sup>	118	36	83	27	59	181
Admin non-management	11	11	56	8	62	30
Support services clinical management	16	19	84	17	53	52
Support services clinical non-management	5	5	80	6	67	16
Support Services non-clinical management	11	18	61	11	64	40
Support Services non-clinical non-management	6	4	100	7	43	17
Nurse managers	40	16	83	11	82	67
Nurses	38	22	77	15	53	75
Clinical Directors	12	6	100	6	67	24
Consultants	9	6	33	11	54	26
GPs	2	-	-	-	-	2
Paramedic managers	18	6	83	6	67	30
Paramedics	2	2	50	3	67	7
CHC members	2	-	-	-	-	2
TOTALS	290	151	77	128	60	569

<sup>1</sup> includes quality staff, trainers, personnel, finance and headquarters management staff

## ***Results of the fieldwork***

The main body of empirical findings is now presented. The criteria used for the evaluation were set out in Chapter 4. These have been grouped up into three main categories – *corporate approaches to quality*, *systematic measurement of quality*, and *customer-driven quality*. These are three of the fundamental principles that are held to underpin orthodox models of TQM.

### ***Corporate Approaches to Quality***

A major outcome of a successful TQM implementation would be increasingly well-developed corporate approaches to quality. This would be judged by:

- a) the extent to which there was quality planning which was fully integrated with the normal business planning process;
- b) installation of structural changes to improve vertical and lateral accountability for quality;
- c) establishment of comprehensive performance review; and
- d) the development of a senior management team which was actively committed to continuous quality improvement.

One would also expect to find that sufficient resources had been provided for widespread and comprehensive education and training. The overall result should be an organisation-wide quality planning system built on a common understanding about definitions of quality and the need for continuous improvement within a given model of TQM. Clearly, the extent to which any organisation can achieve these targets is dependent on its starting position at the outset.

This section begins by describing the context within which TQM was introduced in 1989 and 1990. A summary of the outputs from the corporate planning process is

included at Appendix 6, complete with brief details about the resulting choice of TQM approaches.

Whilst the contexts at each site had much in common, there were also some important differences which had a bearing on whether or not, and in what form, TQM would be implemented. In common was the fact that all of the sites had had a history of earlier, if mainly unsystematic, attempts at quality improvements. Indeed, it is important to note that at least two of the original eight authorities had begun TQM-style projects in some of their acute units prior to bidding for Department of Health funds. However, the effort that had to be put into carrying out pre-TQM diagnostics at a site, then pre-planning TQM, including methods and resources for monitoring, did not appear to have been fully appreciated.

A detailed technical summary of TQM was available from the centre, but few of the TQM sites appeared to have made much use of this. Both they, and senior people at the centre, appeared to have down played some of the main features of TQM which were also held to be essential to its successful implementation. These included the need to focus explicitly on the prevention of errors and the elimination or duplication or waste; the identification of internal customer supplier chains which meant that doctors were essential to process improvement; and the need for comprehensive training and education programmes that included all staff.

The implementation of TQM was seen in the context of a number of quality initiatives that were designed to improve the physical environment and facilities for patients. This was reflected in much of the early work on TQM programmes which, in turn, focused on environmental improvements. At an early stage TQM was already being seen as an important *additional* tool for improving quality rather than a mechanism for integrating existing initiatives.

The factors that triggered a decision to implement TQM at a local level varied. For example, those units that were applying for trust status were aware that bids were unlikely to be successful if arrangements for quality assurance were not given a high profile. In many cases, this led to someone at director level being given specific

responsibility for quality. This was typically the director of nursing but, elsewhere, responsibility for quality at board level had also been given to directors of contracting rather than nursing.

Other factors were also influential. The appointment of a new District General Manager or chief executive with an interest in some of the principles of TQM could start an initiative because he or she had a desire to empower staff or to improve access to services. Other triggers that were mentioned included: the higher profile for quality standards required by contracting; a desire to integrate professionals and managers within the general management structure; the need to find further ways to save money; and a pragmatic decision not to turn down money being offered by the Department of Health for the TQM trials.

A further major influence at some sites was a desire to provide coherent integration of a wide range of other initiatives including the Resource Management Initiative (RMI), Medical Audit, Nursing Audit, the work of quality circles and other similar initiatives such as Personalising the Service Initiative (PSI). Other initiatives which were already under way or in the pipeline included the purchaser/provider split, Compulsory Competitive Tendering, introduction of standard setting, devolved budgets, and the Patient's Charter.

From the outset of the fieldwork, it was clear that a large number of quality improvement initiatives and projects were in place before the start of TQM. This confirms the findings of Dalley and Carr-Hill<sup>191</sup>. Despite financial restrictions, increasingly heavy workloads, and low morale, staff continued to try out new ideas for service improvement. However, the impression formed from respondents' descriptions during the first round of field work in 1991 was that pre-TQM initiatives were often one-off attempts to improve the quality of an individual process (or part of a process) rather than part of a full quality assurance programme. Several examples were projects that individuals were carrying out as part of further education or professional qualifications. Most tended to have certain characteristics:

- the initiatives were driven by interested individuals, often ploughing a rather lonely furrow;
- they were limited to the internal workings of a single department;
- staff implementing some of the projects felt that they were not supported by middle or senior management in terms of recognition or provision of resources;
- these projects were not normally integrated with other projects and initiatives; and
- they were not integrated with the general strategic thrust and direction of the unit or service.

### **Preplanning – diagnostics and benchmarking**

The term diagnostics is used here to refer to surveys and other data collection exercises designed to establish the position of an organisation in relation to its internal and external customers. Benchmarking refers to an analysis of how the organisation stands in relation to its competitors – an idea developed first in the commercial sector, in order to compare one's own organisation against the practice of leading organisations in the same field.

Few of the sites carried out any diagnostics or benchmarking at the outset of their TQM initiatives. One or two sites undertook staff surveys, whilst others reviewed the data which had been collected from sporadic patient surveys. Elsewhere specific services had carried out their own studies for reasons unconnected to TQM. For example, in one authority, sophisticated epidemiological studies and patient satisfaction surveys had been carried out over the past four years in public dental health. It appeared as if dental services were in advance of other services – in many respects they were already operating within a basic TQM framework.

One site, however, had used management consultants to carry out a comprehensive data collection exercise. This included a thorough staff attitude survey; a survey of 110 GPs; interviews with patients and other interested parties who had experiences of the services; a more general survey of residents in the area, and a confidential study of medical audit. Taken together, the results helped senior management to identify the gaps between what they saw as the goals and objectives for the future and what they were told by some of the main stakeholders. It is significant that this site had already been made aware of the threat of a potential take-over by its larger neighbours and intended to develop a range of services which were explicitly designed to be locally based and directly matched to the needs of local users.

The lack of basic data collection by sites at the outset and in subsequent monitoring caused problems for this evaluation. It had originally been intended that much of the data required for the evaluation would come from the sites' own monitoring. In the event, sites did little collection or analysis of the progress of their initiatives.

Two important areas were covered by the evaluators. The first was what respondents saw as the quality states prior to the start of TQM and the second was what the existing concepts of quality were at the outset. Since the sites, themselves, had collected few data on these issues the team was forced to rely on the recollection of interviewees in the first round of fieldwork which took place at least a year after TQM had started. The findings on these two issues are set out below.

### *Quality states prior to the start of TQM*

The majority of respondents felt there were no serious problems at the time their programmes started – certainly nothing that would require such a fundamental change as the implementation of TQM – although almost all believed that work on quality improvement was desirable. The only exceptions were particular community hospitals or acute unit support services that were singled out as causes for concern.

There was a widespread, but not unanimous, feeling that resources were inadequate to provide the level of service that staff felt they should be giving. Many staff felt

they were constantly under pressure to introduce new initiatives some of which, for example, Compulsory Competitive Tendering (CCT), were cost driven rather than quality driven. Because general cost improvement exercises were running alongside TQM, some believed that TQM was going to lead to further reductions in resources (i.e. anything saved would not be reinvested in improved services). Whilst respondents considered that many of their problems derived from lack of resources, some felt this was exaggerated by poor utilisation or lack of appropriate and effective processes and systems. Processes which involved more than one department or function were more likely to be complained about than those internal to just one area. There were many complaints about the 'hassle factor' in terms of difficulties that inefficient processes caused for staff and patients, but few interviewees mentioned the likely costs in terms of waste from duplication of work, error, or delays in treatment and discharges.

It was recognised by many respondents that, prior to the start of TQM, there was an over-reliance on professional expert and medical models of patient care rather than more holistic understanding of *total* patient care. Thus, insufficient attention was seen as being paid to the patients' emotional and non-medical needs. Patients were often treated as passive by nurses and doctors who were more task oriented than patient oriented. Nurses, both front line and managers, referred many times to what they called 'the arrogance of consultants' and/or to the unwarranted certainty they displayed towards patients and other staff<sup>192 193</sup>.

It was said that systems and staff sometimes appeared to be geared more to meeting staff needs than those of patients. Examples included wider choice and better quality food for staff than that destined for patients; unnecessary restrictions on visiting hours; lack of parking, and staff parking in visitors' bays; patients on wards still woken very early in the morning; and consultants who arrived late for clinics, or who held them at times inconvenient to the users.

There was a general sense that improvements could be made in the information given to patients and that they were insufficiently involved in the development of services. Patient satisfaction surveys were beginning to be used in some areas, but



these were often framed from a professional perspective and users of the services were still not actively involved in development or monitoring. For the most part, sites felt that they lacked technical competence in this area.

Internal communication was also the subject of extensive comment. Prior to TQM, barriers between different departments and specialisms were seen to be contributing to some inefficiency and, on occasions, to poor working relationships. Systemic problems also arose which led to a lack of coordination between internal customers. Common examples were between doctors and the therapy professions, X-ray and the wards; between wards and places such as catering and laundry; and finance or personnel and their internal customers. One of the important advances made by TQM was in improving communication between some of these groups. Enthusiastic accounts were received, for example, of improvements between teams of people working at the operational level in finance and personnel at one site and between wards and catering at another.

It was said that new organisational structures were designed and implemented with little consultation or with inadequate information – something that still tended to happen after TQM was implemented. The fact that some departments were already beginning to make changes at the outset of TQM could lead to problems when other departments that were in the same process had not moved as far. For example, mothers-to-be in one maternity hospital found the reception and some antenatal processes prepared to include the father and other relatives in discussions about procedures, but just down the corridor, in the ultrasound unit, even fathers were excluded. It was cross-functional issues such as this that were often mentioned as being of concern prior to TQM

### *Concepts of quality prior to start of TQM*

Interviewees were asked about the concepts of quality that were prevalent at the start of their projects. Most of the respondents felt that people would find it difficult to provide definitions of quality. They would be vague or give definitions based on their own professional background. If they were asked to define what they

meant by 'best service' or 'high quality', they would have some difficulty expanding on general statements. Nevertheless, many emphasised that quality meant a shift to a customer focus. Part of the problem was that few knew what TQM was and were unable to articulate definitions of quality within that context. Perceptions about definitions prior to TQM are grouped into the following categories:

## Standards

Although definitions of quality were somewhat uncertain and varied, most staff groups had their own standards and would refer to these as a reference point for their own definitions. They were derived from a combination of professional training and guidance, legal prescription, national and local criteria imposed by sources outside the organisation, and also standards laid down by the organisations themselves. For example, in one hospital porters had their 'do's and don'ts' about smoking in areas to which the public had access; pathologists had strict quality control procedures for tests based on national norms; finance followed financial rules and prescribed accounting practice; medical engineering complied with BS 5724; catering had to meet national hygiene regulations, and medical staff followed ethical and practical guidelines provided by their colleges and national committees. Thus concepts of quality in obstetrics, psychiatry, medical engineering and linen services would have been quite different. This would not only be so in their technical core, as might be expected, but also in such dimensions as relationships with patients, where one might expect a more generic approach.

Several of the interviewees recognised that the standards existing before TQM were different from definitions of quality under TQM. For example, a pathologist noted that the specialist focus on technical excellence would have to be broadened to include issues of customer satisfaction (health authorities, GPs, hospital doctors, patients and carers, for example). Some of the nurse managers and nurses saw that setting nursing standards did not necessarily meet the principles of continuous improvement under TQM. Other interviewees saw the need to integrate changes in organisation, structure and systems, in order to widen definitions of quality to

include the users' views. Some further concepts, which were held to be common prior to the start of the projects, are discussed below.

### **Quality is equivalent to, or dependent on, resources**

According to the respondents, the perception that the quality of service could not be improved without an injection of resources was a common theme prior to 1989. Staff felt they were being asked to improve standards of quality at the same time as they were being required to reduce costs in the form of various cost improvement programmes. This was seen to be a contradiction, particularly in some of the support services that were required to contract for their work. It was felt that contracting was finance led rather than quality led.

### **Technical/professional models versus holistic models**

Medical and nursing staff stated that, in the past, quality would have been seen in terms of technical and medical outcomes rather than the broader-based concerns of patients. Even where nursing standards had been defined these appeared largely to have been based on professional views of patient need rather than asking the patients what they wanted. There were however some exceptions – for example in maternity and psychiatric services where there had been an increasing recognition of the need to build the views of patients and relatives into the care planning process. Hospital services for children were also likely to have taken a broad perspective on patient need before TQM started. In some specialties, active and sophisticated interest groups contributed to the widening of perspectives.

## *Progress since the outset of TQM*

### **Changes in definitions and concepts of quality**

An important requirement under TQM is that there should be a progressive convergence towards common definitions of quality. In the commercial sector, all staff would be encouraged to follow a single definition of quality. There were marked differences between the NHS sites in this respect. At one extreme there was

almost no movement at all towards a single organisational definition at two of the sites, through to marked movements towards common definitions at two others. The rest of the sites lay some where in between. Analysis of differences showed that the amount of movement could be accounted for by four important variables:

*Training:* where a significant amount of training had taken place and the widespread dissemination of a particular definition of quality was part of that training, then there was less variation in definitions of quality.

*Management consultants:* where sites had employed firms of management consultants, definitions used by the consultants tended to have taken a firm hold. Interestingly, at one site, this was so even though the services of the management consultants had been dispensed with after the initial diagnostic phase and little further training had taken place.

*Organisational definitions:* there was more variability in personal definitions where little or no attempt had been made to propose and disseminate an organisational definition. It was clear that proposing an organisational definition on its own was not sufficient for it to take hold. This only occurred if that definition was disseminated through training events and through other mechanisms – for example, separate quality structures, meetings, projects, and internal documentation, including newsletters.

*Following a distinct TQM approach:* where sites that were following a particular TQM model, for example Crosby, or a model developed by management consultants, respondents were much more likely to produce common definitions based on the model that the site was following.

Even at sites where there had been less progress towards a single organisational definition, significant shifts towards the basic philosophy of TQM could be seen. The main themes were:

- A shift from focusing on inputs, for example a lack of resources *per se*, to a concern with outputs and optimum use of resources.
- A shift from focusing on environmental improvement to process improvement with more of a customer orientation (quite common); and a move to process improvement with a view to reducing waste and error (still quite rare).
- A shift from exclusive dependence on technical/professional views of quality to more holistic patient-centred ones. This grew quite rapidly in the first year of the projects and had become clearer and more sustained by 1993. It should be said, however, that considerable variation still existed within individual sites.

There had been a progressive move towards the general idea of internal customers, particularly at those sites following a structured TQM approach. The concepts of internal customers were strongest at those sites where they were following a specific form of TQM and where the idea was promoted in training. In contrast, the principle of internal customer *chains* had really only begun to appear in one or two departments at a few sites. Typically, it had been taken up in some clinical support services (for example pharmacy) and non-clinical support services (finance or personnel).

### Level of understanding of TQM concepts

Although there were differences between the sites in terms of respondents' understanding of the concepts of TQM, the extent to which they felt that they had a better understanding was, not surprisingly, correlated with the amount of training they had had in their own particular schemes. Even as late as 1992, as many as one third of respondents at three sites where there had been little or no training, said they had little or no understanding about their schemes at all. By and large, this was still the case after a further year of TQM, at least up until the summer of 1993.

Those respondents who had continued to get further training in 1992 and 1993 reported an increase in understanding of and commitment to TQM.

Even where interviewees had had no further training, but had been involved in quality improvement projects, they also gave positive views of TQM and stated they had a better understanding of TQM implementation because of continued involvement. Staff who had had no training and no involvement in improvement projects had more negative views about TQM. This was also found to be the case in the commercial organisations in the sample, emphasising the importance of early involvement of staff in both training and quality improvement projects.

### The planning process

Sites that were encouraged to bid for Department of Health money were asked to submit proposals following an outline structure that was provided by the department. There was also a detailed synopsis available of the basic principles of TQM. It was clear from an analysis of the original project proposals that there was considerable variation at the sites both in understanding of TQM and in how to go about implementing it.

The terms under which proposals were accepted illuminate the Department of Health's thinking at that time. It was clear that the Department was content to allow sites to develop their own approaches to TQM. It was hoped that this would encourage sites to 'own' their own approaches and, secondly, to allow a range of different approaches to be tested. It can be seen that there is a marked contrast between this and the approach the Department took to the Patient's Charter. The Charter was centrally driven, explicit in context and framed around centrally set objectives and time scales. There was also a requirement for continuous monitoring of both the implementation of the Charter and a number of standards.

An analysis of the corporate planning process at the sites, both at the outset and in terms of subsequent developments, is summarised in the table at Appendix 6 and discussed further in Chapters 5 and 6. In summary, all TQM funded projects had

issued mission statements with varying degrees of specificity. These were markedly similar in spite of the very different approaches sites were taking to TQM. Priorities were stated in most authorities as threefold. First, there was responsiveness to, and empowerment of, patients as individuals with unique needs. Second, was a commitment to the development of staff, thus enabling them to play a full part in provision of high quality services. Third, were some statements framed around pursuit of service relevance, efficiency and value for money.

It is significant that this is a reversal of the priorities found in commercial organisations at the outset of TQM. The constant pressure in the commercial sector to reduce costs by cutting out error and waste is invariably seen as the starting point for TQM programmes. It is a fundamental principle of both Crosby's and Deming's approaches that reducing errors (Crosby) or process variation (Deming) will inevitably improve the overall quality of a product or service. Reductions in error and waste will then free resources that can be invested in further process improvement, in new technology, in the training of staff, and in better identification of customer needs. Once process improvement is underway commercial organisations will concentrate on reorienting the business towards their customers' needs.

The development of mission statements at almost all the sites took place through senior management team meetings and further work by quality managers where they were appointed. Only three sites involved more junior staff in work on mission and philosophy statements or what were often called value statements. It is notable that, in all these three examples, the TQM projects were being led by management consultants.

The early mission statements had been refined since the start of implementation. The main driving force behind this had been the need to be more explicit about quality in trust applications. There had been other important developments. One site, by far the most advanced of all those in the sample, demonstrated how new initiatives such as the Patient's Charter could be incorporated in an over-arching TQM philosophy. At another location management consultants carried out

elaborate work on 40 value statements which enabled senior management to identify the gaps between these organisational 'ideals' and the current position.

While all the sites developed mission statements of some kind, only four of the eight original authorities turned these into measurable objectives. However, there had been growing specificity of objectives since those early days. The introduction of corporate business planning at all sites could be said to be one of the most obvious examples of progress over the three-year period. There was still some gap between corporate business planning and planning for quality, but it was clear that these were coming closer together – one was much more likely to find quality objectives being stated at both corporate and departmental level.

The pressure of the purchaser/provider split and the resulting contracting process appeared to have been more influential on these developments than TQM *per se*. This was evident, for example, where departments which were not yet developing specific contracts for internal or external customers, had much weaker quality objectives than departments which were subject to strong purchaser pressure, although all the departments were, theoretically, equally subject to TQM. That is to say, it was contracting which had produced quality standards and targets at most sites rather than TQM.

The weakest area of corporate planning for quality at the outset was the specification of how quality objectives would be turned into action. Almost all the sites specified milestones for implementation and most provided outline plans. Some of these were very detailed. One site put forward 130 actions as part of a plan although it less clear how these were to be monitored since there were no specific standards or targets set. A second site also had detailed and extensive plans. These covered a proposed shadow quality structure, education programmes, systems and processes for continuous improvement and quality improvement tools.

A third site planned to set up five local pilot projects for TQM but specific targets and plans were not available. This initiative was seen as a consolidation and extension of existing good management practice rather than a major departure from



what had gone before. The other sites either had no specific plans with targets to achieve, or else did have some initial plans but these fell by the wayside with changes in, or loss of, management consultant support.

It was difficult to keep track of developments with the move to so many trusts. Generally speaking, it was observed that the progress made in the setting and achievement of objectives had been confined mainly to the Patient's Charter rather than more general objectives based on the principles of TQM. Further pressure in this direction had also come from increasingly specific quality objectives set by purchasers as they moved away from the block contracts of the early days.

Overall, the picture was one of increasingly strong integration of business and quality planning at the corporate level though the setting and monitoring of quality objectives still remained weak. One of the biggest differences between the NHS and the commercial sector organisations in this study was the effort put into critically monitoring and evaluating the progress of TQM implementation as well as improvements in the quality of services more generally. In particular, the detailed reviews of its TQM programme undertaken by Post Office Counters were in marked contrast to all but one of our TQM sites.

### **Structural issues at the outset**

Models of TQM stress the need for changes to the organisational structure in order to encourage and support the quality improvement process. However, tensions exist between structures which emphasise the role of line managers in quality and those which result in a complete shadow structure for implementing TQM. TQM argues for structures which:

- reduce barriers between different functions and groups;
- provide explicit vertical and lateral accountability for quality throughout the organisation, including closer cooperation between management and professional roles;

- support improved multi-disciplinary and multi-functional working towards continuous quality improvement.

### Structural changes during the project

Attempts by sites to put structures in place for handling quality have to be seen in the context of almost continuous change during the same period. Almost all the sites had moved towards, or had already implemented, clinical directorates with appreciable involvement of doctors in management at most sites. The general model had a clinical director supported by a clinical manager and a business manager although many variations of this were tried out over the three years.

Superimposed on this structure at most of the sites had been a separate quality structure consisting of a quality manager in a central role and a unit-wide quality steering group. These were normally supported by a number of quality facilitators. Even where this had been the intention, few sites had implemented a full shadow structure. At most sites quality teams below steering group level were confined to just one or two directorates. In two sites, there had been no progress in implementing improvement groups below the quality steering group level.

In addition to quality improvement teams, there were many other groups at all the sites that had explicit or implicit quality improvement objectives. In some places these groups were flourishing, whereas elsewhere they had all but ceased activity. They included quality circles, quality action teams, problem solving teams, King's Fund audit groups, BS 5750 groups, standard setting groups, and a wide range of committees, divisional meetings and specialty meetings.

The gap between medical audit and broader forms of clinical audit was a salient feature at most sites. The gulf between doctors and the rest of the staff was well illustrated by the fact that at three hospitals the TQM managers had no idea of how much money was provided for medical audit at the site, did not know how it was spent and did not know what was being achieved through the use of the money. Whilst there were obvious difficulties because of the issue of confidentiality, many staff expressed criticism of, and frustration with, the current relationship between

medical audit and other modes of audit. There was general support for a shift from funding of medical audit to funding of clinical or process-based audit. This support included a number of medical consultants who were themselves critical of the medical audit system.

### *Provision of resources for TQM implementation*

Resourcing is considered under two headings *Training for TQM*, and *General Funding of TQM*. Resourcing, generally, was one of the areas that showed the biggest differences between sites, but it was difficult to secure reliable data. In the early stages of TQM, few records were kept at any of the locations about the numbers of people trained or what kind of training they had had. Whilst there was some information about the actual expenditure on TQM, and on related quality improvement activity, there were many areas of expense which were not costed. Some of the figures produced later in this section may well also be underestimated, because some sites were concerned that if they provided cost data on TQM the figures might be misrepresented or used to justify cost reduction exercises – a significant finding in itself.

### **Training for TQM**

Proponents of TQM stress the fact that its implementation should be led by wide-scale education and training. The word education is used to emphasise the attitudinal and cultural changes required, whilst training usually refers to providing specific tools and techniques. Given the onus on education and training to lead change, it was surprising how little was conducted at many sites. Even those locations which began with programmes of two-hour ‘awareness raising’ for large numbers of staff (a relatively common approach) did not follow this with more extended tools and techniques training.

After such events, training was normally carried out on a top-down basis. Typically, there were workshops for senior management teams that lasted from one to three days, and in some places, there was more than one such event. It was quite usual

for these to be facilitated by external consultants, particularly where they had been engaged for TQM implementation. Another approach was to hold one- or two-day customer awareness training events, either alone, or following on after short introductory sessions. These events were often hosted away from the workplace and run by professional facilitators from training organisations. It was common to include material presented by successful commercial TQM organisations, such as British Airways, Scandinavian Airlines (SAS) and Trust House Forte. Again, these were rarely followed by training in the tools and techniques of TQM.

The sites that were following Crosby or Crosby-like programmes, with the support of outside consultants, pursued a different line. First, internal trainers were trained by the external consultants, and then a full programme of training was introduced for the organisation. In the case of these sites, trainers, or combinations of trainers and managers, conducted weekly workshops of around two hours' duration for multi-disciplinary and multi-level groups of staff. These normally ran for up to ten weeks. In one case, some of the participants who showed particular commitment to TQM were selected to 'cascade' further training in the form of shorter events to front-line staff in their own work groups. One of the sites pursued this programme successfully in a smaller community hospital, but had little success in getting widespread training underway in the acute unit. The other site was altogether more ambitious and successful, in the sense of achieving widespread coverage.

Table 5.2 below shows the coverage that was achieved at the Crosby site over the three years. This is one of the top three sites in terms of coverage and content of courses. Some of the figures were estimated by the site, but are thought to be reasonably accurate. Table 5.3 below shows the results from another site that achieved similar coverage, though following a different pattern of courses.

The site with the widest coverage had considerably exceeded the sites in the tables above. It had trained 550 managers, supervisors and senior professionals down to F-grade staff. This included 40 medical consultants as well as other medical staff. The executive board and the senior management group had also had a full training programme. The managers were trained on a two-hour a week, eight-week training

programme, and instructors were then trained to take the education programme down to front-line work groups. By the end of three years, more than 2500 staff out of 3000 had been trained in a work group setting. More importantly, the organisation had started refresher training for managers.

Table 5.2: Training coverage at one site over three years

Site A	Total pop.n	2 day Executive programme	Crosby QES 10x2 hrs	Quality for Work Groups 6-9 hrs	Awareness for doctors up to 4½ hrs	Workshop A (equiv. to QWG)	Workshop B (equiv. to QWG)	Induction (non-medical)
Senior Management	29	12	7					
Medical consultants	80		8		14			
Other medical staff	139		1		2			
Clinical mid-management	150		40					
Other nursing staff	1150		34	19 courses for 120 staff (in all) before new courses were designed		200 trained in three years	28 trained in three years	
Non-clinical managers	N/K		20					
Ancillary staff	1402		20					
Paramedic managers	10		8					
Paramedic non-managers	304		20					
Clinical support staff	160		10					
Others								12 per month
Totals	3,424	12	178	120	16	200	28	Total N/K

Apart from this particular site, the attendance of doctors on training courses was low throughout the study. At most sites, the attendance of consultants was under 5

per cent and other doctors less than 1 per cent. Although time and money were frequently cited as reasons why doctors had not attended, it was clear that the unwillingness of many doctors to accept the principles of TQM was at the heart of their non-attendance. A related problem concerned the disparity in levels of skills among participants. It was likely that on a course one would find some scientists, research staff and doctors with a developed understanding of research methodology and at least descriptive statistics.

Table 5.3: Training coverage at a second site over three years

Site B	Total population	Intro workshop 4 hrs	Quality Leadership and Change 3 days	Train the Trainers 1½ days	Caring for Customers
Senior Management	45	40	41		
Medical consultants	78	32	5		
Other medical staff	245				
Clinical mid management	172	27	28	5	14
Other nursing staff	2022	44		1	71
Non-clinical managers	232	9	42	4	7
Ancillary staff	1193	19	1		118
Paramedic managers	100	4	6	2	1
Paramedic non-managers	153	6	2		8
Clinical support staff	183				8
Totals	4,423	181	125	12	227

Other staff, who had little or no formal skills in these areas felt uncomfortable with the technical aspects of measurement and analysis and were often intimidated by the skills displayed by professional staff. However, the courses were greatly valued for the opportunity they gave front-line staff to meet colleagues in other departments and to meet senior staff in a wide range of different functions. Trainers and

managers tried to consider disparity by running the courses at a basic level but this, in turn, raised considerable criticism from staff already familiar with basic data collection and analysis techniques. In some cases the skills gap proved too wide to bridge.

### General Funding of TQM

There was a considerable amount of money, though often in relatively small amounts, spent on quality improvement activity of different kinds. This could come from within departments, be provided by the Trust, come from DHA or regional sources, from the Department of Health itself, and from research and charitable institutions. Deciding on how much a site spent on quality improvement, therefore, depended on being able to track down sources of money, verify the amounts, and then decide whether or not it fell within the general umbrella of quality improvement. The following examples show how two sites that were asked to provide information came up with roughly similar figures, but using different criteria (Tables 5.4 and 5.5)

Table 5.4: Costs of resourcing TQM at Site A

<b>Resources</b>	<b>Costs</b>
External Management Consultancy	£20-50K
2 Full-time Quality Facilitators	£50K
Part-time Quality Assistant Posts	£35K
Non-medical Audit Projects	£40K
Costs of Medical Audit	£120K
Customer Care/Standard Setting Training	£10K
<b>TOTAL</b>	<b>£275-305K</b>

In one of these examples, the cost of training is not shown and in the second, it is comparatively low. The demonstration site where comprehensive training had been carried out with the support of management consultants estimated that it had spent around £40K on pre-implementation for planning for training, and then a further £100K on training the trainers and on material for courses over the first three years.

These figures do not take account of opportunity costs in terms of what people might have been doing had they not been engaged in training, or substitution costs to pay for bank staff to cover for nurses, or to pay for extra sessions for medical consultants.

Table 5.5: Costs of resourcing TQM at Site B

<b>Resources</b>	<b>Costs</b>
Medical Audit	£ 80K
Quality Department Salaries	£ 80K
Management Consultancy from Region	£ 50K
Charter Fellowship Research on Cancelled Operations	£ 10K
Management Competence Research (Regional Funding)	£ 5K
District Health Authority for Leaflets and Information to Patients	£ 15K
Multi-disciplinary Audit of Therapy Profession Contribution to Wards	£ 10K
<b>TOTAL</b>	<b>£ 250K</b>

It is interesting to compare these apparently substantial figures with the costs of implementing TQM in the commercial sector. They were, in fact, only around a third of what Post Office Counters and Thames Water Utilities (our two comparator sites) had spent on TQM for similar numbers of staff. The main differences were in the amount spent on training and on internal and external customer surveys.

Post Office Counters, in particular, spent substantial amounts of money on identifying what customers (post office users and major agency customers) wanted from the services that they provided. The original diagnostic surveys of customer requirements, carried out at the outset of the Counters' initiative, provided the company with a number of criteria that they continued to track monthly through further surveys. This was in marked contrast to most of our NHS sites that, at best, only carried out sporadic patient surveys and, apart from analysing complaints, did little in the way of continuous monitoring of customers' requirements.



Although the figures for general quality improvement at the NHS sites were substantial, they disguised the small amounts of money available to quality departments for implementing TQM itself. For example, at one site in 1992 the Quality Manager was fighting to secure a budget of only £9K to provide some much-needed training for relevant staff. Two other large multiple-site acute units were expected to implement TQM on budgets of under £60K per year, and it was not unusual to find only one or two quality facilitators for sites of around 5000 staff. Of more concern was that funding had been reduced progressively over the three years at several sites. One community service, which had made considerable advances in implementing TQM, had had to reduce work-group training sessions that were previously of three hours' duration for around 14 staff, to sessions of only one hour for larger numbers.

It is important to note that all the sites that provided data appeared to have exceeded the amounts they were given by the Department of Health for TQM funding. Originally, seven out of the eight authorities had been funded for two years and one for one year. Of the former, funding over the two years ranged from £45K to £90 (including support from region where this had been forthcoming). The eighth authority had received £20K for its first year. Even these figures may be misleading since in some places all the money went to just one location, whereas in other cases it was split between several provider units. Other than absolute size, what proved to be important about this money was that it was relatively firmly ring-fenced for quality improvement purposes. It at least entailed the funding of one or more quality managers or facilitators, specifically mandated to implement TQM.

When the Department of Health funding ran out, continuation at most sites depended almost entirely on the attitude of the Unit General Manager or Chief Executive. Until 1992, all sites managed to continue funding at least the central post of Quality Manager. However, for reasons that were not entirely clear, and may not have been financial, two sites had made the quality managers redundant and showed no signs of replacing them. The general impression was that front-line staff read this as an indication that Total Quality Management was being put 'on the back burner', if not being abandoned altogether.

### *Savings made by TQM*

There are many examples from the commercial sector to indicate that considerable savings can be made by introducing TQM – at least those forms of TQM based on Crosby or Deming or on comprehensive management consultancy-driven programmes. Research talks expansively of anything from 15 to 40 per cent savings being made through reductions in error and waste, particularly in manufacturing organisations<sup>194</sup>. The evidence for the public sector is less clear. However, recent work has shown that similar savings could be made when the full range of errors, waste, unnecessary duplication, and work carried out by the wrong skills mix is taken into account. One study of a ward for the elderly in an acute unit showed that up to 17 per cent of costs could be saved by attention to six or seven main areas<sup>195</sup>. Similar studies in both acute units and community services showed average savings of 5-15 per cent of budget in many areas of services, with some figures as high as 38 per cent, for example in radiology and some community services.<sup>196</sup>

These studies apart, most of the research sites had not looked at the costs of quality (more accurately thought of as costs of non-quality or non-conformance) in this way. Consequently, it was difficult to estimate, with any degree of accuracy, the actual savings that could be made by the introduction of TQM in a single department or a complete unit.

However, there were many examples of savings that had been made in individual procedures and processes. Typical examples included a pharmacy department that had made an annual saving of £13,000 following a two-month review of stock held in dispensaries. Stream-lined stock lines and lower stock-holdings in an outpatients' department in the same hospital had made further savings of £3000 per year by reducing the amount of stock carried from a three-month supply to two weeks. This was by applying standard materials' management techniques.

In another hospital a study of wastage of food in catering, previously running at £1000 per month, had been cut by 50 per cent in nine months of concerted action. Two other services, found that wheelchairs and walking aids were disappearing at

unacceptable rates. The imposition of a £10 deposit on equipment had dramatically reduced losses. These examples point to the kinds of savings that could be made. Overall, the research suggested that savings of 10 to 20 per cent on departmental budgets across a complete unit would be achievable, though not all of this could be recovered in the first year of a TQM programme.

Savings of this order would need concerted and integrated action across groups of related departments. However, most of the projects observed during the course of the research were being designed and implemented on an individual basis, albeit by highly committed and competent staff. It was rare to find comprehensive activity going on across more than one or two departments in any unit. Furthermore, the lack of training in specific process improvement tools and techniques in most units meant that most staff, even if they were committed to TQM, did not have the skills to implement continuous improvement in their own processes.

### *Systematic measurement*

Systematic measurement of progress on introduction of quality improvement systems and quality of services is a significant feature of TQM. This involves continuous monitoring of systems and processes which, in turn, requires high quality information. In this respect sites started from a relatively poor position. Most were carrying out some form of patients' satisfaction surveys in a number of areas, and there was a wealth of financial performance information available, though not necessarily in a form helpful to potential users. A number of other initiatives were either calling for, or actually providing, new levels and new kinds of information. The waiting list and outpatients initiatives required the introduction of better appointment systems which provided new management information for the first time. Elsewhere the Patient's Charter and the contracting process began to specify standards that had to be monitored on a regular basis.

In addition, the Resource Management Initiative (RMI) was beginning to influence clinicians, principally towards basing decision making about resource allocation on more reliable information. Further, medical, clinical and nursing audit arrangements

were also beginning to produce data on both processes and outcomes in a more systematic way than had been the case before. During the period of the research, a plethora of different systems, both manual and computer based were introduced. These included MONITOR, THEATREMAN, ITUMAN, CRESCENDO, PATSAT, QAID and QARX, in addition to purpose-developed systems for individual units as far apart as X-Ray, catering and some community services.

Part of the increased attention to organisational monitoring had been due to the influence of the Patient's Charter that was making professionals far more aware of patients' rights. Certainly in A & E and outpatients departments there was a broader range of indicators now being used than those provided by the Patient's Charter. Examples included trolley waits, the results of triage, the level of DNAs, and the number of follow-ups after initial outpatients appointments. The latter was an important measure because it was seen as an attempt to ensure that further appointments were necessary. The performance of health visitors and district nurses also came in for sustained attention at two sites following studies which showed the considerable variation in individual performance which could not be justified by the dependency of clients.

### *Quality of information available for measurement*

There is little doubt that there had been major improvements in the information made available for process improvement purposes. However, even with imaginative use, it was often the case that the information provided was unable to meet most of the needs of quality improvement groups or teams. This was because, typically, quality improvement groups wanted to examine the detailed stages of processes that cut across several departments or functions. For example, a team might have wanted to know what the delay was between a doctor telling a patient on a ward round that he or she could go home and the actual discharge taking place. The information available rarely covered the detail necessary to analyse the process. Nor were there any integrated systems that followed processes across departmental boundaries.

This meant that quality improvement groups or teams had to start by analysing all the stages of an existing process and then develop their own measures to provide the information that was required. This, in turn, meant that expertise in collecting and analysing data was essential to the successful working of a quality improvement group. But only two sites had undertaken specific training for their teams in data collection tools and techniques. Elsewhere, teams had to rely on a few individuals who had picked up their research skills during the course of doing external qualifications or because they had, in the past, worked in a research capacity.

The situation was better with regard to information provision to patients and external groups. There was a significant improvement over the three years in both the quality and the quantity of this kind of information. However, this was found to be the case at both TQM and non-TQM sites and there was little to suggest that TQM was the cause. The changes appeared to have been driven primarily by the contracting process (where purchasers' contracts specified the need for better quality information) and by the Patient's Charter that had also sought the same goals. Although much of this information was seen by some respondents as little more than public relations, it had important effects both in terms of reducing demand and improving the quality of service generally. For example at several sites they found that sending out information packs greatly reduced the number of telephone calls to get further information. At another site, a user's guide for GPs gave more information on the services on offer but also set out the unit's requirements of referring GPs. This resulted in, for example, more typed letters from GPs with a faster response rate and less queries on both sides.

### *Monitoring of departmental quality*

It was clear that there had been substantial moves towards, and in some cases, actual progress in implementing, systematic monitoring in a number of departments at most sites. In areas where there had been a tradition of measuring the technical aspects of work – for example in pathology and pharmacy – there had been some moves to look at the requirements of internal and external customers. Some departments such as psychiatry, which traditionally had carried out little monitoring,

began to make efforts to be more systematic in reviewing the quality of their work. In the case of pharmacy, several sites had studied what patients and their relatives wanted in terms of take-home drug services. There was also an increasing focus on streamlining processes to save time. Three main mechanisms were used to monitor service quality:

### **Standard setting/audits**

Most clinical areas at all sites put in place some form of medical, clinical or nursing audit. Nursing audits were carried out more frequently, using nursing standards as the criteria. There were wide variations in practice, however, from the most elaborate standard setting and auditing arrangements in some places through to less substantial 20-minute ward walkabouts in others. With one notable exception, several departments in acute units appeared to have become locked into a relatively static system of setting standards that were only monitored once a year. Some of the nurses interviewed were concerned about this and were actively looking to find more continuous modes of monitoring.

Medical audit was also more widespread by the end of the project though, again, practice varied widely in terms of the perceived purpose, the frequency, and the conduct of meetings. Whilst medical audit still tended to take place as a completely separate exercise from other forms of audit, some exceptions to this had allowed for the participation of nursing and support services staff within a broader clinical audit remit.

### **Contracting/service level agreements**

Most sites continued to operate a policy of block contracts, but it was clear that issues of quality, and the development of criteria and methods for measuring it, were beginning to be specified in more detail in contracts for specific services. It was anticipated that with the ending of block contracts, there would be a further increase in the specificity of quality criteria. It was also apparent that current and prospective GP fundholders were exerting considerable influence over the services they required and they, too, were being more specific in the setting of quality

standards. Interviewees believed that whilst the setting of quality standards was more explicit between purchasers and providers, they did not feel that this had penetrated the relationships between different departments within provider units.

By the end of the research, though, several sites were implementing service level agreements (SLAs) between departments that had to collaborate in service provision. As might be expected, the earliest and most prevalent examples of service level agreements (SLAs) appeared in non-medical support services such as Estates but this practice had spread by the end of the research to several clinical areas – most notably Pharmacy Services.

At most places this had been driven more by the purchaser/provider contracting process than by TQM. Departments setting contracts with purchasers had found that these could only be fulfilled if the services they received from other departments were also reliable and on time. This had led, naturally, to seeking agreement from internal ‘suppliers’ that the wherewithal to meet external contracts would be forthcoming. Departments in one unit were also sending questionnaires to internal customers to check on their satisfaction. At this same site the community health council had been more involved in monitoring than other sites elsewhere. For example, it had been consulted about specifications in contracts before the contracts were let. The CHC had also been involved in discussions about the amalgamation of two hospitals into a combined unit before the plans were finalised.

### **Audits of patient satisfaction**

There was a general increase in patient survey activity throughout the first year of the research though this was, in many cases, still at the stage of discussion and planning. By the end of the second year most sites had systems in place for monitoring patient satisfaction. The main form was the use of short satisfaction questionnaires with multiple choice answers, designed by management and their staff, and carried out with patients either whilst they were in the hospital, or once they returned home. At one site, there were some interesting attempts to employ

more interactive methods of surveying opinion. These included the use of critical incident analysis interviews with patients and clients as well as an approach in which patients and staff in several occupational areas discussed how they thought services could be improved. The resulting ideas were turned into statements that were then paired and rated by a main sample of patients and staff, and analysed using a commercial software package. Involvement of patients in selecting criteria for questionnaires or in designing survey systems was rare.

Some improvements were led by highly motivated groups of staff who, although coming under the general TQM banner, did not fully follow the principles of TQM. A number of significant results had been achieved. For example, a benefits realisation group had been set up to examine the benefits of an outpatients' computer system, a centralised X-ray booking system, and the speeding up of ordering of prescriptions. There was also more attention being paid to specifications in contracts than was the case 12 months previously. This was particularly so in contracts set through compulsory competitive tendering.

### *Impediments to further developments*

Although advances had been made in systematic measurement, several issues had slowed progress at all the sites. The availability of resources for monitoring and evaluation were insufficient at most locations. Resources were often limited in quantitative terms to one central TQM manager supported by, at best, one or two part-time facilitators. It was true that, theoretically, other resources were also available, including medical audit assistants and other staff who were on the periphery of process improvement, such as project nurses, liaison officers and so on. However these staff did not come under the control of the Quality Department and were often operating with different assumptions about how to improve processes.

The situation might not have been so bad had all staff, particularly TQM managers and facilitators, been well versed in research methodology and data collection tools and techniques. At most of the sites, however, this had been far from the case.



Staff appointed to quality roles often found themselves there because of their strong commitment to quality improvement rather than their technical skills. Many had little or no training either in the model of TQM being installed at the site or in general process improvement techniques. This could be contrasted with the training of quality managers in Post Office Counters who had six weeks of intensive training before starting in their roles, followed by a further 12 to 17 days training per year throughout the three years of research.

There was little expertise on offer from the Department of Health, beyond the original technical note that was available to sites at the outset of the experiment. The Department invested considerable time and energy in cross-site dissemination seminars that provided much needed opportunities for sites to learn from one another. However, this was not an adequate substitute for centrally provided technical skills on TQM, or on monitoring and evaluation. Again, this could be compared to the experience of Counters, where a large and highly skilled central staff was available to support Post Office branches and districts in improving their measurement skills and evaluating the effectiveness of local services. In that case, the resources came from a number of disciplines, including operations research, research and development, management support services, and sales and marketing. It was noticeable that the support provided by the Department of Health for the implementation of the Patient's Charter was well above anything provided for TQM. The provision of a similar central service for the TQM sites would have done much to enhance their capacity to design and then monitor TQM objectives and targets.

### *Customer-driven Quality*

A major test for any TQM programme is the extent to which organisational cultures, structures, systems, processes, and people have been reoriented towards the idea of quality being driven by customers' definitions, expectations and requirements. The idea of the customer extends to internal customers (staff) and external customers. The latter are generally thought of in the commercial sector as consumers but in the public sector the definition goes beyond this to other

important stakeholders including GPs, patient support groups, voluntary and statutory agencies, purchasers and so on.

In this evaluation, the principal evaluative focus was on staff and patients, although some data were collected on the influence of local interest groups. Little work had been done at most of the sites on involving other agencies, apart from some work towards the end of the research on multi-disciplinary planning for the discharge of patients to residential homes.

For the purposes of this section internal and external customer issues have been sub-divided into whether or not there was an increased *focus* on each area, whether the respective customers were *empowered*, and finally what actual *improvements* any focus or empowerment might have led to.

### Internal customer focus

It was the intention of all sites, from the outset, to focus on the needs of staff and to generate a commitment to involve them more systematically in process improvement. This was evident from mission statements, with the accompanying aims and objectives, of the original bids for Department of Health funding. In the event, few sites did much to operationalise this intent beyond the comprehensive training programmes that took place at two locations. Other than Compulsory Competitive Tender (CCT) contracts, where there were usual specific references to internal and external specifications, few places took up the idea of internal customer-supplier chains.

A general concern raised by a significant number of interviewees was the lack of a patient input to the contracting process. It was pointed out that in spite of the Department of Health's advice on involving patients and other groups,<sup>197</sup> few purchasers had done much to gain patients' views in any systematic fashion. Similarly, GPs, whether fundholders or not, also rarely surveyed patient opinion. It was said that most domestic services contracts were negotiated without the involvement of end users. Thus, those SLAs being negotiated internally were not,

in the main, based on any clear understanding of what external users' requirements were. As was suggested in Chapter 2, the issue of backward mapping is highly relevant here. Largely professional providers decided what level of service was going to be provided to patients and other users. Then systems would be devised to provide the service, and only when the service was in operation would users be asked, retrospectively as it were, to provide their views.

The problem of a lack of high quality information was not the only issue in setting up SLAs. It appeared that there was a particular kind of inter-dependency between hospital services which was not so apparent in commercial systems. In one particular case, for instance, an internal supplier had internal customers whom the supplier was also required to instruct and control in respect of 'the right way to work'. Thus, an infection control officer had wards as customers but also had to ensure that those customers followed correct procedures set by the supplier. This could have reversed the normal customer-supplier relationship, because it would normally have been the customers setting the requirements. Where a supplier held the technical skills, it was clear there was an educative aspect to the relationship that complicated matters.

### **Internal Customer Empowerment**

The extent to which staff felt they had been empowered was quite different across the sites. It proved difficult to analyse and categorise the position at different sites without losing the richness of qualitative aspects of the data. This is best indicated by direct quotes from reports written in the second year of the experiments for two different sites.

#### *Site One*

'There was some sense of real movement here (on staff commitment). For the most part, answers were not glib but reflected thoughtfulness about resistance and how far and why it was shifting. However interviewees were most optimistic at the top of the organisation. For example, the chief executive felt that the staff of the work group education programme had

revitalised TQM when they had been losing momentum nine months ago. Two medical consultants interviewed both reported positive change; in the case of one, personal as well as among colleagues. She described herself as “a minor convert”. Doctors were seeing the value of data collection and analysis, because of successful projects. They were also recognising the value of agreeing requirements with their colleagues, but some staff were also aware of external reasons – survival was an issue for them in view of the perceived spare capacity in ....(the surrounding catchment area). Senior and middle managers presented a more mixed picture ... staff were still uncertain in the finance department about taking the time required to keep charts and measure performance ... they thought they were checking up on each others' performance. The King's Fund Organisational Audit was seen in several interviews as having provided a boost to TQM by giving staff the opportunity to make their views known and have good quality celebrated ... a wide range and different levels of staff have been involved in process improvement projects ... ’

#### *Site Two*

‘Few of the interviewees reported that they felt more empowered since they were interviewed 12 months ago. If they were, it was because of other initiatives such as the Patient's Charter and standard setting, not through TQM. It was expected that the implementation of quality teams at the base would empower more staff but these had not yet been established. In the absence of a proper structure for quality, or changes to systems, or the provision of widespread training, empowerment was seen to be too dependent on personalities. For example, staff on one ward said they had had a lot of opportunity to contribute to design and development, while at a ward next door the opposite was said to be the case. The BS 5750 group generally agreed that they had had some opportunity to input into the development and implementation of BS 5750. Contracting was said to have increased the power of middle managers who were now seen to be essential to the standards in contracts, but front-line staff had been relatively unaffected (although they were aware of how important contracting now

was). Staff commitment and any sense of empowerment was clearly related to whether or not they had been trained and how much opportunity they had had to be involved in process improvement projects. Involvement of medical staff was particularly low, because so few of them had been trained. At a recent meeting, a consultant said 'We don't need to train junior doctors here because they are only here for six months.' It was difficult to leave the site with any impression other than that TQM had failed to empower staff to any significant extent.'

The results from other sites could be said to lie somewhere in between those contained in these two short extracts. One could say, more analytically, that certain factors predicted a sense of staff commitment and empowerment. These are listed below, in no specific order:

- ❑ a separate structure for quality which, as a minimum, went down as far as quality improvement groups in a directorate
- ❑ staff had been trained in process improvement tools and techniques
- ❑ the training had extended to a personal project which enabled each trainee to 'cut his or her teeth' on a relatively simple but relevant area of service development
- ❑ trainees were supported when they returned to the workplace from their training, by involving them in some way in ongoing process improvement activities
- ❑ staff were encouraged to review their own performance in the light of all processes, not just those where there were obvious problems, (though there was little evidence of this except in one or two roles)

- the contributions staff made to process improvement were recognised and rewarded
- where process improvement groups or teams made recommendations, these were taken seriously by middle and senior management and, if possible, changes were implemented. Where this was not possible, full reasons were given
- pump-priming money was given to teams to initiate projects. Where financial savings resulted from process improvement exercises, a proportion of the savings remained within the department concerned for expenditure on further quality initiatives
- senior management found a new role for middle managers and supported them in the facilitation and coordination of quality improvement activity.

### **External Customer Focus**

There had been a discernible increase in staff awareness of the importance of the external customer at all sites. This had been driven by many factors – the Patient's Charter, trust applications, and the purchaser/provider split, as well as TQM. However, where sites followed an explicit model of TQM, it was clear that this had definitely contributed to that shift. Where TQM had been implemented most successfully, the influence of the Patient's Charter and the contracting process on customer focus had contributed to, and been framed by, an organisation-wide total quality approach.

At the outset of this evaluation, the most prevalent concepts and definitions of quality were those which were driven by professional and managerial definitions of service standards (see earlier in this chapter). This position had changed markedly over the three years in all but the most entrenched of medical staff. By the end of the research there was considerably more information being disseminated to patients and clients about what they might expect from hospitals or community

services. This had been backed up by more systematic and sophisticated patient satisfaction monitoring in many occupational areas.

Changes were also been made to the way services were provided. For example, at one site they introduced a dedicated clerk in outpatients to make appointments. This meant that a GP was able to ring up and get an appointment for a patient whilst the patient was actually in the GP's surgery. Introduction of one-stop clinics, and the preparedness of outpatients' staff to go to health centres and GPs' surgeries for clinics, were all examples of increased patient or client focus.

### **Patient and client empowerment**

Although there had been a dramatic increase in a general focus on external customers during the period covered by the research, the extent to which this had been translated into empowerment was more variable. There were differences at some sites that appeared to go beyond individual departments to the culture of the trusts themselves. At one level, there was a clear difference between acute units and community services. At a second level, there could be differences within units where some services, typically, mental health were ahead of most areas. Not surprisingly, perhaps, community services were among those who were further ahead in empowerment of patients. The reasons for this are explored in Chapter 9 where the influences of size and complexity on TQM are analysed.

Taking an example of one service in particular, the last round of fieldwork in 1993 found a considerable shift towards patient empowerment. In this service, each board member had specific responsibility for representing the public who lived in each geographical area. Information was then collected through a variety of means, including public meetings, and from members of the community at large, to tap their views. A booklet for patients, which included a questionnaire on services, was available in libraries and health centres and not confined to circulation to recent patients.

Amongst the normal range of patients' surveys, it was interesting to see that a care survey had been undertaken by volunteers. At a health centre, a suggestions box system had produced ideas on car parking, the tannoy system at the health centre, and ideas for involving and updating case-group representatives. It was also intended to establish neighbourhood participation groups, and a carers' liaison post had been created with funding from the Department of Health and Social Services.

Patient care plans in both a mental health and a long-stay hospital for the elderly had a specific page set aside for comments by patients on their own care. At first it was thought that patients would be reluctant to write criticisms, this was found not to be the case – for some patients it proved to be an alternative medium of expression.

Although most of the acute units were unable to match this, there were exceptions. One relatively large acute unit had managed to find methods of involving patients in important ways. There were well-supported and organised cardiac support and stroke support groups, as well as a group for stoma care. There was also a range of other informal advisory and voluntary multi-disciplinary groups. Several departments ran pre-admission clinics, including a Saturday club for children in orthopaedics. It was also interesting that this unit had made a greater use of the local Community Health Council. The CHC had been used to carry out patient surveys, to undertake studies of signposting in the hospital (including the special needs of the visually impaired), and its views about the amalgamation of two hospitals onto one new site had been sought. It had also been consulted about specifications in contracts before they were let.

In another unit, support groups had been set up for patients who required longer-term care. These included a heart group, a group for the disabled, a pelvic inflammation support group, an AIDS group, and further groups for haematology, diabetes, rheumatology and stoma care. In most of these cases, however, it has to be said that the extent to which the groups were involved in planning improvements for the delivery of care was limited. Most of them were set up to provide emotional and practical support to patients and ex-patients. There was little



evidence that these groups were used pro-actively, though there was obviously potential for this to be done.

### **Quality and process improvement initiatives**

It is difficult to do justice to the extraordinary range of quality initiatives that were seen being planned and put in place in the course of this research. In many cases, these initiatives were generated independently of TQM. Since the examples of quality improvement were being used to evaluate movement on TQM at the demonstration sites, they had to be subjected, necessarily, to a critical evaluation against TQM objectives. This did not, however, detract from many worthwhile improvements that made a significant positive impact on patients. The following examples show the wide range of improvements from those that exemplified the principles of TQM and those that did not.

### **Information to users and purchasers**

As mentioned earlier in this chapter, all sites reported an increase in the information available to purchasers and patients. Much of the material going to individual users provided them with more information, but would be seen as a long way from empowering them. There were substantial differences between sites.

At one location, for example, a pamphlet for the recently bereaved described what would happen after a death, gave advice about how to register the death and provided a list of people and groups who could provide bereavement counselling. However, the leaflet did not inform relatives that it was their right to see the body and to spend some time alone with it, or that they had a right to see a priest or other representative of an appropriate religious group. In contrast, at another site there was an excellent set of initiatives on care for the dying. At this location, the recently bereaved, different disciplines and different levels of staff had combined to put together a coherent set of changes for improving the experience of the bereaved.

There was also an important example of how services had been improved through the provision of better information. This started after a study of the return rates for patients, who were the subject of either day-care or in-patient treatment in obstetrics and gynaecology, showed that there was an increased return rate for in-patients. Closer examination showed that this turned out to be caused by a difference in the information given to patients in the two groups. More detailed information was given to day-care patients because they were going home and would be responsible for their own post-operative care, whereas less of this kind of information was given to in-patients on discharge. By improving the information given to the latter group, the return rate was reduced.

### **Multi-disciplinary and multi-level effort**

Although doctors had, in the main, maintained medical audit as a separate exercise from other forms of audit, it was extended to broader-based clinical audit in a few instances. The fact that a number of doctors were now more prepared to discuss a broader range of issues with other staff was indicated by an unusual procedure which took place on a ward at one of the research hospitals. This was an off-ward discussion group where doctors and nurses met before each ward round. Here the nurses were expected to contribute fully and this had greatly improved communication. It had also provided an opportunity to bring patients' problems to the notice of doctors in as confidential a way as possible, and to open up areas of discussion which might be of emotional or social concern as well as of medical importance.

A good medical study led to a spectacular reduction in pre-operative fasting on a children's unit – the figure came down from eight hours to two hours. This followed research that showed there was no need to fast children for eight hours. However, these changes were being carried out in the teeth of opposition from some consultants because it constrained their ability to move patients from morning to afternoon lists and vice versa.

A good example of multi-disciplinary collaboration, which also involved patients, was home assessments. Here a multi-disciplinary team of OTs, physiotherapists, social workers and district nurses would accompany elderly patients, or others needing on-going community support, to carry out a joint home visit in order to check conditions prior to discharge. Several units, typically in mental health services, had introduced multi-disciplinary case notes which meant that nurses, therapy professions and it was hoped, eventually doctors, would be maintaining one set of notes. In another example, this time in orthopaedics, doctors and physiotherapists used the same notes, particularly for discharge, and in common with many of our sites, there was a multi-disciplinary discharge planning process undertaken jointly with social services departments as part of Community Care.

In some units there was an increasing awareness of the need to tackle broader cross-functional or unit-wide issues. Two particularly important studies had been carried out on catering and linen services in two of our units, although they were too extensive to report on in any detail here. Another multi-level and multi-disciplinary study had taken place looking at all the issues that concerned users in their first contact with the organisation including the environment, attitudes and skills of reception staff, information needs and many other issues.

### **Studies of patient need**

Some examples of initiatives collected during the study would probably not have occurred prior to the research. In one instance, a group of staff on an ophthalmology ward felt that too many patients admitted for operations had them cancelled because they were not otherwise fit enough. Having systematically collected data to confirm their suspicions, they negotiated with GPs and consultants for the establishment of a pre-admissions clinic to screen out unfit patients. The result had been an all round improvement in the use of scarce resources.

Some studies, which were designed to find ways to improve patient satisfaction, also led to savings in costs. For example, a study of the management of incontinence home supplies showed that the service fell short in a number of important respects.

Staff were retrained to meet the need better and a set of redesigned forms for monitoring and systematic analysis were implemented. A spin off from improved service to clients had been savings because the new system more accurately predicted the levels of supplies which clients actually needed and reduced the amount of over-ordering of inappropriate items.

Another study examined the preferences of women attending a unit for termination of pregnancies under 22 weeks in terms of whether they preferred it to be carried out in gynaecology or maternity – of considerable psychological importance to the women involved.

Elsewhere pharmacists and wards had collaborated with a consultant to develop a successful system to give patients more control over their own pain relief. In the main, such initiatives were not being monitored in a comprehensive way. However, at one community hospital a number of professional groups had collaborated to carry out a patient satisfaction questionnaire and had then designed a more sensitive and staged process of transfers to the community. This system was being monitored by a specially devised audit tool.

Another important project was a thematic study of all the multi-disciplinary contributions made in the course of handling relatives and friends of the dying and deceased. This triggered restatements of standards and procedures across many functions including the ambulance service, A & E units and wards. It had exemplified many of the features one would expect to find in a TQM programme – customer-focus, systematic analysis, and multi-disciplinary teamwork. This initiative was tracked for three years and was seen to have continued spin-offs in terms of improved support to the bereaved and better staff attitudes and skills.

### **Cost reduction**

Many initiatives demonstrated clear savings by reducing costs and improving the use of existing resources. They also demonstrated that TQM's emphasis on systematic measurement could be a major driving force. Introduction of carefully designed

triage systems was a case in point. A help-line telephone triage service at one site increased the appropriateness of A&E attendances and reduced demand at peak periods. A similar result was achieved at another site where triage was integrated with a separate reception point and a detailed method of monitoring. The success was attributed to a comprehensive study of the current issues and concerns facing the department, drawing on research evidence about queuing behaviour and related issues.

Another study carried out in A&E used an analysis of recently computerised patients' data, to monitor patterns of demand. The first important finding was that the work in the A&E department was remarkably predictable, contrary to local myths. This enabled them to design new shift patterns and skill mixes to deliver a better service with more effective use of resources.

A specific cost-reduction study was carried out at one hospital into the matter of post-natal cots and was another good example of the importance of managing by fact rather than myth. The accepted wisdom was that they could not afford to purchase new cots and that it was cheaper to repair rather than replace them. However, a careful survey clearly showed that it would be cheaper in the end to purchase new cots and this was done. Not only did it save money but it had also reduced the conflict between nursing staff and the engineering department.

A pharmacy service carried out patient surveys in outpatients as well as staff surveys on the wards covering clinical pharmacy requirements and stock distribution. They were able to identify the relationship between some drugs and lengths of stay. In one case, by using a more expensive drug, they were able to discharge patients ten days earlier than would normally be expected after bone marrow transplants. This demonstrated an overall cost saving, whilst reducing infections and increasing patient satisfaction.

Another drugs' study, this time in a long-stay hospital for the elderly, was a determined effort to reduce the pharmacy bill on a ward. This resulted in 30% fall in the annual bill over the two years from 1991-1992. This, it was said, was not

achieved by cutting care, but the result of systematic analysis of wastage and better attention to prevention that, in turn, reduced the need for some drugs, dressings and ointments.

Several examples were cited of attempts to improve the quality of catering services and to reduce costs. One study showed that the wrong supply of meals was primarily caused by illegible menu cards and an unreliable system for getting the cards to the catering department. A new system was designed with printed menus which had colour coded tear off strips, and this led to the reduction in the number of wrong meals supplied. Another unit took this one stage further with the provision of a fax machine on each ward that faxed variations on meals up to the last moment to the catering department. It was anticipated that this would reduce the number of wasted meals by up to 50%.

A study of process improvement, which resulted in large resource savings, was a major exercise on the provision of take-home drugs. This showed that the equivalent of two nurses' time was being spent across ten directorates in going backwards and forwards to pharmacy collecting drugs and making enquiries. A new system involving a messenger service was developed to collect prescriptions and deliver drugs. This system was expected to provide for considerable savings by freeing up the equivalent of two nurses' time.

The importance of detailed studies for apparently simple problems was well demonstrated in the following example. Bacteriological problems were occurring from the use of crockery on wards that had been provided with dishwashers. A study showed that the equipment was not being used because it was too complicated and there was a lack of training for staff who had opted to wash dishes manually, rather than use the dishwashers. A multi-disciplinary group including staff from, for example, engineering and maintenance produced a new system for using the washer with better training for staff and the implementation of a proper monitoring system. This had virtually eliminated the original problem.

Several examples of reductions in error or waste were achieved through implementation of audit arrangements. For example, clinical audit in physiotherapy showed that it was cheaper to buy-in soft collars rather than have staff make their own (which was the current system). Changes in this procedure had led to savings. A further example concerned physiotherapy, where there was now more preparedness to send patients back to GPs when the physiotherapist felt that she or he was unlikely to help them – for example in cases of tennis elbow. This was clearly more efficient and led to reductions in wasted appointment time, but did not necessarily increase patient satisfaction.

### **Reorientation of services as a result of users' views**

Although after three years of TQM the level of empowerment of users and carers was seen as disappointing, there had been more examples each year of changes in the way services were planned and delivered as a result of what patients had said in satisfaction surveys. For example, the results of one catering survey led to cooked meals replacing sandwiches in the evening; in another example, menu cards had been changed after recommendations from an ethnic minority working group. In the same hospital, elderly patients wanted staff to spend more time with them outside that allowed for nursing or therapeutic intervention – each key worker was now spending a full hour each day talking to and interacting with residents outside normal nursing activities.

In a community service health visitors began to leave their names and visiting cards after complaints that people did not know who they were – they also had to draft and implement an action plan about how they intended to improve the concerns of clients arising from patient questionnaires. In an example from a mental health unit staff had changed the way they tackled anxiety management as a result of feedback from patients, implementing counselling sessions for those who were about to go out on leave.

In a gynaecology unit it was clear that patients did not feel they got the service they wanted from permanently-based outpatients' nurses. As a result the nurses were

transferred to work full time on gynaecology wards and then released from that base to run clinics. Up-to-date experience meant they were now more able to answer questions posed by clients. Services for vulnerable groups featured increasingly frequently. A survey of care of the elderly showed shortcomings in the management of patients' clothing and of the allocation of sexes on wards and both these had been changed to reflect users' requirements. In several places, pre-admission clinics had been put on for children and their relatives before the children were admitted to wards. A new AIDS unit had also been designed from start to finish by patients and had been well received.

Changes in working practices were also beginning to feature as the research ended. Multi-skilling of porters had been favourably commented on at one hospital because they were now able to provide continuity for patients through serving meals and cleaning, as well as transporting them around the site. The porters were to be qualified to NVQ level as 'service assistants'.

It has to be said that many of these projects, though commendable in themselves, had not followed systematic process improvement techniques, as one would have expected under TQM. In some situations, visiting hours had been changed because staff felt they ought to be and patients were only surveyed afterwards. Elsewhere, well-documented and analysed problems had led to new solutions but subsequent changes had not been monitored. However there were some particularly good examples of 'classic' TQM-style changes. One was the establishment of a new back pain clinic that was carefully researched and staffed. The unit measured the condition of patients before and after treatment in order to compare different methods of treating back pain using the TQM problem-solving model being taught and practised at the site. Staff also worked towards identifying, on a multi-disciplinary basis, the most cost-effective treatment for different kinds of condition.

This concludes the findings of the main fieldwork at the NHS TQM demonstration sites. Analysis of the fieldwork is reserved for Chapters 8 and 9. The next chapter summarises the fieldwork conducted at the non-TQM NHS sites.



## **Chapter 6 – Fieldwork at Non-TQM NHS Sites**

### ***Introduction***

The results at the NHS TQM sites were compared against a group of hospitals and community services that were not implementing TQM (though various quality improvement initiatives were being installed). The purpose of this comparison was to draw out the differences between the two samples. If TQM had been working, one would have expected to find the NHS TQM sites showing better corporate integration of quality initiatives; more systematic measurement of improvements; and greater commitment to a single definition of quality based on users' views.

### ***Description of non-TQM NHS sites***

The four non-TQM sites were Stoke Mandeville, Portsmouth Hospitals, (2 units), Cambridge Community Services (Addenbrooke's) and Norfolk and Norwich Hospitals (2 units). At the outset of the study, three of these sites were still planning to undertake a more structured quality assurance (QA) approach. One intended to undergo a King's Fund Hospital Audit and then move into a QA programme, and two sites were planning to introduce TQM at a later stage.

Three of the sites included at least one major acute unit and the fourth was a community unit located in an old hospital. The latter also included a range of outlying centres. In three cases, the major acute units and one or more further hospitals or community units had been brought under one management team. All the sites were in the throes of substantial reorganisation. Major capital programmes were planned or in place, ranging from basic refurbishment, through the building of small new units to the combination of two major existing hospitals on one new site. Although none were trusts at the outset, they were all trusts by the summer of 1994.

### ***Methodology for the fieldwork***

The same basic methodology was used to study both TQM and non-TQM sites. The latter were part of a second phase of data collection and consequently were not visited until February and March 1992. They were revisited in the same months of

1993 so, unlike the phase-one TQM sites, they received two rather than three visits. However, these two visits gave us important comparisons with the progress being made in installing TQM. The possibility of a third visit was also discussed. However, by the third year of the research, three out of the four were starting to implement TQM and thus had lost most of their value as non-TQM comparators.

In all, 177 one-hour interviews were carried out in the spring of 1992 and 1993 with a wide range of respondents – see Table 6.1 below.

Table 6.1: Analysis of interviewees by role for 1992 and 1993

<b>Roles</b>	<b>1992</b>	<b>1993</b>	<b>% of those interviewed in 1993 who were also interviewed in 1992</b>	<b>Total number of interviews</b>
Admin management	17	25	52	42
Admin non management	13	8	88	21
Clinical management	12	8	75	20
Support services clinical non management	3	2	100	5
Support services non clinical management	8	10	70	18
Support services non clinical non management	2	1	100	3
Nursing management	8	12	58	20
Nurses	7	11	45	18
Clinical directors	2	4	50	6
Consultants	8	5	62	13
GPs				
Paramedic managers	4	4	100	8
Paramedics	2	1	100	3
CHC/Others				
<b>TOTALS</b>	<b>86</b>	<b>91</b>	<b>67% (average across all roles)</b>	<b>177</b>

It can be seen that although the numbers are smaller than the sample for the TQM sites (see Chapter 5, Table 5.1), there is a relatively similar distribution. The interviews were conducted on a similar semi-structured basis using the schedules

shown in Appendix 4. These were modified over the two years to reflect changes in the priorities for the evaluation, but some of the questions were kept the same for time series' purposes.

### ***Results of the fieldwork***

In order to compare the results from the non-TQM sites with the TQM demonstration sites, the fieldwork is presented using the same main headings – *Corporate approaches to quality*, *Systematic measurement of quality* and *Customer-driven quality*.

#### ***Corporate approaches to quality***

##### **Introduction**

All the units were undergoing major structural changes. These had an impact on those sites that were attempting to introduce more systematic approaches to quality improvement, which were similar in kind and extent to those at the TQM sites. Changes included furthering the purchaser/provider split; developing the contracting process; restructuring into directorates; devolving budgets; and preparing for trust status.

There had been relatively little in the way of diagnostics or benchmarking of quality at the non-NHS sites. The hospital audit site was an exception since the audit itself was seen as the start of a benchmarking process. However, this was only so in respect of certain basic systems and procedures and was not, *per se*, extended to surveys of patients and other internal or external customers. Some patient-satisfaction surveys had been carried out with varied success.

The hospital audit site had also set up an organisational development group led by the UGM and an external management consultant. This group was carrying out a staff attitude survey about quality of service. Only one other site showed evidence of any internal customer surveys being carried out. This was an interview-based survey programme carried out by the pharmaceutical services at one location with clinical service managers, clinical directors, consultants and senior nursing staff.

This had led to a fundamental review of what characteristics should form the basis for the service.

It was common at both TQM and non-TQM sites to find multi-disciplinary staff groups in place for development of new computer-based systems. However, the tradition of setting up users' groups for installing new technology or new information systems did not extend to similar structures for process improvement either at these locations or at a significant number of TQM sites.

Although there was little in the way of an organisation-wide drive for identifying users' needs, individual members of staff who were particularly committed to a patient-focused approach did work with patients on service improvements. For example, long-term relationships had developed between a stoma care nurse and her patients at one location. She had carried out patient surveys twice yearly in 1991 and 1992. In addition, patients were invited to social evenings to check on their views every two months. Thirty to 50 people would attend this sort of event and their annual social gathering brought together nearly 200 people. These events were funded by commercial equipment companies and the feedback from such meetings made significant changes in the way services were provided to patients after they had had their operations.

Overall, there were few significant differences between the way non-TQM and TQM sites initiated major change programmes for quality improvement. The programmes were preceded by some basic planning, and data that were already available were analysed in some detail. However, little additional survey work was undertaken and it was rare to find substantial involvement of users, either internal or external, at the planning stage. Although project management milestones for implementation would be set and reviewed, little attention was given to how the success of programmes would be evaluated

## Quality states prior to the start of TQM

When questioned on this issue, responses were similar across all the sites. Whilst there was some disquiet about the quality of service in some specific departments or hospitals, there was little to suggest an over-riding concern with poor quality. For the most part, the decision to install TQM or QA was not problem-led. The decision about whether or not to start a programme and, if so, which approach to adopt, tended to be based on factors other than specific concerns with particular areas of quality. The factors were said to include whether or not the unit was seeking trust status (it was generally agreed that this could not be achieved without evidence of systematic quality assurance programmes in place). The choice of which approach to take was rather hit and miss. It could depend on the previous experience of a senior manager with a particular model, or the advice of management consultants currently working with the organisation on other issues.

There did not appear to have been an in-depth assessment of different alternatives, nor a widespread debate about the issues. There was little evidence of a thorough understanding of QA or TQM or other approaches to quality improvement including the King's Fund model, other than in some of the quality managers and one or two senior managers. Even where a TQM initiative was thought to be the right choice, senior management at some sites were wary of a high profile approach, given existing relationships with medical staff and the difficulties already being experienced with other major change programmes.

Potential difficulties had not lessened concern about quality improvement. The author was made aware that, even at this earlier stage in the contracting process, at least one unit had recently lost a GP contract. This was said to be because of a lack of specificity about the level of quality or how it was to be assured, not because of low levels of quality *per se*. Our results suggest perceptions about quality (or the lack of it) were roughly comparable across the four sites. Where one site might appear to be better in one area, it was deemed weaker elsewhere.

There were no appreciable differences between the TQM and non-TQM sites. Some of the data suggested that problems with quality at the beginning of 1992

would appear to have been more widespread, and more persistent, at some of the sites where no programmes were in place than they were at our phase one TQM sites. However, the language of TQM and the raised awareness meant that quality initiatives and success stories about improvements were easier to gather.

Second, the TQM experiments had given individuals an opportunity to demonstrate that they could learn from their process improvement work and this was expressed as a favourable learning experience. The need to collect data before changing something and then to monitor it afterwards had the potential, if more widely undertaken, to develop a more reflexive organisation.

In some ways, differences were more marked between some departments within the same unit, than between different authorities. For example, at one site, a completely new specialist unit had been developed with much more of a customer focus than was apparent in other departments and functions at the same hospital. The same was true of the pharmaceutical service in another authority that was clearly further ahead than other services in collecting data from internal and external customers on its work.

### **Perceptions of problems facing the sites before 1992**

In general, respondents saw similar issues facing both TQM and non-TQM sites. High on the agenda was the matter of communication. Communication was seen as poor where different groups of staff had to work together, often across more than one department or geographic location, or where hospitals with different cultures were being combined under single management teams. This may be seen as a general failure to develop corporate approaches. Indeed, there was a tendency for departments to see their problems as having originated in other parts of the organisation or to tackle issues from a uni-disciplinary perspective. This was also apparent at some sites in their relationships with GPs and other agencies, for example Social Services departments, although day-to-day co-operation was predominantly seen to be quite good. A connected issue was the lack of a clear strategic vision from some top-management teams.

Some of the communication problems were to do with the lack of reliable and timely information. Data systems were mostly manual and could not provide the level of specific and up-to-date information that was needed to manage effectively. The amount and quality of monitoring were deemed poor. Where monitoring took place, it tended to be on the management of inputs, for example financial issues and staff hours, rather than on process improvement or outputs.

Whilst treatment of patients was felt to be relatively good, most, if not all the units, showed all the signs of being at a pre-quality assurance stage. Where senior management were showing increasing signs of commitment to customer-focused quality improvement programmes, it had not yet gained much purchase power down any of the organisations, except in specific departments which saw themselves as leading the way. There was little evidence of exposure to corporate concepts of quality or to the language of customer-focused process improvement. There was little formal organisation for quality on a multi-disciplinary or cross-functional basis in many areas, although uni-disciplinary standard-setting groups were increasingly common.

Yet there were important individual quality-improvement initiatives in place at all the sites and some are described later in this Chapter. However, there was a sense of an overwhelming number of issues to be faced and action on quality was seen more often as an additional burden rather than a unifying theme that could underpin all change. One of the clear issues at all the sites was that even where the level of service was good, there was a danger that, without a clear and comprehensive quality improvement initiative, they were going to have difficulties in meeting the rising expectations of important groups including patients, GPs and purchasers.

### **Concepts of quality prior to start of initiatives**

This section reports some of the concepts of quality referred to by respondents. The periods to which they refer are not as clear cut as they were when interviews were being conducted at the TQM sites because some sites had started initiatives and some had not. In addition, where new initiatives were in place, they had started

so recently that some respondents knew little about them. Generally, though, the views refer to personal definitions of quality before new initiatives had made a significant impression and would have covered the period of mid-1991 to early 1992.

#### *Vague or personal definitions*

Some interviewees at all the sites stated that they would have had difficulty prior to the initiatives in defining exactly what they meant by quality. They would have said something like *'Give a good standard of service'*, or *'Provide the best possible service given our resources'*. Other kinds of definition included *'You need to be adaptable, patient and cheerful, and to present many faces.'* This may be seen as a general move towards patient-centred attitudes, but was said to be strongest at the individual level. It had only just begun to impact on processes and procedures.

#### *Professional/technical definitions*

The largest group of definitions was based on professional and technical definitions of care. For example, *'Quality was my professional competence as seen in terms of technical skills.'* A catering manager said quality was *'seeing meals were delivered properly, stating what that meant in terms of hygiene, proper plates, cutlery, warm food and on time'*. Similarly, a finance manager said *'It's important to give a quick, efficient and accurate service'*.

Professional and technical definitions were reinforced by audit arrangements and systems for monitoring quality such as THEATREMAN, ITUMAN and MONITOR. None of these systems focused in any detail on patients' or carers' views. In medicine, medical audit was widespread, but it was not felt to impinge on anyone but the doctors. In some areas, however, the standards were open to reiterative and systematic testing for quality. For example, in one histopathology department, eleven internal medical audits a year were administered so that each consultant was subjected to some three audits a year – similar arrangements were presumed to exist in other areas of pathology.



### *Patient-focused definitions*

More respondents gave this kind of definition than two years previously. A typical example was *'an acceptable level of service that would produce the outcome that a person receiving the service would want'*. Other variations included *'deal sympathetically with patients and meet their needs'*, *'give the patients the information they need'*, *'do your best to give the patients what they want'*. In all these cases, there was a sense in which the staff was putting together a particular package of care that would meet the unique circumstances of an individual patient. However, there was little sense of the need to aggregate these data in some way in order to measure provision more systematically. It would be *this* aspect one would expect to find articulated by more staff at TQM sites.

### *Changes in definition*

If all the sites are taken together, the scatter of assumptions about the meaning of quality was wide. It included: speed of response and waiting times; staff appearance; the public image of hospital; continuous improvement; the monitoring of complaints; individualised patient care; good working environment; good resource management; safety; good medical environment and clinical standards; supervision of learners.

Although individual shifts in views towards what might be thought of as more patient-focused approaches were observed, even by 1993, there was little evidence at most sites of a unit-wide initiative to capture and systematise these principles. While technical and professional definitions still dominated respondents' ideas, there was some evidence of a shift from a monopoly of clinically based criteria to patients as sources of criteria. Professional groups varied in the extent to which they had moved to making standards, norms and values explicit, to building in the patients' views, or to acknowledging the need to measure and monitor their work. The majority of effort was still in uni-disciplinary groups, but multi-disciplinary co-operation was stronger in community services. Where such an effort was being made it had yet to impact significantly on the people and systems lower down the organisations concerned.

As far as shifting views towards patient-oriented views of quality was concerned, the non-TQM sites were further behind those TQM sites that had made most progress towards introducing orthodox models of TQM. However, they were on a par with the weaker TQM sites that had made little progress on implementing TQM. This suggests that the dominant pressure for changes in both groups had come from non-TQM related issues – the Patients’ Charter, contracting, and pursuing trust status. Nevertheless, the additional progress made at the more advanced TQM sites demonstrated that further progress could be made by installing effective TQM programmes.

### **The planning process for quality improvement**

A corporate drive for quality was definitely under way at two of the non-TQM sites. At one of these there was a strategic plan for quality in place, with some associated action plans, although this had been set back somewhat by their trust application and a move to a clinical directorate structure. At the second location, a unit-wide quality steering group had recently been established whose first task was to develop a strategic plan. In this case, the work of the group was supported by comprehensive surveys of the organisation, staff views and the views of GPs and patients. This survey activity was more comprehensive than anything that had been done at all bar one of the TQM sites, and it was significant that TQM management consultants were behind the direction that this location was taking. The other two units in the non-TQM sample had done little in the way of large-scale surveys, but corporate planning for quality was under discussion.

By the start of the first round of interviews, all sites had named individuals in full- or part-time quality manager or director-level jobs. As will be seen in a later section on resourcing, there were actually few differences in both the quality and quantity of resources being put into quality improvement. However, with one exception, there was little evidence that the many quality initiatives identified in the fieldwork were coordinated through any overall strategic plans for quality improvement. Thus, as far as planning was concerned, the big difference between TQM and non-TQM sites was that at the better TQM sites, at least, there was a greater overall grasp for

the need for coordinated strategic planning at Board and senior management team levels.

### **Structural issues**

By 1993, all but one of the sites had implemented a clinical directorate structure although the precise form varied from site to site. It was also quite common to find different places abandoning their original versions after a year or so and implementing a new structure. A similar process was apparent in the way quality improvement structures were set up.

Most sites had at one time or another established a unit-wide quality forum but three out of the four sites later disbanded their original groups in favour of different structures, or groups of different composition, or nothing at all. The fourth unit had only recently appointed such a group. One of the units that had disbanded its forum also had a King's Fund Organisational Audit group in place for the duration of their audit. This group was also to be disbanded after a year, but elements of it were being reconstituted as a series of task forces to act on the recommendations of the King's Fund report.

The difficulty of integrating initiatives emerged as a major issue at all the non-TQM sites. This might well have been one of the most important differences between these sites and those TQM sites that were successful in using TQM models to integrate change. At the macro-level the problem was one of integrating the bewildering array of changes being thrust upon the health service and the resultant need to co-ordinate all the groups set up to handle them.

Taking the hospital audit site as one example, a number of different and separate audit systems were in place including medical audit, regional nursing standards, local standards, the contracting process and purchasers' standards, educational audit from the School of Nursing, control of infection audits, monitoring arising from the Patient's Charter, as well as the King's Fund exercise. In order to tackle these initiatives there was a King's Fund Audit co-ordination group, an organisation

development group, a quality forum, a Patient's Charter group, a Medical Audit committee, and then a range of sub-committees and lower level groups including standard setting groups, quality circles and process improvement teams. Many of these initiatives assumed different models and processes and had different objectives.

What was most striking at all sites was a lack of co-ordination or consistency between the different initiatives. In one location the region was promoting the establishment of TQM in pharmaceutical services but the rest of the unit did not want to go down this road; the catering department was investigating applying for BS 5750 whereas elsewhere it had been rejected as being too mechanistic (a micro-biological-led kitchen audit system was already in place); nursing was investigating the commercial PATSAT system for on-going monitoring of patient satisfaction but elsewhere customer satisfaction data were not systematically collected; two functions, nursing and radiography, were either using or planning to use part of a vacant post for a quality facilitator but these were not clearly linked with corporate level planning.

At a different unit, where hospital-wide systems existed, these could be either function-based (nursing groups for standard setting, nursing audit and a new system for stock holding on wards), or unit management-led (as in the steering group for the Patient's Charter). Medical audit had resulted in some important advances including an improved system for handling discharge reports to GPs, but it was rare for paramedics, nurses or managers to be involved in the process.

Relatively static, uni-disciplinary standard setting groups could be found alongside bottom-up quality circles and top-down management-led multi-disciplinary cross-functional teams in the same site. The relationship between these groups was not clear and, in many cases, the goals of some of these groups, and the way that they operated, were based on different objectives and models.

There was some improvement in this position by the end of 1993 but overall planning for quality improvement at the corporate level continued to be weak.

Business planning, though, was much stronger than it had been in 1992. It was also clear that most of the quality improvement work going on had been initiated in the absence of any organisation-wide benchmarking or diagnostics. Much of the planning on quality, therefore, was proceeding in the absence of detailed information on the requirements of internal or external customers. Only one of the units had a formal system for recording data on quality improvement projects in a way that allowed them to be tracked.

### **Resourcing of quality improvement initiatives**

The differences between resourcing of quality improvement at TQM and non-TQM sites were more a matter of qualitative than quantitative differences.

#### *Training for quality improvement*

When the sites were first visited in the spring of 1992, training and development for quality improvement were under-developed at all the units. The little training received in quality assurance and customer service had come from a variety of normal professional development courses – standard setting; medical audit seminars; events on improving medical records; and courses undertaken by individuals as part of their own development including MBAs. A few customer awareness or customer relations courses had also been run at two of the sites. Generally, the view was that increasingly professional and personal skills courses included material on quality, patient satisfaction and the Patient's Charter, but this was not seen as adequate by those staff now involved in process improvement groups or newly appointed to quality facilitator roles.

As far as specific in-house QA or TQM training was concerned, some of the staff at the King's Fund Audit site had received two-hour presentations on that approach but little or nothing on audit skills. One or two senior managers had trained as surveyors with the King's Fund on a detailed three-day programme. All the sites ran some courses on standard setting, though many of the staff in standard-setting groups had received no training. There was no proper training for standard-setting

facilitators or quality circle facilitators at most of the sites. Few quality managers or directorate-level facilitators had had any training.

The only substantial management exercise to develop understanding of QA assurance models had been at one site where the chief executive had run two quality days with 120 managers. This group had carried out a quality review of their own areas and had developed action plans in response to a management-consultant led organisational audit.

In spite of the general lack of substantial training, there was a clear increase in awareness of interviewees of the importance of quality. This had been brought about by preparation for trust status, the pressure of quality in contracting, and a general move towards questioning the effectiveness of what they were doing. What was lacking, however, was understanding of the tools of quality improvement, particularly outside the traditional scientific and medical audit areas.

#### *General funding of quality improvement initiatives*

It was difficult to estimate the extent to which resources were being provided for quality improvement. Only one of the four sites kept a central record of initiatives being funded specifically for quality improvement. At this site, leaving aside medical audit, it was found that some 17 projects, costed at a total of £40K, were due for completion within 12 months. The costs of a full-time senior manager to head up quality, plus a number of other full- and part-time quality facilitators and assistants, could be estimated to cost between £80-100K.

Many other costs were not included in this list. For example, the King's Fund Organisational Audit cost around £15-20K for a large multiple-site acute unit. The opportunity cost in terms of time for staff attending quality circles and other group meetings had not been costed, but obviously could have amounted to an appreciable figure. If one added to the known costs, the expenditure on medical audit, variously estimated to be between £70K and £200K at different sites, one could see that appreciable sums were actually being invested in quality

improvement. This was, however, still an order of magnitude lower than that being spent by the commercial organisations (see Chapter 7 page 194)

### **Savings to be made from quality improvement**

Many examples of savings made through quality improvement initiatives were identified in both visits to the sites and it is significant that the second round of fieldwork in 1993 identified many more examples than were given in 1992. In most cases, these savings were the result of service improvements. However, in some cases the level of service had been maintained whilst actual costs had gone down.

Some savings had been made because of reviews of diagnostic procedures. For example, one X-ray department had re-evaluated the kinds of X-rays they undertook and consequently had been able to reduce the number of films required. In a related initiative, radiologists had produced a booklet for casualty officers outlining what kinds of X-rays they should ask for in different circumstances. This, together with the appointment of a new consultant in casualty, had reduced the number of inappropriate requests. In one maternity unit they had discontinued the routine shaving of women prior to labour and the use of enemas. This had made clear savings in resources and had also improved client satisfaction. A medical audit study of flexible sigmoidoscopy by a surgeon in an outpatients department found that some 80% of the requests for barium enemas were not necessary and automatic requests for this procedure had stopped.

Straightforward savings in materials had also been made. For example, impressive savings were reported in the handling of clinical waste – at one hospital this had been reduced to £12,000 per year which was thought to be lower than many other hospitals. At the same unit, the appointment of a supplies liaison nurse had resulted in streamlined stock lines and lower stocks in many locations including outpatients. A CSSD in another hospital reported that it had costed and remedied wastage caused by mislabelling of surgical equipment. These examples are similar in kind to those reported at TQM sites (see Chapter 5) but there appeared to be fewer of them. This might have been misleading because the lack of formal quality

improvement structures and centralised quality planning made it more difficult to identify the overall picture.

The range of departments working to make better use of resources was wide. At a single site one could find occupational therapists producing a hand protocol for the treatment of paralysis which would lead to reduction of wastage of splinting materials and, at the same time, the finance department had saved some 70-80 hours a week that had previously been spent on error checking of invoices.

In an ophthalmology unit where long waiting times were due to a lack of consultant resources, a study found that most patients did not need to see the consultant. Consequently, a GP, who had more than an average knowledge and interest, was employed to help with sessions on cataracts. The GP was able to screen patients successfully and identify those who really did need to see the consultant. This had made a considerable impact on waiting times.

Overall, it was difficult to get accurate figures on costs of investing in quality improvement or of what savings were made. In general, the problem was that, at a pre-quality assurance stage, people just did not look at process improvement in this way. In addition, the culture did not endorse longer-term investments in quality improvement at the expense of short-term cuts in facilities or resources. Money could be spent on one scheme or saved by another, and neither would be thought of as quality improvement.

### *Systematic measurement*

#### **Information provision**

Under TQM, there should be more systematic monitoring of processes based on greatly enhanced information provision. Progress was monitored at non-TQM sites for comparative purposes. All the non-TQM sites reported some improvements in the accuracy, relevance and timeliness of information being provided for planning



and process improvement purposes. However, most units were starting from a low base and what improvements there were should be seen in this context.

Some data that had been collected proved to be useful for other purposes but they were not well connected with quality issues including planning or monitoring. Data were still on the crude side and based, in the main, on over-simplified quantitative measures such as waiting times or waiting lists. More complicated relationships – for example, between activity, skills mix and patient dependency – were poor. As one midwifery manager said

*'seven women on one midwife's list might require very different levels of support from seven women on another's list, but this could not be identified from data on client contact'.* (Interview number TR/92/87)

There was considerable investment at all the sites in new information technology. These systems included the Hospital Information System, PAS, a Nursing Information and Management System and specific new systems for areas such as radiology. Investments were also being made in new software for outpatients' management, and radiology. Specific programmes such as QAID were frequently mentioned at two sites.

Progress on the development and integration of existing systems across departmental boundaries was uneven. There was considerable satisfaction expressed in departments where they now had their own purpose-developed computer systems, but it was pointed out that these would probably never be capable of integration with other hospital systems. Manual systems were still the order of the day in many places, particularly therapy services at most of the sites. This was also the case at one hospital where discharges and admissions were not yet computerised and the wards did not have terminals. Much of the data provided by these systems just did not provide the level of detail required to support process improvement work.

## Measurement of departmental performance

There was a wide range of performance indicators in place. These could be categorised under the following headings – *general monitoring, contracting, setting and monitoring standards, quality improvement groups of different kinds, medical/clinical audit and quality assurance.*

### *General monitoring*

There were general indicators that were monitored more or less on a continuous basis. These included the Patient's Charter standards for waiting times for appointments and operations; waiting times once people arrived for appointments; activity data including throughput; dependency measures and skills mix. It was found that that the Charter measures were still primarily geared to acute services. Other general indicators included time to return correspondence, to reply to complaints and to answer telephones. Some managers were also looking at the effectiveness of meetings.

### *Contracting*

There were two main forms of contracting. The first was contracts with purchasers, including GP fund holders and the second was where contracts were set for non-clinical support services. Over the research period, both forms played an increasingly influential part on the direction that the sites took when choosing quality criteria for measurement and setting standards. It was recognised on both sides that they had not yet developed satisfactory criteria or measurements for some services including community services. Much of the monitoring still relied on quantitative measures such as contact time and throughput, without equally explicit criteria for establishing the quality of what was happening in any given contact.

There were some important exceptions to this. Examples given included one maternity services unit where a percentage ceiling was set by the purchaser for the number of permissible operative deliveries. It had also set a percentage target for mothers who should be breast-feeding after six weeks. In intensive care services, targets had been set for a range of indicators that included cancellation of patient

admissions and the maximum number of pressure sores that would be permitted. In other areas, purchasers' quality indicators included the time taken for letters to go out to GPs after discharge, patient accident rates, junior doctors' hours and waiting times for outpatient clinics.

Overall, the influence of the purchasers was stronger by the time of the second round of visits in 1993. Some work was being put into designing more detailed and qualitative criteria for monitoring performance in clinical contracts. The main issue here was seen to be that the contract setting process with purchasers and GP fund holders appeared to take place in the absence of any specific involvement of patients or other groups. Not surprisingly, both acute and community services units were responding to purchasers as the primary customers.

The second form of contracting, and one that normally had the most detailed amount of monitoring, was exemplified by domestic services and catering. In one domestic service, they were required to send out certificates of service to every user who then provided them with feedback on whether or not their services were satisfactory. Catering departments in all the units also carried out regular surveys of patient and staff satisfaction. This was probably most comprehensive in one unit where catering surveys were carried out on a sample of 150-200 patients every month on a rolling programme around the wards. Importantly, the monitoring was carried out by 'independent' monitoring officers employed in general services. There was also a multi-disciplinary catering quality review group that met once a month.

#### *Standard setting and monitoring*

Almost all areas of nursing in the research units had standards in place. Typically, these ranged from four to 20 standards. In some cases, they were generic hospital standards rather than ones specifically written for that specialty. In most of the units, however, there had been little new activity in standard setting over the period between the first and second research visits. Monitoring of existing standards was becoming less and less frequent, and often confined to one or two important

standards. At the King's Fund audit site one manager said there had been 'a spectacular burst of activity with much dusting off of manuals' but this activity had died away after the audit.

Several other problems and difficulties had been experienced in setting up and monitoring systems. One problem, which has been frequently documented in other studies, was low patient expectations. Even where services were quite poor it was difficult to get patients to complain. In one case, the researcher was present when two patients were being admitted to a ward where there were no pillowcases on the beds. The senior sister apologised for this and suggested that they complain about it when they were asked to complete their patient satisfaction questionnaires. However, in spite of this prompting, both expressed reluctance to complain because "the NHS gets enough stick as it is".

There was great variability between units and even within departments. For example, in one new day-procedures unit monitoring was most elaborate. In addition to monitoring their standards, staff fed back information from questionnaires on patient satisfaction to the rest of the unit. There was an audit on patients who failed the pre-operative assessment procedure. They had a GP questionnaire that they sent to the GP of every patient, and they audited the surgeons' use of theatre sessions. They also monitored the number of patients admitted to hospital from the unit rather than being discharged. In a move from nursing to administrative audit, they had documented flow patterns of work and produced a normative model for their administrative systems.

A similar comprehensive package of auditing was going on in community midwifery at another unit. There they carried out an annual audit of the six midwives' practices with a detailed list of criteria. They had ten standards which were audited regularly and more frequently if they didn't come up to scratch. They had also just carried out 1,000 questionnaires with women who had been through the service in the last 12 months though there were no results out at the time this research finished. They had carried out a number of specific audits – for example, on breast-feeding, in an attempt to improve the percentage of breast feeders.

Non-nursing areas had shown that it was possible to set and monitor standards. For example, portering in a third unit had set a series of standards including maximum waiting time for patients, and had written procedures for moving patients. There was a detailed logging system for recording waiting times and it was possible to trace complaints back to individual porters.

#### *Medical/clinical audit*

Views about medical audit were mixed. In some areas, it was said that audit groups were limited to attendance by doctors who would only examine narrow issues of a medical nature. There was also a lack of preparedness to tackle some substantive issues of variation in quality. From time to time, some of these groups would invite nurses or PAMs to attend specific sessions where it was thought that they had a contribution to make, but there was no standing invitation.

In contrast, other groups were much more open. In one maternity department, for instance, there had been a shift from looking at morbidity and mortality data, to a weekly meeting between nurses and doctors where they reviewed a more representative sample of cases from that week's deliveries. In another example, a non-medical member of staff was facilitating the medical audit process.

#### *Quality Assurance systems*

Pharmaceutical services at two units were advanced in many respects. They measured error rate, waiting time and the number of 'to follows' (TFs). At one of the units these were systematically charted using quality assurance tools to pin-point the causes and address them. The same department had also been undertaking outpatients surveys for the last two years. At the other site, TFs were accompanied by a detailed explanation of why they were not available and alternatives were suggested. As might be expected, these more systematic approaches were likely to be found in technical support services such as pathology, pharmacy and radiography, though they often amounted to quality control rather than quality assurance.

### *Integration of performance measurement*

Whilst almost all these different forms of performance measurement could be identified at each of our sites, the implementation of the different approaches and the extent to which they influenced practice were variable. It was also clear that they were underpinned by different philosophies, methodologies and assumptions about purpose. This was succinctly put by one interviewee who said

*'doctors rush around collecting masses of data under medical audit, but don't really know what to do with it and have no standards, whereas nurses get into a huddle and come up with reams of standards without having collected any data'.*  
(Interview number CA/91/28)

Although there had been a considerable increase in both the number and range of quality improvement initiatives (see the next section – *Customer-driven quality*), progress on supporting these initiatives with more systematic measurement was less marked. What was lacking was understanding of the tools of quality improvement, particularly outside the traditional scientific and medical audit areas. For example, one pharmaceutical service had a long history of monitoring the technical quality of its products but was struggling to develop broader-based methods for evaluating the quality of services, especially in terms of internal and external customer satisfaction. This was one area in which the non-TQM sites were beginning to slip behind the TQM demonstration sites.

### **Customer-driven quality**

There was little detectable difference between the TQM sites and the non-TQM sites at the outset of the evaluation in this area. Neither group was particularly advanced on the TQM principle of establishing and meeting internal or external customers' needs. By 1993, one would have expected the TQM sites to have moved further on this feature of TQM programmes. In fact, this was only the case at three of the TQM sites. The rest had made some progress, but so had the non-TQM sites. As in Chapter 4, the section is divided into internal and external customers, and the difference between the focus on these groups and actually empowering them.

### *Internal customer focus*

Although the sites were not pursuing TQM, there were several pressures on them to improve internal systems and processes and this led, naturally, to some work on improving internal relationships. This was most obvious at the King's Fund hospital audit site although, even here, most effort went into examining processes *within* departments rather than *across* departments. Also, pressures coming from purchasers meant that departments had to review the extent to which they could meet their commitments. This raised the issue of 'internal customers' and by 1993 this was a common phrase to hear in interviews at several non-TQM sites, albeit not always in a corporate context.

The idea of internal customers appeared to be more prevalent in support services (clinical and non-clinical) than it was in the main operational units. Thus, catering and domestic services had strong contract-driven ideas of their customers, and a fair amount of progress had been made in pharmacy, pathology and radiology. Progress was more variable in other support departments. For example, X-ray, medical records and personnel officers in most units had done little to identify internal customers and their needs.

Whilst the idea of internal customers was becoming more prevalent, this had rarely extended to thinking about one's department as part of a customer-supplier *chain*. Exceptions were in CSSD and Management Services in one of the units. The latter had negotiated service-level agreements with each hospital and individual terms of reference were developed jointly with each department, according to their perception of their needs on any given project. At another unit, pharmaceutical services had been involved in setting up specific internal contracts and then clarifying these with customers in an explicitly customer-led way. There were also negotiations taking place in at least two units about the potential for setting up trading accounts – ITU and pathology were leading the way. In a third unit, outpatients and surgery were working together on a service level agreement.

### *Internal customer empowerment*

Departments and individuals could strengthen their focus on internal customers by making more effort to find out what they wanted and then providing for their needs. This, however, might still not amount to empowerment. The latter would entail more active involvement of staff in designing, delivering and evaluating services. Although the results were patchy at all sites, there were some important examples of where this was beginning to happen.

At one site, contracts were being discussed by multi-level, multi-disciplinary groups. There were attempts to identify the quality requirements and state these prior to setting the contract. A good example of this was in the setting of a new contract with the ambulance service at one acute unit. The contract group included a management consultant from the RHA, ambulance staff and transport clerks as well as nursing representatives. The result had been better defined quality standards, agreement about appropriate levels of quality, and a system for monitoring the contract. Having said this, a common criticism of the contracting process was the lack of involvement of users in the contract-setting process.

The pharmacy services at one site had found that developing service contracts with internal customers by forward mapping to meet their needs had proved less than satisfactory. Although they had been able to meet some customers' needs there was little sense of involvement or satisfaction of those customers. The service then turned this into a backward mapping exercise that started by asking customers what they needed and building them into the delivery process. The data from this exercise were then combined and aggregated to provide service characteristics, which in turn led to standards of acceptability and a monitoring system for quality assurance. It was seen as a much more successful exercise.

The biggest changes in empowerment of staff were to be found in one of the community services units. Here there was widespread optimism about staff empowerment from middle managers and from some of the other staff interviewed. Many of the developments in audit, for example, had a distinct bottom-up flavour to them. Clinical audit had developed into a system of peer audit in chiropody and



to a lesser extent in physiotherapy. Similarly, a clinical nurse manager reported that a professional development group, composed of health visitors and school nurses, had been the forum for a bottom-up process for standard setting which had led on to policy development. Similar points could be made in respect of occupational therapy.

Empowerment in the acute units was said to be more variable and depended on what department a person was working in. Overall, many interviewees spoke about less formal relationships in the NHS over the research period. This enabled people to contribute more at meetings, but had little to do with quality management in itself. The difference in views between those involved in quality improvement groups and those that were not was most marked. Quality circles in areas as far apart as catering and radiography had clearly empowered the staff involved, and they spoke highly of these groups.

#### *External customer focus*

The focus on external customers, patients, clients, and purchasers, had increased over the two years of fieldwork. This could be seen in the increased amount of information going out to patients, clients, and carers. It was more professionally designed and more substantial in terms of the detail provided. Many patients now knew about the Patient's Charter and where this was the case, it had undoubtedly strengthened their perception of their power and rights.

In the main, though, patients remained relatively passive recipients of information generated by the units on their behalf. There were few examples of information leaflets that had been produced by actual consumers. Thus, a booklet providing information to bereaved families about what to do if a relative died had involved the Community Health Council (CHC) in its production, but had not surveyed the needs of actual users. In other cases, bereavement booklets were explicit on what the bereaved person had to do in the event of a death, but not informative on their rights in terms of what they were entitled to expect from the hospital.

There had been a noticeable increase in the number of surveys being carried out of customers' opinions at several of the sites. These ranged from simple checklist type questionnaires with patients and clients, through to detailed surveys of GP fundholders. However, they typically still tended to be post hoc, and the analysis of questionnaires, or the resulting changes that were made, was not generally available to respondents or community groups. Further changes were taking place as the research ended. In two units, patients could see their notes if they wanted to. In the case of one urology department, this fact was published prominently in pre-operative literature, and again made clear on the wards.

#### *External customer empowerment*

Although many departments were still at the stage of post hoc customer satisfaction testing, elsewhere there were interesting developments in both information provision and patient involvement. In another urology department, for instance, staff carried out pre-operative interviews with 50 patients in their homes to ascertain expectations of care and prepare the patients to be 'informed consumers'. The patients then kept diaries whilst they were in-patients, and carried these on after they were discharged. This project was seen to have made four important advances:

- ❑ it tackled patients' expectation prior to admission
- ❑ it involved face-to-face structured interviews rather than questionnaires
- ❑ it was a process-based study carried out from admission to discharge
- ❑ it was underpinned by the notion of empowering consumers by making them better informed

In another example, this time in maternity, staff had monitored nearly 900 patients over a nine-month period to correlate the outcomes of labour with different procedures. They were now in a position to tell women more precisely, what they could expect from different procedures. This enabled women to make more informed choices about different procedures. Another process-based study was being conducted in a different unit on cataract operations. Here, again, patients were filling in forms and keeping detailed diaries throughout their treatment. These

data would be used to improve the service to this group but, more adventurously, would also be used to identify what longer-term outcomes were in terms of improvements to quality of life.

Informing customers about the services they could expect, and asking for their comments after the event was relatively easy compared with the difficulties of building them into the actual systems and processes of service delivery. Two powerful examples of the latter both came from the same unit. The first was a multi-disciplinary quality improvement team set up in A&E at one site. This had important features including the fact that it was consultant-led, was attended by a GP, and had patient representation. Patient representatives were contributing to both identification of issues and taking part in 'corrective action' groups. The second concerned the selection process for a business manager of a specialist trauma unit. In this case, a quadriplegic patient and a representative of a patient support group sat on the interview panel for the new business manager.

Although progress at the non-TQM sites had been less widespread than some of the more advanced TQM sites, these examples showed what was possible without a TQM initiative. The next section looks more specifically at some of the examples of process improvement. It reinforces the point that excellent examples of quality improvement could be found everywhere at the non-TQM sites. If TQM were to add anything, it would be to provide training in the necessary skills, and more systematic support and coordination across whole units.

### **Quality and process improvement initiatives**

TQM is intended to produce a shift to multi-disciplinary projects; systematic as opposed to ad hoc process improvement; customer-driven improvement; empowerment of internal and external customers; and savings made through reduction in errors and waste, or improvements in resource utilisation. Some worthwhile examples of customer empowerment and cost reduction have already been covered. The areas of multi-disciplinary and systematic process improvement are examined below.

### *Multi-disciplinary studies*

There were many examples of multi-disciplinary process improvement. In some departments at all the units encouraging moves were taking place towards multi-disciplinary medical and clinical audit. A multi-disciplinary group made up of medical and surgical staff, dieticians, and two sisters had carried out a study of patients who were underweight because of different illnesses. This study produced a new systematic assessment procedure with specific guidelines for the care of underweight patients and led to better nutritional management.

Another multi-disciplinary working group, this time in geriatric medicine, had developed a functional assessment scale for the systematic assessment of patients prior to admission and discharge, using a single agreed set of criteria. This allowed the department to construct a database to monitor progress. The same department had also developed a cohesive resuscitation policy and associated guidelines on 'the right to die' for geriatrics. This major and complex piece of work had been through the resuscitation committee, and a consultant staff council, been vetted by lawyers, and later became a model for other hospitals.

Some studies went well beyond the units concerned and involved other agencies. In one case, a multi-agency group had looked at ethnic minority issues for consumers across a whole range of services. This work involved the hospitals, local authorities, social services and education. Similar activity was being undertaken because of the Community Care Act that required complex assessments for patients who were going into residential care. This had led to major multi-disciplinary studies of discharge procedures in several units.

A number of important audit studies had also been carried out. Two examples are given here, both from urology: one which was mainly a professionally oriented exercise and one which was strongly consumer-driven. The first was part of a national study on prostate operations, looking at the success rates of specialist urologists compared to general surgeons. The second was also interesting because, whilst it was a medical audit of circumcisions, the views of patients were solicited and these had a strong influence on the outcome of the audit.

Although medical audit studies generally followed scientific methodology, many other studies and process improvement initiatives would not fall into a category of systematic process improvement within the meaning of TQM simply because the data collection phases had either not been carried out or else were weak, methodologically speaking. In other cases, and this included medical audit studies, the original analysis might have been good but there had been no subsequent follow-up after changes had been put in place. This was one area where the non-TQM sites had fallen behind the more advanced TQM sites.

Our overall impression was that, individually, there had been few differences in the number or quality of process improvement projects between non-TQM sites and the less advanced TQM locations. However, the more advanced TQM sites had been better able to integrate individual projects with on-going organisational development at corporate level. This had been the result of better training, more explicit structures, and facilitation provided at the TQM locations. The early pressure of trust applications and contracting had pushed the non-TQM sites faster than might otherwise have been the case, but this early spurt of progress had slowed down by the end of the second year of fieldwork.

### *Summary*

The main conclusion at the end of the first round of fieldwork at the non-TQM NHS sites was that the TQM sites were ahead in almost all respects as far as systematic and organisation-wide quality improvement was concerned. Of course it was possible that the TQM sites would have been more advanced even if they had not introduced TQM. They had put themselves forward as potential demonstration sites when bidding for Department of Health funding, which was an indication of an awareness of, and preparedness to tackle, quality improvement on an organisation-wide basis.

Although the non-TQM sites appeared to lag behind, a strong impression was formed that they were fast catching up with those that had adopted TQM. The gap appeared to be closing because they were being driven by other compelling

pressures toward similar quality improvement arrangements as the TQM sites. These pressures included applications for trust status, implementation of the Patient's Charter and, in one case, going through a King's Fund Hospital Audit. Taken together these pressures suggested the need to move to corporate planning for quality, more systematic measurement, and greater attention to patients' and purchasers' needs – the same objectives that the TQM sites had set for themselves.

In the period between the two pieces of fieldwork, all non-TQM sites moved, albeit at different speeds, towards the implementation of different forms of quality improvement programmes. This was not, in the main, because of planned organisation-wide changes in strategic direction on quality. Change was being driven more by reactive responses to achieving trust status, securing contracts, and implementing initiatives such as the Patient's Charter. Although these pressures were often in conflict with one another, they were underpinned, to some extent, by a common philosophy. This included general notions of increased corporate accountability, competition, value for money, and focus on the customer. It was apparent that several of the sites had looked at commercial sector models of quality improvement, if only because they appeared to espouse the same principles.

The pressures outlined above had appeared to accelerate the move towards customer-oriented quality improvements. By the summer of 1992, the researchers had formed a view that the gap might be narrowing between TQM and non-TQM sites. However, the fieldwork in 1993 suggested that the non-TQM sites, after an early burst of activity, did not appear to have gathered pace in the way that was expected twelve months previously. This was primarily because they had not been successful, in the main, in implementing a corporate response which was strong enough to get the ideas formed at senior management level to penetrate sufficiently far down the organisations in order to affect the way services were actually delivered.

Although the TQM sites had also had their problems, the more formal structures they had for handling quality improvement, and the greater extent of training at the more advanced sites, had clearly kept them ahead of the non-TQM locations.

Having said that, TQM did not appear to have added the value one would have expected from either the literature or from early demonstration sites' documentation. Since two sites did make considerable advances in the implementation of TQM, the conclusion could be drawn that part of the failure to make significant gains through the use of TQM by the majority of sites was more the result of failure to implement TQM properly, rather than the complete unsuitability of TQM *per se*. To some extent it is impossible to disentangle cause and effect here – some of the difficulties of implementing TQM were, in themselves, the results of poor leadership and muddled thinking at a local level, but the ability of TQM to adapt itself to the particular socio-technology of the NHS is also questionable.

The next chapter reviews the progress made at two commercial companies on installing TQM.

## **Chapter 7 – Fieldwork at the Commercial Companies**

### ***Introduction***

It was considered important to have commercial sites as part of the sample, given that the ideas behind TQM and its methods of implementation have their origins in the commercial sector. In 1992 and 1993 fieldwork was carried out at Thames Water Utilities and Post Office Counters, using the same methodology and semi-structured interview schedules as those used with the NHS sites.

There were three questions that this comparative exercise hoped to answer:

- a) Are there particular factors in a commercial operation which lend themselves to orthodox TQM approaches?
- b) By implication, therefore, are some of those factors inimical to the introduction of orthodox TQM to the NHS?
- c) To what extent could understanding of the commercial experience of TQM at the time the NHS TQM experiments were being planned have predicted some of the difficulties later found during installation?

### ***Description of the sites and approaches to TQM***

The issues faced by each organisation in securing the future of their respective operations led to selection of quite different approaches to TQM, in both conceptualisation and implementation. Some of the main differences between the two organisations and their models are described below.

#### ***Post Office Counters***

Post Office Counters was a large national organisation with a long stable history. Its core business was made up of short transaction, high volume work. The processes for handling this were in relatively short chains with many lateral lines. The processes were well understood and documented. Staff had well-designed and tested performance measures, based on a clear understanding of external customer



needs. From 1990 onward, the company recognised that competition was increasing and that the organisation faced forecast reductions in the volume of its business. The circumstances were seen to dictate the choice of a comprehensive, top-down, corporate TQM initiative with tight time-scales of a revolutionary, rather than evolutionary kind. The initial focus was to be on cross-functional and intra-departmental quality improvement programmes, driven by across-the-board training and comprehensive information about customer requirements.

The Counter's model, called 'Customer First', followed a learn-use-lead approach, derived from Xerox, but adapted somewhat in the light of experiences at Royal Mail. Considerable effort had gone into developing the methods by which the principles of TQM would be embedded in all the organisational structures, systems and procedures. The diagnostic model and the elements for implementation are portrayed diagrammatically at Appendix 7. Although the implementation process was top down, it was anticipated from the outset that maximum opportunity would be given to staff to be involved in cross-functional quality improvement exercises.

Interviews conducted during the fieldwork showed that there was strong support for a coordinated and primarily top-down implementation. Two senior managers made the point that a number of quality initiatives had been tried in the past, ranging from individual district exercises to bottom-up arrangements for securing BS 5750 at GiroBank. However, they felt that what was needed now was an organisation-wide 'quality culture'. A decision was made to pilot TQM in three districts during 1991 and 1992 before extending it to the rest of the organisation.

### *Thames Water Utilities*

Thames Water Utilities could not have been more different. Its history was one of amalgamation of numerous small and large companies, each with its own culture and operating practices. Process chains were long with high technical and scientific content for water quality, supported by mainly administrative systems and processes. Yet apart from scientific water quality, there was little documentation of processes prior to the start of Thames Water's initiatives. The customer base was

relatively static and captive and there were tensions between expansion of the business and the need for conservation of water. The potential for diversification was more limited than at Counters.

Thames Water, like Post Office Counters, was facing pressures, though of a different kind. The Regulator was calling for increased efficiency and effectiveness and there was pressure from shareholders and other potential investors. However, Thames had a more obvious crisis when, in June 1989, serious contamination occurred at Hampton Water Treatment Works. This forced management into a detailed examination of the causes. It was recognised that the lack of documented procedures and poorly understood internal customer-supplier relationships were major factors. The combination of poor documentation and a felt need to secure the support of a fairly demoralised and uncommitted workforce, led to the choice of a more evolutionary, bottom-up model, than that chosen by Counters.

The company decided to carry out three different approaches to quality improvement, based on the perceived needs of different parts of the business – BS 5750 for the Engineering function; an internally-based Thames Quality Award programme for the majority of operational and administrative systems; and two limited TQM pilots. Although Thames Water was not keen to have its model of TQM linked too closely to the thinking behind any one approach, it was clear that many elements of the design followed Deming's concepts, particularly as it had been implemented at the Florida Power and Light Company.

The Deming-like approach had three distinct stages. First, there was the requirement to bring processes under control by identifying the constituent elements and sequences, and then documenting them. The next stage was one of analysis of processes through establishing systems for monitoring and evaluation. The third stage was the start of specific process-improvement exercises. This brought with it an increasing emphasis on statistical procedures and the mapping of statistical variation.

## **Methodology**

The same methodology was followed at both commercial and NHS sites. Tables 7.1 and 7.2 gives details of the interview samples achieved during 1992 and 1993:

Table 7.1: Samples achieved at Thames Water Utilities

Locations	Roles	1992	1993	% of 93 also interviewed in 92
HQ	HQ/Senior managers	3	2	
Customer Services	Managers	2	2	
	Supervisors	2	2	
	Other staff	2		
Operations	Managers	3	3	
	Supervisors	2	2	
	Operators/Engineers	6	5	
Support Services	Managers	6	6	
	Other staff	6	5	
	<b>TOTALS</b>	<b>32</b>	<b>27</b>	<b>15 (55%)</b>

Table 7.2: Samples achieved at Post Office Counters

Locations	Roles	1992	1993	% of 93 also interviewed in 92
HQ	Senior managers	2	2	
	Support staff	0	3	
Post Office District	Managers	12	11	
	Sub-post Master	1	2	
	Postal officers	6	4	
Support Staff	Accountant	1	1	
	<b>TOTALS</b>	<b>22</b>	<b>23</b>	<b>12 (57%)</b>

## **Results of the fieldwork**

### *Corporate approaches to quality*

There are two ideal-typical approaches to TQM implementation. One is the 'revolutionary' and the other is the 'evolutionary' model. In the revolutionary approach, an organisation starts with a comprehensive organisation-wide, top-down

implementation of TQM. Participation is explicitly compulsory, time-scales are short and the whole emphasis is on achieving rapid cultural change. The evolutionary model is more diffuse and less rigidly controlled. The emphasis is on longer term, bottom-up, gradual development of participation on a voluntary basis, by groups of staff who lead pockets of organisational change.

Thames Water was following the evolutionary approach. It was therefore expected to find a wide range of different quality improvement initiatives, often operating with different approaches and assumptions, but loosely integrated into an overall corporate approach. As each of the main schemes progressed, one would have expected to find more structure being applied and more control exerted by the centre. Typically, control would be only mildly directive and no more than necessary to provide increased coordination and integration as the number of schemes increased both vertically and laterally.

This was found to be the case with three different approaches being piloted – TQM, BS 5750 and internal Thames Quality Awards (ThQAs). At headquarters' level, a quality management team had departmental managers on it from each department. This team was established below board level. Each department then had a part-time facilitator who could be at any level and need not necessarily be the manager. Departments were encouraged to take part in the ThQA system, but participation was not enforced. The awards were made by the Chief Executive to departments that passed an internal audit.

At the BS 5750 site, there was a 5750 steering committee that handled the coordination of progress towards registration. Activity in most departments was only loosely coordinated and managed through the normal line-management structure. The set-up at the Thames TQM pilot sites was more formal, as one might expect. Both the sites had a multi-disciplinary, multi-level quality forum that received reports from, and monitored the progress of, a number of quality improvement groups.

Post Office Counter's model for implementing TQM was quite different. It began with a separate Customer First (CF) meetings' structure which paralleled normal line management meetings known as 'Business as Usual' (BAU). It was the intention that the separate meetings' structures would be progressively merged. Progress towards this aim differed between some departments and levels. By 1993 some staff continued with separate meetings whereas elsewhere the two streams of activity had been fully integrated.

It was evident that the point at which the two systems were merged required careful judgement. If the decision was delayed too long, staff complained about the additional workload caused by Customer First. It also reinforced the perception that Customer First was somehow different from normal on-going operational activity. On the other hand, if the integration took place too soon, there was a danger that the emphasis given to TQM would decline markedly. There were no clear criteria at the outset as to when or how the meetings' structures should be merged. This was seen, in hindsight, to have been something that would have been helpful.

### *Preplanning – diagnostics and benchmarking*

Post Office Counters undertook a range of major diagnostic exercises in the early stages of developing Customer First. These included staff and customer/client national surveys that allowed for a breakdown of data down to district level. In addition, local diagnostics were then carried out at branch level – for example 1,000 questionnaires were sent out from each branch to its customers as the district implemented CF. Some limited internal customer surveys were also undertaken within districts, but such surveys were still relatively rare at headquarters' level.

Post Office Counters was, generally, a strongly data-driven organisation and was fortunate in having both a strong marketing department and a sophisticated operations research function. Taken together these two departments enabled Counters to draw on considerable expertise for the development of both qualitative and quantitative indicators for measuring quality.

At Thames, little in the way of diagnostics or benchmarking had been carried out at sites that were applying for, or had achieved Thames Quality Awards. Since the organisation was still at the stage of documenting processes it was seen to be more important to understand what people did than to analyse the appropriateness of those processes and procedures in terms of their contribution to achieving quality in service delivery.

The company did measure external customer satisfaction. Regular customer surveys were carried out but no attempt had been made to link changes in these surveys with changes in processes or procedures at individual locations. However, there was an expectation that increased measurement would start to take place once processes 'were under control' and before process-improvement teams were set up.

In the main, surveys of internal customers were rare in both companies, particularly at the outset of the initiatives. The only exception found was the involvement of internal users in the development of new computer-based systems – much as had been the case in the NHS. At Thames Water's TQM sites they had undertaken employee attitude surveys.

### *Quality states prior to the start of TQM*

Respondents' perceptions were coded and then grouped into categories that are presented below.

#### **Quality and performance**

In Counters, it was generally accepted that, prior to Customer First, error rates were either too high or else that they were too easily tolerated. The deficiencies were put down to staff attitudes (see next section), poor or cumbersome procedures, and too much variation in local managers' acceptance of what constituted appropriate standards. A similar problem was seen to exist at Thames Water, though greater emphasis was put on the lack of documented procedures or agreed standards of performance. This issue was seen to span all levels in the organisation from lack of

co-ordination and over-reliance on short-term planning at strategic levels through to variation in the way individual customers were handled at front-line level.

A second, and related, issue was the availability and reliability of data about performance. In both organisations, interviewees felt that either there was a lack of data or that such data as were available were unreliable. Thus, in Counters, people were not aware of how much mistakes actually cost or else did not understand the relationship between customer satisfaction and internal measures of performance. At Thames, emphasis also tended to be on managing inputs and monitoring processes though more attention was paid to technical outputs especially the quality of water.

### **Quality and communication**

Problems with communication figured high on the list of people's perceptions of the issues prior to the start of TQM in both companies. Nearly two thirds of both samples stated that internal communication was particularly poor between different departments and functions. Our impression was that communication was seen as more of a problem in Thames than in Counters. At Thames, knowledge was seen as power and there was a reluctance to share information between departments. This led to poor teamwork and a strong sense of isolationism.

### **Quality and staff attitudes**

At Counters, there was a clear split between those staff who were critical of attitudes prior to TQM and those who felt that, by and large, not too much was wrong prior to the start of their initiative. Members of the former group were strong supporters of CF. They felt that too many staff assumed they had a job for life, or were otherwise not interested in raising standards or had no pride in their work. Respondents adopting the latter view were more critical of CF and felt that front-line staff were being unfairly blamed for some of the problems Counters faced. Thames' staff tended to see the issue of negative attitudes as a reflection of demoralisation with what were seen as constant reorganisations and lack of a clear strategic vision prior to TQM.

Customer orientation was said by interviewees to be weak in both organisations. The notion of having 'internal' customers was thought to be non-existent and the attitudes towards external customers were variable. New customers were regarded as an additional burden rather than being valued. The general sense of a lack of accountability led to accepting of lower levels of quality than should have been expected and several examples of unnecessary waste were given by the interviewees.

### *Concepts of quality prior to the start of TQM*

Implicit in most models of TQM is the expectation that personal definitions of quality would shift towards a more collective understanding based on external customers requirements. Respondents were therefore asked about their definitions of quality prior to the introduction of each company's schemes. The results may be grouped under the following headings.

#### **Vague definitions of quality**

Roughly a third of all respondents in Counters felt they would have found it very difficult to define quality – the figure for Thames was slightly higher. Generally, concepts of quality were not at the forefront of people's minds. There was a general sense of 'providing the best possible service', but this was not seen as being definable. Several respondents in each company thought that since everybody's version was different it would not have been a useful question to ask.

#### **Efficiency versus effectiveness**

By far the largest number of responses in Counters related to issues of efficiency rather than effectiveness. Respondents saw quality in terms of accuracy in their work and the timeliness or promptness with which customers were handled, or reports submitted. Two respondents gave particularly vivid examples where the need to submit reports on time was seen as more important than the actual content. It was clear that much of the focus on quality was on inputs and accounting for their use rather than process improvement or a focus on the outputs.



At Thames Water, the concern was more with value for money. Respondents talked about meeting quantitative targets in as cost-effective a way as possible, providing value for money, and meeting good standards as defined by some measure or another. One problem was that there were few measures available beyond the traditional technical measures of water purity. Several respondents referred to the phrase 'delivering a Rolls-Royce when a Mini would have been more suitable'. People pointed out they could well have been carrying out a technically skilled job even though it no longer met the needs of internal or external customers.

### Changing definitions of quality

The second round of fieldwork found substantial changes with regard to how respondents defined quality. At the Counters' TQM pilot site, vague or idiosyncratic definitions had almost completely disappeared. Only two people out of 23 based their definitions on 'give a best possible service' or 'give a level of service I would want myself'. The rest of the definitions were far more specific and in keeping with the company's promoted definitions of quality. For example, over half the sample defined quality as 'continuously satisfying (or meeting, or exceeding) agreed customer requirements'. Five of the respondents (all middle and senior management levels) also spontaneously defined quality in terms of the four Customer First principles – management by fact, continuous improvement, people-based management, and customer focus. The overall impression was that the general principles behind TQM had taken a significant hold on the perceptions of those respondents who had been trained.

Apart from the two small pilot TQM sites, Thames Water did not make any attempt to develop a company-wide definition of quality, other than to stress the need for quality in process documentation. As expected, there was not as much consistency and commonality of definitions as one would find within the usual top-down, corporate-wide TQM implementations. Definitions tended to span inputs, process, and outputs. A few staff still maintained input-based definitions that revolved around efficiency, cost reduction exercises, value for money and the proper management of financial and other resources. Here, notions of internal or external

customers were markedly absent. Those in engineering departments were more likely to define quality in terms of 'fitness for purpose' with an accent on BS 5750. There was a suggestion here that the means and the ends had become confused with, again, little in the way of a connection being drawn between requirements to improve the quality of documentation and improvements in service delivery to customers.

### *The planning process*

Any move towards a corporate approach to quality must provide for systematic planning for quality improvement at both strategic and operational levels. One would also expect to find, over time, progress towards a common understanding about definitions of quality and the need for continuous improvement within an explicit model of TQM.

If one sees Thames Water's philosophy as one based on an evolutionary approach, one can see the start of progress in this direction. For example, although the company had no detailed strategy for quality up until early 1993, this was being developed by the end of the research. It was anticipated that it would lead to an explicit organisational definition of quality that would embrace notions of continuous improvement. Also, although there were three different quality improvement approaches being implemented – TQM, ThQAs and BS 5750 – there were common assumptions underpinning each approach.

Thames' evolutionary approach appeared to have allowed a more relaxed and eclectic approach than at Counters. There were insufficient Board-level people in the interview sample to form a view about how committed senior managers were to the longer-term future of TQM. However, examination of high level documentation and the views of most interviewees suggested that there was more confidence in 1993 than in 1992 in both companies that senior managers were committed to TQM.

In the case of Counters, in particular, knowledge about TQM at Board level was well above that which was to be found in the public sector organisations, including most of the NHS. There was also an explicit commitment at Board level to attempt to quantify their mission and vision statements and to track these with various indices. One of the most important features observed in both companies was a general organisational willingness constantly to review the quality improvement planning process, and the data coming back about the quality of services.

### Structural issues

At Post Office Counters, the strategy for implementation of Customer First assumed the need, at least in the early stages, for a separate set of structures and systems that paralleled the normal line-management structure. Counters had described this as Customer First (CF) on the one hand and 'business as usual' on the other (BAU). It was anticipated that over time, the two systems would be merged, as CF objectives and targets became merged with day-to-day business matters. Thus, the arrangement at district level was for the District Management Team to act as a steering group for CF. This team was supported in that task by a Quality Support Manager (QSM) who acted in a facilitative rather than a managerial role and who had prime responsibility for ensuring that training was carried out.

At area level, a similar situation existed in that the area manager met once a month with all the branch managers. There was then a separate CF meeting, though this was currently being merged into the normal business agenda at the time of the second round of interviews. At branch level quality issues were raised in normal staff meetings but quality improvement activity was being undertaken in the various Quality Improvement Projects (QIPs). A similar system of separate business and CF meetings was reported in other departments.

In contrast, Thames Water had sought to keep control and co-ordination of quality improvement in the hands of the normal management structure, with little separation of structures or systems. The company quality manager was located within the environment directorate and reported for line-management issues to the

director of the environment, but also had a dotted line on quality issues direct to the chief executive. He directed a quality management team that was made up of a senior or middle manager from each of the 10 headquarters-level departments. These managers held the quality brief for their own departments where they were on the respective senior management teams.

The company quality manager was supported by a quality assurance officer at headquarters and some eight full-time equivalent quality facilitators located, in the main, within the normal line-management structure in different areas. At local level, quality was handled through normal management and supervisor meetings and there was no separate quality structure per se. There were, however, small groups of staff that had been brought together to document procedures for the Thames Quality Awards but it was not until the end of the research that they were beginning to be used to identify problems and suggest solutions. In the case of Engineering there was also a BS 5750 Steering Group which was co-ordinating their application for registration.

The arrangements at the TQM sites were different. There was a separate steering group at each site which was co-ordinating the implementation of TQM. In the case of the Water Treatment site that was visited for this research, the site steering group consisted of the Group Manager (Supply), two engineers, the site supervisor and the team leaders of the five project improvement teams that had been set up. The members of the project teams were volunteers but the team leaders were selected by the management team. This was seen as an opportunity to engage in some staff development by providing additional leadership experience for the project team leaders. The group was supported at its meetings by the company quality manager and the quality manager for special projects.

### *Integration of improvement mechanisms*

Another measure of successful implementation of TQM is the extent to which new initiatives are seen to be consistent with the model of quality improvement being promoted by the organisation. At Thames, most interviewees were in agreement

that this was the case. Initiatives were certainly aimed at improving the quality of services to customers and there was a strong sense of continuous improvement. Concerns were expressed, however, about the fourth principle of the quality programme, 'treating people as individuals'. Several examples were given which suggested that some managers seemed not to have thought through the implications for those involved in some of the proposed organisational changes.

At Counters, too, staff were faced with a major reorganisation and substantial job cuts, particularly in management. At the time of the interviews in 1993, people were satisfied, so far, with the company's approach to handling the human resource implications. However, the restructuring was seen as a major test of the company's 'people-based management' principle. Most interviewees at Counters also felt that initiatives coming from the centre or from district level appeared to be consistent with Customer First principles. This had been particularly evident in the way the organisation had tried to link CF and the company's Customer Charter.

The widespread view that new initiatives were part of an integrated and cohesive corporate plan was a major difference between the respondents in the commercial companies and those in the NHS. In the main, analysis of the structures, systems and policies in the two groups of organisations would seem to bear this out. Some of the reasons for the disparities are discussed in more detail in the next Chapter.

### *Provision of resources for TQM implementation*

The layout in previous chapters is followed again here, looking first at training and then at other resources.

#### **Training for TQM**

In theory, the resources made available for TQM implementation should provide for sufficient training and support to equip all staff with the commitment and skills to implement customer-driven continuous improvement. At Thames Water, the amount of training and development that individuals had had depended on which

quality programme they had been involved in. Taking the ThQA first, some 48 facilitators had been trained on a 2½-day programme. In addition, the facilitators followed a personal development programme that could last up to a further twelve months and would lead to validation as internal auditors.

Otherwise, most of those interviewed at Thames had had a one-day introduction to the ThQA. This was seen as being sufficient to understand the reasons behind the award and how it was linked to the company's policies on quality. It was clearly, however, not sufficient to help people with specific areas of skills – for example writing quality manuals, flow-charting processes, or making a start on systematic process improvement. Because of the three-stage implementation programme, the company had not yet entered a full-scale training programme. They wanted staff to complete process documentation before providing training in improvement skills.

Those interviewed about BS 5750 had had less training – only a two-hour introduction to 5750. This was seen as a good basic introduction to the overall picture, but people were far from clear about their own roles. This lack of understanding was said to be a major reason why the company failed to secure registration on the first attempt. There was a general lack of ownership of 5750 by some of the interviewees. This was in marked contrast to the ThQA sample who were generally positive about the process and felt a much greater sense of involvement.

The first round of training at the Thames TQM sites had been altogether more substantial. All managers and employees had a one-day general awareness event. Team leaders of process improvement teams had an additional two days training in facilitation and teamwork skills. In addition, they also had a three-day course on statistical process control (SPC). Post-training support had been provided by the attendance of the company quality manager or the manager for special projects at their meetings. Although facilitators did receive special training, it became clear that there was a need to provide some basic training in tools and techniques for ordinary team members.

The training at the Post Office Counters' TQM pilot district was more comprehensive. The quality support managers had had six weeks of training on a course run by the management consultants. The training at senior and middle management levels varied between three and five days, though the latest senior management training programme had been lengthened to ten days. All those interviewed thought that programmes at this level were particularly good at conveying the importance of CF and the necessary tools and techniques, though some participants felt that facilitation skills and the application of tools to specific work at lower levels had not been so well handled.

Most front-line staff had had a one-day general introduction to CF, followed by six further modules over a period of six months. These were interspersed with practical learning by way of Quality Improvement Projects (QIPs). During the 1992 interviews, the general view was that the training had been sufficient to raise their awareness to the need for a change in attitudes and behaviour. It was also said to be sufficient to provide them with some basic quality improvement tools, although most respondents felt that they had insufficient experience of how to use these tools in real life situations in their own work. Spreading the training over a number of modules and months had been welcomed.

A number of respondents felt the general CF methodology was too complicated and over-sophisticated for the range of problems that they would typically tackle in their own work. This may have been a factor of the rather simple examples they worked through in their training. It also suggested that they were not used to managing and improving their work based on the systematic collection and analysis of data. When re-interviewed in 1993 a significant proportion of the interviewees were more positive about their training than they had been the previous year. With the benefit of a year's worth of experience they felt that sticking strictly to their problem-solving methodology, even for simple tasks, had been the correct way to learn about TQM

Participants who had been in multi-disciplinary or multi-branch workshops expressed satisfaction with the opportunity the workshops provided to hear about

other people's experiences. Where events had been multi-level as well as multi-functional, views were more variable. As had been found in the NHS, it appeared that trainers had some difficulty in bridging the gap between those staff who were coming to these ideas for the first time and other staff who, because of their education or experience, were used to basic research methods.

### General funding of TQM

Both commercial organisations had committed considerable resources to the design and implementation of their respective programmes. The centralised, top-down model at Counters had allowed a better estimate of what resources had been committed. The company estimated that the cost for the three-year pilot of TQM in just three of their districts (roughly equivalent in workforce terms to a small provider unit) had amounted to some £3 million in the first three years. This did not include environmental improvements, capital programmes, or opportunity costs of staff involvement. Counters expected that extending TQM to all other districts would cost a further £3 million in 1992/3 and then still require £1 million a year for the foreseeable future to maintain and reinforce the programmes. Management consultancy support, staff training, and customer surveys of different kinds accounted for a large proportion of the costs. In addition, appreciable sums had been spent on tracking customer expectations and satisfaction on a set of significant criteria every month.

Thames Water's costs were less easy to identify because the different schemes had been funded from different sources. There was no overall central TQM budget, other than for the salaries of central TQM staff. Nevertheless, their figures were roughly comparable to those of Counters when calculated on a per capita basis. Given Thames Waters' increasing commitment to corporate approaches to TQM and the popularity of their Thames Water Quality Awards, their current expenditure was unlikely to diminish in the near future.



## Savings from implementing TQM

Many examples were given in both organisations of savings that had been made by simplifying processes, cutting out duplication, and reducing errors and waste. Whilst records were kept of these individual improvements, the savings made were publicised to emphasise the importance of process improvement rather than to provide aggregate figures of savings made across the pilot districts. It was significant that the proposed solutions for quality improvement coming from Quality Improvement Projects had proved in the main to have low cost implications and, in many cases, provided for substantial savings.

A similar situation existed at Thames Water. There were many examples cited of small cost-saving programmes, as well as one or two which were expected to make substantial savings over the longer term. Because of issues of commercial confidentiality, it is not possible to report the most impressive results. However, in both organisations there was considerable faith that once TQM was bedded into the structure and systems of the organisation, there would be substantial savings to be made that would both cover the costs of investment in quality and also maintain, if not expand, their existing customer base thereby bringing in additional revenue.

## *Systematic measurement*

### Information provision

Post Office Counters had always been data rich and data conscious. Even before the implementation of Customer First, there was a wide range of data available for planning purposes at all levels. However, the general view was that between 1992 and 1993 these data had become more relevant and accurate.

Some managers thought there was a potential for overload and that it was time for a review of available data, to assess the extent to which they were reliable, useful and customer related. Whilst there was a general improvement in data about operational performance, this improvement was thought to be primarily confined to processes within individual departments. Data about larger processes that cut across several

departments were said to be less widely available. It was thought that this might improve with the reorganisation.

At Thames Water, there was almost universal agreement that the quality of information had dramatically improved as a result of the implementation of either the Thames Quality Awards or BS 5750. This was because there was better understanding about the nature of processes within which people worked and there was clearer, more detailed specification, of these processes in quality manuals.

### **Measurement of departmental performance**

At Counters, a whole range of performance indicators and standards were identifiable at section or department levels. In branches, for instance, two main areas were identified. The first was quality of service to branch office customers (QOS) and the second was quality of performance to agency customers (QPA) such as Girobank and the Department of Social Security. QOS was measured primarily by the length of time customers had to wait for service. Individual branches were given a grading in terms of the targets set for them. Thus in one of the branches, 80% of customers had to be served in under three minutes and 96% to be served within five minutes.

QPA on the other hand was related to the maximum number of permissible errors set by the major agencies in respect of customer transactions such as the issue of tax disks and Girobank business. Branches were charged for these errors if they exceeded agency targets. Other indicators were also in use – for example overnight cash holdings and the quality of displays and leaflets in the post offices. Sub-post offices were also monitored by staff from the area office. Data from all the branches were aggregated to area and district level. These data were published on a league table basis and there were regular prizes for the best branch.

A similar situation prevailed at Thames Water. For example, in Customer Services, specific targets were set in relation to the collection of arrears, the turn-round time for getting bills out, and for answering correspondence and telephones. The second

area was in operational performance – as in the case of Water Treatment Works. Here a whole range of standards and targets were set, for example the chlorine content, bacteriological content, and the pH of water. It was significant that there was a measure of independence here. These measures were carried out under the supervision of laboratory staff who, although they were Thames Water employees, reported up a different management chain and were not accountable to local managers.

### *Customer-driven quality*

Within TQM programmes, one would expect to find an increasing focus on both internal and external customers. The research monitored the extent to which quality improvement initiatives had involved these groups at the design, delivery or evaluation stages. Again, it is important to distinguish between a more general focus on customers and actually *empowering* them.

### Internal customer focus

Interviewees in both companies stated that the idea of internal customers was strongly developed as a concept and, over the period of the evaluation, had begun to be turned into organisational changes. For example, at Counters many departments at both headquarters and district level had been surveying their internal customers to identify their expectations and satisfaction. In some cases, researchers were told, this had proved unexpectedly difficult because some new-found customers, particularly some sub-postmasters, were ‘abusing the idea’ by making what were seen to be unreasonable demands upon their suppliers.

At Thames the idea of internal customers had advanced considerably between 1992 and 1993. Twelve months previously, a fair proportion of interviewees were comfortable with the phrase but were not entirely sure how it affected them in their day-to-day work. The company then introduced service level agreements between internal suppliers and their customers. By April 1993, the idea of internal customers was much more widespread. Further, the idea of internal customer chains (not very

prevalent in 1992) was also more evident, and people could give many more examples of how thinking in this way was actually changing their way of working.

The situation at Counters was similar. Support services, some of which had rather weak monitoring systems in 1992, had strengthened these over the last twelve months. The focus of these new measures had been on achieving a better understanding of what internal customers wanted.

### **Internal customer empowerment**

Overall, the results of the interviews suggested that the vast majority of respondents at Counters were committed to the principles of Customer First, and that their training had equipped them to participate as members of Quality Improvement Projects (QIPs). These groups were the main mechanism for achieving empowerment. The opportunity to be a member of such a group was highly valued by all those who had had the opportunity. There was tension between empowering staff to tackle issues that they thought were important (thereby gaining maximum ownership) and the need to gear QIPs progressively towards business rather than personal objectives. It was becoming clear by the end of the research that the latter reason needed more emphasis.

The situation at Thames Water was dependent upon the scheme in which people were involved. Overall, the Thames Quality Award arrangements had secured the greatest ownership by front-line staff although by April 1993, they still lacked the skills to move into process improvement. The better of the two TQM pilot sites was next in line. The BS 5750 site had generated the least personal commitment. The value of the principles of 5750 was recognised but they wanted more involvement in actually designing and implementing the approach. As a result, the quality manager was seeking ways to place the 5750 initiative within a broader TQM perspective.

## External customer focus

As far as external customers were concerned, there were substantial differences between the two companies. Counters was more clearly customer oriented. Almost all their performance measures were based on customer-driven criteria derived from initial benchmarking surveys and systematically tracked on a monthly basis. Also, individual branches had carried out local surveys of around 1,000 customers per branch, and these data had led to some important local changes. The Customer Charter was thought to be an important extension to the involvement of customers. Thames Water was still preoccupied with documenting existing processes. They had yet to move to a stage of relating these processes to the needs of external customers.

## External customer empowerment

Although many of Counters' QIPs were concerned with internal process issues, a significant number were directly related to identifying customer needs and making appropriate changes. This had continued over 12 months between the two sets of interviews, and there had been some interesting developments including the use of customer focus groups to tap customers' views. However, much of this activity was still post hoc. Customers would be invited to comment about changes already made in branches rather than being involved in the design and delivery of new systems. Some changes had been made in response to customers' views in a previous round of surveys, but there were still few examples of instances where customers had been invited to comment on changes before they were actually made or to indicate preferences where there were alternative options.

Counters' respondents said there was a lot of anecdotal evidence to suggest that customers were pleased with changes that had been made, but establishing the extent of customer satisfaction had not yet extended to formal surveys. Where repeat surveys had been planned, they had been held back, pending the introduction of the Customer Charter. It was important to note that this charter in itself was developed from what customers said they wanted.

In Thames Water the process chains were extremely long. It was often difficult for staff working a long way from the end users to get a feeling for what the users wanted from the service. Whilst marketing and customer relations departments did survey public opinion, there was little evidence that this information found its way back to front-line staff. In the absence of concrete information, most staff relied on their own beliefs about what they thought customers wanted. Some departments at Thames Water, for example Customer Accounts, had a much closer relationship with individual consumers, but they did not monitor consumer views in any comprehensive or systematic way. Complaints were monitored strictly and responded to promptly but there was little survey work undertaken with consumers who were not complaining.

There were, of course, no consumer-oriented pressures brought to bear on the company. The most significant factor in the view of all staff was OFWAT, which was seen to have influence both at a policy level and in the handling of individual complaints. OFWAT was also supported by three Consumer Services Committees (CSCs) which were made up of consumers and their representatives and may be thought of as informed user groups. However, it was pointed out that in many instances, both OFWAT and the CSCs were commenting retrospectively on service issues, rather than being involved in developing new initiatives or monitoring existing ones.

### *Quality and process improvement initiatives*

It was clear that the whole process of the Thames Quality Awards had begun to dominate the thinking of those involved in the schemes. This was so both in places where there had previously been little in the way of documentation and also in places where traditionally documentation had been reasonably good – for example in project management. Introduction of the ThQAs had caused people to question why they worked in particular ways and many changes in procedures had resulted.

The response to the awards was mainly favourable. By 1993, there were nearly 700 awards in different stages of completion. Some 250 awards had been achieved and

a further 450 were in progress. This represented a considerable amount of systematic quality improvement activity. Twelve months previously, in 1992, a significant number of interviewees were concerned about the expenditure in time and money on the ThQAs and were not at all certain that this expenditure could be justified in terms of improved quality. The number of interviewees holding that view fell considerably over the next 12 months. Some of the more sceptical staff now felt that they were beginning to see the benefits in improved working practices, reductions in errors or duplication and better relationships with departments downstream in their processes.

Some problems continued with the quality manuals which were, in many cases, over-inclusive and too detailed. It was thought, however, that this was preferable to running the risk of omitting important components of processes. The problem had been recognised at the centre, and local staff were being encouraged to review their manuals and prune documentation which did not appear to add value to the quality improvement process.

Probably the best example of a comprehensive process improvement exercise at Thames Water, and one which pointed to the possible gains to be made under TQM, was on sludge at one of the TQM pilot sites (a sewage treatment works). This project was a multi-disciplinary exercise involving operators, engineers and other staff. They also applied systematic teamwork approaches to problem solving and employed statistical process control (SPC). The result had been more effective use of the sludge digester, and improvements in the thickness of sludge. This was expected to make substantial savings over the longer term.

Projects at the second pilot TQM site had been more modest. Staff had gone through a brainstorming exercise in which they had identified some 90 issues that needed to be tackled. These had been prioritised and five small process improvement teams had been set up to look into five issues of concern. These were seen to be personal development opportunities as well as potential improvement projects.

At Counters, there were many examples of quality improvement projects, a significant proportion of which were multi-disciplinary and cross-functional. In all, 41 QIPs were mentioned, though it was not always possible to identify whether or not different people were talking about the same QIP. The QIPs were of two kinds. There were a small number of multi-disciplinary, cross-functional teams set up to look at issues which affected the district as a whole – for example team briefing, the district magazine, and customers' perceptions of closed counter positions. The more common kind of QIP was, typically, an exercise set up within a unidisciplinary work group to examine a relatively local problem – for example, a QIP in one branch was researching overnight cash holdings and another team was looking at the system for petty claims.

Most of the examples given to us at Counters exemplified the methodology proposed by Customer First and the subsequent training – the members of the QIPs were methodically collecting data on internal or external customer need, analysing these data, designing improvements to processes, implementing changes and then monitoring and reviewing changes brought about by new systems.

Most interviewees thought this was a considerable improvement on former practices, although, there were three or four respondents in both year's samples who felt that such a rigorous and time consuming methodology was unnecessary. This may reflect, in part, the choice of relatively simple exercises for staff to practice on following their training and may have been taken care of when the idea of simpler Quality Improvement Activities was introduced in 1993. These could be individual projects that were more in keeping with the idea of continuous quality improvement, rather than big 'set-piece' projects.

Many QIPs were still running and could not yet report outcomes. Those that could demonstrated an impressive range of achievements. For example, the QIP on recognition of staff contributions to quality improvement had enabled each branch manager to have a recognition budget. There were now set amounts allowable for certain kinds of rewards, including a small discretionary budget for 'heroes'. Other examples included a project in remittance units on postage that had saved some



£5,000 in postage costs. As a result of a study of customer requirements in one branch, they had introduced stamp vending machines. These were said to take hundreds of pounds a week and significantly reduce queues. Examples were also found of reductions in error or waste at both companies.

### *Monitoring/evaluation*

At Counters, the processes for tracking and coordinating quality improvement projects were well developed. It was possible to identify the criteria by which projects had been selected, how they were going to be tackled and, in most cases, how they would be evaluated. The systems were very detailed at Counters and some front-line staff felt the process was over-elaborate. There had been some discussion at the centre about this issue. It was said that there was a trade-off between controlling and coordinating local projects (thereby possibly reducing duplication and improving the chance of cross-site learning) and the potential for an over-bureaucratic system which would discourage local creativity and innovation.

At Thames Water, there was also good coordination from the centre on quality improvement projects. However, the impression here was one of a more relaxed style where groups set themselves up on a voluntary basis when the time was judged right. The principle appeared to be that the centre would only apply as much structure and control as was necessary to ensure sufficient coordination without the periphery feeling deprived of initiative or ownership.

Taking both companies together, the attention paid to selecting and monitoring appropriate improvement projects, and then making the best of the learning were much more effective than at the NHS TQM sites. This was helped by the fact that TQM was used as an over-arching organising theme for many organisational changes in the commercial sector. In the NHS, TQM was just one of a number of new initiatives, and was not used as a unifying methodology.

### *Benefits and problems of concepts and implementation*

In the main, considerable enthusiasm was expressed for Post Office Counters' Customer First initiative and a wide range of benefits were claimed on its behalf. Views were more mixed at Thames Water, though supporters outnumbered those who were more sceptical. This was a reflection of the fact that Thames were not as far advanced as Counters and staff were not as clear about what the future held. In addition, the Thames Quality System was seen as being different from the TQM initiatives, rather than the first stage of such a process. Overall, staff views were noticeably more positive in 1993 than 1992. Views about the different initiatives are summarised below.

#### **Reported Positive changes**

At Thames Water, one of the most significant changes was said to be the provision of major new systems for monitoring work in progress and providing increased customer support. These systems included a new job management system and new arrangements for account managers, project managers and help desks. At Counters, interviewees felt that there was a greater availability of problem-solving and planning tools, which were linked to more specific and measurable targets and indicators. This provided better guidelines for jobs, more clarity about roles and responsibilities, and better performance indicators.

By far the most frequent improvement mentioned about processes at Counters was the increase in teamwork between branches and improvements in communication. Views at Thames, on the other hand, reflected the audit approach and revolved around a better understanding of what they were doing and why they were doing it. Management, generally, was seen as more accountable and more disciplined particularly as it related to the management of projects. The fact that the process was generally one of social change through a bottom-up involvement of front-line staff was frequently mentioned. In the main, employees appeared to have welcomed the opportunity to participate and managers claimed that there was an increase in ownership of the quality of work.

At the Thames TQM site the emphasis was much more on process improvement. Two aspects of the way respondents reported changes in processes stood out. The first was that they thought they were looking at all the aspects of a process, not just technical quality. The second point was that they were already looking at alternative ways of doing things, not merely documenting what was already in place. This was an important distinction because many audit systems get locked into improving the documentation for existing processes rather than exploring alternative ways of doing things.

At Counters, there was good agreement that there had been concrete impacts from Customer First. In terms of more intermediate outputs, several interviewees were convinced that there had been positive changes in the standards of people's dress, their general appearance and their manners when talking to customers. This was seen to be the result of a considerable increase in the awareness of the importance of customers, and a general sense of pride in the place they worked. Three other areas of changes in outputs were also frequently mentioned. The first was an increased awareness of the importance of, and a reduction in, errors concerning agency work. The second was the evidence of considerable savings in cash flow and overnight cash holdings. The third area was in the availability of stock for branches.

At Thames Water, improvements in consistency and reliability of outputs were claimed to be the major benefit of the Thames Quality Awards. Documented and agreed procedures led to less variation in ways of working. As consistency improved, the reliability of data was seen to have also improved. Certainly in terms of computer systems, there had been major improvements in the reduction in errors and queries from users of the systems because of better specification.

Overall, there was evidence of a major technical culture shift taking place at Thames Water – primarily a shift from craft work to problem-solving in complex systems. This meant a re-orientation in concepts of quality. Somehow, staff had to develop new models of technical excellence without losing sight of the broader criteria that customers felt were important.

## Reported problems

There was considerable concern in both companies about the extent to which more resources were needed for what was seen as additional work. At Counters, branch managers and others felt that they were being expected to finance training, staff meetings, and QIP activity either out of existing budgets or out of inadequate enhancement. Two interviewees also mentioned that there were cuts being made in staff hours at the same time as they were being asked to improve quality using techniques involving more time – for example double checking. At Thames Water, the major concern was the considerable time that was required to complete the documentation process properly.

A number of issues were raised about process problems. A frequent area of comments concerned the delay between the TQM programme being launched, the training taking place and ‘things’ actually happening. It was clear that there was an expectation on the part of many respondents that they expected to be further ahead than they actually were at their respective stages.

An important process issue was raised at Counters about the use of cross-functional teams. These were thought to be a particularly good idea but it was clear that inter-professional jealousy was limiting the effectiveness of work within at least one of these teams. This point linked back to the lack of facilitation training for these teams.

The main issue raised by respondents at Thames Water was a clear contrast between what they saw as a mechanistic and rather superficial one-off exercise (procedures audits) and attempts continuously to improve service delivery (TQM). In the former, the value was seen to lie in preparations for the audit and not the audit itself. Respondents spoke of ‘learning their lines’, and few felt that there was any attempt to continue improvement once Awards had been made. Nor was the connection between improved documentation and improved service-delivery clear.

The experience of TQM over the two years at two Thames Water pilot sites could not have been more variable. Whilst at one site it continued to be implemented

with some degree of vigour and enthusiasm, it had almost come to a halt at the other location. In terms of interviewees' perceptions, there were strong differences between the views of those who had been involved in successful projects and those who had not been involved at all or had been on ones which had not gone so well.

Analysis of efforts at the less successful site showed that there were issues that needed to be addressed if the chances of a successful installation were to be improved. These included:

- a) TQM is one of the few initiatives that can not easily be re-launched in an organisation and therefore it is important to get it right before one starts. This means thorough pre-implementation planning and consultation.
- b) Line managers must be prepared to provide early pump priming resources and then must act as role models in everything they do.
- c) There should be a better diagnostic phase before the initiative starts so that workers, supervisors and managers have a better understanding of the views of external customers, the unit's internal customers and the staff.
- d) All staff involved in improvement projects should get training, not just the team leaders or facilitators. It is clear from the two experiments so far that many front line staff had only the most basic problem-solving and statistical skills. They needed a lot more coaching and support than could be provided in a two-day workshop. It was seen as essential that each team should have a trained quality coach or facilitator.
- e) The projects that teams choose are crucial to future success. These should be challenging, but also manageable. The experience at Thames Water suggested that teams should not be given tasks which go beyond the site or which require considerable external expertise on a cross-functional basis, unless time and technical support can be provided. Furthermore, it should be established

that there are no higher-level groups in the organisation looking at the same problems.

- f) One senior manager felt that TQM had been a success at one of the sites because they used a cascade model of starting up groups. That is, they started with one highly motivated and skilled group working on a project and when that project was completed, the group was split up to form the nucleus of several more groups. Clearly this would take longer than the normal implementation model, but could be useful at some sites, particularly in the early stages when there were only a few highly motivated staff.
- g) It is vital that teams receive recognition at early stages of projects as well as on completion. If teams come up with sensible and cost effective solutions, they must be implemented whenever possible.

At Counter's one of the problems identified during the fieldwork was that the way Customer First was being implemented could lead to a problem-oriented culture. A substantial proportion of the interviewees saw the model as a systematic approach for solving problems whenever they arose, rather than a requirement to improve processes continuously, even when there was no obvious problem.

Some interviewees criticised TQM on the grounds that the formal problem solving approach was over-elaborate and unnecessary for tackling many of the small issues that came up from day to day. There was strong support for the idea of quality improvement activities (QIAs) amongst those that had heard of the idea. It was thought it would lead to the empowerment of a greater number of staff as the emphasis moved away from small groups of specially selected staff on QIPs, towards continuous quality improvement being normal behaviour for all staff.

Several managers complained about the amount of time that was required for training commitments given their already high workloads. For example, one manager was spending two to three evenings a week on sub-postmaster training,

and another manager reckoned TQM had involved him in 80 meetings or other events during the year.

### *Conclusions*

Overall, substantial progress had been made by both companies during the 12 months between the interviews. Areas where further initiatives needed to be made at Thames Water already appeared to be in hand. The most important were: a corporate plan on quality, a detailed strategy, and action plans for moving to continuous quality improvement with set target dates; more attention to empowering consumers and securing their views at various interfaces with the organisation; and continued effort to develop cross functional quality improvement activities through the establishment of Work Flow Champions and the like.

In spite of some of the criticisms made by a minority of the interviewees at Counters, there was considerable support for Customer First both in terms of its general principles and the way it was being applied. QIPs had accomplished important goals by tackling substantial issues – within and across functions. They had also enabled individuals to gain process-improvement experience after their training in a supportive and coordinated atmosphere.

In the next Chapter, a comparison is made of the similarities and differences between the NHS TQM sites and commercial TQM companies.

## **Chapter 8 – Comparison of NHS and Commercial Sites**

### ***Introduction***

The preceding chapters presented the results of the fieldwork at NHS demonstration sites, non-TQM NHS sites and two commercial organisations. An analysis of the findings now follows, with a comparative review of performance in the NHS TQM sites and the commercial organisations.

### ***Perceptions about the context prior to TQM***

There were more similarities than differences between the commercial and NHS organisations in this respect. One similarity, for example, was a problem of communication within and between different departments and functions though, in the case of the NHS, inter-professional differences were cited more often. As was shown in Chapter 7, there were also differences between the two commercial companies themselves.

An important finding, however, was that in spite of widely differing starting points and choices of TQM models, both commercial organisations had progressively converged in terms of the range of implementation steps being undertaken. This had implications for installing TQM in the NHS which are discussed in more detail below.

### ***Potential for reduction in errors***

Views about the level of errors and the potential for improvement were more frequent and explicit in both the Counters' and Thames' interviews than in the NHS. This does not mean that the *actual* level of errors was more or less in either case. However, there did appear to be a greater willingness in the commercial organisations to accept that the rates of some errors were too high and that aspects of the service needed considerable improvement.



### *Lack of resources*

It was noticeable that lack of resources was less likely to be cited as a reason for poor service at the commercial organisations than it was at the NHS TQM sites. The results from our NHS sites suggest, though, that this did change over the course of the research. Complaints about the absolute lack of resources remained, but there was also increased awareness about skills mix and the appropriateness of resources. There were equal concerns in both commercial companies and the NHS about the additional resources needed to manage implementation of TQM, particularly in the early stages.

### *Staff attitudes*

Poor staff attitudes were given as a reason for variable service in both sectors, but there was a difference in the reasoning. Counters' staff tended to see those with inappropriate attitudes as bad mannered or lacking in skills. In Thames, inappropriate attitudes were attributed to low motivation after continual reorganisations and a felt lack of clear strategic vision. In the NHS, the issue of poor attitudes was frequently described as staff taking a professional or technical stance rather than a patient-centred one. The importance of the idea of internal customers had not featured strongly prior to TQM in any of the organisations surveyed. It was also said in the two commercial companies that insufficient priority was given to external customers. However, many NHS staff felt they already had a strong patient focus, albeit from a professional perspective.

### *Expressed need for TQM*

There was a marked difference in the extent to which managers and more junior staff in all three organisations felt there was a need to implement some form of organisation-wide quality improvement. Nearly all the managers interviewed in both Counters and Thames said that organisation-wide quality improvement was the key to survival. One senior manager at Counters said that, prior to implementation, the organisation faced forecast reductions in the volume of business and it was nothing less than a '*strategic imperative* to improve the quality of service to customers and

clients' (emphasis added). Similar views were also expressed by several of Counters' front-line staff.

This view was not so clearly articulated at Thames, which had no direct competitors for water supply. However, managers were equally concerned that a fall in the confidence of shareholders would adversely affect investment. Whilst many health service staff felt there was room for improvement, few of those in front-line health roles perceived similar pressures – in particular, the need for economic survival – that would warrant such a wide-spread or costly initiative.

Senior NHS managers saw themselves as facing other pressures. Units applying for trust status, or under pressure from GPs and other purchasers, were certain that coordinated quality improvement needed to be higher on all staff's agendas. This was most obvious in the case of one small health district where there was an explicit concern about losing patients to nearby teaching hospitals. It was no coincidence that this was the only site in our NHS TQM sample to carry out elaborate diagnostic surveys of staff and customers at the outset. A perception that survival was at stake appeared to be an important factor in generating the motivation necessary for people critically to review and improve their own performance.

### ***Changes in definitions of quality***

There were similarities in definitions of quality across all three groups of sites. In all three, it was said that, prior to TQM, definitions revolved around organisational and professional definitions of quality rather than those based on customer satisfaction. This was most clearly the case in the NHS. Measures of efficiency, primarily in the management of inputs, were seen to be more important than effectiveness of processes or outcomes at the start of the project.

Definitions of quality at the more advanced NHS sites practising TQM had become more uniform and closer to the customer-oriented definition promoted by the organisations concerned over the three-year period. However, at most TQM sites,

relatively little changed in terms of integrating the increased awareness of the importance of the customer into organisational structures and systems.

There had been altogether more movement at Counters where there had been a major shift towards customer-centred definitions on the lines of 'continuously meeting agreed customer requirements'. Thames Water had not yet begun to promote a customer-centred definition of quality, so changes were less marked there.

### ***Provision of resources for TQM***

#### ***General funding***

Counters estimated that the cost of the three-year pilot of TQM in just three of their Districts (roughly equivalent in manpower to a small provider unit) amounted to over £3M. This did not include environmental improvements, capital programmes, or opportunity costs of staff involvement. Thames Water's costs were roughly comparable when calculated on a per capita basis. On average, investment by the NHS sites on TQM was considerably lower, perhaps amounting *to less than one tenth or one twentieth of these figures*. However, if one added the cost of medical audit and regional and district grants for process improvement, the better resourced sites might average around £275K-£300K per year – roughly one third of what the commercial companies were spending. The largest proportion of the differences in costs could be accounted for by substantial expenditure in the commercial companies on management consultancy, training, and customer surveys.

#### ***Training***

Respondents in both Thames and Counters had a better understanding of their companies' respective TQM models than in the majority of NHS sites. This was particularly so in the case of Counters' managers who were interviewed. The weaker knowledge in the NHS reflected, in part, the much more detailed documentation available to participants in the commercial companies and the greater effort put into training across the board. In addition, the greater complexity and range of

disciplines and cultures in the NHS meant that it was more difficult (and, from a broader perspective than orthodox TQM, perhaps less desirable) to secure agreement on a common definition of quality based purely on customer requirements.

Training was a compulsory exercise for nominated individuals in the commercial companies. All respondents at the Counters' pilot TQM site had either already been trained or were shortly due to go on their courses. Their Quality Support Managers received six weeks of initial training with a further 20 days in 1992 and again in 1993. At Thames, roughly two-thirds of interviewees involved in the Thames Quality System had received some training, as had all those involved in TQM at the pilot sites.

In the NHS, on the other hand, coverage was much lower at most locations particularly in the attendance of doctors. At one site almost no doctors had attended training at all after three or more years, whilst at the best performing site, it was judged a success that around *a third* of consultants had attended. It was also relevant that other training events with a quality content, for example courses on standard setting, hospital audit, BS 5750 and customer awareness, had not followed the same philosophy or principles of TQM. This tended to give mixed messages to participants, especially those who had been on both kinds of course.

The emphasis given to training in the use of measurement tools was strong in both commercial organisations. Up to July 1993, only two NHS sites were providing training in the use of process improvement tools and this was not as comprehensive as that available in the commercial companies.

Complaints about the training were similar in all the organisations. Participants at Counters and Thames felt that sufficient time had been devoted to awareness raising, but they wanted more time on work-related examples. In the cases of managers, the call was for more facilitation skills training. In particular, middle managers were concerned that they only had a surface knowledge of the principles of TQM and could not handle the difficult questions asked by more sceptical

and/or knowledgeable delegates. There was a similar finding in the interviews at the NHS TQM sites.

All Counters' delegates and most of those in the NHS felt they had benefited from multi-disciplinary courses but a much larger number of NHS staff questioned the value of this type of event. There was a big gap between the formal research skills of some medical staff, and those with research or higher education backgrounds in the NHS, and other staff who had never had the opportunity to gain experience of systematic data collection. Some NHS participants complained about the triviality of much of the training, one going so far as to describe it as 'Noddy level'. This issue was voiced by two Counters' staff but generally, it was seen as much less of a problem. It was not seen as a problem at Thames Water.

### ***The models of TQM***

Customer First was an explicitly top-down arrangement for cascading quality improvement. It had many features in common with some of the approaches being used within the NHS. However, it was considerably more detailed, particularly in the strategies, systems and training designed to embed the TQM principles in the infrastructure of the organisation. Thames Water, at the time of the research, was limited in the main to a documentary audit model but it, too, seemed clearer about what it was trying to achieve in strategic terms

The NHS models focus much more explicitly on securing a generalised culture change toward customer focus and continuous quality improvement through senior management commitment. By the end of the research, there were quite detailed quality plans, but actual progress often remained at the level of senior management rhetoric or simple appointment of quality facilitator roles. The NHS sites did not, on the whole, have detailed strategies for aligning existing and future organisational systems and initiatives in ways which were compatible with TQM and which would produce coherent and consistent behaviour change down to front-line levels. Only the most advanced site was a significant exception in this respect.

### ***Establishing a base line***

Considerable resources were devoted by Post Office Counters to establishing where they stood in relation to their staff, customers and clients at the outset of Customer First. This had been considered crucial if they were to *realign* their systems and procedures to meet better the needs of these three groups. Because of their initial surveys, the company was in a good position to judge improvements and to demonstrate these to internal and external customers. They also had elaborate systems for monitoring a wide range of quantitative and qualitative issues including the monthly tracking of significant measures of customer expectations and satisfaction. Thames Water, too, monitored external customer satisfaction in a fairly elaborate and sophisticated way. Once their first stage of getting processes under control was completed, they intended to carry out a major measurement exercise prior to starting process improvement.

In contrast, only one health district had carried out an elaborate diagnostic exercise before starting TQM. The rest had relied on brainstorming sessions in senior management teams, some (rather patchy) patient survey data in a limited number of areas, the results of standard setting, and their general professional views of what internal and external customers would want. At all the NHS sites it was possible to find one or two services which were well ahead of the rest, particularly in the extent to which they had carried out initial surveys before making major changes. However, the need for a corporate-level drive for customer-based information on quality, or the need for a detailed analysis of existing performance prior to making changes, was still not common by the end of the research.

### ***Improving performance in work groups***

More attention was paid to monitoring the work of groups in both Counters and Thames than in the NHS, though medical and nursing audits had narrowed this gap and one should not discount action taken in cases of negligence. The commercial sector's priorities reflected better agreement about what constituted appropriate performance indicators and standards. It also reflected the fact that, compared to many NHS services, the work was less complex and more uniform.

At Counters, Quality of Service indicators such as waiting times were monitored more or less on a continuous basis, as were error rates in handling transactions for major clients. Many of the results were published as inter-district league tables and prizes awarded for outstanding branches. At Thames, too, a considerable amount of performance monitoring took place, though it was less related to direct customer contact.

In the NHS the setting of standards had always been an important part of work in areas such as pathology but was beginning to be extended in a more explicit way. Changes in contracting, where some purchasers were setting specific targets for provider units, were also a new influence though this was some way from the systems in place in the commercial organisations.

### ***Quality improvement initiatives***

Here there were many parallels. Counters had around 40 Quality Improvement Projects (QIPs) under way in both uni- and cross-functional arrangements. These were similar to the exercises taking place at NHS sites that were employing Crosby or Crosby-like formulations. There was a similar mix in both types of organisation of bottom-up arrangements with voluntary membership looking at issues judged important by front-line staff, and top-down QIPs where membership was by appointment and topics for investigation were selected by senior management.

Thames was only just beginning QIPs at its TQM pilot sites and had yet to reach this stage in those areas where Thames Quality Awards had been secured. A major difference between the commercial organisations and the NHS was that neither of the companies involved had tried to put in place both standard-setting and process improvement groups. These were seen to have different philosophies and objectives.

As described earlier, there were many excellent projects going on at all NHS sites. Apart from the *number* of examples (somewhat fewer at non-TQM locations) there was little to distinguish non-TQM from the established TQM units. In both cases,

there was still a tendency for quality improvement projects to have the following characteristics:

- ❑ work still continued relatively unrecognised and under-resourced;
- ❑ it was often being carried out by individuals, sometimes as part of preparation for an internal or external training qualification, rather than as part of an organisational initiative;
- ❑ the work may have been consistent with organisational priorities but just as likely was not;
- ❑ it was frequently uni-disciplinary rather than cross functional;
- ❑ it would often follow principles and approaches that were not consistent with work being carried by other teams.

This said, these kinds of project had provided a potential starting point for broader initiatives and were a sure indication that quality was a real and not an artificially created issue.

### ***Patterns of organisation for quality***

Again, there were similarities between the commercial companies and the NHS TQM arrangements. In Counters it was argued that in the early stages of TQM there needed to be a separate set of arrangements for promoting and co-ordinating the implementation of Customer First. Thus 45 Quality Support Managers had been identified and trained to take an off-line support role to their respective District Managers. Further, each senior management team on District and Area met to handle what was known as Business As Usual quite separately from CF meetings where issues of quality and implementation of CF took place. It was envisaged that these meetings' structures would gradually merge as CF issues became part of the everyday agenda for managers.

This was similar to the arrangements at the NHS TQM sites that were pursuing the more formal or ideal-typical TQM implementations. All NHS sites had appointed a



senior or middle manager as quality manager or facilitator at the centre and all but one had a forum for quality. The exact format varied. In some places the senior management team met to discuss issues of quality whilst elsewhere there was a separate quality forum. Most sites had a Board-level director responsibility for quality.

At the next level down, some sites had appointed a number of full- and part-time quality facilitators, though these would usually only be found in one or two directorates. Quality improvement groups or teams could also be found in some service areas at most sites. In addition, there was a wide range of different groups engaged specifically in quality activity – medical audit groups, ward audit teams, quality circles, process improvement teams, standard-setting groups and so on.

Many of these groups had produced some excellent work and their efforts should not be under-estimated. However, the organisational arrangements for integrating their work and for co-ordinating philosophies, objectives and activities were judged as weak. Only one TQM site had made significant progress with an integrated strategy for handling current and new quality initiatives.

Quality improvement structures and working arrangements in the commercial companies were better integrated than at most NHS sites. This reflected, in part, the more directive implementation of a single model of TQM and the less complex range of work being undertaken. This analysis points to one of the main observations about the differences between the samples. Those NHS sites following management consultant-led programmes or Crosby-type installations had a clearer framework to follow. They also had a means by which new quality initiatives could be judged and, where deemed appropriate, built into a coherent organisation-wide approach. Although the framework was available, it was not always employed as effectively as it might have been. The sites which were following less well-specified models had no mechanism by which different initiatives could be integrated. This caused considerable confusion and some resentment between groups that were following different arrangements for monitoring and improving quality.

### ***Benefits of the respective approaches***

Comparisons of benefits between the NHS and the commercial companies were difficult to make because they started from quite different bases. Generally speaking, the claims for positive progress made by the commercial companies were similar in nature to those at NHS sites – for example, improvements in communication, a greater focus on internal and external customers, and a stronger emphasis on systematic analysis of problems – but the impression gained from the research was that commercial respondents were more positive and enthusiastic about their schemes than their NHS counterparts, especially lower down their organisations.

This, in part, depended on the extent to which staff in each organisation could see the relevance to their own work. A more negative view was apparent where the initiative appeared to have faltered after initial training or where only limited environmental improvements had been achieved. At Counters, knowledge was more detailed about the methodology, and personal definitions of quality were closer to organisational ones, than either Thames or the NHS. Respondents also expressed more willingness to break down barriers between different departments and to share resources. They also felt that there was more flexibility in responding to customer need than had been the case before Customer First and this appeared to go right across the board.

Similar points were made in the NHS but it was noticeable that they were often limited to particular areas – for example in maternity or paediatrics – and to comments by senior management. Two possible exceptions to this were the NHS sites that were implementing Crosby-type approaches where understanding appeared to go much further down the organisation. Partly this was due to the detail provided by the respective implementation procedures and partly by the investment in training, which was considerably higher than at the other NHS TQM sites. There were some areas in the NHS that appeared to have moved little in responding more proactively to customer need over the period of research.

## ***Problems and issues***

The lack of resources was mentioned frequently in all the organisations. However, in the commercial companies complaints appeared to revolve around the additional workload caused by the quality improvement initiatives whereas, in the NHS, the issue was more one of resources needed to carry out their equivalent of 'business as usual'.

A second important similarity between all the organisations, commercial and NHS, was the extent to which staff misjudged how far they expected to have moved in the first 18 months to two years of the implementation. They had expected to be much further ahead than they were. This is an important consideration because of the tendency in all organisations to fund TQM on a short-term basis. As other priorities emerge, TQM can be sidelined or downgraded in importance.

Unless there is a detailed implementation strategy to ensure that TQM is installed in all structures and systems, as in the case of Counters, new initiatives may well be started which are not consistent with the general thrust of TQM. Similarly, impetus can easily be lost as individual parts of the business are expected to fund quality initiatives from their own sources, or senior managers leave, before TQM has become part of everyday working.

Other common problems were said to be the cynicism of some older managers and staff; the lack of management skills in facilitation and empowering of staff; the fact that local units were required to implement TQM but headquarters' departments (Regions and the Centre in the case of the NHS) were not; and the failure adequately to recognise individuals who had particularly distinguished themselves. The Thames Awards' system did not produce these kinds of comments although it, too, did not actually reward individual performance. Overall, the commitment of NHS leaders at the demonstration sites, and their knowledge and understanding of TQM and models of Quality Assurance were a good deal weaker than those of the top management in either of the two commercial companies.

### ***Converging implementations***

The comparison between Thames Water and Post Office Counters also provided a particularly important finding. This was that although the two companies had started with different organisational contexts, which had resulted in the choice of different TQM models, their initiatives had progressively merged over the three years. Appendix 8 summarises this convergence.

At the outset, Counters was significantly stronger than Thames in its corporate approach, the speed of implementation, and the results of team-based process improvement – especially cross-functional activity. Thames found that it had to strengthen this area after the second year with a more explicit corporate stance on quality. In return, Thames was stronger in ownership of smaller continuous improvement activity – something that Counters found was necessary to augment its major cross-functional projects.

Both organisations then re-evaluated their positions and this led to further convergence. Counters began to integrate their Customer First and Business as Usual meetings' structures whereas Thames had always kept quality in the hands of operational managers. However, Thames found that the increasing quality improvement activity needed co-ordination and technical support. This led to the appointment of quality facilitators to support managers. Both organisations found that they had to modify structures and systems to be more process-oriented and customer-focused.

By 1993, both companies had begun to implement similar sets of process improvement initiatives in an attempt to capitalise on past successes and strengthen weaker areas. The fieldwork showed that a common set of implementation strategies and stages was becoming visible, notwithstanding the differences in starting points. This may mean that there is a limited set of change management strategies that are suitable for implementing TQM. The implications of this finding, were it to hold good for a wider range of organisations, is taken up in Chapter 10.

## **Conclusions**

The thoroughness with which Post Office Counters had approached the implementation of TQM was impressive. The attention to pre-planning, the investment they were prepared to make, and commitment of a wide cross-section of staff appeared to be contributing to visible improvements in both processes and outcomes. The fact that they had carried out comprehensive diagnostics prior to implementation meant that they were in a good position to judge the extent to which they were continuing to meet customer and client need. The methodology appeared well designed, logically coherent, and capable, in theory, of tackling one of the most difficult aspects of implementation – namely the integration of TQM principles with everyday systems and processes at different levels in the organisation to ensure continuity and consistency.

Thames Water was at a much earlier stage in their initiative and had started from a lower base than either of the other two sets of organisations. Rapid implementation of new technology and standards meant they also had to master more complex technical systems. This meant that they had to begin by documenting procedures that had never formally been examined and which varied widely from one part of the business to another. This process had clearly been successful in reducing errors and anomalies and in getting staff to think more constructively about why they worked in the way they did. However, they had yet to start systematically measuring and improving existing processes. As in the case of many audit models, a link had yet to be demonstrated between improving documentary processes and actually improving services to external customers.

In many respects, and going by the criteria for evaluating an ideal-typical model of TQM, the NHS appeared to be less successful after three years of its implementations than the commercial comparison sites. One should be careful, though, in drawing direct comparisons between the NHS and the commercial sector. The complex multi-professional nature of much health care work, the different cultures and knowledge bases, and the distancing of relationships between many groups, make it difficult to secure consensus on quality criteria or on organisational mechanisms for improving quality.

A further issue is the range of stakeholders outside the organisation who must be included in the debate if TQM is to put the customer at the centre of service delivery. These are not strong features in the two commercial companies concerned but that does not weaken the favourable comparison with Post Office Counters, and to a lesser extent the Thames Water TQM sites, in the matter of attitudes.

It is also clear that funding of TQM at the NHS sites, whilst not inconsiderable, was a whole order of magnitude lower than in the two commercial companies concerned. The companies also had the advantage of well-developed and organised research facilities in their marketing and organisation research departments. This meant that considerable skills were available for advice on the design and administration of sound instruments for measuring expectations and satisfaction. This was one area where the Department of Health had done little to support the sites. Whilst it may have been reasonable to allow the sites as much freedom as possible in choice of models, the Department could, and should, have done more to support them with technical skills for process improvement and evaluation.

The benefits in the commercial companies were also underpinned by a general seriousness of purpose and understanding of TQM that spanned a broader base of staff than was found at most NHS TQM sites. The links between improvements in quality of service, maintaining a successful business, and security of employment were easier to draw in the commercial sector (though this was changing markedly at the NHS sites as the implications of an internal market began to bite). Clearly, more visible outcomes make it easier to demonstrate progress and motivate staff.

The next Chapter, continues with a more detailed analysis of the fieldwork at the NHS TQM sites.

## **Chapter 9 – Comparisons between the NHS Sites**

### ***Introduction***

One of the most significant findings from the fieldwork in all the organisations was the variability in progress across different sites within each sample. In part, this could be explained by the range of different TQM approaches – clearly, the more complex and comprehensive an approach, the more difficult it would have been to install successfully. However, there was a range of other factors that could have accounted for the variability. Analysis of these factors, in terms of their influence on the rate and kind of progress made, will test the hypotheses set out in Chapter 1.

The analysis described in this chapter was carried out in two steps. The first was to test whether or not the TQM sites actually made more progress than the non-TQM sites on the main changes one would expect to see in an orthodox TQM programme. Where significant differences were found, attempts were made to account for the differences – between TQM and non-TQM sites, and within the TQM sample itself.

The latter step provided considerable insight into the extent to which understanding of the literature on organisational change could have helped in predicting the ways in which TQM might have been progressed or hindered in the NHS. The second analysis was carried out using the propositions about designing organisational change and choosing TQM approaches as set out in Chapter 1.

### ***Inter-site comparisons***

The starting point for the analysis of similarities and differences was a progress rating exercise. The fieldwork data were reviewed for two significant variables – stated intent with regard to identifying issues and planning responses, and actual movement on implementation of changes.

The nature of the data employed here should be made plain. At least two, and sometimes three researchers,<sup>2</sup> interviewed at each of the sites. The interviews were fully recorded and circulated to each of the researchers. They were then collated, analysed, and written up as site reports on each of the two or three occasions that the site was visited. Based on both the individual interview data and reports, the researchers formed themselves into a jury that awarded gradings on a set of variables for each of the sites. These were based on the main objectives of orthodox TQM programmes.

This process was obviously subjective, although 'objectivised' by virtue of the accumulation of data, the cumulative checking of the data, and the interaction of three separate readers of the data. It was not used to make a published rating of any one site. The accumulated scores for each site on each category corresponded highly with the general impression formed of each site by each of the researchers involved. They also correlated well with the observations made by interviewees at some of the sites when they attended briefing days held by the author.

Sites were rated by the research team on a five-point scale from *No discernible movement* through to *Comprehensive and effective movement in a majority of functions/departments*. Intermediate points are shown in the key to Table 9.1. *'Stated intent'* included the pre-TQM planning process, documented objectives, plans and targets, as well as evidence from interviews that reinforced commitment to implementation of TQM.

*'Movement'* covered the extent to which stated intent was actually being translated into progress towards TQM objectives, as evident from documentation, interview data and some direct observation at sites. The TQM objectives were those developed at the outset of the research and detailed in Chapter 4. They were based on the broad objectives set by sites for themselves and by what the TQM literature claims should be achieved at successful TQM sites.

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<sup>2</sup> As was explained earlier, the author was assisted in the fieldwork by two colleagues. The author designed the numerical rating system used throughout this section. The three researchers then worked jointly as a peer review group to rate the sites as described in this Chapter.



Also included was an assessment of the extent to which individuals at sites were developing concepts and skills for quality improvement in general, since it was possible that they could make progress towards more structured and systematic quality assurance without it being TQM. Although, in the first year, interviews were conducted at 31 different TQM hospitals and community units, only 20 were revisited in subsequent years. This group of 20 formed the basis of the rating exercise. For some analyses, five health districts have been included where the researchers had sufficient contact to make a judgement about their contribution to implementation of TQM. Data on progress at district level were limited to observations made at the outset of the research when most sites had already been implementing TQM for a year or so. The transformation of directly managed units (DMUs) into autonomous trusts, each with its own version of TQM, and the greater distance put between the purchasers and providers led the evaluation to focus principally on TQM in provider units. It was not possible, therefore, to say with any detail how well district authorities had been able to continue their early progress.

### *Comparison of TQM and non-TQM sites*

Table 9.1 below shows results of the rating exercise in terms of mean ratings for all sites in the TQM and non-TQM samples. These have been calculated from the raw data for each site, which are shown in anonymised form in Table 1 of Appendix 9.

Table 9.1: TQM and non-TQM sites (including districts) rated for progress on general quality criteria

MEAN SCORES	Mean Ratings – overall		Customer focus		Corporate integration		Monitoring & Evaluation		Empower. of staff		Empower. of customers		Quality structures: TQM		Concepts/technical skills – TQM		Concepts/technical skills – other		Training for TQM		Training for other QA approaches	
	Int.	Mov.	Int.	Mov.	Int.	Mov.	Int.	Mov.	Int.	Mov.	Int.	Mov.	Int.	Mov.	Int.	Mov.	Int.	Mov.	Int.	Mov.	Int.	Mov.
25 TQM SITES <sup>1</sup>	2.9	2.3	3.9	3.0	3.4	2.7	2.7	2.1	3.2	2.7	2.7	2.2	3.3	2.6	2.5	2.0	2.7	2.3	2.0	1.6	2.8	2.2
4 NON-TQM SITES <sup>2</sup>	2.2	1.7	3.5	3.0	3.3	2.0	2.5	2.0	2.3	1.8	2.3	2.3	2.3	1.5	0.8	0.8	2.8	2.3	0.3	0.0	2.3	1.8

NB <sup>1</sup> 5 districts included  
<sup>2</sup> No districts included

Key: 0 = No discernible movement  
 1 = Barely discernible movement  
 2 = Some movement in a few functions/departments but very patchy and/or ineffective  
 3 = Moderate movement in a few functions/departments with some significant effects  
 4 = Considerable movement in a significant number of functions/departments but not comprehensive  
 5 = Comprehensive and effective movement in majority of functions/departments

There were considerable variations between the sites in the TQM sample and some of the reasons are discussed later in this chapter. At this stage, though, it is worth noting that the mean scores across all TQM sites for the 11 variables in Table 9.1 showed, at best, only 'moderate movement with some effects' in stated intention (a score of 2.9 out of a possible 5) and only 'some movement in actual progress in a few functions or departments' (2.3 out of 5):

The differences in mean scores did not differ as significantly as one might have expected between TQM and non-TQM sites. In part, this was a reflection of the fact that other changes – the purchaser/provider split, the Patient's Charter and standard setting – had encouraged non-TQM sites to tackle similar issues of customer focus, corporate planning, and measurement.

Nevertheless, one would have expected observable differences in some of the individual criteria, particularly in those factors regarded as the distinguishing characteristics of TQM. This proved to be the case. There were appreciable differences on both intent and movement for empowerment of staff (3.2/2.7 against 2.3/1.8) and formal structures for handling quality (3.3/2.6 against 2.3/1.5). In contrast, and to be expected, there was little difference between TQM and non-TQM sites on customer focus (3.9/3.04 against 3.5/3.0).

Elsewhere, there were similarities between TQM and non-TQM sites in stated intent but the TQM sites appeared to have made more progress. Thus similar intent on integrated corporate approaches to quality and planning (3.44 against 3.25) had not led to as much progress at the non-TQM sites (2.68 against 2.0). The reverse was the case for empowerment of customers where it was more strongly stated at TQM sites but actual movement in both samples was low.

Obviously, training for TQM and technical understanding were higher at the TQM sites. However, the results were still only modest across the TQM sites (2.7/2.8 for intent and 2.3/2.2 for movement). This meant no more than 'some/moderate movement in a few functions or departments'.

Both groups of sites had invested some resources in training for a general awareness of quality improvement – for example in customer awareness programmes, training for standard setting, BS 5750, and King's Fund Audit, as well as technical and managerial skills' courses. On the whole, where general quality awareness training was taking place, it was not well integrated with TQM training. Overall, however, Table 9.1 shows that the different kinds and levels of training taking place at both TQM and non-TQM sites reduced the potential gap in conceptual understanding between staff in the two groups about general issues to do with quality.

### *Comparison of TQM progress only*

The columns on conceptual and training issues in Table 9.1 were then removed enabling a more direct focus on the important changes to be expected from a TQM programme. These are shown in Table 9.2 below:

Table 9.2: TQM and non-TQM sites (including districts) rated for progress on TQM criteria

MEAN SCORES	Mean Ratings		Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures	
	Stated Intent	Move ment	Stated Intent	Move ment	Stated Intent	Move ment	Stated Intent	Move ment	Stated Intent	Move ment	Stated Intent	Move ment	Stated Intent	Move ment
TQM SITES n = 25	3.2	2.6	3.9	3.0	3.4	2.7	2.7	2.1	3.2	2.7	2.7	2.2	3.3	2.6
NON-TQM SITES n = 4	2.7	2.1	3.5	3.0	3.3	2.0	2.5	2.0	2.3	1.8	2.3	2.3	2.3	1.5

Here it can be seen that the mean differences between TQM and non-TQM sites (Column 2) remained roughly the same as those in Table 9.1, when training is removed, though there are differences in the individual variables. Of some concern for the proponents of TQM must be the low figures achieved by TQM sites on monitoring (Column 5). The results placed sites somewhere between 'some patchy movement' and 'moderate movement in a few functions'. The results suggested that, overall, there were few differences between TQM and non-TQM sites on this variable.

## The influence of district results

The results discussed so far have included district data. Table 9.3 gives the means for both samples when the district results are removed. Again, it can be seen that the mean ratings remain almost unchanged (Column 2).

Table 9.3: TQM and non-TQM sites (excluding districts) rated for progress on TQM criteria

MEAN SCORES	Mean Ratings		Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures	
	Stated Intent	Movement	Stated Intent	Movement	Stated Intent	Movement	Stated Intent	Movement	Stated Intent	Movement	Stated Intent	Movement	Stated Intent	Movement
TQM SITES n = 20	3.1	2.6	3.8	3.2	3.3	2.8	2.8	2.3	3.2	2.8	2.5	2.1	3.2	2.6
NON-TQM SITES n = 4	2.7	2.1	3.5	3.0	3.3	2.0	2.5	2.0	2.3	1.8	2.3	2.3	2.3	1.5

Key: 0 = No discernible movement  
 1 = Barely discernible movement  
 2 = Some movement in a few functions/departments but very patchy and/or ineffective  
 3 = Moderate movement in a few functions/departments with some significant effects  
 4 = Considerable movement in a significant number of functions/departments but not comprehensive  
 5 = Comprehensive and effective movement in majority of functions/departments

This shows that whilst the districts gave an important early lead to the provider units, their own scores on TQM were not high enough to pull the provider unit results up when they were included. Indeed, with one significant exception, districts' results followed the same pattern – higher on corporate integration and empowerment of staff, and lower on monitoring and empowerment of customers.

## Comparisons between types of site

Community services and smaller community hospitals outperformed all but two of the larger, acute services units. Table 9.4 below gives the mean scores for both types of unit. The results showed that all types of TQM site had progressed further than the non-TQM sites. A fuller breakdown of these results is included in Appendix 9. The community sites had higher mean scores on customer focus, integration and both forms of empowerment. They had, however, undertaken less training, and monitoring and evaluation were also weaker. The comparison sample of non-TQM sites comprised two large acute unit sites, a smaller specialist hospital and a community services unit. It was the latter two sites that enabled non-TQM scores to hold up reasonably well.

Table 9.4: TQM Acute Units, TQM Community Units/Services and Non-TQM sites rated for progress on TQM criteria

MEAN SCORES	Overall Mean Ratings		Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures: TQM		Concepts/ technical skills - TQM		Training for TQM	
	Stated Intent	Move-ment	Stated Intent	Move-ment	Stated Intent	Move-ment	Stated Intent	Move-ment	Stated Intent	Move-ment	Stated Intent	Move-ment	Stated Intent	Move-ment	Stated Intent	Move-ment	Stated Intent	Move-ment
COMM HOSP/ SERVICES (n = 9)	3.1	2.6	4.4	3.9	3.4	2.9	2.3	1.9	4.1	3.6	3.0	2.4	3.2	2.9	2.3	2.1	1.7	1.4
ACUTE UNITS (n = 11)	2.7	2.2	3.3	2.6	3.3	2.6	3.0	2.5	2.4	2.2	2.0	1.6	3.2	2.3	2.6	2.1	2.3	1.7
NON-TQM SITES (n = 4)	2.2	1.7	3.5	3.0	3.3	2.0	2.5	2.0	2.3	1.8	2.3	2.3	2.3	1.5	0.8	0.8	0.3	0.0

### *Inside the TQM sample*

There was pronounced variation on intent and movement variables within the TQM sample. Some of these differences are highlighted below – the full breakdown of results is given in Table 1 at Appendix 9.

### The top performers

Table 9.5 gives examples of two of the best performing acute services sites. Only one unit with major acute services had managed comprehensive and effective movement though a second, smaller hospital trust also had high scores. Both sites were strong on nearly all the criteria with scores of 5 or 4 on most variables including evaluation. It is important to note, however, that even these two sites had made less progress on empowerment of service users (Table 9.5, column 7 below). This may be contrasted with the results from community services where two units had made considerable progress in this respect (Table 9.6 column 7).

It is significant that both of the top performers had commissioned considerable support from external management consultants (though one site discontinued the relationship after the initial customer/staff surveys and some development work on auditing). A further major factor was the realisation of the threat to their survival after surveys of capacity in their respective markets. This ‘survival factor’ was

particularly strong for one site from the outset but it had become an increasingly salient issue for the other site as well.

Table 9.5: Best performing TQM Acute Units re progress on TQM/general quality criteria

MEAN SCORES	Mean Ratings	Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures: TQM		Concepts/technical skills - TQM		Concepts/technical skills - other		Training for TQM		Training for other QA approaches	
		Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Mov	Int.	Mov
Site k	4.3 4.0	4	3	5	5	5	4	5	4	2	2	5	5	5	5	4	4	5	5	3	3
Site q	3.5 3.1	5	5	5	3	5	5	3	3	3	2	3	2	2	2	4	4	1	1	4	4

Overall, progress in most community services and smaller community hospitals was stronger than in all but the best acute units (see Table 9.6). The main strengths at these sites were on customer focus and empowerment of customers and staff. All but one site had made a reasonable attempt at establishing formal structures for managing the quality improvement process.

Table 9.6 – Best performing TQM Community Hospitals/Services

MEAN SCORES	Mean Ratings	Customer focus		Corporate integration		Monitoring & Evaluation		Empower staff		Empower customers		Quality structures: TQM		Concepts/technical skills - TQM		Concepts/technical skills - other		Training for TQM		Training for other QA approaches		
		Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Mov	Int.	Move	Int.	Move	Int.	Mov	Int.	Mov	
Site l	4.0 3.5	5	4	4	4	4	3	4	4	4	3	5	4	4	4	4	3	3	3	3	3	3
Site e	3.4 2.8	4	3	5	4	3	2	4	3	3	2	4	4	4	4	1	1	5	4	1	1	
Site x	3.2 3.1	5	5	3	3	2	2	5	5	5	5	3	3	2	1	3	3	2	2	2	2	
Site o	3.2 2.7	3	3	4	4	4	3	5	4	2	2	4	3	1	1	4	3	1	1	4	3	
Site u	3.2 2.6	4	4	2	2	2	2	4	3	3	2	2	2	4	3	4	3	4	3	3	2	

Key: 0 = No discernible movement  
 1 = Barely discernible movement  
 2 = Some movement in a few functions/departments but very patchy and/or ineffective  
 3 = Moderate movement in a few functions/departments with some significant effects  
 4 = Considerable movement in a significant number of functions/departments but not comprehensive  
 5 = Comprehensive and effective movement in majority of functions/departments

Except for one community hospital, the general level of technical understanding of TQM was good, and far higher than most large acute units. This was mainly accounted for by the extent of the training undertaken in TQM. All but one site

had also invested a fair amount of time and effort in carrying out other forms of training which contributed to generating commitment to the quality improvement process.

### The weaker sites

The weaker sites were all trusts incorporating large acute units. Using the TQM criteria, it must be said that none of these units had progressed beyond some limited developments in a few areas. Table 9.7 shows that one site had made appreciable progress on developing a system for corporate planning for quality improvement and another had an elaborate programme of rolling nursing audit in place. However, neither unit had achieved much on staff or customer empowerment and the training for TQM was all but non-existent. The same could be said for the other units – each had one or two strong points but, overall, little progress had been made in implementing TQM after three or more years.

Table 9.7: The weaker sites – all TQM Acute Units

MEAN SCORES	Mean Ratings	Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures: TQM		Concepts/ technical skills - TQM		Concepts/ technical skills - other		Training for TQM		Training for other QA approaches			
		Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Move	Int.	Move		
Site b	2.0 1.5	4	2	2	2	1	1	2	2	2	2	2	1	1	1	1	3	2	0	0	3	2	
Site d	2.0 1.3	2	2	2	1	1	1	2	1	1	1	3	2	3	1	1	1	4	2	1	1		
Site f	2.3 1.9	2	1	4	3	3	3	2	2	1	1	3	2	2	2	2	2	2	2	1	1	3	2
Site i	2.4 1.7	3	2	2	1	1	1	2	2	2	1	2	2	4	2	2	2	4	2	4	2	2	2
Site n	2.3 1.9	3	2	2	2	4	3	2	2	2	2	2	2	1	1	3	2	1	1	1	1	3	2

These data were borne out by the research visits. The gulf between the more advanced sites and this group were marked in almost every area. It must be emphasised once again, that this conclusion should not be taken to mean that either the quality of services was less than satisfactory, or that there was little or no quality improvement activity going on. There was some excellent quality improvement activity to be found at most sites but much of this was taking place without following the principles of TQM and without being coordinated with other initiatives. In this chapter, progress is analysed against the TQM objectives set by

the sites for themselves, combined with the criteria used in commercial organisations to evaluate TQM movement. Following these criteria most sites failed to achieve TQM objectives.

The results shown so far have been analysed in terms of progress across the sites as a whole. However, the research also showed that the differences in progress *within* sites could be as great as *between* sites. If more progress were to be made across units as a whole, one would need to have a better understanding of what might lie behind variability in progress. The next section of this chapter goes on to analyse some of these 'within' site differences in more detail.

### ***Accounting for 'within' site differences***

Four factors are analysed here in an attempt to account for the variations in progress made within different locations. They are: analysis by type of site; by organisational structures for quality improvement; by specialist disciplines; and by different models of change and implementation.

#### *Analysis by type of site*

The NHS TQM sites differed not only in size but also in the range of specialties which they offered. The broadest distinction to be made was between units offering acute services, and those offering community services. However, there are great variations within these categories. Thus, one of the 'acute' sites studied was wholly devoted to cardiothoracic work; others offered virtually the whole range of specialties.

Introducing TQM into the NHS meant attempting to install a corporate management approach to quality development in a service shaped predominantly by professionalism, specialisation, and individualised conceptions of service. Values, goals and standards were traditionally provider-determined. Providers varied in the forms of knowledge deployed and the power wielded in the system. Differentiation, tribalism, stratification and competition were and still are a feature in most district



general hospitals. However, they were (and may still be) found in their most extreme forms in teaching hospitals and recognised centres of excellence for some, if not all, specialties. They foster conceptions of excellence honed within strong professional boundaries that often nevertheless allow for individual autonomy and variation within those boundaries. While recent reforms have been geared towards instilling a stronger managerial approach on the part of clinical professionals, until very recently these have done little to break down the boundaries between specialties.

The research showed that at several of the sites clinical directorates based on specialties tended to reinforce uni-disciplinary perspectives and competitiveness, particularly as market forces were brought to bear on them. Hence the trend towards reducing the number of directorates to create pressure for more strategic and corporate thinking about objectives, resource allocation and modes of work.

Directorate structures based on medical specialties were seen as potential threats to weaker clinical professions such as physiotherapists, occupational therapists and dieticians. They were concerned that their services should be treated as a whole and centrally purchased, rather than being absorbed into a range of directorates in which it might be more difficult for them to sustain their numbers and range.

Professional approaches to quality have focused primarily on standard setting, protocols and audit. Audits, traditionally, have been conducted largely within professional, and often specialty, boundaries<sup>198</sup>. Initiatives towards opening medical audit to other professions or managers were strictly limited during the period of the evaluation. Integration of forms of audit took place, for the most part, against a background of substantial but weakening resistance on the part of doctors. Publications by the Department had encouraged a move to a broader-based form of clinical audit and this had been taken up at some of the sites in the latter part of 1993. At that time, though, there was little evidence of any dilution of professional determination of standards and quality.

Challenges to uni-disciplinary audit seemed to come from professional groups other than doctors with a strong interest in a particular field (e.g. physiotherapists in the

treatment of strokes) or from multi-disciplinary groups in small units or fields in which the medical dominance of a specialty was less strong (e.g. small geriatric units or community hospitals). In these areas, there had been a more marked movement toward multi-disciplinary specifications of quality and more involvement of users in the process.

### **Acute care**

Among the most advanced sites in the implementation of TQM was a large acute hospital. The difficulties of such an organisation embarking on systemic quality initiatives were considerable. There was an emphasis on specialist quality that demands high technical content and the quality systems depended strongly upon their own professional and technical bases. Yet the hospital concerned had the most comprehensive implementation policy and structures for TQM and had invested the most resources in it.

Nor was it surprising that in the hospitals with a large range of specialties many departmental and working groups were engaged in quality initiatives, but with one or two notable exceptions, this hospital as a whole had not found it easy to advance comprehensive TQM or other quality systems. In a small specialist hospital it was more possible to consider, if not easily to implement, a distinctive and strongly top-led quality initiative. In that case, the range of specialties was small and commonalities between them more easy to find.

In most acute hospitals the dominant types of quality initiatives were those deriving from external initiatives or forms of regulation, such as the Patient's Charter or those generated by particular professional groups or individual departments. The former are cross-system; the latter are predominantly intra-departmental, although some are multi-disciplinary. Nevertheless, there was no clear evidence as to whether intra-organisational learning was becoming a characteristic of hospitals. Motivation for quality improvement seemed to be more strongly associated with individual or group ownership and initiative.

The most common form of professional initiative was that of standard setting, accompanied, in some cases, by monitoring systems. In the context of nursing it was in this form of activity that leadership from the top of the hierarchy was most discernible, although the rigour and consistency with which it was carried out in multi-specialty hospitals varied greatly. In nursing and elsewhere, however, some disenchantment with standard setting was evident, largely because it seemed mechanistic, based on minimum standards, and confined to enumeration of component parts of processes.

This had led in places to a virtual halt in standard setting and related nursing audit without anything taking its place. Again, this was evidence of the low level of evaluative skills and resources available to operational staff for process improvement – few of them had anyone to turn to for guidance about alternative models of evaluation. Where there were exceptions to this general finding, they came from ward or specialist departmental level through the leadership and creativity of individuals. The problem of designing more dynamic standard setting systems was compounded by weaknesses in information systems, which did not provide data in a form that was helpful to detailed monitoring of stages in the process of service delivery.

### **Community health services**

Some community health units offered both residential in-patient services for the elderly, mentally ill, and those with learning disabilities, as well as day, out-patient and, in some cases, domiciliary services. Other units or sub-units concentrated their provision primarily on services in the home by district nurses, health visitors, chiropodists, therapists, and other caring professions. Community services tended to offer in-patient and domiciliary services in separate sub-unit organisations. Some were integrated with general practices in primary health care provision.

They thus contained contrasting types of organisation: some were small, cohesive, single specialty units or units serving a well-defined population, with a limited range of functions and strong external boundaries. Others were bases for a highly

dispersed set of activities by staff from a range of disciplines, where there was tension between ensuring collective disciplinary standards and culture and promoting inter-disciplinary collaboration.

Medical specialists, although influential in some areas such as psychiatry, were few in number and the services were primarily in the hands of nursing and other professions allied to medicine, who moved more readily between different client groups and across different clinical boundaries. The community residential in-patient sub-units had been most active in quality initiatives, although few of them had embarked upon full-scale TQM. Perhaps the most important factor in generating initiatives had been the presence of clear supportive leadership. The smaller the range of specialties, the easier it was for a pattern of leadership to be established. Stratification and inter-professional inequalities were also less evident in community units and, nursing apart, no individual profession had a strong numerical presence. In this study, leadership had come from hospital managers and ward managers. Quality initiatives that had attracted staff commitment and created visible change had been launched in under-regarded units and, in one case, in the knowledge that the unit was to close.

The range of specialties was, therefore, one factor to be taken into account. Nevertheless, generalisations have to be made with caution. The range of units in which quality initiatives had been advanced spanned a large acute unit, a small and narrow-focused acute unit, and both community domiciliary and community residentially based units. Moreover, there were particular examples that defied any such classifications, being based mainly around personal initiatives led by charismatic individuals with a strong sense of commitment to a particular issue.

### *Organisational structures and the installation of TQM*

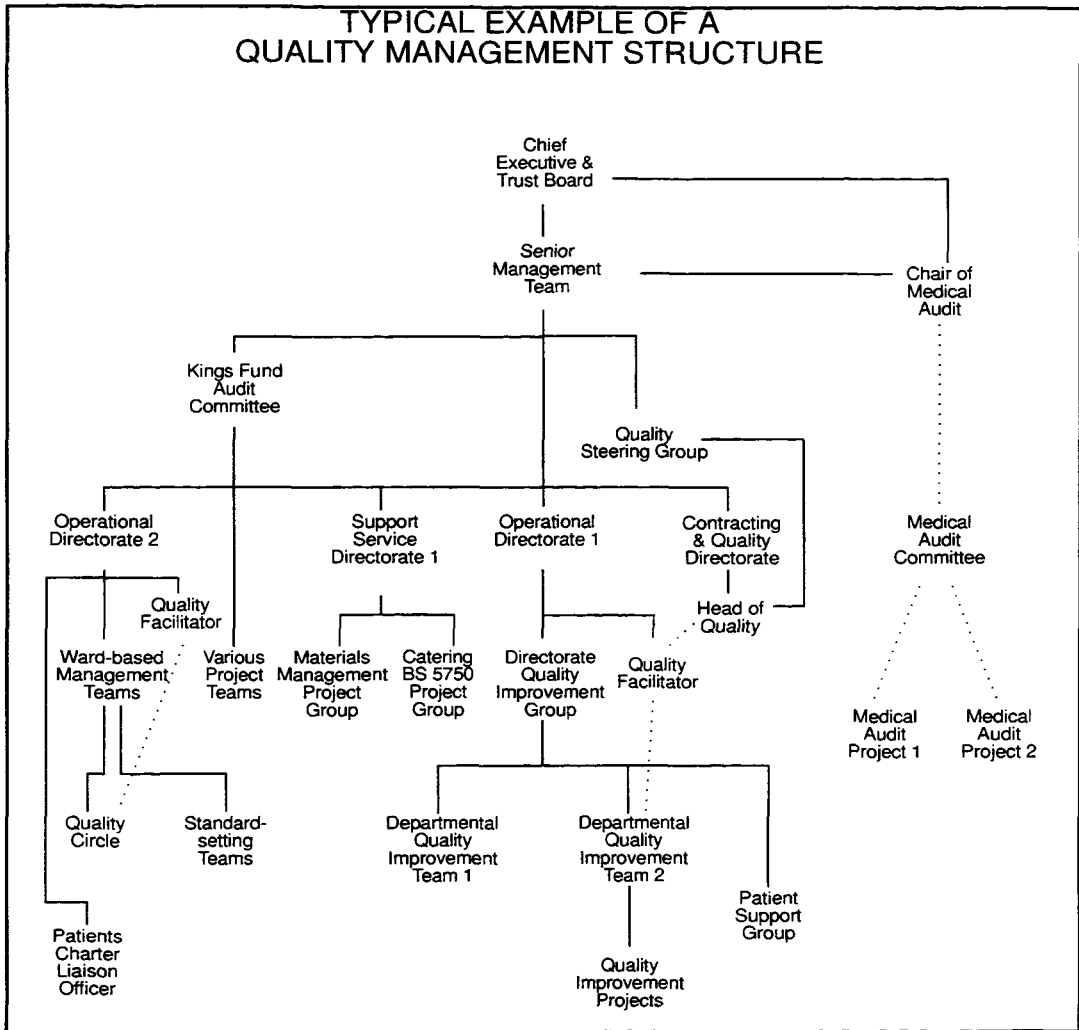
Attempts to introduce structural changes in order to install TQM were taking place against a background of major reorganisation everywhere. The fieldwork at almost all the NHS sites showed that the introduction of directorates and the move to trust status had impeded the implementation of TQM. Trust applications often involved

protracted negotiations between units and in several instances proceedings were halted as new units were included in applications and others were dropped. Furthermore, local structural changes had been made with little or no consultation with either staff or users and with no clear analysis of how these changes would contribute to meeting users' requirements. Realistically, little could be done at NHS Management Executive level to protect TQM sites from NHS-wide changes taking place at the same time. However, with more thought, the centre might have been able to pilot variations on national changes at the TQM sites which would have been more in keeping with the spirit of TQM (for example locally-developed, user-driven definitions of quality standards).

Almost all the sites had opted for a separate quality forum alongside or just below the senior management team. This was the start of a shadow structure for quality but few sites had a full shadow structure below this. It was more normal to find lower-level quality groups at directorate and department level in only one or two lead services at each site. There were many other groups working directly or indirectly on quality improvement projects. A typical structure for a TQM site is shown in Figure 9.1 below.

This has been constructed to reflect a cross-section of several examples encountered during the research. There were potential problems with structures of this kind. For example there was a quality steering group at senior management level but other groups were operating at the same level with quality briefs – for example a King's Fund audit group and a medical audit committee. Two operational directorates are shown in the diagram and it can be seen that quality was handled quite differently in each of them. In directorate 1 there was a directorate quality improvement group that coordinated the work of a number of quality improvement teams. Each of these teams was supported by the directorate quality facilitator.

Figure 9.1: a typical example of a quality management structure



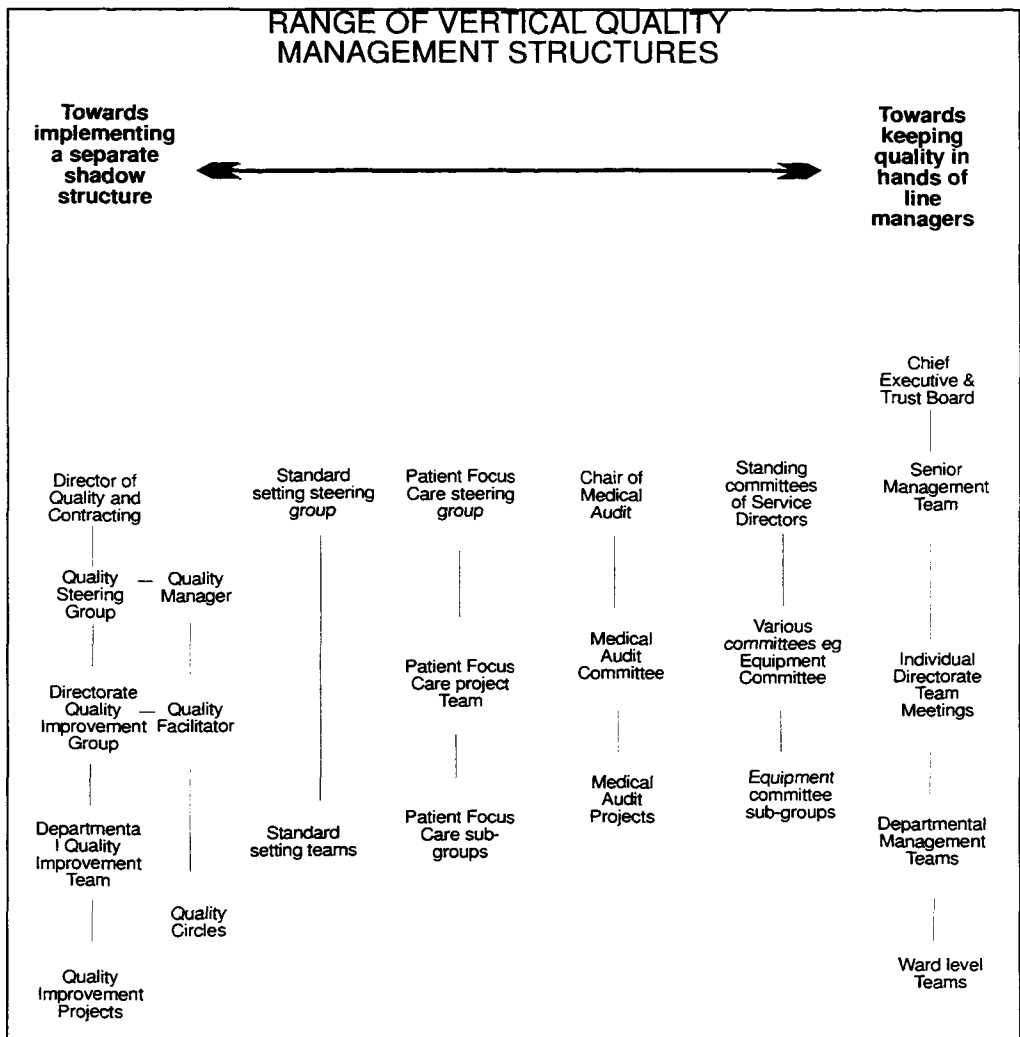
In directorate 2, however, they did not have separate quality improvement teams. Rather, quality was handled by ward-based management teams supported by a quality facilitator. In most of the wards there were standard-setting teams but in two wards there were both standard-setting teams *and* quality circles. There was also a Patient's Charter liaison officer with special responsibility for outpatients, unconnected in any way with other groups.

The third directorate in the figure is one of the support services. Here there were neither quality improvement groups nor teams, nor quality circles. Rather they were trying for BS 5750 registration for catering and a project management structure for specific projects – the example here was materials' management. Since this acute unit was also in the early stages of a King's Fund hospital audit, there was an audit

committee and a number of project teams were super-imposed on the structure already discussed.

As Figure 9.2 below indicates, the vertical structures could be distinguished on a continuum that runs between completely separate shadow structures at one end and integration with management at the other:

Figure 9.2: a range of vertical quality management structures



Specific individual projects probably lie somewhere between the two ends of the continuum. Standing committees, with responsibility for managing a range of specific issues, are probably nearer the line management end.

## Integration of quality improvement mechanisms

Analysis of the vertical and lateral arrangements for quality improvement at the sites showed that some had been considerably more successful than others in integrating and coordinating a mass of often unconnected quality improvement activity. Although the overall picture was rather confused, some clear patterns did emerge.

Those sites which had effective quality steering groups or forums established at senior management level were more able to integrate the various initiatives at strategic level than was the case where sites relied solely on a senior management team to coordinate quality improvement. Even at these sites, however, there were difficulties if, for example, other groups existed at the same level – in particular unit-wide standard-setting coordinating committees. A similar state prevailed at directorate and departmental levels: where there were active quality-improvement teams in place there was more of a sense of coordination. However, even here, new groups such as Patient's Charter groups and standard-setting teams could be set up without either being aware of the other's existence.

A second important variable was the amount of training on TQM at a site. Where a considerable amount had been carried out there were fewer differences between the way groups worked. Although they might have met separately, the language they used when discussing quality improvement was similar. A third essential difference was that there was more multi-disciplinary work going on in community services. Here the generally smaller scale meant that relevant people such as the chairs of quality improvement teams, quality facilitators and standard setting facilitators, would be working more closely together and would cross over more easily between different committees.

During the period of the evaluation it was observed that medical audit had proved the most difficult initiative to integrate with other systems and processes. The general picture was of an outcome-based, doctor-driven audit model that was still primarily seen as a mechanism for the continuing education of doctors<sup>199</sup>. The links between medical audit and clinical and nursing audit were generally weak although there were important exceptions. Integrated audit was most likely to be found in



community services and some departments in acute units including maternity services, accident and emergency and some clinics. During the last six months of the evaluation, considerable efforts were made by Department of Health to promote a broader-based clinical audit approach and this had been taken up in some limited areas by the end of 1994. However the factors at work were complex and it was difficult to predict whether integrated audit was likely to be found in any particular unit.

Most organisations in the commercial sector start with separate quality structures, while acknowledging that these need to be merged with normal line management once TQM is bedded in. There is an obvious tension between employing the services of separate quality personnel and wanting to keep responsibility for quality firmly in the hands of line-managers. As this study has shown it can be achieved but it requires pre-planning of the shift from one arrangement to the other over time. It is possible to say that, after three years (and in the case of some sites, four years), those of the sites which had no quality structure beyond a senior management forum showed little progress. Where sites had such a structure, even if only in some directorates – for example pathology or some support services – then TQM had definitely taken a firmer hold.

Sites with the most extensive quality structures had made the most progress on three important TQM criteria: raising awareness of the importance of quality; promulgating common definitions of quality; and getting process improvement initiatives off the ground which were consistent with the principles of TQM. However, it was not clear to what extent middle managers and other staff not connected with quality improvement groups or teams had accepted the need for continuous improvement in their own work. Most of the effort for quality improvement still seemed to arise from the work of quality coordinators and quality improvement teams.

The third point about structure is that, even where there was a full shadow arrangement, this had proved inadequate in getting to grips with, and providing integration for, all the other quality improvement and service-development

initiatives to be found at any one site. At the minimum, these included medical, clinical and nursing audit groups, quality circles, quality of service teams, Patient's Charter groups, contracting and service-level agreement teams, and standard-setting groups. Many of these groups continued to operate with objectives and procedures that were not consistent with TQM principles.

The main exceptions were two of the three sites that began by implementing management consultant-led models of TQM. These models had demanded a certain uniformity of process and had enabled the sites to have more control over the process improvement assumptions underpinning the work of different groups.

### *Analysis by specialist disciplines*

#### **Certainty and determinacy of technical content**

The health service is comprised of a wide range of specialised groups each responding to the demands placed on it by managerial systems and clients, but at the same time following the assumptions and knowledge derived from training and professional induction. These assumptions and knowledge vary greatly in their technical content often making it inaccessible to those who do not share the same knowledge base. Indeed a standard component of professionalism is the possession of esoteric knowledge<sup>200</sup>. The issue raised in this section is how far approaches to different kinds of quality assurance are affected by the degree of specialised technical knowledge (technicity).

It is possible to distinguish between those disciplines with strongly-framed and those with weakly-framed procedures. Those with strongly-framed procedures might have the following characteristics:

- ❑ strong and determined technical content or technicity;
- ❑ common units of judgement;
- ❑ a strong frame of legal requirements;
- ❑ well-defined processes.

Those with weakly defined procedures would have:

- ❑ indeterminate technical content;
- ❑ strong individual professional discretion;
- ❑ multiple and contested knowledge assumptions and procedures;
- ❑ individual units of judgement.

In many areas of work, the degree of technical content, or technicity, can be defined by the extent of the measurable content. This would entail the extent to which the inputs, processes and outputs are definable, predictable and measurable. In other areas of clinical care, the esoteric or technical content may not be easily quantified but none the less the specialist practitioners would have reached agreed definitions of given health states and their treatment.

In this study, an assumption was made that the degree of technicity would affect the nature of the quality initiatives, rules and procedures that would be observed. If that were so (and it will be seen later in this chapter that there is no simple correspondence) one could, for example, assume that departments with a high degree of specialisation and technical expertise (e.g. pathology, pharmacy, and many medical specialities) would base their judgements of quality primarily on technical and professional definitions which would also entail a strong desire to keep control over their own criteria. If this were the case, the question would then arise of whether this would exclude attention to other, more system-wide criteria.

Similarly, one would assume that a non-technical area such as customer relations would have little by way of systematic knowledge or methods on which to rely. In this case, quality criteria would consist of more general appeals to common sense notions of consumer satisfaction and the extent of active networking both within a unit and between the unit and outside groups of cross-functional processes. This uncertainty of quality criteria and operational procedures could be mitigated by, for example, securing knowledge about customer satisfaction through surveys, or

striving, through TQM, to define and monitor quality. However, such procedures would be universal and not esoteric or specialist.

A corollary to the assumptions about degrees of boundedness would be that departments with low technical content or without a scientific base would be more permeable; more outward looking in cross-functional working; more ready to accept users' definitions of quality, and more likely to monitor by using a wider range of criteria including financial and productivity criteria.

In sorting out the extent to which technicity affects quality, one has to note multi-variant states among the different types of working groups. For purposes of defining technicity, one can note the following groups that employ some of the criteria noted in above:

- a) high technicity where content of work is strongly bounded by measurable standards. Pathology, pharmacy, and medical engineering are obvious examples
- b) high technicity where measurable standards are the basis but modified by large degrees of interpretation (most areas of clinical medicine)
- c) high specialist knowledge but largely subject to non-measurement interpretation (e.g. psychiatry, geriatrics, physiotherapy, speech therapy)
- d) areas in which specialist knowledge under a), b) or c) is combined with grasp of environment and systems and networks (e.g., many areas of nursing, OT)
- e) non-specialist knowledge, and control over work established through the charting of appropriate systems, reference points and networks (e.g., customer relations, some estate services, areas of administration)
- f) areas in which non-medical technical knowledge is required and where control over systems and procedures are important, (e.g. catering, finance and personnel)

Cutting across these groupings are three dimensions of quality: *technical quality* involving technical-professional criteria in each area of work; *generic quality* common to all areas, e.g. civility, punctuality, reliability, respect for worth of others and recognition of legal responsibilities; and *systemic quality* concerned with the efficacy of systems cutting across specialisations. In TQM, the generic criteria have been made more specific to include customer-focused work, interdepartmental cooperation and so on. Staff are asked to subject generic quality issues to systemic approaches to improvement – for example flow-charting receipt and dispatch of correspondence to ensure that ‘customers’ are getting prompt service.

Taking these groupings and dimensions as a starting point, the conclusions derived from the empirical evidence are as follows:

- a) Professional groups with a high degree of quality monitoring based on technicity are trusted by other groups with similar conceptual frameworks to ensure quality, and go unchallenged in their technical standards by those concerned more generally with the system or in non-technical areas. Only in cases of severe negligence or incompetence would technical judgements be challenged, except inasmuch as some specialties, such as pathology, are subject to recurrent internal and external assessment.
- b) If high technicity criteria of quality are challenged, it would be through the exercise of medical and clinical audit, but there was little evidence in this study (and some contrary evidence) of that taking place. Medical audit was seen primarily as an educational rather than a monitoring process. Although there were exceptions, it also tended to focus on narrow medical issues rather than systemic matters. Appreciable levels of non-clinical technicity were also to be found in areas such as finance, legal aspects of personnel work, technical requirements of hygiene in catering and CSSDs. In these cases, audits did take place against established quality criteria and there was an element of independent scrutiny.

- c) It is a bigger step for the more technical departments to shift to definitions of quality based on users' perceptions. There are problems with spanning the gap in technical knowledge between professionals and users. Moreover, this group of professionals includes the highly-trained clinical consultants and medical scientists, whose training assumes the capacity to make individual judgements on individual cases. This is in contrast to the requirements under TQM to consider aggregates of cases as part of systemic analyses.

Within the highly technical areas, the difference between those who restrict quality control to their own professional criteria and those also who concern themselves with generic or systemic quality rests in the nature of their customers. In this research, it was found that pathology and pharmacy responded to demands made by other highly technical groups – primarily clinicians – whereas clinicians mainly responded only to the demands of individual clients.

It therefore follows that the first groups are more likely to show concern with the total organisation's working of quality. At the same time, whilst for the most part clinicians are thought to be unresponsive to TQM or other generic quality initiatives, particular examples of clinicians taking a lead in quality movements could be found in a range of specialties including anaesthetics, pathology, cardiology, psychiatry, and geriatrics. In one trust, doctors had volunteered for TQM training and had used it in process improvement work. Furthermore, in the interviews it was pointed out that some specialties such as paediatrics and psychiatric medicine had a less sharply defined concept of quality because they were dealing with the family as a unit and had considerable interaction with local community groups.

At the other end of the technicity spectrum, the monitoring of quality was conceived in different, largely non-technical, terms. Groups concerned with systems and procedures were increasingly aware of quality dimensions although mostly not within the more rigorous TQM frameworks. Those concerned with maintaining systems would be more concerned with general quality criteria, including attention to customers, both internal and external, and relationships between departments,

efficiency and punctuality. Examples included getting letters out to GPs on time, making meetings more productive and improving security in an acute unit.

It was noticeable how those departments responsible for implementing quality improvement, including planning and quality departments, did little monitoring of their own work. This was partly because of lack of clarity about how to do this and also because they lacked a history of scientific or technical expertise. They had little in the way of a formal knowledge base to fall back on. Instead, they saw it as their job to monitor how well *other* departments were implementing quality improvement initiatives.

### *Change and implementation models*

Change is assumed to be a prime objective of quality assurance models, and much of the action embodied in quality initiatives concerns itself with finding appropriate ways of bringing it about. As was described in Chapter 2, there are several patterns proposed for causing change, and here some of the leading choices are selected for testing against the evidence. They are

- ❑ bottom-up, top-down structures
- ❑ forward mapping, backward mapping
- ❑ normative re-educative, coercive techniques

### **Bottom-up, top-down arrangements**

The most often used phrase in the research sites was that quality systems were top led and bottom fed. In practice, however, for the most part the reiterative interaction between levels that this phrase implies did not exist. All sites were to some extent working on a top down model, but as was seen in Chapter 5, the extent of senior management commitment and active leadership was mostly unimpressive.

It was only in a minority of cases that determined leadership also encouraged maximum initiative from the working base of the organisation. In one case the

leadership was strong but committed to a particular 'hard' model and widely criticised for not involving the base except by using coercion.

The majority of initiatives were started at the base. They were not then well connected with other levels of the organisation, and did not form part of total organisational quality initiatives either through specification of objectives or techniques, or by the allocation of resources. In fact, in most of the observed cases the action was at the top or the bottom but with no linkage or coherent policy linking the two. Most of the cases displayed a quality structure and a quality facilitator or manager. The latter's role was that of educator and facilitator without staff authority to fully inaugurate and monitor action. Many of the initiatives began with a statement of principles followed by educational events without further follow through.

In one authority, the author was able to monitor efforts to bring two hospitals under a single management team prior to both hospitals being merged. The two hospitals were implementing different forms of quality improvement. The larger acute unit was implementing a top-down TQM approach whilst the smaller hospital was following the Personalising the Service Initiative (PSI). This latter was a bottom-up arrangement of small front-line teams facilitated by someone other than their own manager.

The differences are summarised in Table 9.8 below. It can be seen that there were advantages and disadvantages to both approaches. Efforts were made by the unit to draw on the best of both but, it has to be said, it was relatively unsuccessful in bringing the idea of bottom-up approaches into the larger hospital. This occurred for many reasons including sheer size, incompatibility with the general top-down culture, constant reorganisation, the loss of the quality manager (not replaced) and a decision to restart the quality initiative with a new management consultant-led programme.



Table 9.8: Comparison of bottom-up and top-down approaches in a split-site provider unit

<b>Common Axes</b>	<b>Hospital following bottom-up approach</b>	<b>Hospital following top-down approach</b>
<b>Breadth versus depth</b>	Tended to be uni-disciplinary, inward looking isolated teams. Narrow breadth but greater vertical penetration	Tended to be more corporate, more multi-disciplinary, outward looking and more likely to be integrated with organisational objectives. Much less penetration after three years except where full directorate quality structures had been put in place.
<b>Approaches and activities</b>	Mainly reactive, problem-focused, concerned with generic issues, entrepreneurial and based on personal interests. Mainly focused on improving environment though this changed somewhat in Year 3	More proactive and systemic. More likely to be looking at cross-functional issues. Strong managerial content
<b>Commitment and awareness</b>	Senior management-High Middle management-Low Junior staff-High	Senior management-High Middle management-Moderate Junior staff-Low
<b>Issues</b>	Potential for inward looking teams Preponderance of very enthusiastic staff but under-skilled in quality techniques Lack of coordination and some duplication/inconsistency Concern by middle managers that they were losing control Failure by some managers to recognise and reward individual efforts Staff felt that at least the changes made were the right ones	Long implementation Organisational drag and cynicism could build up High levels of rumour in absence of detailed progress reports Lack of consultation with junior staff by management Lack of ownership of aims/objectives by staff at base

### Forward mapping, backward mapping (see Chapter 2)

It follows from the description of top-down initiatives above that there had been little or no mapping of either kind for setting quality objectives. The general model, however, was one of forward mapping of change. Objectives had been set at the top but in most sites, implementation had not been achieved through the phased application of specific techniques.

Most of the initiatives had been started outside the TQM pilots at the point where practitioners worked with their clients. For the most part these had not been brought together into a total organisation scheme or worked through layers of organisation and ultimately adopted by the top. Some forward mapping was evident in a minority of cases where it had been felt that a culture shift had been secured through the pursuit of specific problems and the monitoring of their solution.

### **Normative re-educative, coercive prescriptive**

In only one site was full managerial authority imposed to secure a quality initiative of a specific type although in another, trainers were recruited to teach a particular body of techniques sometimes against their own wishes. For the most part, inauguration and maintenance of quality initiatives have been through educational means, through short training courses, were sometimes then cascaded through the organisation by other trainers or by managers, or through quality circles. The coercive models of change were therefore evident only in a small minority of cases and often unsystematic attempts had been made to shift the norms and culture through educational means.

### *Approaches to quality improvement*

The approaches taken to both the concepts and implementation of TQM were varied. The range can be seen in Table 9.9 below. This table does not cover all the sites (different services in an authority, and even in a trust could be following different approaches) but the table does show the range of approaches in the sample. It also shows that a majority of the sites had changed course once, and in the case of one location, twice over the period of research. Not surprisingly, the sites that had changed course were those having the utmost difficulty in making progress on implementation. Although TQM was intended to be used to frame the way all quality initiatives were coordinated and implemented, this was only happening with conviction at one site.

Two others had used the more general notions of leadership for change to underpin some projects but this did not always have a strong connection with TQM. Consequently, major change programmes tended to be taking place alongside TQM rather than as part of an integrated approach. They included BS 5750 where registration was being sought in services as far apart as community dentistry, catering and medical engineering. Nowhere were these linked more than peripherally to TQM. Patient's Charter groups, King's Fund hospital audit groups, medical audit groups and Resource Management Projects were also in place at nearly all the sites. It should be said that, overall, the understanding by a significant

proportion of respondents was not strong on any of these initiatives (other than those who had a special interest in, or responsibility for, the schemes).

Table 9.9: The range of approaches to TQM implementation

	<b>Features</b>	<b>Origins</b>
1	Explicit Crosby complete with all 14 steps etc	Crosby management consultants – 'hard' Crosby model – now self-driven by quality staff with modified language and steps
2	Crosby derivative, using much Crosby language but not explicit step leaders or his implementation stages etc	Management consultant led. They helped design and carried out much training. Still involved
3	Mostly a self-driven model of comprehensive and dynamic standard setting. Now in early stages of another change to Deming – training only but will implement in 3 lead departments	Management consultant led for original diagnostics and development of values etc. Then self-driven standard-setting, followed by self-driven move to Deming
4	Started with Deming theory but prescriptive approach. Faltering with loss of Chief Exec.	Following Deming but self-developed implementation
5	Self-driven programme later moving to Deming but only in limited number of training events. No implementation in structures or processes	Self-driven 'generic' initiative but now switching to Deming
6	Strong customer service model supported by high profile management change programme already running when TQM started	Management consultant led change programme adapted from commercial-sector service model. Strong emphasis on leadership for quality
7	Several management consultants with differing ideas involved in different parts of organisation. Emphasises leadership for quality and change agents. Now considering following Berwick	Model adopted was part self-developed and part based on management consultant. There was a recent move to switch to Berwick but re-organisation has made future uncertain
8	Based on education-led changes through empowering managers and staff in professional development groups. Detailed training packages developed on semi-commercial basis	Based on partnership with local University to develop training materials and approaches to professional development
9	a) Approach based on training critical mass of staff in customer awareness. Sought attitude change through top-down corporate approach but little done on techniques or structure for quality  b) In another hospital under same management team employed the Personalising the Services Initiative – explicitly bottom-up in nature	Self-developed and driven. Now changing to management consultant led programme after own scheme seen to have stalled.  Drew on expertise of ex-NHS consultant for advice and training then self-driven

It is important to note that this was mediated by the success or otherwise of the TQM programmes. For example, a King's Fund organisational audit was carried at two of our sites during the evaluation – one was a non-TQM site just setting out on structured quality improvement and one was what was probably the most advanced TQM site. At the non-TQM site there were considerable problems with the audit – staff had little training or understanding, they saw it as a mechanistic paper-driven exercise which was superficial, and which was (many of them said) organised *by* the doctors and managers, *for* the doctors and managers.

The results at the TQM site were totally different. Staff interviewed saw it as just one part, but an important part, of their overall audit efforts. Its limitations were realised and accepted by more staff than at the non-TQM site. This was also true of views about the Patient's Charter and BS 5750 – those who spoke about the initiatives could see how they might all contribute, in different ways, to process improvement.

The different approaches to quality assurance (this term is used because few of the sites could claim to be doing TQM) could be analysed in different ways as described below.

### By 'hardness' of approach

Some of the approaches were more prescriptive and directive than others. At one end of the spectrum, the Crosby site and a second that was following a management-consultant-led Crosby derivative, were particularly specific in both content and modes of implementation. They were explicitly top down in character, though both were quickly into a pattern of 'bottom-fed' quality improvement. This bottom-fed process, though, had to take place within the quite severe constraints of the model being followed.

The site employing a professional development group approach was at the other extreme with the accent being on normative re-educative concerns. All change was

to be developed and led through multi-level groups on a similar pattern to the Post Office Counters approach of 'learn-use-lead'.

The leadership sites were in between, with the implicit idea that improved leadership would inspire and move staff towards the organisational objectives – not necessarily by empowering them but more by acting as role models for change. This is not to say that there was no empowerment; there were some examples especially in the community services but the leadership model was only peripheral to this movement. It was difficult to judge some of the self-development approaches because there had often been insufficient movement to ascertain how they had come about.

### Corporate integration

In terms of lateral integration, the Crosby sites were more successful in bringing different initiatives together in a single framework. One, in particular, had made significant efforts to integrate the Patient's Charter, Patient Focused Care and the King's Fund Hospital Audit amongst others, with their TQM programme at both corporate and operating levels. The non-TQM sites, and those sites in the TQM sample that had made little progress on TQM, had encountered difficulties with these often disparate schemes.

The standard-setting site had achieved what few others had managed – a genuinely dynamic system that went well beyond nursing. Although this led, in some situations, to quality advances, it could not be described as TQM. There were no quality improvement structures or groups below senior management level and up to 1993, no one had been trained in TQM.

The King's Fund Hospital Audit site was also somewhere in between. It had achieved broad coverage in its audits and brought a unified theme and methodology to the process. However, it was based on the assumption that documentary audits were an effective way of bringing about change. This was true as far as some practices were concerned but, in the absence of other forms of quality assurance, including audits of the actual services, it was always going to be too narrow in its

focus. It certainly could not be considered to amount to TQM. Like BS 5750 it was about assuring standards rather than setting them and made little room for patients or their carers to be involved in designing or carrying out audits.

### **Empowerment of staff and users**

This factor was more dependent on how TQM was implemented than the concepts behind some of the approaches. For example, Deming's model was being applied in quite different ways at three sites. At one, it was being used as a training mechanism for increasing understanding of the need to measure variation, with little implementation in practice. At a second, it was also being used in training but plans were in hand to progressively install it in three lead directorates once it had been developed and negotiated with top medical staff. At the third location, it was being implemented in a highly prescriptive and top-down way. (Deming would probably say that if you did it this way, then it was no longer his model, but it was still intended to use his ideas and methods of process analysis.)

The Crosby approach actually involved a considerable number of staff in interesting and highly effective quality projects at a small community hospital but was significantly less effective at the larger acute unit. It clearly required well-developed relationships and a prior willingness to tackle some substantial and long-standing areas of error and waste. It was also led by a charismatic consultant who certainly helped the process. Staff empowerment in this context was clearly constrained by the model. It would have been difficult, if not impossible, for a member of staff to initiate change without following the quite elaborate quality improvement procedures, or without using Crosby's definitions of quality.

The other approaches, including the softer leadership and self-developed approaches appeared, on the face of it, to provide for greater empowerment of staff. However, in many cases, they reached only a limited number of people. It was apparent that these approaches needed more structure and direction in order to get more people involved.

Empowerment of patients and carers was weak at most sites although there were significant exceptions to be found everywhere, often the result of dedicated effort by individuals or small groups with a particular interest in a single client group. TQM actually had done little to promote empowerment (as opposed to giving out information and initiating post hoc satisfaction surveys). The tension between developing comprehensive orthodox TQM initiatives that require complicated language and an appreciable level of technicity, and involvement of users who may be unfamiliar with the theories and concepts of TQM was a significant finding.

There was more community involvement at the weakest TQM site and least involvement at the one that had made most progress. One of the consequences of the models of TQM revealed in this research (in both the public and private sector) is that they can encourage staff to concentrate on internal customer-supplier issues to the exclusion of the end-user. There were insufficient data to say with certainty that this finding would hold well across more sites, but the data obtained were enough to give some cause for concern.

### ***Conclusions***

Whilst many factors affected the likely success of TQM schemes, much depended on the design of the schemes and the care that was taken to ensure that they were adapted to take account of the structures, systems, range of work and styles, and professional values and norms. It is noteworthy that the two pilots that made most progress on TQM were the only ones to carry out measurement of pre-existing issues and extensive pre-planning before they were launched. The pre-intervention data collection exercise forced senior managers and clinicians into a detailed consideration of the issues facing the organisations about how to remain competitive – survival was a significant factor that they needed to take into account. They had this in common with both the commercial companies in the research sample where there was also a feeling of the need to change in order to survive. This produced a certain amount of co-operation and mitigated what would otherwise have been seen to be particularly ‘hard’ approaches to TQM.

## Chapter 10 – Summary and Conclusions

This empirical study of TQM pilots has provided a wide range of data about the progress made on implementation of TQM in 31 TQM NHS sites and two commercial companies, Post Office Counters and Thames Water Utilities. Since the research sample also included four non-TQM NHS sites, some analysis was possible of the extent to which TQM added value beyond that which could be expected from other forms of quality improvement activity.

The desire by the Department of Health to be as eclectic as possible meant that a wide range of quality improvement models was in evidence. The pilots were not set up with a full awareness of the variety of models being attempted but by virtue of that perhaps unintended variety it made it possible to investigate an equally wide range of factors that affect the use of TQM. From this wide range of experiences, some broad generalisations can be drawn in the form of the propositions first set out in Chapter 1 and returned to below.

### *The nature of the NHS*

***The first proposition was that the NHS TQM pilots that made the most progress in implementing TQM would be those whose approaches to TQM had been adapted to encompass the diversity of services provided by the NHS.***

This proposition is supported by the evidence as far as changes at the very top and very bottom of some of the experimental locations were concerned. However, since progress at most sites fell a long way short of what might be expected in a successful implementation one is speaking here of only one or two sites. Where locations seemed to have the most difficulty was in bridging the gap between top-down production of corporate plans and the bottom-up involvement of staff and patients in operationalising those plans. This is discussed further below concerning modes of implementation.



In the more successful larger units senior management had come to some agreement with senior clinicians, generated corporate plans for implementation of TQM that took into account the various needs of different services, and put appropriate TQM-type quality structures in place. At two locations there had been in-depth studies carried out prior to the planning stage of the strengths and weaknesses of different departments and the work also included surveys of GPs, community service staff and patients. At the most advanced of these two sites there had been small-scale studies of 'the cost of quality' (or more accurately the cost of non-conformance). These did much to demonstrate the inefficiencies in some systems and that performance was poor on specific quality criteria.

Understanding of TQM, and commitment to its principles, were markedly stronger at these two sites than at locations where such studies had not been carried out. The data coming back from surveys, for example, did much to convince clinicians of the need to improve on the systemic and generic forms of quality whilst reassuring them of the technical strengths of many of their services. Training at this level had also resulted in some movement towards single definitions of quality.

At the base of these and other organisations, there was also much evidence of quality improvement within individual teams, some of which followed TQM principles by insisting on evidence-based change driven by patients' views. There was also evidence that the general principles of TQM had been adapted in novel ways to the special needs of different patient and carer groups. However, much of this effort conflicted with demands being made on front-line staff to implement other changes that were invariably underpinned by different models and assumptions – the Patient's Charter, nursing standards, BS 5750 and so on. The lack of long-term funding and committed leadership (medical and managerial) caused many of these worthwhile initiatives to founder. This finding is supported by another study of that period where a survey of 28 quality teams showed that 43% had stopped meeting within two years of formation – lack of funding and middle-management support were again two factors.<sup>201</sup>

Where the change process was weakest, though, was in the middle of the larger more complex acute hospitals. Even at the most successful of the hospitals in the sample, the sheer diversity of services and the range of organisational and systemic changes being made at the same time as TQM defeated all but the most ardent of TQM supporters. The problems were compounded by a general unwillingness of junior doctors and consultants to participate in what they saw as an attack on their professional discretion. Few took the time to attend training sessions (well below 5 % at most sites) or to take part in quality improvement groups and other TQM-related activities. The situation was compounded by poor definition of the accountabilities of managers, doctors, and quality facilitators. The latter role, in particular, caused many problems for line-managers who were unsure about what authority facilitators had in the day-to-day running of departments.

The second and fifth propositions are taken together.

*A second proposition is that it would be difficult to establish TQM in the NHS through traditional TQM approaches that depend on rationalistic views of organisational change and that are based in large measure upon a single, customer-driven, definition of quality. A multi-modal, mixed model allowing for sensitivity to the intrinsic characteristics of the organisation could be inferred to be more effective.*

*The fifth proposition is that rationalistic models of change, of which TQM is a prime example, are less suited to public sector organisations such as the NHS. Primarily this is because of the severe social and medical problems to be faced; complex and diffuse organisational structures and cultures; multiple stakeholders with conflicting views about both means and ends; and difficulties in establishing agreed measures of performance, particularly around clinical outcomes.*

TQM is an organisational change process that follows structured pre-planned sequences of implementation. It is clear that in choosing to conduct experiments with TQM the Department of Health took a rationalistic view of policy analysis and

formulation. It assumed that pre-planning, setting of objectives, and pre-determined sequences of change would work. But these propositions could not be fully tested because the eclectic approach that the Department encouraged weakened the experimental design in as much as the latitude given to the pilot sites meant that there was little attempt to rigorously define the experimental conditions. Thus, it is difficult to say whether the experiments failed primarily because a rationalistic approach was adopted, or whether a failure to follow through in any rigorous fashion on the implementation of such a strategy was more influential.

As discussed in Chapter 2, the decision to follow a rationalistic approach implies certain assumptions:

- That, following Berman<sup>202</sup>, a programmed approach implies a rigorously designed and detailed specification for the implementation (although Wolman argues that the conceptualisation stage may be rather more important.<sup>203</sup>)
- That the analysis of the problems was correct in the first place – no easy matter given the complexity and multiplicity of problems faced by the NHS. The issues are more akin to what Rittel has called ‘wicked’ problems.<sup>204</sup>
- That there is an underpinning theory which connects the analysis of the problems to systems changes and predicted changes in outputs.<sup>205</sup>
- That a switch between programmed and adaptive implementations can be effective but needs to be based on a clear understanding of which mode is best for what changes, and why the switch is necessary. It, too, should be planned.<sup>206</sup>

Berman argues that programmed implementations best suit stable, tightly coupled organisations where there is low conflict and agreed authorities and accountabilities for the proposed changes. Clearly, this was very different from the state of the NHS in 1990. The organisation was (and continues to be) a loosely couple one with

complex structures and multiple socio-technologies. Perhaps, on reflection, it would have been more useful for the Department of Health to structure the experiments around a test of TQM schemes as differentiated by levels of prescription and adaptation rather than, as it did, select prospective sites based on ideal-typical views of orthodox TQM.

There have been attempts to offer alternative models for structured quality improvement. Much debate has hinged on analyses of the manager–clinician interface and it is generally accepted that fundamental differences of culture, professional norms and values lies at the heart of the difficulties. However, most attempts to improve relations between the two groups have focused on structural and systemic change rather than seeking change in values and personal behaviour.

Pollitt, for example, sees the main implications of introducing QA as being twofold – explicit public statements about standards of service provision (thereby demystifying and delimiting the narrow criteria used for medical judgements of quality), and an increased responsiveness to the stated or implied needs of users.<sup>207</sup> He puts forward six possible relationships between managers and professionals in relation to Quality Assurance (QA). These range from minimal intervention at one end of the spectrum, through to a point where the professional is directed to employ a designated approach and rewarded when there is compliance. The six approaches are in Figure 10.1 below.

Figure 10.1: Pollitt's (1990) variations on manager-professional relations

Approach 1	Approach 2	Approach 3	Approach 4	Approach 5	Approach 6
Exhortation to install QA but no interventions or sanctions	Offers positive incentives to install but no interventions or sanctions	Requires installation with penalties if necessary but no intervention	Requires installation and specifies design features but no intervention	Requires specific model of QA and intervenes to drive it	All of 1-5 but uses data to deploy, promote and discipline professionals

Pollitt advises a middle course, Approach 3, perhaps with some requirement that the data be made available for, and be of a kind, that would allow inter-institutional comparison.<sup>208</sup>

Whilst this might be appropriate for the specification of a single QA system, it would probably be seen as insufficient within a full TQM programme. For example, one could envisage each of six or seven clinical directorates deciding to design and implement their own versions of QA with little in the way of co-ordination or compatibility. For an ideal-typical or orthodox TQM programme, there might well be pressure for Pollitt's fifth approach. This would be one where there would be more management intervention in order to ensure that a generalisable corporate approach was being taken. Here managers might be involved in the full specification of the design, development, implementation and monitoring of any systems for continuous quality improvement. The role played by the General Manager or Chief Executive would then be one of co-ordinating and integrating multi-disciplinary relationships between all those involved in process improvement at senior levels.

In their argument for a mixed model of quality assurance for the NHS, Joss et al<sup>209</sup> argued for a position in which the centre would require all services and departments to put quality assurance systems in place, but work with individual services to develop systems which would be most appropriate to those services' requirements. The role of the centre would then be in carrying out a 'meta-evaluation' of how well those systems would be operating; each service would also be required to evaluate the content of its own work through a QA system that was most suitable for the socio-technology of that service. There would, however, be a requirement to monitor all three modes of quality – technical, systemic and generic. This requirement, on balance, would most closely approximate to Pollitt's Approach 4 with Approach 5 being a last resort.

In thinking about change strategies, important lessons could also be drawn from the experiences of the Post Office Counters and Thames Water Utilities. As was described in Chapter 7, the companies began with very different problems and

employed equally different quality improvement techniques. However, as time went on, each company found itself having to deal with matters it had at first thought not to be important. It then transpired that a similar set of issues were relevant to both companies. Implementation strategies progressively converged toward a small number of common ideas. If the hypothesis of converging commercial strategies was to hold good for a wider selection of companies and, most importantly for the public sector, then important general lessons could be learned. The following points may be derived from such a hypothesis. For TQM to succeed:

- a) The model of TQM selected and/or developed by an organisation would have to be appropriate to the environment of that organisation. Culture and socio-technological issues are important variables. In particular, the model chosen would have to value, and then harness, existing skills in the organisation.
- b) The order in which changes were introduced would depend on a thorough analysis of the starting point in terms of organisational structures, systems and processes; strengths and weaknesses in current quality systems; staff attitudes and skills levels; and a detailed understanding of customer requirements.
- c) If the organisation sets out to secure a shift towards organisation-wide, customer-driven continuous improvement it may have to implement a common general set of changes, irrespective of starting point. Although it may start out with a particular set of priorities, it will subsequently have to tackle a common set of problems and employ a similar range of organisational changes.

This, in turn, suggests the importance of having some sense of what will be required over the medium to long term. Such a rationalistic approach suggests that senior management have to be able to provide constancy of purpose and demonstrated commitment through their personal leadership styles. The considerable attention paid by the commercial companies to pre-planning for an integrated strategy and

their general preparedness to subject their implementations to critical review were significant factors in their progress on TQM. This implies that the NHS plans would need to be supported by a critical and reflexive review process. To this extent, the commercial experience provided a valuable lesson for the NHS.

***The third proposition is that the problems of providing an integrated structure for managing quality are magnified in the NHS with its complex structures and more diffuse ways of operating.***

Those NHS sites that were following Crosby or Crosby-like schemes, or management-consultant led programmes, took much the same approach as Post Office Counters by implementing a separate shadow structure for managing quality improvement. Similarly, some NHS programmes sought to keep accountability for quality in the hands of line managers in much the same way as Thames Water tried to do. The evidence suggests, therefore, that differences in performance in the two sectors were not significantly a function of differences in the structures set up for quality improvement. There is ample evidence throughout this study to show that the differences lay rather more in the extent of the commercial companies' pre-planning, their clarity and commonality of purpose, and the less complex services they were required to deliver.

Although Post Office Counters started off with a separate structure for implementing quality improvements, there was a clear strategy for how the quality structure and the normal line-management structure were to be merged, when they were to be merged, and what criteria had to be met before that would happen. Further, the objectives and purpose of each structure were clear and there was good agreement at senior level across operational and specialist support functions about the need for a specific approach to quality improvement and how it was supposed to work. There was also an equally clear sense of purpose at Thames Water Utilities about their plans. In contrast, there was little evidence in the NHS of any thought about how or when structures should be merged and, except for one or two sites; there was little agreement at the sites about the most appropriate quality improvement models.

The problems for the NHS sites lay in the multiple arrangements already in place for managing other aspects of quality. As shown in Chapter 9 (see for example Figures 9.1 and 9.2), there was an almost bewildering mix of different initiatives that had to be integrated into the TQM framework. These included King's Fund Hospital audits, medical audit, clinical audit, nursing standards and audits, contracting and compulsory competitive tendering, Resource Management, Patient's Charter standards, and BS 5750 applications. Most of these initiatives had very different aims and objectives and were underpinned by models and concepts that were at variance with those proposed by TQM. They were also normally managed through different organisational structures and were not easily amenable to integration.

Clearly the TQM initiatives were only a small part of the Department of Health's change agenda and national initiatives could not wait for the results of the TQM experiment. However, it would have been possible for some flexibility to be granted to the pilot sites to modify national requirements so that they were more in keeping with the principles and practices of TQM. This would have made it more likely that sites could have made a better job of integrating the initiatives in such a way that they appeared coherent and consistent to staff. This may have reduced some of the antagonism shown towards TQM by many of the medical staff in the research hospitals.

***The fourth proposition is that the degree of technicity affects the way TQM-type initiatives are accepted by staff in different disciplines.***

One of the main findings of the research was that quality could be conceived as having three dimensions: *technical quality* involving technical-professional criteria in each area of work; *generic quality* common to all areas, e.g. civility, punctuality, reliability, respect for worth of others and recognition of legal responsibilities; and *systemic quality* concerned with the efficacy of systems cutting across specialisations.

From the evidence set out in Chapters 5 and 6, and the analysis in Chapter 9, two generalisations can be made. First, degrees of technicity appear to be inversely



related to a capacity to engage in generic and systemic quality initiatives. Important exceptions to this were found, but it was as if the higher the level of technicity, the more difficult technically-minded staff found it to work across boundaries or to acknowledge the worth of others outside their own discipline. One of the reasons was the characteristics of the knowledge employed – where certainty is possible and essential, that will be the focus of the quest for quality. However, the nature of the relations with patients and other customers that the tasks require, does to some extent operate as a mitigating force.

Second, those who exercise highly technical skills are also involved with the total care system, and there are many examples of technicity and systemic quality initiatives going together. However, highly trained practitioners employed to care for individual patients may not regard the second and third aspects of quality – the generic and the systemic – as important. One can distinguish between those professional groups engaged primarily at the systemic level – for example public health – and those working essentially at the individual case level.

As was seen in Chapter 5, TQM is essentially collectivist and primarily concerned with developing common responses to aggregated flows of work. Much of the highly technical work, however, is based on providing individual responses to particular cases often at the leading edge of technical quality. TQM is therefore more likely to appeal to those in search of mechanisms for strengthening the organisation's capability at the systemic level and be seen as a restriction of professional discretion by those managing individual cases.

Granted that degrees of technicity may have made some departments more permeable to generic criteria of quality than others, what might be the ways in which different groups might relate to management as it seeks to ensure comprehensive quality systems?

- a) On technical-professional criteria, specialist departments are left to their own devices. It would be only in cases of serious default or negligence that the system would expect the application of these criteria to be

demonstrated. However, it was known that, outside the research sample, some management boards and some health authorities were receiving published accounts of medical audit. There was a moving edge of practice in which all forms of clinical audit might cease to be simply mutual peer education and become, in addition, a way in which management could monitor the efficacy of clinical interventions.

In any event, it seems likely that a quality-led unit would expect, at a minimum, to be satisfied that systems for technical-professional monitoring were in place and being used by practitioners. An essential component would be for managers and professional staff jointly to audit the quality systems.

- b) The generic and systemic forms of quality are, by definition, the concern of systems' managers and would be applied irrespective of the amount of technical monitoring that takes place. Managers also, however, have an ultimate accountability to ensure that appropriate technical forms of quality assurance are being observed – an accountability that might become acutely important in cases of alleged negligence.

### *The design of the change process*

***The sixth proposition is that where rationalistic approaches are chosen, their implementations are weakened when the planning models and planners' roles are not consistent with a rationalistic approach or when there is little or no determined follow-through on plans.***

As was seen in Chapter 2, rationalistic models appear to require clear pre-programming and coherence in implementation even where there is a switch from programmed to adaptive approaches.<sup>210</sup> This also holds good for the roles of planners and internal change agents but the evidence from the sites was that there was little agreement about what roles people such as quality managers and facilitators should be playing. Further, they often came into conflict with other staff

who also had a mandate to drive change – for example medical audit staff, research and development staff and training staff – but who were adopting different roles.

An analysis of the different roles played, for example, by quality managers and facilitators, can be carried out using Rathwell's five planner types (Chapter 2, Table 2.2). The first point is that there was a difference between the two groups. The managers usually sat on middle management steering groups or committees at which line-managers and clinicians were present. This more formal arrangement meant that in most cases they played technical rather than overtly political roles. This finding lends support to the hypothesis advanced in Chapter 2 that non-clinical service managers would also have preferred a systematised and formal planning process.

The facilitators, on the other hand, were at a lower level in the organisations and had little formal access to managers or senior clinicians at times when planning was under discussion. Consequently, they spent much of their time in more informal discussions with front-line staff where politicking was the norm. Within this group there was also a distinction between facilitators from technical departments with low or short-term patient contact (as in trauma out-patients clinics) and those from areas where there were long-term multi-disciplinary relationships with clients or patients (as in colostomy cases). As might be predicted, the facilitators representing the latter group acted as lobbyists for their groups.

There was also considerable support for the analysis of styles in Table 2.3 in Chapter 2, which broadens the previous argument from planners and change agents to managers in general. The formal appointment of quality managers, and concomitant changes in the job descriptions of some managers made it clear that they were expected to contribute at a technical level on issues of quality. Providing they played professional expert roles they were not seen to be a threat to mainstream management or to the clinicians. However some took on the mantle of activists at the far right of Table 2.3. They often then became casualties – at least two middle and senior managers with accountability for quality were sacked and not replaced. Two senior consultants also had difficulties with colleagues after they

became strongly committed to quality improvement approaches – one to Berwick’s models and one to Deming.

*The seventh proposition is that quality improvement schemes are most effective when they follow design and installation phases based on a helical sequence of unambiguous top-down commitment and genuine bottom-up engagement with staff, and a planned mixture of forward and backward mapping.*

The theoretical aspects of the issue were set out first in Chapter 2 and the empirical results from Chapters 5 and 6 were analysed in some depth in Chapter 9. From Chapter 5 one can see a clear tension between the need to implement organisation-wide change by determined efforts from the top and the equally important requirement that staff are involved and committed to the consequent changes in working practice at the base. The way that sites set out to design and implement their different schemes suggested that there was little systematic attention paid to the means by which this tension would be managed. Most schemes either started explicitly from one end or the other with little or nothing in place to bring the two ends together.

In a rare opportunity, the researcher was able to observe each approach being implemented in a different hospital in the same directly managed unit. The results demonstrated quite clearly the advantages and disadvantages of each approach (Chapter 9, Figure 9.7). Since the plan was that the two hospitals would be amalgamated onto one site, the Chief Executive naturally wanted to find a way to integrate both approaches in the newly combined site. One of the most important findings of the research was that it was found almost impossible to get either site to compromise with the other site’s approach. Both hospitals were solidly committed to their own models and at the end of the research period, two years later, little had changed. This strongly suggests that if one intends to put in place an approach designed to harness the best of both models, there must be an overt plan to do so from the outset.

There were similar findings in respect of the forward mapping, backward mapping<sup>211</sup> debate. The design and implementation process was invariably forward and downward with the cascading of policies, plans, objectives and training. Except at two sites, there had been little or no attempt to backward map the perceptions and requirements of end users, or of staff in front-line roles. At most locations, this led to a lack of acceptance of the relevance of the TQM material by staff and a disjunction with the perceptions of patients and clients. There were some notable exceptions but these were most often led by independent action of staff in specific departments or specialties where there was felt to be a need to involve patients. It was rare to find that this kind of activity had been mandated by the top as part of a coherent and integrated quality strategy.

As was suggested in Chapter 2, it is possible to conceive of a mixed model in which the top first outlines a broad philosophy based on a strategic assessment of the external environment at that level. This outline would be discussed at each succeeding lower level, the potential consequences identified, and appropriate changes negotiated before the reaction of significant interest groups makes it way back to the top. This would then be an iterative helical arrangement in which the organisation would be open to change as the result of feedback from both internal and external sources.

***The eighth proposition is that there is a potential contradiction in as much as TQM is required to generate empowerment of users so that they can contribute to its design and evaluation but, to contribute, the users have to understand TQM's increasingly sophisticated language and technicity.***

As was seen in Chapter 3, an important characteristic of commercial TQM programmes is the focus on the customer – going as far as to require that the organisation's structure, systems and processes should be re-oriented towards meeting quality standards based on the customers' perceptions of their requirements. In some schemes, particularly in public sector adaptations, there is a further requirement to move from customer focus to customer 'empowerment'. The argument is that the need for more transparency and public accountability<sup>212</sup>,

combined with the fact that users of welfare services have more voice than they have power of exit<sup>213</sup> means that a more influential role should be sought for them.

However, the empirical data set out in Chapters 5 and 6 suggested that the 'harder' models of TQM required some effort to understand the concepts and working technical language for each model. This was particularly evident in Deming's ideas based as they are on understanding statistical variation in processes. Indeed, as described in the discussion about professionalism in Chapter 2 and reinforced by evidence in Chapter 5, managers perceive themselves as being equipped, at best, with a set of diffuse general skills. However, with the advent of TQM they are promised a set of 'theoretical' and conceptual models that they can use to develop expertise and so challenge the professionals<sup>214</sup>.

In this research, the site which was furthest ahead in terms of organisation-wide implementation of an explicit model of TQM seemed to have less overall patient empowerment than sites which had made much less progress on TQM. For example, a multi-disciplinary group of staff at the hospital were developing a new unit to be based on Patient Centred Care but there were no patients or carers on the working group.

It is almost as if the increasing technical nature of the language and the procedures for implementing TQM at the advanced site had resulted in an overemphasis on internal processes to the exclusion of end users. Certainly there appeared to be a reduced opportunity for relatively 'naïve' users to be involved in the design and delivery of new systems. The situation was exacerbated by the tension that exists in all TQM initiatives between a top-down, forward-mapping process in order to gain organisational-wide change, and the need for bottom-up, backward-mapped customer-driven process improvement. In this case it had been resolved at the advanced site in favour of the top-down, forward-mapping mode.

This phenomenon was a second-order finding and too much should not be made of it. However, it is an important issue because increasing the representativeness and independence of those involved in auditing the quality of health care goes beyond

TQM *per se*. For it to become a reality, new ways would have to be found to develop people from outside the delivery systems to work as independent auditors. It has been suggested that ‘informed user groups’ would be one way to overcome the problem<sup>215</sup>, but the whole issue needs further research.

### *Concluding remarks*

This thesis has analysed attempts by both private and public sector organisations to bring about quality improvements through wide-scale organisational change as part of wider managerial and governmental fashions of securing higher quality that built up in the 1980s. The NHS trials were based on approaches to quality improvement that originated in manufacturing organisations and were later adapted for private sector service industries. These, in turn, were based partly on the work of private sector quality ‘gurus’ and partly on the practical work of many managers with accountability for quality improvement systems in both public and private sectors.

The thesis confirms the general experience that attempts to install wide-ranging changes on the basis of generalisable models are likely to fail unless they have been adapted to the deeply-seated values and beliefs of the groups and institutions who are expected to adapt to the change. The TQM experiment in the NHS is a prime example of social engineering that largely failed because it was imperfectly conceptualised and implemented in an area where the intrinsic nature of the work would make it difficult for any system-induced change to take hold.

## Glossary of terms

<b>A&amp;E</b>	Accident and Emergency (Services, Unit, Directorate etc)
<b>AIDS</b>	Acquired Immune Deficiency Syndrome
<b>AQL</b>	Acceptable Quality Level
<b>BAU</b>	'Business As Usual' (Post Office Counters)
<b>BPRE/BPR</b>	Business Process Reengineering
<b>BS 5750</b>	The British standard for quality systems developed and inspected by the British Standards Institute (see also ISO 9000)
<b>CCT</b>	Compulsory Competitive Tendering
<b>CF</b>	'Customer First' (Post Office Counters' TQM approach)
<b>CHC</b>	Community Health Council
<b>CQI</b>	Continuous Quality Improvement
<b>CSC</b>	Consumer Services Committee (Thames Water)
<b>CSSD</b>	Central Sterile Supplies Department
<b>CTC</b>	Cardiothoracic Centre
<b>DGM</b>	District General Manager
<b>DHA</b>	District Health Authority
<b>DMU</b>	Directly Managed Unit
<b>DNA</b>	Did not attend (statistics for patients not keeping appointments)
<b>DoH</b>	Department of Health
<b>DRI</b>	Doncaster Royal Infirmary
<b>GP</b>	General Practitioner
<b>ISO 9000</b>	The international series of standards for quality systems provided by International Standards Organisation (the international equivalent of British Standards and BS 5750 q.v.)
<b>ITU</b>	Intensive Care Unit
<b>LHA</b>	Liverpool Health Authority



<b>MONITOR</b>	One of a number of tools for measuring performance against standards etc – also includes Phaneuf, Qualpacs, Theatreman, Ituman, Crescendo, Patsat, Qaid and Qarx
<b>NHS</b>	National Health Service
<b>OT</b>	Occupational therapy/therapist
<b>PAM</b>	Profession Allied to Medicine
<b>PSI</b>	Personalising the Services Initiative
<b>QA</b>	Quality Assurance
<b>QC</b>	Quality Control
<b>QES</b>	Quality Education Seminars
<b>QIA</b>	Quality Improvement Activity
<b>QIP</b>	Quality Improvement Project
<b>QOS</b>	‘Quality of Service’ (Post Office Counters’ measure of quality for post office counter services)
<b>QPA</b>	‘Quality of Performance to Agency Customers’ (Post Office Counters measure of quality to major customers)
<b>QSG</b>	Quality Steering Group
<b>QSM</b>	Quality Support Manager
<b>QWG</b>	Quality for Work Groups
<b>RHA</b>	Regional Health Authority
<b>RMI</b>	Resource Management Initiative
<b>SLA</b>	Service Level Agreement (internal customer-supplier contracts)
<b>SPC</b>	Statistical Process Control
<b>ThQA</b>	Thames Water Quality Award
<b>TQC</b>	Total quality control
<b>UGM</b>	Unit General Manager
<b>VFM</b>	Value for Money

## Appendix I – Analysis of TQM versus other initiatives

TQM OBJECTIVES	Patient's Charter	Resource Management Initiative	Medical Audit	Compulsory Competitive Tendering
1. Customers' definitions of need put at centre of process improvement	Not directly – waiting times <u>are</u> a patient concern but standards are not set locally in response to local customer requirements as would be required under TQM	Not a strong feature, although some link to internal customers. Presumptions of indirect link to patient care	Not in standard medical audit though there are a few examples of audit which specifically build in patients' views	Not a feature. Internal and external customers rarely consulted about their requirements prior to tender. Also problem of single supplier relationships
2. Collective definitions of quality across whole organisation	No actual definition of quality. Also many parts of service not involved in Charter	Not designed to achieve this	Yes, at least between doctors, but does not include nurses or support services etc.	Does not produce common definitions but quality likely to be specified in contracts
3. Reductions in inter-disciplinary barriers	Has potential to do so through limited multi-disciplinary collaboration – e.g. over waiting times	Should do so because those responsible for own activity must consult others involved in process management	Yes, within and between specialities but not between doctors and other staff	No <i>a priori</i> reason why CCT should produce this. Opposite could be the case where ownership of quality is low
4. Reductions in errors and waste	Not directly but might do so indirectly through analysis of processes	Definitely should result in savings. More likely to be savings in waste than in errors	Yes, especially where local medical audit includes use of resources. More likely to result in savings in errors than in waste	May lead to this but not always without compromising other aspects of quality
5. 'Obsessive' commitment to Continuous Quality Improvement	Not a specified objective – standards in this format are relatively static and emphasise minimum performance	Yes, but only in respect of optimum use of resources – not in patient satisfaction	Yes, in respect of technical and professional quality but not designed to enhance overall quality of patient experience	Not likely to result from CCT – but there will almost certainly be a commitment to monitoring existing standards in contracts
6. Major commitment to training and education in quality improvement techniques	No training for staff specified	Yes, in relation to use of management information, but not in use of specific process improvement tools	Yes, in that it is a vehicle for education, but only weakly related to existing medical training and weaker still to quality improvement techniques	Few contracts specify training and development requirements other than national minimum standards – no training in quality improvement
7. Provision of enhanced management information	Could lead to better management information if performance is monitored on an on-going basis	Definitely – the prime purpose of the initiative	In theory, yes, <u>providing</u> general aggregated information is made available to management	Yes – monitoring of contract specs will provide useful management information

## Appendix 2 – A comparison of three authors' approaches

JURAN	CROSBY	DEMING
Build awareness of need and opportunity for improvement	Ensure management commitment	Create consistency of purpose
Set goals for improvement	Quality improvement teams	Adopt the new philosophy
Organise to reach goals (establish a quality council, identify problems, select projects, appoint teams, designate facilitators etc.)	Quality measurement	Cease dependence on mass inspection:
Provide training	Monitor the cost of quality evaluation	Select vendors for quality and not just price
Carry out projects to solve problems	Quality awareness	Find the problems and work continually for improvement in systems
Report progress	Take corrective action:	Use modern methods of training on the job for employees
Give recognition	Ad hoc committee for zero defects programme	Institute modern methods of supervision for foremen and supervisors
Communicate results	Supervisor training	Drive out fear
Keep score	Zero defects day: performance standard set	Break down barriers between departments
Maintain momentum by making annual improvement part of the regular systems and processes	Goal setting for each work group	Eliminate <i>numerical</i> goals and slogans
	Remove causes of error. Forms developed to describe problems passed to appropriate groups to reply	Eliminate work standards which prescribe numerical quotas
	Recognition: Award programmes	Foster pride in workmanship
	Quality councils	Institute vigorous programme of education and training
	Do it over again: set up new quality group and follow the steps again.	Create top management structure to push the above 13 points <i>every day</i>

## **Appendix 3 – Interview Locations**

### ***TQM SITES:***

#### **BOLTON**

Bolton General Hospital

Bolton Royal Infirmary

#### **SOUTH-EAST STAFFORDSHIRE**

Burton General Hospital

Burton District Hospital Centre

St Matthew's Hospital

St Michael's Hospital

Victoria Hospital

#### **DONCASTER**

Doncaster Royal Infirmary

Montagu Hospital

#### **TRAFFORD**

Bridgewater House (psychiatric hospital)

Trafford General Hospital

Trafford Park Hospital

#### **LIVERPOOL**

Alder Hey Children's Hospital

Broadgreen Hospital

Cardiothoracic Centre

Liverpool Maternity Hospital

Royal Liverpool University Hospital

## **WINCHESTER**

Andover Hospital

The Mount Hospital

Royal Hampshire County Hospital

St Paul's Hospital

St Walerics Hospital

Silverhill Community Health Services

Winchester Hospital

## **MERTON & SUTTON**

St Helier Hospital

Southland's Hospital

Sutton Hospital

Wilson Hospital

## **WORTHING**

Merton & Sutton Community Health Services

Shoreham-by-Sea Hospital

Swandean Hospital

## ***NON-TQM SITES:***

Stoke Manderville

Portsmouth Hospitals (2 separate units)

Cambridge Community Services/Addenbrooke's

Norfolk & Norwich (2 separate units)

## ***COMMERCIAL COMPANIES:***

Post Office Counters

Thames Water Utilities



## Interview Schedule for 1992

1. Date of interview
2. Name/age
3. Job Title
4. Length of Time in Role
5. Job Location
6. Description of Role – major features, responsibilities etc. If in same/similar role as last time, how has it changed since first interview?
7. Current Definitions and Concepts of Quality – personal and organisation's, if known. How does it differ from definitions at other sites/culture?
8. If a specific programme in place, e.g. TQM/QA/BS 5750, what does the interviewee understand by the terms and the concepts – is grasp better than last time? -does it differ from other sites?
9. Are quality standards or targets specified for the interviewee's work? If so, what sorts of activities have standards or targets and what are they? How are they linked to TQM?
10. How does the interviewee measure/monitor quality in his/her work?
11. How does the department/function as a whole monitor quality?
12. What quality initiatives have been implemented since last time? Are there any further ones planned?
13. How has structure to promote/control/coordinate quality initiatives changed since first interview? – e.g. more or less structure, more bottom up or top down, better integration etc. What are main differences between two cultures?
14. What training has the interviewee had to provide awareness/skills for quality improvement – overall *and* since last year?
15. If there are quality initiatives in place
  - a) What are the perceived benefits of the initiatives? Contrast with initiatives at other sites (any actual examples, any independent evidence?)
  - b) What are interviewee's perceptions of problems with concepts or with implementation? Do these differ to issues at other sites? (any actual examples, any independent evidence?)
16. Interviewer's remarks

## Interview Schedule for 1993

1. Date of Interview:
2. Name/Age:
3. Job Title:
4. Length of time in role:
5. Job Location:
- Interviewer:
6. Has role changed significantly since last year re quality? If so how?
7. Current definitions/concepts of quality (personal). Is there evidence of increased common definition (organisational) which embraces continuous improvement? (23b)
8. If a specific programme in place, e.g. TQM/QA/BS 5750, what does the interviewee understand by the terms and the concepts? Is understanding better than last time he/she was interviewed? (23b)
9. Are there quality standards/objectives for his/her work? If yes give examples? (22h)
10. How does the interviewee measure/monitor quality in his/her work? (22h)
11. How does the department/function as a whole monitor quality? (22c)
12. What quality initiatives are in place or planned for the job/department or function? To what extent is this multi-disciplinary/cross-functional? (22a & 22b)

### Structure

13. What structure exists in the organisation/department to progress quality initiatives?
14. Does it integrate managerial and professional/medical concerns with quality? If yes, how?(20d)
15. Does it reduce barriers between departments and/or occupational groups? (20b) If yes, give examples (23f)

### Resourcing

16. What training has the interviewee had to provide knowledge **and skills** for continuous quality improvement? (21a). Has this been sufficient for his/her role? (22g)
17. Have the implementation costs and benefits been costed – if so how – and what results? (21d)



8. Has the need for information about quality of services been adequately resourced? (21b, 21c). Has quality/availability of information improved – if yes, secure examples (22f)

### **Systems and Processes**

19. Examples of multi-disciplinary activity to improve selected processes? (22b) and examples of actual improvements? (23g)
20. Systems/processes to empower staff to contribute to service planning, delivery and monitoring/evaluation? (22e).  
Examples of actual empowerment? (23e)
21. Systems/processes to empower consumers to contribute to service planning, delivery and monitoring/evaluation? (22e) Have they actually been empowered? (23d)
22. Has the site been able to integrate all the different quality initiatives affecting this person's department/role? (22k)

### **Outcomes**

23. Have there been genuine improvements in a range of targeted processes? Examples? (23g)
24. Have there been identifiable savings made through reductions in waste and/or improvements in efficiency? If so give examples – were these due to GIRFT (Crosby) or systematic process improvement (e.g. Deming)? (23h)
25. Has the notion of internal customer chains become embedded in internal process improvements? Has internal customer satisfaction been measured and/or found to have improved? 23(j)
26. Are there any examples of positive changes in the health status of patients as a result of changes in treatment or general care? (23k)
27. Are there examples of improvements in the perception of external customers/clients/patients with regard to information and/or the general level of service received? (23k)
28. To what extent have services been reoriented as a result of a more developed understanding of stakeholders' needs? (23l)
29. If there are quality initiatives in place, what are interviewee's perceptions of problems either with concepts or with implementation?

## Appendix 5 – Factors predicting significant TQM movement

Extract from Joss R, Kogan M, and Henkel M, *Third Interim Report to the Department of Health*, October 1992, p 54

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### **Factors appearing to predict TQM progress:**

All senior managers demonstrate commitment and have detailed understanding of TQM

Well-developed/documented implementation strategy is in place, with proper objectives, time scales, action plans, and review mechanisms

Strong TQM Coordinator with excellent communication skills;  
Board-level appointment or at least direct access to Chief Executive

Sufficient funding for adequate number of TQM facilitators.  
Experience suggests need for up to one per 500 staff

Installation of a full shadow quality structure. Pre-planned strategy for integrating this with normal line management

Comprehensive review of service quality plus views of staff, users, purchasers, competitors. Then continuous monitoring of key customer criteria

Early effort to gain support of medical consultants using survey data.  
Stronger links between different forms of audit

Standard-setting but only part of continuous improvement approach

Comprehensive TQM training attended by staff at all levels including the Board. Training covers tools and techniques, not just awareness

Explicit strategy/resources to recognise/reward quality progress

Changes to organisational structures only made after careful evaluation using principles of TQM

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## Appendix 6 – Analysis of Corporate Planning Process

Site	Start Date	Mission/Philosophy Statement		Goals/objectives		Targets/Plans		Models of TQM	
		At outset	Developments	At outset	Developments	At outset	Developments	At outset	Developments
1	Quality Assurance manager appointed June 89. TQM started Sept 89. D of H bid 90/91	Yes – considerable work done on this aspect at early stage. Idea of Get It Right First Time/consistently meeting requirement not explicit – loosely concealed in 'efficient' service	Values statement continues to be used and displayed prominently	5 general goals - in outline only	More detailed objectives by Sept 90 but little in way of performance criteria or targets	None	Brief report and action plan document in March 1991. Followed by Block contract document in Apr 91 specifying range of standards and targets of Pat. Chart. kind	Two different schemes in place. No formal/explicit model at large acute unit but strongly top-down in nature. Bottom-up Personalising Services Initiative at community hospital	By 1994 both sites under single management in anticipation of re-location of all units on single site. Attempts made to integrate two approaches with little success. Management consultants brought in for re-launch
2	Launched December 89 with Steering group. Management consultant appointed Feb 90 D of H bid 90/91	Yes - Mission statement pre-dated TQM bid. No separate philosophy/value statement but implicit in goals	More explicit mission statement arising from Trust applications	4 general goals and 7 detailed strategic objectives. Up front statement of meeting internal/external customers' needs - concentration on prevention of errors	Re-stated objectives after parting from management consultants. More acceptable language but still based strongly on Crosby	40 actions set at outset complete with schedule and completion dates. However, few criteria for measurement	Project schedule used to manage implementation but little evidence of modification or development against critical review. Much stronger thrust on process improvement through statistical techniques than most other sites	Relatively 'pure' implementation of Crosby approach through dedicated Crosby consultants. Top-down process of securing zero defects; cost of poor quality/non-conformance; customer-supplier chains and corrective action all features	Broke from management consultants following disagreements about operationalising Crosby in health culture; also loss of funding in 91/92 meant authority was unable to continue funding consultants. Training package re-designed/training re-started
3	Launched 1990. D of H bid 1990. Only one unit applied for funding. This site was to be used as a demonstration site for the others in District	Only in outline. Surprisingly little detail available. Strategy document for little more than statement of quality achievements	More explicit mission statement arising from Trust applications. Also all departments now producing own business plans with statements of objectives.	Outline short, medium and long-term objectives only. Not stated in way that was measurable	Subsequently a set of criteria for quality monitoring were produced which asked series of important questions about culture, plans, objectives and monitoring arrangements. This did not appear to have been systematically used.	Little work done on this. Model was more a development approach of working opportunistically with groups of staff - either because they were supporters of QA or because they had a problem	Little further development at DHQ level. Sites broke up into competing trusts with own approaches to quality though attempts made by District to keep cooperation going.	No formal/ recognised model. General approach was to use District Quality coordinator as support to each unit for development purposes.	1st hospital doing QA by 1994; 2nd using top-down business planning model; 3rd using bottom-up Quality Circles plus Deming; 4th following top-down Deming

Analysis of Corporate Planning Process (continued – page 2)

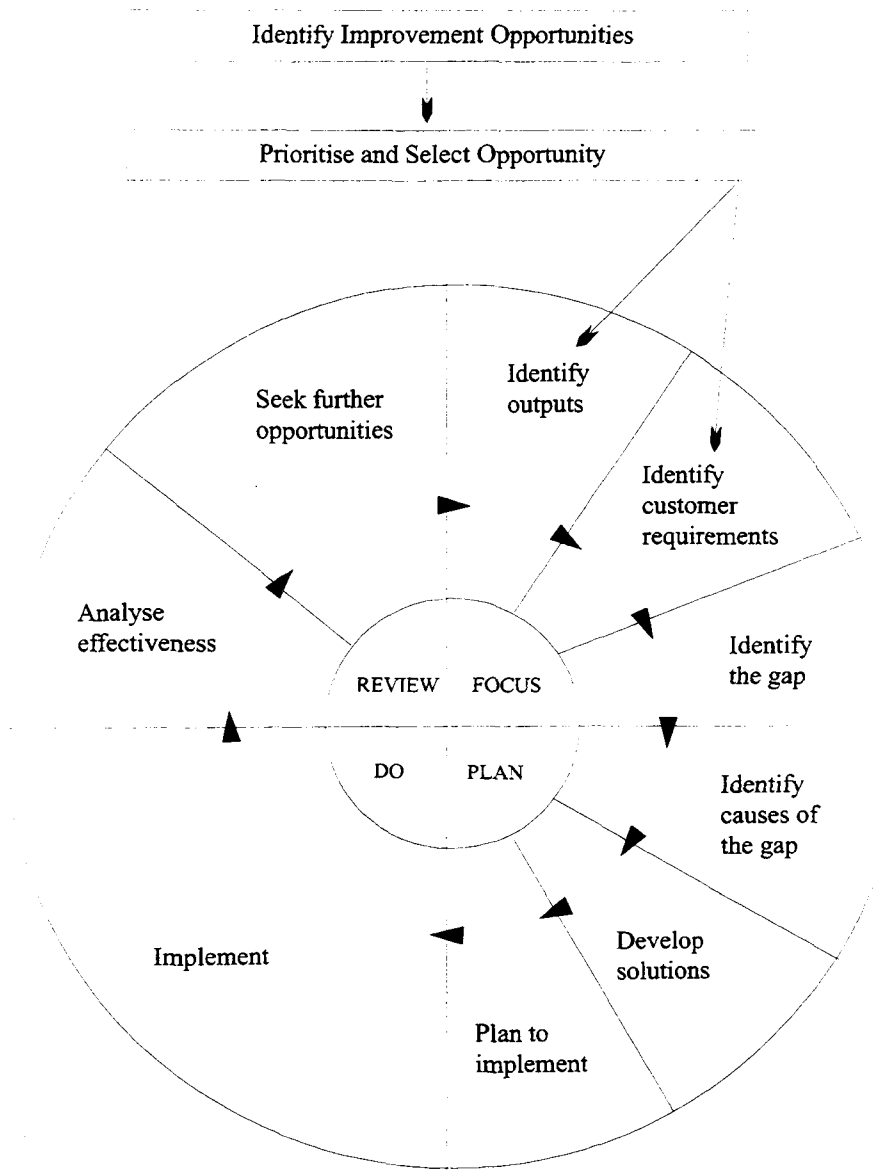
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Site	Start Date	Mission/Philosophy Statement		Goals/objectives		Targets/Plans		Models of TQM	
		At outset	Developments	At outset	Developments	At outset	Developments	At outset	Developments
4	Planning started before D of H initiative in Nov 89. Full plan agreed Mar 90 and project commenced. Funded for large acute unit only but other hospitals joined or were supported.	Most elaborate of all sites in our sample. Explicit and detailed mission statement emphasising continuous improvement and business development (e.g. increasing number of patients)	Only site which has been able to demonstrate how new initiatives - e.g. Patient Charter etc can be incorporated in over-arching TQM philosophy	Value statements also seen as longer-term goals - overall everyone actively seeks out opportunities to continuously improve performance.	Overriding objective is to strive to exceed patients expectations. Have held faithfully to original objectives.	Plans were extensive and detailed. Covered proposed shadow quality structure, education programmes, systems and processes for continuous improvement and quality improvement tools	Continue with strong corporate planning process complete with critical review and forward planning for next stages of implementation.	Management consultant-led programme based originally on Crosby. Has all the Crosby language including problem cause removal corrective action team etc.	More statistical approaches than Crosby including SPC. Also more ways of modifying this approach in a health context for both training and operations.
5	Funding by D of H in 90/91 was for District initiative to develop training programme for implementation of QA	Considerable work done with support of local University on origins of quality movement, and various packages for training. Definitions of quality, QA and TQM explicit but not linked to organisational mission statements etc.	This professional development model was quite different from work undertaken elsewhere. Never really linked to work done on orthodox TQM. Did not develop usual structures for implementing quality or tools for data collection and analysis	The objectives were to help managers to develop their own mission statement, objectives and plans through the use of professional development groups	No appreciable development	Later training packages developed included	No appreciable development	Based somewhat on Maxwell's six dimensions. Structured framework for managers but no specific proposals for implementation, quality structures, training on tools and techniques or how one might empower users. However, empowerment of management is explicit	Little further development work had been undertaken by 1992 No further research visits were made to the unit after this following a decision to concentrate on implementation of BS 5750 elsewhere in the district. Thus more up-to-date information is not available
5b	Early QA in smaller community hospitals pre-dates D of H initiative by several years. Funding not received for this work.	Quality Assurance Strategy developed for small acute unit in 1989 with support of Scottish University-based consultants. Six value statements developed	Statement of strategic intent developed. UGM then moved to new post of UGM for merged acute units.	Aims developed in support of each value statement. These were to be monitored through setting of standards.	Less development work after UGM left for new post.	130 actions put forward as part of action plan. Less clear how actions were to be monitored. No specific standards or targets set for most objectives.	Important nursing audit package developed which was to serve as model well beyond boundaries of this unit	Always labelled as QA rather than TQM, this programme actually had much of a flavour of TQM about it. However, not based on any recognised TQM approach.	

Analysis of Corporate Planning Process (continued – page 3)

Site	Start Date	Mission/Philosophy Statement		Goals/objectives		Targets/Plans		Models of TQM	
		At outset	Developments	At outset	Developments	At outset	Developments	At outset	Developments
6	Jan 90. Decision to do TQM pre-dated D of H initiative. Funded by D of H 90/91	No mission statement at outset - awaited potential merger between acute and community units.	Elaborate work done by management consultants on 40 value statements and gaps between these and current position	Value statements reduced to smaller set of objectives for bid	More detailed short, medium and long-term objectives produced in Sept 1990 complete with accompanying activities (not really action plans in that no dates or schedules)	Detailed diagnostic phase targets and plans. Further action plans and implementation only in outline - fell by wayside with end of consultant contract	Moved to strong and relatively dynamic standard setting model - objective and plans now based around setting and improving upon standards	Basically a QA approach with considerable investment in development of dynamic standard-setting system.	No training on TQM and no quality structure below senior management level. Began series of workshops on Deming and intended to use Pathology directorate as pilot for QIP etc. Much work being undertaken with senior medical staff on process variation.
7	Began with Leadership for Quality initiative in 1989 driven by DHA. Funded by D of H in 90/91	No mission statement at outset but developed later	Mission statement developed but little elaboration of philosophy of units or DHA beyond statements from original LFQ model.	Objectives for the project were clearly stated. These explicitly covered TQM areas of shared vision, valuing staff; service objectives driven by patient requirements; and systematic monitoring	By 1991, progress was seen to have faltered using the softer educational approach and a move was made to strengthen this with more top-down organisationally-driven change.	Planning was most extensive for targeting and training of managers. Little work was done on requisite organisational structures for quality or for measurement.	Little in the way of detailed development of plans and targets, though the increasingly strong top-down drive did lead to more specific setting of standards	Stated as an eclectic approach drawn from the work of three different management consultancies working there at the same time. However, it was a top-down programme of widespread management education and development. By and large a soft 'human relation' model	Relaunched in 1991 with a stronger TQM-type focus - including stronger links to structural changes, implementation of business planning and notion of continuous improvement was more explicit. A further change of direction with visit of managers and clinician to USA. Berwick's ideas more in evidence - especially notions of process analysis
8	Earliest of starters with 'The Worthing Way' in 1985	WW led by 5 core values (stated as goals) plus 10 standards of good practice for managers.	WW developed into WW for Quality established in five local demonstration projects for piloting TQM	Objectives clearly stated but little in way of detail or how these were related to their TQM model - see columns 9 & 10	Objectives became more formal when later linked to business planning process	Plans included setting up five local pilot projects but specific targets and plans were not available. It was seen as consolidation and extension of existing good management practice rather than major departure.	More detailed quality strategies and plans for most departments and functions now produced. Systematic monitoring (other than by management observation) is not much in evidence.	Started mainly as a management leadership approach building on good management practice from earlier well-established approach. Also included a classic Crosby-style cost of quality study which has been extended to other departments	Brought in management consultant who provided more detailed and systematic model for quality improvement based on his experience in commercial service industry. Basically an input/output model with systematic monitoring and feedback loops. Not immediately clear how cost of quality exercise would fit with the mainly leadership model of change

# Appendix 7 – Post Office Counters' Model for Quality Improvement



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Int. process chains	Short - many lateral relationships
Company history	Fairly clear; national network; single employer; new chairman ex-Xerox
Working processes	Well understood and well documented. Relatively small variation except in some local processes
Customer base	Increasingly volatile base with more alternatives for customers - eg banks, building socs, retail chains
Previous QI approaches	Little in way of structured or comprehensive approaches to QI
Product/service range	Wide range of products and services - capable of expansion in absolute T/O, market share and diversification

RESPONSE TO INITIAL ANALYSIS PUT IN FOR YEAR 1

Top-down corporate TQM with full shadow quality meetings' structure

Revolutionary approach

Training-led QIPs

Set-piece QIPs and considerable X-functional activity

System driven

Strong external customer-focus with extensive surveys

Management Behaviour Feed-back System

LOCATIONS

Headquarters and three pilot TQM sites (districts) out of 30 plus all of HQ

BY END YEAR 2

Tension between potential for a problem-oriented culture and QI as normal practice

Strong internal customer links developing - restructuring will help here

Number of highly successful QIPs including X-functional

Set-piece approach of QIPs did not provide sufficient opportunity for continuous improvement of small scale processes

High ownership if people are involved in QIPs after initial training, but this can fade

RESPONSE TO YEAR 2

Integrating Customer First and "Business as Usual"

Shift to more overt continuous improvement.

Moving away from formal set-piece QIPs towards larger number of smaller scale Quality Improvement Activities

Devolving power to periphery and widening involvement of staff

Restructuring to flatten management hierarchy, gain process ownership, and service level agreements

YEAR 3 ??

?

Further convergence

Int. process Chains	Very long with less lateral relationships
Company history	Chequered history with amalgamations of many small and large companies
Working processes	Poorly documented. Considerable variation throughout supply, distribution, sewage treatment etc
Customer base	Stable/captive base, but increased pressure from shareholders and EC/Government watch-dogs
Previous QI approaches	Strong emphasis on QC in water quality control but little experience of QA/TQM approaches in other areas
Product/service range	Few products and services - ie water supply and Sewage & Sewage Treatment. Limited expansion or diversification possible - tension between expansion and conservation

Strong bottom-up de-centralised approach. Quality in hands of line-managers

Three stage evolutionary approach - *understanding and documenting processes process control through systematic measurement Process improvement*

Mainly voluntary involvement

Weak links between external customers and internal processes

Almost all developments involved uni-disciplinary and intra-departmental documentation of processes.

Weak internal customer links between processes

Thames Quality Awards (now over 700 locations working towards or secured awards)

BS 5750 in Engineering (now achieved)

Two pilot TQM sites (Sewage and Water Treatment Works)

Progress more variable than Counters - much less training undertaken

Stronger individual ownership in TQAs but less so in BS 5750. Only one of two pilot TQM site showing marked progress

Substantial improvements in process documentation

Weaknesses in personal QI skills becoming evident as TWU moves toward process improvement

Need recognised for stronger internal and external customer links

Need for more training and development in tools and techniques for data collection

Centre beginning to apply more quality structure, co-ordination and direction to business units. More facilitation and expertise provided to support front-line

Introducing Work Flow Champions and Service Level Agreements etc to improve and formalise internal customer chains and build in the end-users

Process engineering study to re-align central processes and process owners with business needs

# Appendix 9 – Ratings of stated intent versus actual progress

Table 1 - TQM and non-TQM sites (including districts) rated for progress on all general quality criteria

TQM SITES	Size	Mean Rating		Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures: TQM		Concepts/technical skills - TQM		Concepts/technical skills - other		Training for TQM		Training for other QA approaches	
		Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement
a		2.1	1.1	4	2	2	1	0	0	5	2	3	1	2	1	1	1	1	1	0	0	3	2
b		2.0	1.5	4	2	2	2	1	1	2	2	2	2	2	1	1	1	2	0	0	3	2	
c		2.5	2.0	5	4	2	2	1	1	4	3	2	2	3	2	1	1	4	3	0	0	3	2
d		2.0	1.3	2	2	2	1	1	1	2	1	1	1	3	2	3	1	1	1	4	2	1	1
e		3.4	2.8	4	3	5	4	3	2	4	3	3	2	4	4	4	4	1	1	5	4	1	1
f		2.3	1.9	2	1	4	3	3	3	2	2	1	1	3	2	2	2	2	2	1	1	3	2
g		2.7	2.0	4	4	3	3	2	1	3	2	3	2	3	2	2	1	3	2	2	2	2	1
h		2.9	2.1	2	1	5	5	5	3	1	1	1	1	5	2	4	4	0	0	5	3	1	1
i		2.4	1.7	3	2	2	1	1	1	2	2	2	1	2	2	4	2	2	2	4	2	2	2
j		3.6	2.0	5	2	5	2	3	1	1	1	4	3	4	4	5	3	2	1	5	2	2	1
k		4.3	4.0	4	3	5	5	5	4	5	4	2	2	5	5	5	5	4	4	5	5	3	3
l		4.0	3.5	5	4	4	4	4	3	4	4	4	3	5	4	4	4	4	3	3	3	3	3
m		2.3	1.8	3	1	3	2	1	1	1	1	3	3	4	3	2	2	4	3	1	1	1	1
n		2.3	1.9	3	2	2	2	4	3	2	2	2	2	2	2	1	1	3	2	1	1	3	2
o		3.2	2.7	3	3	4	4	4	3	5	4	2	2	4	3	1	1	4	3	1	1	4	3
p		3.0	2.8	4	4	4	4	2	2	4	3	3	3	4	4	1	1	4	4	0	0	4	3
q		3.5	3.1	5	5	5	3	5	5	3	3	3	2	3	2	2	2	4	4	1	1	4	4
r		2.5	1.9	5	3	2	2	3	2	2	2	2	2	1	1	2	1	3	3	1	1	4	2

300



	Size	Mean Rating		Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures: TQM		Concepts/technical skills - TQM		Concepts/technical skills - other		Training for TQM		Training for other QA approaches	
TQM SITES		Stated Intent	Effect/Achievement	Stated Intent	Effect/Achievement	Stated Intent	Effect/Achievement	Stated Intent	Effect/Achievement	Stated Intent	Effect/Achievement	Stated Intent	Effect/Achievement	Stated Intent	Effect/Achievement	Stated Intent	Effect/Achievement	Stated Intent	Effect/Achievement	Stated Intent	Effect/Achievement	Stated Intent	Effect/Achievement
s		3.5	2.4	4	3	5	2	4	2	5	4	4	2	4	2	2	2	2	2	1	1	4	4
t		2.5	2.3	3	3	3	3	3	2	2	2	2	2	3	2	2	2	3	3	1	1	3	3
u - (3rd Unit)		3.2	2.6	4	4	2	2	2	2	4	3	3	2	2	2	4	3	4	3	4	3	3	2
		Insuffic. data																					
v		3.8	2.9	5	4	5	4	5	3	4	4	4	4	5	3	4	2	1	1	2	2	3	2
w		2.9	2.5	4	4	3	1	3	3	2	3	3	2	4	3	2	2	3	3	1	1	4	3
x		3.2	3.1	5	5	3	3	2	2	5	5	5	5	3	3	2	1	3	3	2	2	2	2
y		3.0	2.6	5	5	4	2	1	1	5	5	4	3	3	3	2	2	2	2	1	1	3	2
TOTALS				97.0	76.0	86.0	67.0	68.0	52.0	79.0	68.0	68.0	55.0	83.0	64.0	63.0	51.0	67.0	58.0	51.0	40.0	69.0	54.0
MEANS		2.9	2.3	3.9	3.0	3.4	2.7	2.7	2.1	3.2	2.7	2.7	2.2	3.3	2.6	2.5	2.0	2.7	2.3	2.0	1.6	2.8	2.2
NON-TQM S																							
1		2.8	2.1	4	4	4	3	3	2	3	2	3	3	3	1	1	1	4	3	0	0	3	2
2		1.8	1.3	3	2	1	1	2	2	2	1	2	1	2	2	1	1	2	2	1	0	2	1
3		2.1	1.6	3	2	4	2	2	2	2	2	2	2	3	2	1	1	2	1	0	0	2	2
4		2.1	1.9	4	4	4	2	3	2	2	2	2	3	1	1	0	0	3	3	0	0	2	2
TOTALS				14.0	12.0	13.0	8.0	10.0	8.0	9.0	7.0	9.0	9.0	9.0	6.0	3.0	3.0	11.0	9.0	1.0	0.0	9.0	7.0
MEANS		2.2	1.8	3.5	3.0	3.3	2.0	2.5	2.0	2.3	1.8	2.3	2.3	2.3	1.5	0.8	0.8	2.8	2.3	0.3	0.0	2.3	1.8

Key: 0 = No discernible movement  
1 = Barely discernible movement  
2 = Some movement in a few functions/departments but very patchy and/or ineffective  
3 = Moderate movement in a few functions/departments with some significant effects  
4 = Considerable movement in a significant number of functions/departments but not comprehensive  
5 = Comprehensive and effective movement in majority of functions/departments

**Table 2 - TQM and non-TQM sites (including districts) rated for progress on TQM criteria only**

TQM SITES	Size	Mean Rating		Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures: TQM		Concepts/technical skills - TQM		Training for TQM	
		Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement
a		2.1	1.0	4	2	2	1	0	0	5	2	3	1	2	1	1	1	0	0
b		1.8	1.4	4	2	2	2	1	1	2	2	2	2	2	1	1	1	0	0
c		2.3	1.9	5	4	2	2	1	1	4	3	2	2	3	2	1	1	0	0
d		2.3	1.4	2	2	2	1	1	1	2	1	1	1	3	2	3	1	4	2
e		4.0	3.3	4	3	5	4	3	2	4	3	3	2	4	4	4	4	5	4
f		2.3	1.9	2	1	4	3	3	3	2	2	1	1	3	2	2	2	1	1
g		2.8	2.1	4	4	3	3	2	1	3	2	3	2	3	2	2	1	2	2
h		3.5	2.5	2	1	5	5	5	3	1	1	1	1	5	2	4	4	5	3
i		2.5	1.6	3	2	2	1	1	1	2	2	2	1	2	2	4	2	4	2
j		4.0	2.3	5	2	5	2	3	1	1	1	4	3	4	4	5	3	5	2
k		4.5	4.1	4	3	5	5	5	4	5	4	2	2	5	5	5	5	5	5
l		4.1	3.6	5	4	4	4	4	3	4	4	4	3	5	4	4	4	3	3
m		2.3	1.8	3	1	3	2	1	1	1	1	3	3	4	3	2	2	1	1
n		2.1	1.9	3	2	2	2	4	3	2	2	2	2	2	2	1	1	1	1
o		3.0	2.6	3	3	4	4	4	3	5	4	2	2	4	3	1	1	1	1
p		2.8	2.6	4	4	4	4	2	2	4	3	3	3	4	4	1	1	0	0
q		3.4	2.9	5	5	5	3	5	5	3	3	3	2	3	2	2	2	1	1
r		2.3	1.8	5	3	2	2	3	2	2	2	2	2	1	1	2	1	1	1
s		3.6	2.3	4	3	5	2	4	2	5	4	4	2	4	2	2	2	1	1
t		2.4	2.1	3	3	3	3	3	2	2	2	2	2	3	2	2	2	1	1

	Size	Mean Rating		Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures: TQM		Concepts/technical skills - TQM		Training for TQM	
TQM SITES		Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement
u - (3rd Unit)		3.1	2.6	4	4	2	2	2	2	4	3	3	2	2	2	4	3	4	3
		Insuffic data																	
v		4.3	3.3	5	4	5	4	5	3	4	4	4	4	5	3	4	2	2	2
w		2.8	2.4	4	4	3	1	3	3	2	3	3	2	4	3	2	2	1	1
x		3.4	3.3	5	5	3	3	2	2	5	5	5	5	3	3	2	1	2	2
y		3.1	2.8	5	5	4	2	1	1	5	5	4	3	3	3	2	2	1	1
TOTALS				97.0	76.0	86.0	67.0	68.0	52.0	79.0	68.0	68.0	55.0	83.0	64.0	63.0	51.0	51.0	40.0
MEAN SCORES		3.0	2.4	3.9	3.0	3.4	2.7	2.7	2.1	3.2	2.7	2.7	2.2	3.3	2.6	2.5	2.0	2.0	1.6
NON-TQM SITES																			
1		2.6	2.0	4	4	4	3	3	2	3	2	3	3	3	1	1	1	0	0
2		1.8	1.3	3	2	1	1	2	2	2	1	2	1	2	2	1	1	1	0
3		2.1	1.6	3	2	4	2	2	2	2	2	2	2	3	2	1	1	0	0
4		2.0	1.8	4	4	4	2	3	2	2	2	2	3	1	1	0	0	0	0
TOTALS				14.0	12.0	13.0	8.0	10.0	8.0	9.0	7.0	9.0	9.0	9.0	6.0	3.0	3.0	1.0	0.0
MEAN SCORES		2.2	1.7	3.5	3.0	3.3	2.0	2.5	2.0	2.3	1.8	2.3	2.3	2.3	1.5	0.8	0.8	0.3	0.0

- Key: 0 = No discernible movement  
1 = Barely discernible movement  
2 = Some movement in a few functions/departments but very patchy and/or ineffective  
3 = Moderate movement in a few functions/departments with some significant effects  
4 = Considerable movement in a significant number of functions/departments but not comprehensive  
5 = Comprehensive and effective movement in majority of functions/departments

**Table 3 - TQM and non-TQM sites (without districts) rated for progress on TQM criteria only**

TQM SITES	Size	Mean Rating		Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures	
		Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement	Stated Intent	Effect./Achievement
b		2.2	1.7	4	2	2	2	1	1	2	2	2	2	2	1
c		2.8	2.3	5	4	2	2	1	1	4	3	2	2	3	2
d		1.8	1.3	2	2	2	1	1	1	2	1	1	1	3	2
e		3.8	3.0	4	3	5	4	3	2	4	3	3	2	4	4
f		2.5	2.0	2	1	4	3	3	3	2	2	1	1	3	2
g		3.0	2.3	4	4	3	3	2	1	3	2	3	2	3	2
h		3.2	2.2	2	1	5	5	5	3	1	1	1	1	5	2
i		2.0	1.5	3	2	2	1	1	1	2	2	2	1	2	2
k		4.3	3.8	4	3	5	5	5	4	5	4	2	2	5	5
l		4.3	3.7	5	4	4	4	4	3	4	4	4	3	5	4
n		2.5	2.2	3	2	2	2	4	3	2	2	2	2	2	2
o		3.7	3.2	3	3	4	4	4	3	5	4	2	2	4	3
p		3.5	3.3	4	4	4	4	2	2	4	3	3	3	4	4
q		4.0	3.3	5	5	5	3	5	5	3	3	3	2	3	2
r		2.5	2.0	5	3	2	2	3	2	2	2	2	2	1	1

	Size	Mean Rating		Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures	
TQM SITES		Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement	Stated Intent	Effect./ Achievement
t		2.7	2.3	3	3	3	3	3	2	2	2	2	3	2	
u		2.8	2.5	4	4	2	2	2	2	4	3	3	2	2	
- 3rd (Unit)		Insuffic data													
w		3.2	2.7	4	4	3	1	3	3	2	3	3	2	4	3
x		3.8	3.8	5	5	3	3	2	2	5	5	5	5	3	3
y		3.7	3.2	5	5	4	2	1	1	5	5	4	3	3	3
<b>TOTALS</b>				76.0	64.0	66.0	56.0	55.0	45.0	63.0	56.0	50.0	42.0	64.0	51.0
<b>MEAN SCORES</b>		3.1	2.6	3.8	3.2	3.3	2.8	2.8	2.3	3.2	2.8	2.5	2.1	3.2	2.6
<b>NON-TQM SITES</b>															
1		3.3	2.5	4	4	4	3	3	2	3	2	3	3	3	1
2		2.0	1.5	3	2	1	1	2	2	2	1	2	1	2	2
3		2.7	2.0	3	2	4	2	2	2	2	2	2	2	3	2
4		2.7	2.3	4	4	4	2	3	2	2	2	2	3	1	1
<b>TOTALS</b>				14.0	12.0	13.0	8.0	10.0	8.0	9.0	7.0	9.0	9.0	9.0	6.0
<b>MEAN SCORES</b>		2.7	2.1	3.5	3.0	3.3	2.0	2.5	2.0	2.3	1.8	2.3	2.3	2.3	1.5

Key: 0 = No discernible movement  
1 = Barely discernible movement  
2 = Some movement in a few functions/departments but very patchy and/or ineffective  
3 = Moderate movement in a few functions/departments with some significant effects  
4 = Considerable movement in a significant number of functions/departments but not comprehensive  
5 = Comprehensive and effective movement in majority of functions/departments

**Table 4 - TQM Acute Units, and TQM Community Units/Services rated for progress on all general quality criteria**

	Mean Rating		Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures: TQM		Concepts/technical skills - TQM		Concepts/technical skills - other		Training for TQM		Training for other QA approaches			
	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement		
<b>ACUTE UNITS</b>																								
d	2.0	1.30	2	2	2	1	1	1	2	1	1	1	3	2	3	1	1	1	4	2	1	1		
k	4.30	4.0	4	3	5	5	5	4	5	4	2	2	5	5	5	5	4	4	5	5	3	3		
n	2.30	1.90	3	2	2	2	4	3	2	2	2	2	2	2	1	1	3	2	1	1	3	2		
b	2.0	1.50	4	2	2	2	1	1	2	2	2	2	2	1	1	1	3	2	0	0	3	2		
q	3.50	3.10	5	5	5	3	5	5	3	3	3	2	3	2	2	2	4	4	1	1	4	4		
f	2.30	1.90	2	1	4	3	3	3	2	2	1	1	3	2	2	2	2	2	2	2	1	1	3	2
g	2.70	2.0	4	4	3	3	2	1	3	2	3	2	3	2	2	1	3	2	2	2	2	1		
h	2.90	2.10	2	1	5	5	5	3	1	1	1	1	5	2	4	4	0	0	5	3	1	1		
i	2.40	1.70	3	2	2	1	1	1	2	2	2	1	2	2	4	2	2	2	4	2	2	2		
t	2.50	2.30	3	3	3	3	3	2	2	2	2	2	3	2	2	2	3	3	1	1	3	3		
w	2.90	2.50	4	4	3	1	3	3	2	3	3	2	4	3	2	2	3	3	1	1	4	3		
<b>TOTALS</b>			36.0	29.0	36.0	29.0	33.0	27.0	26.0	24.0	22.0	18.0	35.0	25.0	28.0	23.0	28.0	25.0	25.0	19.0	29.0	24.0		
<b>MEAN SCORES</b>	2.70	2.20	3.30	2.60	3.30	2.60	3.0	2.50	2.40	2.20	2.0	1.60	3.20	2.30	2.50	2.10	2.50	2.30	2.30	1.70	2.60	2.20		
<b>COMM SERVICES</b>																								
l	4.0	3.50	5	4	4	4	4	3	4	4	4	3	5	4	4	4	4	3	3	3	3	3		
c	2.50	2.0	5	4	2	2	1	1	4	3	2	2	3	2	1	1	4	3	0	0	3	2		
u	3.20	2.60	4	4	2	2	2	2	4	3	3	2	2	2	4	3	4	3	4	3	3	2		
o	3.20	2.70	3	3	4	4	4	3	5	4	2	2	4	3	1	1	4	3	1	1	4	3		
P	3.0	2.80	4	4	4	4	2	2	4	3	3	3	4	4	1	1	4	4	0	0	4	3		
c	3.40	2.80	4	3	5	4	3	2	4	3	3	2	4	4	4	4	1	1	5	4	1	1		
r	2.50	1.90	5	3	2	2	3	2	2	2	2	2	1	1	2	1	3	3	1	1	4	2		

	Mean Rating		Customer focus		Corporate integration		Monitoring & Evaluation		Empowerment of staff		Empowerment of customers		Quality structures: TQM		Concepts/technical skills - TQM		Concepts/technical skills - other		Training for TQM		Training for other QA approaches	
	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement	Stated Intent	Achievement
x	3.20	3.10	5	5	3	3	2	2	5	5	5	5	3	3	2	1	3	3	2	2	2	2
y	3.0	2.60	5	5	4	2	1	1	5	5	4	3	3	3	2	2	2	2	1	1	3	2
<b>TOTALS</b>			40.0	35.0	31.0	26.0	21.0	17.0	37.0	32.0	27.0	22.0	29.0	26.0	21.0	19.0	28.0	24.0	16.0	14.0	28.0	20.0
<b>MEAN SCORES</b>	<b>3.10</b>	<b>2.60</b>	4.40	3.90	3.40	2.90	2.30	1.90	4.10	3.60	3.0	2.40	3.20	2.90	2.30	2.10	3.10	2.70	1.80	1.60	3.10	2.20

- Key: 0 = No discernible movement  
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## Bibliography

Ackoff J (1974) *Redesigning the Future*, Wiley, New York

Ackoff R (1979) *The Art of Problem Solving*, Wiley, New York

Armstrong, M (1993), *A Handbook of Management Techniques*, Kogan Page, London

Atkinson P E (1990) *Creating Culture Change – The Key to Successful Total Quality Management*, IFS Publications, Bedford, England

Bailey J (1975) *Social Theory for Planning*, Routledge

Beer M, Eisenstat R and Spector B (1990). Why Change Programmes Don't Produce Change, *Harvard Business Review*, November-December 1990

Bell L, Brown R and Morris B (1993), Auditing Community Services from A New Perspective, in *Quality and Its Applications*, University of Newcastle on Tyne

Bell L, Brown R M, and McCartney S (1993) Patient Defined Audit – A New Perspective, in Malek M, Vacani P and Davey P, (Eds.) *Managerial Issues in the Reformed NHS*, John Wiley and Sons, London

Benison M and Casson J (1984) *The Manpower Planning Handbook*, McGraw Hill

Berman P (1980) 'Thinking about programmed and adaptive implementations: matching strategies to situations' in *Why Policies Succeed or Fail*, Ingram H and Mann D (eds.) Sage, London

Berwick D (1992) 'Quality management in the NHS: the doctor's role – parts I & II, *British Medical Journal*, Vol. 304, pp 235-239 and 304-308

Bitner M (1991), "The Evolution of the Services Marketing Mix and its Relationship to Service Quality", in Brown et Al (eds.) 1991, *Service Quality – Multidisciplinary and Multinational Perspectives*, Lexington Books, Lexington, Massachusetts.

Braybrooke D and Lindblom C (1963) *A Strategy of Decision*, Collier Macmillan, London



- Brooks T (1988) Introduction to Sketris I, Health Service Accreditation – an International Overview, *King's Fund Centre – Centre Handbook*
- Buxton M, Packwood T & Keen J (1991), *Resource Management: Final Report of the Brunel University Evaluation of Resource Management*, Brunel University Uxbridge, Middlesex
- Camp R. C. (1989) *Benchmarking: The search for industry best practices that lead to superior performance*. ASQC, Quality Press, Milwaukee, Wisconsin
- Chase R & Bowen, D (1991), “Service Quality and the Service Delivery System – A Diagnostic Framework”, in Brown S et al (1991) (eds.) *Service Quality – Multidisciplinary and Multinational Perspectives*, Lexington Books, Lexington, Massachusetts, USA
- Checkland P (1972) ‘Real world problem-solving’, *Journal of System Engineering*
- Chin R and Benn K (1969) ‘The roots of planned change’ in Bennis W, Benn K and Chin R, *The Planning of Change* (2<sup>nd</sup> edition), Holt, Reinhart and Winston, New York
- Collard R (1989), *Total Quality – Success Through People*, London, Institute of Personnel Management
- Crosby P B (1979), *Quality is Free*, McGraw-Hill, New York
- Dalley G & Carr-Hill R (1991), Pathways to Quality, a Study of Quality Management Initiatives in the NHS. A Guide for Managers, *Quality Management Initiatives*, No 2, Centre for Health Economics, University of York, UK
- Deming W E (1986), *Out of the Crisis*, Massachusetts Institute of Technology, Centre for Advanced Engineering Study Massachusetts, USA
- Department of Health (1989) Chief Executive’s circular (EL [89]/MB/114).
- Department of Health (1989), *Medical Audit – Working Paper No 6. Working for Patients*, HMSO, London
- Department of Health, *Local Voices*, Department of Health Publications, London

- Donabedian A (1980), *The Definition of Quality and Approaches to its Management*, Vol. 1: *Explorations in Quality Assessment and Monitoring*, Ann Arbor, Michigan, Health Administration Press
- Donabedian A (1982), *The Criteria and Standards of Quality*, Vol. 2: *Explorations in Quality Assessment and Monitoring*, Ann Arbor, Michigan, Heath Administration Press
- Donabedian A (1988), "The Quality of Care – How can it be Assessed?", *Journal of the American Medical Association*, Vol. 260, No 12, pp 1743-1748
- Edvardsson B & Gustavsson B (1991) "Quality in Services and Quality in Service Organisations – A Model for Quality Assessment", in Brown et al (eds.) in *Service Quality – Multidisciplinary and Multinational Perspectives*, Lexington Books, Lexington, Massachusetts, USA
- Elmore R (1982) 'Backward mapping: implementation research and policy decisions', in Williams W (ed.) *Studying Implementation: Methodological and Administrative Issues*, Chatham House Publishers
- Etzioni, 1964, *Modern Organisations*, Englewood Cliffs, New Jersey, Prentice Hall
- Evans K & Corrigan P (1991) Standard Setting: An Introduction to Differing Approaches, *Nursing Practice*, Vol. 4, No 3, pp 16-19
- Foster & Whittle (1991), *The Quality Management Maze* in Chase R (ed.) *Implementing TQM – The Best of TQM Magazine*, IFS Publications, Bedford
- Gaster L (1991), Quality and decentralisation: are they connected? *Policy and Politics*, Vol. 19, 4
- Goodman R (1972) *After the Planners*, Penguin, Harmondsworth
- Greig J (1993), A study of Quality teams in the NHS, *International Journal of Health Care Quality Assurance*, Vol. 6, Number 6
- Griffiths R (1983) *NHS Management Enquiry: Report to the Secretary of State for Social Services*, Department of Health and Social Security, London
- Gronroos C (1984), A Service Quality Model and its Marketing Implications, *European Journal of Marketing*, Vol. 18, No 4

Hammer M and Champy J (1993), *Reengineering the Corporation – a Manifesto for Business Revolution*, Nicholas Brealey Publishing, London

Harrison S, Hunter D, Marnoch G & Pollitt C (1989), *The Impact of General Management in the National Health Service*, The Open University and Nuffield Institute for Health Service Studies, Milton Keynes, UK

Harvey L and Green D (1993), *Defining Quality, Assessment and Evaluation in Higher Education*, Vol. 18, No 1, page 24

Hirschman A (1970) *Exit, Voice and Loyalty: Responses to Decline in Firms, Organisations and States*, Harvard University Press

Hoggett P (1991) A new management in the public sector? *Policy and Politics*, Vol. 19 no. 4

Hunter D (1983) 'Centre periphery relations in the NHS: facilitators or inhibitors of innovation, in Young K (ed.) *National Interests and Local Government*, Heinemann Educational Books, London

Ishikawa K (1985) *What is Total Quality Control? The Japanese Way*, Prentice Hall, Englewood Cliffs, NJ

ISO 9004:2 (1991) *Quality Management and Quality System Elements – Guidelines for Services*, International Organization for Standardization

Jaques E(1976), *A General Theory of Bureaucracy*, Heinemann Educational Books, New Hampshire, USA

Jones S and Joss R (1995) 'Models of professionalism', in Yelloly M and Henkel M (eds.) *Learning and Teaching in Social Work: Towards Reflective Practice*, Jessica Kingsley Publishers, London

Joss R (1995), "Costing Non-Conformance at an NHS Hospital: a Pilot Study", in Pollitt C and Bouckaert G (eds.) *Quality Improvement in European Public Services: Concepts, Cases and Commentary*, Sage Publications, London

Joss R and Balkwill C (1993), A pilot study of satisfaction with ante natal clinic services, unpublished research report for Hillingdon Health Authority, Uxbridge, Middlesex

Joss R, Kogan M, and Henkel M (1994) *Total Quality Management in the National Health Service: Final Report of an Evaluation*, Centre for the Evaluation of Public Policy and Practice, Brunel University, England

- Joss, R & Kogan, M (1995) *Advancing Quality: Total Quality Management in the National Health Service*, Open University Press, Buckingham
- Juran J (1988) *Juran on Planning for Quality*, Free Press, New York
- Klaus (1985), Quality Epiphenomenon: the Conceptual Understanding of Quality in Face to Face Encounters, in Czepiel J, Solomon M and Suprenant C (Eds.), *The Service Encounter*, Lexington Books, Massachusetts
- Klein (1995) p140, *The New Politics of the NHS*, (3<sup>rd</sup> edition), Longman Group, Essex
- Koch H (1993), Papers presented at 1993 ICM Conference on TQM in the NHS, London
- Kogan M (Ed.) (1986), Papers from the *Journal of Institutional Management in Higher Education*, Jessica Kingsley, London
- Kogan M, Redfern S, Kober A, Norman I, Packwood T, and Robinson S (1995) *Making Use Of Clinical Audit*, Open University Press, Buckingham
- Kogan M. (1986) *Educational Accountability: an Analytic Overview*, London, Hutchinson
- Langlands A (1996), *Patient's Charter News*, Issue 24, June 1996, p. 6, NHS Executive
- Lascelles D & Dale B (1992) *Managing Total Quality Improvement*, IFS Publications, Bedford, England
- Lewin K (1952) *Field Theory in Social Sciences: Selected Theoretical Papers*, Tavistock Publications, London
- Lindblom C (1965) *The Intelligence of Democracy: Decision-making Through Mutual Adjustment*, Macmillan, New York
- Lipsky (1980) *Street Level Bureaucracy: Dilemmas of the Individual in Public Service*, New York, Russell Sage Foundation
- Macdonald I (forthcoming 1998) *Beyond Them and Us*, Australia, Allen and Unwin

Macdonald J & Piggott J (1990) *Global Quality – The New Management Culture*, Mercury Books, London

Macdonald J, (1993) TQM: Does it always Work? *TQM Practitioners Series*, Technical Communications (Publishing) Ltd., Letchworth.

Maxwell R (1984) Quality Assessment in Health, *British Medical Journal*, Vol. 288, pp 1470-1472

Merrifield A (1990) (a), Lead Article in NHS Management Executive News, No 37, Sept., pp 1-2, and

Merrifield A (1990) (b), "The NHS and its Consumers", Opening Address to the *Conference on Total Quality Management in the NHS*, Birmingham, November 1990

Merry M D (1990) Total quality management for physicians: translating the new paradigm, *Quality Review Bulletin*, Vol. 16, No 3, pp. 101-105

Morgan C and Murgatroyd S (1994), *Total Quality Management in the Public Sector: An International Perspective*, Open University Press, Buckingham, England

Nader R, (1965) *Unsafe at any Speed, the designed-in dangers of the American automobile*, Grossman, New York

Neave H (1990), *The Deming Dimension*, SPC Press Inc., Tennessee

Neuhauser P (1988) *Tribal Warfare in Organisations*, Balinger, Cambridge MA

Newman O (1973) *Defensible Space: People and Design in the Violent City*, Architectural Press, London

NHS Management Enquiry, 1983, HMSO, London

Nichols D, (1989), Letter to Regional General Managers, June 1989, EL[89]/MB/114

Nystrom P, Hedberg B and Starbuck W, 1976, 'Interacting processes as organisational designs', in Kilmann R (Ed.) *The Management of Organisational Design*: Vol. 1, New York, Elsevier

O'Connor S, Shewchuck R and Bowers M (1991), A model of service perceptions and health care consumer behaviour, *Journal of Hospital Marketing*, Vol. 6(1), pp. 69-93

Oakland J S (1989), *Total Quality Management*, Heinemann, Oxford

Parasuraman A, Zeithaml V and Berry L (1985), A Conceptual Model of Service Quality and its Implications for Future Research, *Journal of Marketing*, Vol. 49, pp 41-50

Peters T and Waterman R (1982), *In Search Of Excellence: Lessons from America's Best Run Companies*, New York, Harper Row

Peters T, (1989) *Thriving on Chaos – Handbook for a Management Revolution*, Pan Books, London

Pfeffer N & Coote A (1991) *Is Quality Good for You? – A Critical Review of Quality Assurance in Welfare Services*, Institute for Policy Research, London.

Pollitt C (1990), "Doing Business in the Temple? Managers and Quality Assurance in the Public Services", *Public Administration*, Vol. 68, No 4, pp 435-452

Pollitt C and Bouckaert G (1995), Eds., *Quality Improvement in European Public Services: Concepts, Cases and Commentary*, Sage Publications, London

Pollitt C (1995) Justification by Works or by Faith? Evaluating the New Public Management. Paper prepared for the *European Group for Public Administration (EGPA) Conference*, Rotterdam, September 1995

Rathwell T (1987) *Strategic Planning in the Health Sector*, Croom Helm, London

Rein M (1983) Implementation, a theoretical perspective, Chapter 7 of *From Policy to Practice*, Macmillan Press, New York

Rittel (1972), 'On the planning crisis: systems analysis of the first and second generation', *Bedriftsokonomien* pp. 390-396, as cited in Mason & Mitroff (1981) *Challenging Strategic Planning Assumptions*. John Wiley & Sons, New York

Rosander A (1989): *The Quest for Quality in Services*, Quality Press, American Society for Quality Control, Wisconsin

Rothery B (1993) *ISO 9000*, Gower Press, Aldershot.

- Rowbottom D (1977) *Social Analysis*, London, Heinemann
- Schon D (1983) *The Reflective Practitioner; How Professionals Think in Action*, London, Temple Smith
- Shaw C (1989) *Medical Audit: A Hospital Handbook*. King's Fund Centre, London
- Shewhart W A (1931), *Economic Control of Quality of Manufactured Product*, New York, Van Nostrand
- Shostack L (1987) "Service Positioning Through Structural Change", *Journal of Marketing*, 51, pp. 34-43
- Sneddon J (1997) *In pursuit of Quality: The Case Against ISO 9000*, London, Oak Tree Press
- Steffen G (1988) Quality Medical Care – A Definition, *Journal of the American Medical Association*, Vol. 260, No 1
- Stoll B, Best medical practice: viewpoint of a UK oncologist, *International Journal of Health Care Planning and Management*, Vol. 4, p 227
- Taguchi G (1987), *Introduction to Quality Engineering: Designing Quality into Products and Processes*, Quality Resources
- Thompson D (1990), *The Changing Face of the National Health Service in the 1990s*, 2<sup>nd</sup> edition, edited by Spurgeon P., Health Services Management Centre, Longman, Essex
- TQM Magazine*, 1991, p 17 and p. 28
- Tuckman A & Blackburn D (1991), "Fitness for Purpose: Total Quality Management in the Health Service", paper presented at *the BSA Annual Conference*, Manchester, March 1991.
- Waldegrave W (1991), "Developing the Purchasing Role", in *NHS Management Executive News*, Issue No 45, May, p 5
- Williamson J (1991) "Providing Quality Care", *Health Services Management*, Vol. 87, No 1, pp 18-23

Wolman (1984) 'The determinants of program success and failure', *Journal of Public Policy*, Vol. 1, No. 4, pp 433-464

Woodward J (1965) *Industrial Theory and Practice*, Oxford University Press, Oxford

Wragge E C (1984) Conducting and Analysing Interviews in Bell J et al (eds.) *Conducting Small-scale Investigations in Educational Management*, London, Harper and Row

Young K (1981) Discretion as an Implementation Problem, in Adler M and Asquith S (eds.) *Discretion and Welfare*, London, Heinemann

Young K (1983) *National Interests and Local Government*, London, Heinemann

Zairi M. (1992) *TQM-based Performance Measurement: Practical Guidelines*, Technical Communications (Publishing) Ltd., Hertfordshire, England



## References

- <sup>1</sup> Joss, R & Kogan, M (1995) *Advancing Quality: Total Quality Management in the National Health Service*, Open University Press, Buckingham
- <sup>2</sup> Chase R & Bowen, D (1991), "Service Quality and the Service Delivery System – A Diagnostic Framework", in Brown S et al (1991) (eds.) *Service Quality – Multidisciplinary and Multinational Perspectives*, Lexington Books, Lexington, Massachusetts, USA
- <sup>3</sup> Parasuraman A, Zeithaml V and Berry L (1985), A Conceptual Model of Service Quality and its Implications for Future Research, *Journal of Marketing*, Vol. 49, pp 41-50
- <sup>4</sup> Klaus (1985), Quality Epiphenomenon: the Conceptual Understanding of Quality in Face to Face Encounters, in Czepiel J, Solomon M and Suprenant C (Eds.), *The Service Encounter*, Lexington Books, Massachusetts
- <sup>5</sup> O'Connor S, Shewchuck R and Bowers M (1991), A model of service perceptions and health care consumer behaviour, *Journal of Hospital Marketing*, Vol. 6(1), pp. 69-93
- <sup>6</sup> Crosby P B (1979), *Quality is Free*, McGraw-Hill, New York
- <sup>7</sup> Deming W E (1986), *Out of the Crisis*, Massachusetts Institute of Technology, Centre for Advanced Engineering Study Massachusetts, USA
- <sup>8</sup> Juran J (1988) *Juran on Planning for Quality*, Free Press, New York
- <sup>9</sup> Pfeffer N & Coote A (1991) *Is Quality Good for You? – A Critical Review of Quality Assurance in Welfare Services*, Institute for Policy Research, London.
- <sup>10</sup> Rittel (1972), 'On the planning crisis: systems analysis of the first and second generation', *Bedriftsokonomien* pp. 390-396, as cited in Mason & Mitroff (1981) *Challenging Strategic Planning Assumptions*. John Wiley & Sons, New York
- <sup>11</sup> Rein M (1983) Implementation, a theoretical perspective, p 444 in Chapter 7 of *From Policy to Practice*, Macmillan Press, New York

- <sup>12</sup> Berman P (1980) 'Thinking about programmed and adaptive implementations: matching strategies to situations' in *Why Policies Succeed or Fail*, Ingram H and Mann D (eds.) Sage, London
- <sup>13</sup> Crosby P B (1979) op. cit.
- <sup>14</sup> Juran J (1988) op cit.
- <sup>15</sup> Deming W E (1986) op. Cit.
- <sup>16</sup> See, for example, Nystrom P, Hedberg B and Starbuck W, 1976, 'Interacting processes as organisational designs', in Kilmann R (Ed.) *The Management of Organisational Design*: Vol. 1, New York, Elsevier
- <sup>17</sup> Rathwell T (1987) *Strategic Planning in the Health Sector*, Croom Helm, London
- <sup>18</sup> Schon D (1983) *The Reflective Practitioner; How Professionals Think in Action*, London, Temple Smith
- <sup>19</sup> Bailey J (1975) *Social Theory for Planning*, Routledge
- <sup>20</sup> Ackoff J (1974) *Redesigning the Future*, Wiley, New York
- <sup>21</sup> Ackoff R (1979) *The Art of Problem Solving*, Wiley, New York
- <sup>22</sup> Benison M and Casson J (1984) *The Manpower Planning Handbook*, McGraw Hill
- <sup>23</sup> Checkland P (1972) 'Real world problem-solving', *Journal of System Engineering*
- <sup>24</sup> Nader R, (1965) *Unsafe at any Speed, the designed-in dangers of the American automobile*, Grossman, New York
- <sup>25</sup> Lipsky (1980) *Street Level Bureaucracy: Dilemmas of the Individual in Public Service*, New York, Russell Sage Foundation

- <sup>26</sup> Newman O (1973) *Defensible Space: People and Design in the Violent City*, Architectural Press, London
- <sup>27</sup> Goodman R (1972) *After the Planners*, Penguin, Harmondsworth
- <sup>28</sup> Rowbottom D (1977) *Social Analysis*, London, Heinemann
- <sup>29</sup> Elmore R (1982) 'Backward mapping: implementation research and policy decisions', in Williams W (ed.) *Studying Implementation: Methodological and Administrative Issues*, Chatham House Publishers
- <sup>30</sup> Chin R and Benn K (1969) 'The roots of planned change' in Bennis W, Benn K and Chin R, *The Planning of Change* (2<sup>nd</sup> edition), Holt, Reinhart and Winston, New York
- <sup>31</sup> Braybrooke D and Lindblom C (1963) *A Strategy of Decision*, Collier Macmillan, London
- <sup>32</sup> Lindblom C (1965) *The Intelligence of Democracy: Decision-making Through Mutual Adjustment*, Macmillan, New York
- <sup>33</sup> Woodward J (1965) *Industrial Theory and Practice*, Oxford University Press, Oxford
- <sup>34</sup> Beer M, Eisenstat R and Spector B (1990). Why Change Programmes Don't Produce Change, *Harvard Business Review*, November-December 1990
- <sup>35</sup> Macdonald I (forthcoming 1998) *Beyond Them and Us*, Australia, Allen and Unwin
- <sup>36</sup> Beer M et al (1990) op. cit.
- <sup>37</sup> Hunter D (1983) 'Centre periphery relations in the NHS: facilitators or inhibitors of innovation, in Young K (ed.) *National Interests and Local Government*, Heinemann Educational Books, London
- <sup>38</sup> Klein (1995) p140, *The New Politics of the NHS*, (3<sup>rd</sup> edition), Longman Group, Essex

<sup>39</sup> Woodward J (1965) op cit.

<sup>40</sup> Jones S and Joss R (1995) 'Models of professionalism', in Yelloly M and Henkel M (eds.) *Learning and Teaching in Social Work: Towards Reflective Practice*, Jessica Kingsley Publishers, London

<sup>41</sup> Young K (1981) Discretion as an Implementation Problem, in Adler M and Asquith S (eds.) *Discretion and Welfare*, London, Heinemann

<sup>42</sup> Young K (1983) *National Interests and Local Government*, London, Heinemann

<sup>43</sup> Kogan M. (1986) *Educational Accountability: an Analytic Overview*, London, Hutchinson

<sup>44</sup> Braybrook D and Lindblom C (1963) (op. cit.)

<sup>45</sup> Wolman (1984) 'The determinants of program success and failure', *Journal of Public Policy*, Vol. 1, No. 4, pp 433-464

<sup>46</sup> Lewin K (1952) *Field Theory in Social Sciences: Selected Theoretical Papers*, Tavistock Publications, London

<sup>47</sup> Argyris (1970)

<sup>48</sup> Dandridge et al (1980)

<sup>49</sup> Macdonald I (forthcoming 1998) op cit.

<sup>50</sup> Elmore (1982), op. cit.

<sup>51</sup> Juran J (1988) op. cit.

<sup>52</sup> Crosby P B (1979) op cit.

<sup>53</sup> ISO 9004:2 (1991) *Quality Management and Quality System Elements – Guidelines for Services*, International Organization for Standardization

- <sup>54</sup> Macdonald J & Piggott J (1990) *Global Quality – The New Management Culture*, Mercury Books, London
- <sup>55</sup> Taguchi G (1987), *Introduction to Quality Engineering: Designing Quality into Products and Processes*, Quality Resources
- <sup>56</sup> Parasuraman A, Zeithaml V and Berry L (1985), A Conceptual Model of Service Quality and its Implications for Future Research, *Journal of Marketing*, Vol. 49, pp 41-50
- <sup>57</sup> Pollitt C (1995) in Pollitt C and Bouckaert G (1995), Eds., *Quality Improvement in European Public Services: Concepts, Cases and Commentary*, Sage Publications, London
- <sup>58</sup> Morgan C and Murgatroyd S (1994), *Total Quality Management in the Public Sector: An International Perspective*, Open University Press, Buckingham, England
- <sup>59</sup> Parasuraman A, Zeithaml V and Berry L (1985) op. cit.
- <sup>60</sup> Bell L, Brown R M, and McCartney S (1993) Patient Defined Audit – A New Perspective, in Malek M, Vacani P and Davey P, (Eds.) *Managerial Issues in the Reformed NHS*, John Wiley and Sons, London
- <sup>61</sup> Joss R and Balkwill C (1993), A pilot study of satisfaction with ante natal clinic services, unpublished research report for Hillingdon Health Authority, Uxbridge, Middlesex
- <sup>62</sup> Joss R, Kogan M, and Henkel M (1994) *Total Quality Management in the National Health Service: Final Report of an Evaluation*, Centre for the Evaluation of Public Policy and Practice, Brunel University, England
- <sup>63</sup> Morgan C and Murgatroyd S (1994) op. cit.
- <sup>64</sup> Merry M D (1990) Total quality management for physicians: translating the new paradigm, *Quality Review Bulletin*, Vol. 16, No 3, pp. 101-105
- <sup>65</sup> Jaques E(1976), *A General Theory of Bureaucracy*, Heinemann Educational Books, New Hampshire, USA

<sup>66</sup> Joss R and Balkwill C (1993) op. cit.

<sup>67</sup> Rosander A (1989): *The Quest for Quality in Services*, Quality Press, American Society for Quality Control, Wisconsin

<sup>68</sup> Harvey L and Green D (1993), *Defining Quality, Assessment and Evaluation in Higher Education*, Vol. 18, No 1, page 24

<sup>69</sup> Kogan M (Ed.) (1986), *Papers from the Journal of Institutional Management in Higher Education*, Jessica Kingsley, London

<sup>70</sup> Peters T and Waterman R (1982), *In Search Of Excellence: Lessons from America's Best Run Companies*, New York, Harper Row

<sup>71</sup> Langlands A (1996), speaking at the 1996 NAHAT conference as reported in *Patient's Charter News*, Issue 24, June 1996, p. 6, NHS Executive

<sup>72</sup> Rosander A. (1989) op cit.

<sup>73</sup> Bell L, Brown R and Morris B (1993), *Auditing Community Services from A New Perspective*, in *Quality and Its Applications*, University of Newcastle on Tyne

<sup>74</sup> Nader R (1965) op cit.

<sup>75</sup> Macdonald J & Piggott J (1990) *Global Quality – The New Management Culture*, p 44, Mercury Books, London

<sup>76</sup> Hammer M and Champy J (1993), *Reengineering the Corporation – a Manifesto for Business Revolution*, Nicholas Brealey Publishing, London

<sup>77</sup> Rosander A. (1989) op cit.

<sup>78</sup> Joss R & Kogan M (1995) op. cit.

- <sup>79</sup> Donabedian A (1980), *The Definition of Quality and Approaches to its Management*, Vol. 1: *Explorations in Quality Assessment and Monitoring*, Ann Arbor, Michigan, Health Administration Press
- <sup>80</sup> Donabedian A (1982), *The Criteria and Standards of Quality*, Vol. 2: *Explorations in Quality Assessment and Monitoring*, Ann Arbor, Michigan, Health Administration Press
- <sup>81</sup> Donabedian A (1988), "The Quality of Care – How can it be Assessed?", *Journal of the American Medical Association*, Vol. 260, No 12, pp 1743-1748
- <sup>82</sup> Donabedian A (1988) op. cit.
- <sup>83</sup> Steffen G (1988) Quality Medical Care – A Definition, *Journal of the American Medical Association*, Vol. 260, No 1
- <sup>84</sup> Williamson J (1991) Providing Quality Care, *Health Services Management*, Vol. 87, No 1, p 20
- <sup>85</sup> Maxwell R (1984) Quality Assessment in Health, *British Medical Journal*, Vol. 288, pp 1470-1472
- <sup>86</sup> Brooks T (1988) in her introduction to Sketris I, *Health Service Accreditation – an International Overview*, *King's Fund Centre – Centre Handbook*
- <sup>87</sup> Evans K & Corrigan P (1991) Standard Setting: An Introduction to Differing Approaches, *Nursing Practice*, Vol. 4, No 3, pp 16-19
- <sup>88</sup> Ovretveit J (1992) op. cit.
- <sup>89</sup> Joss R, Kogan M, and Henkel M (1994) op. cit.
- <sup>90</sup> Morgan C and Murgatroyd S (1994) op. cit.
- <sup>91</sup> Shewhart W A (1931), *Economic Control of Quality of Manufactured Product*, New York, Van Nostrand

- <sup>92</sup> Neave H (1990), *The Deming Dimension*, SPC Press Inc., Tennessee
- <sup>93</sup> Crosby P B (1979) op cit.
- <sup>94</sup> Taguchi G (1987) op. cit.
- <sup>95</sup> Macdonald, J & Piggott, J (1990) op. cit.
- <sup>96</sup> Deming W E (1986) op cit.
- <sup>97</sup> Macdonald, J & Piggott, J (1990) op. cit.
- <sup>98</sup> Deming (1986) op. cit. p 315
- <sup>99</sup> ISO 9004:2 (1991) op cit.
- <sup>100</sup> Nader R, (1965) op cit.
- <sup>101</sup> Peters T, (1989) *Thriving on Chaos – Handbook for a Management Revolution*, Pan Books, London
- <sup>102</sup> Crosby P B (1979) op cit.
- <sup>103</sup> Collard R (1989), *Total Quality – Success Through People*, London, Institute of Personnel Management
- <sup>104</sup> Oakland J S (1989), *Total Quality Management*, p14, Heinemann, Oxford
- <sup>105</sup> Macdonald J & Piggott J (1990) op cit.
- <sup>106</sup> Atkinson P E (1990) *Creating Culture Change – The Key to Successful Total Quality Management*, IFS Publications, Bedford, England
- <sup>107</sup> Joss, R & Kogan, M (1995) *Advancing Quality: Total Quality Management in the National Health Service*, Open University Press, Buckingham



- <sup>108</sup> Hammer M and Champy J (1993) op cit.
- <sup>109</sup> Armstrong, M (1993), op. cit.
- <sup>110</sup> Armstrong, M (1993), *A Handbook of Management Techniques*, table 41.1, p 197, Kogan Page, London
- <sup>111</sup> Foster & Whittle (1991), *The Quality Management Maze* in Chase R (ed.) *Implementing TQM – The Best of TQM Magazine*, IFS Publications, Bedford
- <sup>112</sup> Crosby P B (1979) op. cit.
- <sup>113</sup> Atkinson P E (1990) op cit.
- <sup>114</sup> Macdonald & Piggot (1990) op. cit.
- <sup>115</sup> Lascelles D & Dale B (1992) *Managing Total Quality Improvement*, IFS Publications, Bedford, England
- <sup>116</sup> Elmore R (1982) op cit.
- <sup>117</sup> Peters, T (1989) *Thriving on Chaos – Handbook for a Management Revolution*, Pan Books, London, p. 70 et seq.
- <sup>118</sup> Joss R, Kogan M, and Henkel M (May 1994) op cit.
- <sup>119</sup> Peters (1989) op. cit. p. 76
- <sup>120</sup> Neuhauser P (1988) *Tribal Warfare in Organisations*, Balinger, Cambridge MA
- <sup>121</sup> Ishikawa K (1985) *What is Total Quality Control? The Japanese Way*, Prentice Hall, Englewood Cliffs, NJ
- <sup>122</sup> Rosander A (1989) op cit.

- <sup>123</sup> Macdonald, J & Piggott, J (1990) op cit.
- <sup>124</sup> Deming (1986), op. cit. p. 315
- <sup>125</sup> Rosander (1989) op. cit.
- <sup>126</sup> Crosby P B (1979) op. cit.
- <sup>127</sup> Juran J (1988) op. cit.
- <sup>128</sup> Crosby P B (1979) op. cit. p 58
- <sup>129</sup> Deming (1986) op. cit.
- <sup>130</sup> Macdonald & Piggot (1990) op. cit. p. 59
- <sup>131</sup> Dalley G & Carr-Hill R (1991), Pathways to Quality, a Study of Quality Management Initiatives in the NHS. A Guide for Managers, *Quality Management Initiatives*, No 2, Centre for Health Economics, University of York, UK
- <sup>132</sup> Oakland J S (1989), *Total Quality Management*, Heinemann, Oxford
- <sup>133</sup> *TQM Magazine*, 1991, p 17 and p. 28
- <sup>134</sup> Macdonald & Piggott, op. cit. p. 15
- <sup>135</sup> Deming (1986) op. cit. p. 184
- <sup>136</sup> Chase R & Bowen, D (1991), "Service Quality and the Service Delivery System – A Diagnostic Framework", in Brown S et al (1991) (eds.) *Service Quality – Multidisciplinary and Multinational Perspectives*, Lexington Books, Lexington, Massachusetts, USA
- <sup>137</sup> Parasuraman A, Zeithaml V and Berry L (1985) op. cit.

<sup>138</sup> Klaus (1985), Quality Epiphenomenon: the Conceptual Understanding of Quality in Face to Face Encounters, in Czepiel J, Solomon M and Suprenant C (Eds.), *The Service Encounter*, Lexington Books, Massachusetts

<sup>139</sup> Pollitt C (1995) in Pollitt C and Bouckaert G (1995) op cit.

<sup>140</sup> Gronroos C (1984), A Service Quality Model and its Marketing Implications, *European Journal of Marketing*, Vol. 18, No 4

<sup>141</sup> Shostack L (1987) "Service Positioning Through Structural Change", *Journal of Marketing*, 51, pp. 34-43

<sup>142</sup> Bitner M (1991), "The Evolution of the Services Marketing Mix and its Relationship to Service Quality", in Brown et Al (eds.) 1991, *Service Quality – Multidisciplinary and Multinational Perspectives*, Lexington Books, Lexington, Massachusetts.

<sup>143</sup> Edvardsson B & Gustavsson B (1991) "Quality in Services and Quality in Service Organisations – A Model for Quality Assessment", in Brown et al (eds.) in *Service Quality – Multidisciplinary and Multinational Perspectives*, Lexington Books, Lexington, Massachusetts, USA

<sup>144</sup> NHS Management Enquiry, 1983, HMSO, London

<sup>145</sup> Buxton M, Packwood T & Keen J (1991), *Resource Management: Final Report of the Brunel University Evaluation of Resource Management*, Brunel University Uxbridge, Middlesex

<sup>146</sup> Department of Health (1989) Chief Executive's circular (EL [89]/MB/114).

<sup>147</sup> Pfeffer N & Coote A (1991) *Is Quality Good for You? – A Critical Review of Quality Assurance in Welfare Services*, Institute for Policy Research, London.

<sup>148</sup> Hirschman A (1970) *Exit, Voice and Loyalty: Responses to Decline in Firms, Organisations and States*, Harvard University Press

<sup>149</sup> Hoggett P (1991) A new management in the public sector? *Policy and Politics*, Vol. 19 no. 4

<sup>150</sup> Pollitt C (1995) Justification by Works or by Faith? Evaluating the New Public Management. Paper prepared for the *European Group for Public Administration (EGPA) Conference*, Rotterdam, September 1995

<sup>151</sup> Gaster L (1991), Quality and decentralisation: are they connected? *Policy and Politics*, Vol. 19, 4

<sup>152</sup> Thompson D. (1990), *The Changing Face of the National Health Service in the 1990s*, 2<sup>nd</sup> edition, edited by Spurgeon P., Health Services Management Centre, Longman, Essex

<sup>153</sup> Harrison S, Hunter D, Marnoch G & Pollitt C (1989), *The Impact of General Management in the National Health Service*, The Open University and Nuffield Institute for Health Service Studies, Milton Keynes, UK

<sup>154</sup> Griffiths R (1983) *NHS Management Enquiry: Report to the Secretary of State for Social Services*, Department of Health and Social Security, London

<sup>155</sup> Stoll B, Best medical practice: viewpoint of a UK oncologist, *International Journal of Health Care Planning and Management*, Vol. 4, p 227

<sup>156</sup> Tuckman A & Blackburn D (1991), "Fitness for Purpose: Total Quality Management in the Health Service", paper presented at *the BSA Annual Conference*, Manchester, March 1991.

<sup>157</sup> Crosby P B (1979) op. cit.

<sup>158</sup> Atkinson (1990) op. cit.

<sup>159</sup> Koch H (1993), Papers presented at 1993 *ICM Conference on TQM in the NHS*, London

<sup>160</sup> Joss R (1995), "Costing Non-Conformance at an NHS Hospital: a Pilot Study", in Pollitt C and Bouckaert G (eds.) *Quality Improvement in European Public Services: Concepts, Cases and Commentary*, Sage Publications, London

<sup>161</sup> Pollitt C (1990), "Doing Business in the Temple? Managers and Quality Assurance in the Public Services", *Public Administration*, Vol. 68, No 4, pp 435-452

<sup>162</sup> Nichols D, (1989), Letter to Regional General Managers, June 1989, EL[89]/MB/114

<sup>163</sup> Merrifield A (1990) (a), Lead Article in NHS Management Executive News, No 37, Sept., pp 1-2, and

Merrifield A (1990) (b), "The NHS and its Consumers", Opening Address to the *Conference on Total Quality Management in the NHS*, Birmingham, November 1990

<sup>164</sup> Waldegrave W (1991), "Developing the Purchasing Role", in *NHS Management Executive News*, Issue No 45, May, p 5

<sup>165</sup> Dalley & Carr-Hill (1991), op. cit.

<sup>166</sup> Buxton M, Packwood T & Keen J (1991), *Resource Management: Final Report of the Brunel University Evaluation of Resource Management*, Brunel University Uxbridge, Middlesex

<sup>167</sup> Department of Health (1989), *Medical Audit – Working Paper No 6. Working for Patients*, HMSO, London

<sup>168</sup> Shaw C (1989) *Medical Audit: A Hospital Handbook*. King's Fund Centre, London

<sup>169</sup> Joss R. Kogan M & Henkel M. (1994), op. cit.

<sup>170</sup> Pollitt C (1993) Medical audit study

<sup>171</sup> Harrison S & Pollitt C (1994) op cit.

<sup>172</sup> Harrison S & Pollitt C, (1994) op. cit.

- <sup>173</sup> Dalley G & Carr-Hill R (1991) op. cit.
- <sup>174</sup> Kogan M, Redfern S, Kober A, Norman I, Packwood T, and Robinson S (1995) *Making Use Of Clinical Audit*, Open University Press, Buckingham
- <sup>175</sup> Williamson J (1991) "Providing Quality Care", *Health Services Management*, Vol. 87, No 1, pp 18-23
- <sup>176</sup> For example, see Rothery B (1993) *ISO 9000*, Gower Press, Aldershot.
- <sup>177</sup> Sneddon J (1997) *In pursuit of Quality: The Case Against ISO 9000*, London, Oak Tree Press
- <sup>178</sup> Sneddon J (1997) op. cit. pages 46 et seq.
- <sup>179</sup> For example, see Camp R. C. (1989) *Benchmarking: The search for industry best practices that lead to superior performance*. ASQC, Quality Press, Milwaukee, Wisconsin
- <sup>180</sup> Zairi M. (1992) *TQM-based Performance Measurement: Practical Guidelines*, Technical Communications (Publishing) Ltd., Hertfordshire, England
- <sup>181</sup> Edvardsson B & Gustavsson B (1991) "Quality in Services and Quality in Service Organisations – A Model for Quality Assessment", in Brown et al (eds.) in *Service Quality – Multidisciplinary and Multinational Perspectives*, Lexington Books, Lexington, Massachusetts, USA
- <sup>182</sup> Pollitt C & Bouckaert G, (1995) op. cit.
- <sup>183</sup> Hammer M and Champy J (1993) op. cit.
- <sup>184</sup> Hammer M and Champy J (1993) op. cit., p. 35
- <sup>185</sup> Macdonald J, (1993) *TQM: Does it always Work? TQM Practitioners Series*, Technical Communications (Publishing) Ltd., Letchworth.
- <sup>186</sup> Deming W E (1986) op cit.

<sup>187</sup> Maxwell R (1984) Quality Assessment in Health, *British Medical Journal*, Vol. 288, pp 1470-1472

<sup>188</sup> Crosby P B(1979) op. cit.

<sup>189</sup> Wragge E C (1984) Conducting and Analysing Interviews in Bell J et al (eds.) *Conducting Small-scale Investigations in Educational Management*, London, Harper and Row

<sup>190</sup> Berwick D (1992) 'Quality management in the NHS: the doctor's role – parts I & II, *British Medical Journal*, Vol. 304, pp 235-239 and 304-308

<sup>191</sup> Dalley G & Carr-Hill R (1991), Pathways to Quality, a Study of Quality Management Initiatives in the NHS. A Guide for Managers, *Quality Management Initiatives*, No 2, Centre for Health Economics, University of York, UK

<sup>192</sup> Much researched and analysed by, for example, Schon D (1983) *The Reflective Practitioner; How Professionals Think in Action*, London, Temple Smith. See also Steffen (1983) below

<sup>193</sup> Steffen G (1988) Quality Medical Care – A Definition, *Journal of the American Medical Association*, Vol. 260, No 1

<sup>194</sup> Atkinson (1990) op cit.

<sup>195</sup> Joss (1995) op cit.

<sup>196</sup> Koch (1993) op cit.

<sup>197</sup> see for example, *Local Voices*, Department of Health Publication, London

<sup>198</sup> Kogan M, Redfern S, Kober A, Norman I, Packwood T, and Robinson S (1995) *Making Use Of Clinical Audit*, Open University Press, Buckingham

<sup>199</sup> see also Kogan M, Redfern S, *et al* (1995) op. cit.

- <sup>200</sup> Etzioni, 1964, *Modern Organisations*, Englewood Cliffs, New Jersey, Prentice Hall
- <sup>201</sup> Greig J (1993), A study of Quality teams in the NHS, *International Journal of Health Care Quality Assurance*, Vol. 6, Number 6
- <sup>202</sup> Berman P (1980) 'Thinking about programmed and adaptive implementations: matching strategies to situations' in *Why Policies Succeed or Fail*, Ingram H and Mann D (eds.) Sage, London
- <sup>203</sup> Wolman (1984) 'The determinants of program success and failure', *Journal of Public Policy*, Vol. 1, No. 4, pp 433-464
- <sup>204</sup> Rittel (1972), 'On the planning crisis: systems analysis of the first and second generation', *Bedriftsokonomer* pp. 390-396, as cited in Mason & Mitroff (1981) *Challenging Strategic Planning Assumptions*. John Wiley & Sons, New York
- <sup>205</sup> Macdonald I (forthcoming 1998) *Beyond Them and Us*, Australia, Allen and Unwin
- <sup>206</sup> Nystrom P, Hedberg B and Starbuck W, 1976, 'Interacting processes as organisational designs', in Kilmann R (Ed.) *The Management of Organisational Design*: Vol. 1, New York, Elsevier
- <sup>207</sup> Pollitt C (1990), "Doing Business in the Temple? Managers and Quality Assurance in the Public Services", *Public Administration*, Vol. 68, No 4, pp 435-452
- <sup>208</sup> Pollitt C (1990) op. cit. p. 442
- <sup>209</sup> Joss, Kogan & Henkel. (1994) op. cit.
- <sup>210</sup> Nystrom P, Hedberg B and Starbuck W, 1976, op. cit.
- <sup>211</sup> Elmore R (1982) 'Backward mapping: implementation research and policy decisions', in Williams W (ed.) *Studying Implementation: Methodological and Administrative Issues*, Chatham House Publishers



<sup>212</sup> Pfeffer N & Coote A (1991) *Is Quality Good for You? – A Critical Review of Quality Assurance in Welfare Services*, Institute for Policy Research, London.

<sup>213</sup> Hirschman A (1970) *Exit, Voice and Loyalty: Responses to Decline in Firms, Organisations and States*, Harvard University Press

<sup>214</sup> Tuckman A & Blackburn D (1991), “Fitness for Purpose: Total Quality Management in the Health Service”, paper presented at *the BSA Annual Conference*, Manchester, March 1991.

<sup>215</sup> Joss R, Kogan M, and Henkel M (1994) *Total Quality Management in the National Health Service: Final Report of an Evaluation*, Centre for the Evaluation of Public Policy and Practice, Brunel University, England