Status of total quality management in Australian public health organisations

RUTH TURNER AND ROSS HARTLEY

Ruth Turner, currently with the South Australian Premier's Department, has an extensive background in quality management in both rural and metropolitan hospitals.
Ross Hartley is Director of the Rural Health Education and Research Centre, Tamworth.

Abstract

Research suggests that there is some confusion among quality improvement managers about the differences between quality management and traditional quality assurance. This lack of understanding would appear to be the same among rural and urban health staff, although there is a higher percentage of staff engaged in multidisciplinary activities in the rural health services. Education of staff and commitment from top management would seem to be the factors inhibiting the health industry from incorporating quality management into their cultures.

Introduction

In today's competitive market environment, quality management (QM) has emerged as one of the strategies for organisation survival. QM, or continuous quality improvement, is about a radical management philosophy that encourages staff to improve their own work environment, to remove the snags, errors and delays that are part of the everyday work routine, and to become involved in designing new ways to work better (Deming 1986). The QM organisation invites every employee to participate in planning and designing the way processes and systems should work, rather than reacting to problems after they arise. Understanding variation to assist in interpreting performance and the subsequent redesigning of work processes to reduce inefficiencies are important principles in the QM philosophy.

Importantly, it is the role of management, especially senior management, to assist employees in their improvement activities by giving them the guidance and authority to change inept work practices, and to visibly and practically support such efforts. It is customers who drive and determine quality by identifying needs and expectations and evaluating how well these have been met. This includes customers who directly receive the service or product, and employees (as internal customers) who also have wants and expectations that need to be met if they, in turn, are to provide an optimal product or service (Roey 1992; Hartley & Turner 1995).

Unlike QM, quality assurance (QA) does not have a progressive labour management component but is purely a measurement technique that uses performance indicators to assess outcomes. As such, problems are investigated after they have occurred (Stuart 1992). Responsibility for the problem tends to be allocated to or blamed on individual employees who supposedly must 'fix' the problem (Deming 1986). While QA would seem to be capable of identifying significant problems in the workplace, its major drawback is that it falls short of providing solutions – these usually requiring a renegotiation of work practices and routines involving various departments and professional disciplines. The inspectorial nature of QA has resulted in poor cooperation from clinicians, while limited understanding of problem-solving tools has left those who have shown some interest without a suitable means to tackle the multidisciplinary or cross-functional nature of problems (Berwick 1987). As a result, the system responsible for producing the problem has tended to go unchanged.

Despite the fact that QM has been on the health agenda for at least a decade, published information would suggest that very little seems to have been achieved. Of course, much could be occurring at the local level. If so, this in itself is a quality issue in that achievements in one organisation are not being extrapolated to other organisations. Without broadcasting results, through popular media, newsletters, conferences or scientific journals, health employees run the risk of duplicating quality projects, thus tying up already sparse resources – another quality issue! Our search of the literature suggests that very little QM activity is being published, especially in relation to practices in rural health services, a contention supported by anecdotal evidence (Turner & Hartley 1997).

In view of this we decided to survey quality managers from across Australia, both rural and urban, essentially to gain baseline data on the status of QM in health. This paper reports our findings.
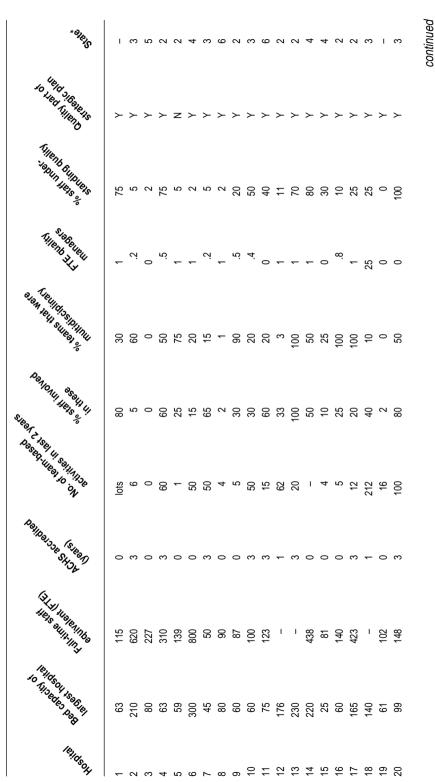
Methods

A mail survey was undertaken during Spring 1996. The target populations were quality managers from urban and rural health services across Australia, representing all States and Territories. A total of 90 urban and 92 rural health services were surveyed. Urban health services were obtained from the Yellow Pages of phone books for each capital city. Rural health services were chosen from the NRMA Accommodation Directory 1994–95. The selection criterion for rural health services was a population larger than 10 000, although this was reduced to 5000 for less densely populated States and Territories.

The survey questionnaire was brief and asked respondents to estimate the number of QM projects undertaken within the previous two years, whether these were multidisciplinary, and the percentage of staff involved with QM. Respondents were also asked to comment on what was required to get QM up and running in their organisations, and the number of staff with a sound understanding of QM.
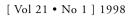
Results and discussion

The response rate was considerably higher from rural than from urban health services (45 per cent and 31 per cent respectively). Each group had two follow-up reminders, so the reasons for this discrepancy are unclear. Notwithstanding this, the data reveal some interesting features of QM practice in both domains (Tables 1 and 2). More than half of the rural health services did not have three-year accreditation status with the Australian Council on Healthcare Standards, compared with less than 5 per cent in the urban health services. This is a large difference. Some of the reasons cited for the relatively low accreditation status among rural health services are limited time, money and personnel necessary to implement a comprehensive quality program; insufficient information technology to store, tabulate and cross-reference data to elicit meaningful information; inadequate continuing education for employees; role overload; and problems of confidentiality and anonymity in rural communities (Bushy 1992; Turner 1996). While we acknowledge that there are many forms of accreditation available to health services, our contention is that the major one sourced remains that of the Australian Council on Healthcare Standards, and that the results presented fairly accurately reflect the state of QM in health care systems.

Table 1: Summary of responses to TQM/CQI survey of rural health services in Australia (n = 41)

Hospital	Bed capacity of largest hospital	Full-time staff equivalent (FTE)	ACHS accredited (years)	No. of team-based activities in last 2 years	% staff involved in these	% teams that were multidisciplinary	FTE quality managers	% staff under-standing quality	Quality part of strategic plan	State*
1	63	115	0	lots	80	30	1	75	Y	–
2	210	620	3	6	5	60	.2	5	Y	3
3	80	227	0	0	0	0	0	2	Y	5
4	63	310	3	60	60	50	.5	75	Y	2
5	59	139	0	1	25	75	1	5	N	2
6	300	800	0	50	15	20	1	2	Y	4
7	45	50	3	50	65	15	.2	5	Y	3
8	80	90	0	4	2	1	1	2	Y	6
9	60	87	0	5	30	90	.5	20	Y	2
10	60	100	3	50	30	20	.4	50	Y	3
11	75	123	3	15	60	20	0	40	Y	6
12	176	–	1	62	33	3	1	11	Y	2
13	230	–	3	20	100	100	1	70	Y	2
14	220	438	0	–	50	50	1	80	Y	4
15	25	81	0	4	10	25	0	30	Y	4
16	60	140	0	5	25	100	.8	10	Y	2
17	165	423	3	12	20	100	1	25	Y	2
18	140	–	1	212	40	10	25	25	Y	3
19	61	102	0	16	2	0	0	0	Y	–
20	99	148	3	100	80	50	0	100	Y	3

Table 1: Summary of responses to TQM/CQI survey of rural health services in Australia (n = 41) *continued*

Hospital	Bed capacity of largest hospital	Full-time staff equivalent (FTE)	ACHS accredited (years)	No. of team-based activities in last 2 years	% staff involved in these	% teams that were multidisciplinary	FTE quality managers	% staff under-standing quality	Quality part of strategic plan	State*
21	135	263	3	–	–	–	.6	50	Y	3
22	–	1058	0	20	2	100	1	60	Y	0
23	62	131	3	4	60	100	–	15	Y	2
24	225	599	3	20	15	80	.6	50	Y	3
25	107	321	3	10	40	100	1	70	Y	2
26	160	–	3	50	60	50	1	30	Y	7
27	120	269	1	–	15	2	.75	15	N	5
28	60	80	3	6	90	80	.2	80	Y	5
29	78	217	0	0	–	–	.5	0	N	5
30	106	302	0	10	20	20	0	18	Y	3
31	166	530	3	51	41	65	1	20	Y	2
32	230	200	1	100	45	35	1	35	Y	2
33	120	159	0	6	50	50	1	75	Y	4
34	21	–	0	50	80	60	0	10	Y	–
35	120	195	0	20	40	100	0	50	Y	4
36	28	74	0	0	0	0	0	20	N	6
37	52	115	3	5	20	60	.6	70	Y	2
38	340	1333	1	–	50	90	1	55	Y	–
39	177	1300	0	–	40	–	1	20	Y	0
40	130	345	3	5	5	20	1	20	Y	2
41	100	450	3	4	5	5	.4	5	Y	6

*0 = NT, 2 = NSW/ACT, 3 = Vic, 4 = Qld, 5 = SA, 6 = WA

Table 2: Summary of responses to TQM/CQI survey of urban health services in Australia (n = 28)

Hospital	Bed capacity of largest hospital	Full-time staff equivalent (FTE)	ACHS accredited (years)	No. of team-based activities in last 2 years	% staff involved in these	% teams that were multidisciplinary	FTE quality managers	% staff under-standing quality	Quality part of strategic plan	State*
1	103	259	3	0	0	0	0	5	Y	2
2	106	251	0	–	–	–	1	2	Y	6
3	193	358	3	–	10	40	1	75	Y	6
4	420	1449	3	10	120	10	1.2	20	Y	–
5	300	700	3	4	5	100	1.6	80	Y	6
6	260	865	3	–	50	25	1	25	Y	5
7	400	3000	3	5	1	5	2.5	20	Y	–
8	220	523	3	43	60	50	1	60	Y	6
9	302	604	3	–	80	50	1.4	20	N	2
10	400	2500	0	8	5	5	0	20	Y	2
11	150	400	3	30	15	–	1	10	Y	6
12	150	300	3	12	100	90	0	80	Y	–
13	160	540	3	14	10	100	.75	10	N	2
14	648	1991	3	200	20	5	1	10	Y	2
15	890	3200	3	1000	70	30	1	60	Y	4
16	125	300	3	100s	20	80	1	60	Y	2
17	300	900	3	8	30	50	0	30	Y	4
18	427	500	3	–	50	1	1	25	Y	3
19	600	2637	3	Many	75	25	4	95	Y	2
20	693	3983	3	200	50	30	1	50	Y	6
21	214	–	3	20	13	55	1	50	Y	4
22	140	530	3	10	20	70	1	60	Y	2
23	270	458	3	97	31	50	3	100	Y	–
24	134	200	0	6	10	10	1.6	80	Y	2
25	93	327	0	–	20	20	.5	50	Y	4
26	748	3300	3	1000	100	70	0	80	Y	3
27	299	–	3	4	5	100	0.2	30	Y	–
28	82	166	3	3	30	2	42	50	Y	2

*0 = NT, 2 = NSW/ACT, 3 = Vic, 4 = Qld, 5 = SA, 6 = WA

The number of successfully completed QM projects reported for the previous two years varied enormously, from none to several hundreds – even more in some cases. The literature explains quite clearly the difference in theory and practice between QA activities and QM. In essence, the former is about auditing people, the latter about improving processes and systems. The present data suggest possible confusion in this regard among quality managers in the health industry. The percentage of respondents reporting what we consider an unusually high number of successfully completed projects was essentially the same in both rural and urban health services (about 30 per cent). The confusion highlighted could be due in part to the nature of the survey undertaken. The Australian Council on Healthcare Standards accreditation program has encouraged quality managers to maintain quality activity registers identifying all quality activities. Therefore, those services reporting an unusually large number of activities may simply have consulted their registers. Even so, the argument regarding confusion stands and, as such, warrants further consideration.

By and large the percentage of teams that were multidisciplinary was slightly higher in the rural health services than in the urban health services (50 per cent and 43 per cent respectively). This finding highlights one of the important differences between rural and urban health services in regard to breaking down traditional discipline-based barriers. Rural health services tend to be smaller, less complex organisations. Their sense of being an outpost and a community enables staff from various departments and backgrounds to work together in establishing consensus positions on how systems can be improved through redesigning work practices (Turner 1996). Much more rigid and inflexible divisions between staff groups, associated with professional autonomy, control and competition, come into play in the larger metropolitan health service (Willis 1983). At the same time, the data suggest that the percentage of staff involved in QM activities is identical in both rural and urban groups, at about 40 per cent. This seems a surprisingly high figure and certainly appears not to correspond with the number of published health studies in QM.

By contrast, there was large variation in the percentage of staff having a sound understanding of QM, from less than 10 per cent in many instances to almost everyone. Again, the variation suggests possible confusion about the differences between QA and QM. The experience of the authors from the context of a quality service and management course they run for health services across Australia suggests widespread ignorance of QM theory and practice (Turner & Hartley 1997).

Finally, as regards what was needed to get QM up and running in health services, the answers were similar from both groups: more staff education (particularly in

rural areas), commitment from managers (especially the top), and a cultural change (Tables 3 and 4). These findings are hardly surprising. What is surprising, however, is that the health industry may not have progressed much, in over a decade, in incorporating QM into its culture. A marketing consultant recently commissioned by the South Australian Association for Quality in Health Care to interview quality personnel and senior staff in hospitals had the following to say:

> *The quality initiative has created perplexity. A wave of new terminology and conflicting views on quality has led to confusion and sometimes scepticism over the quality movement. In particular, management in general has not understood or embraced quality.*

The reluctance, or perhaps inability, of top management to provide effective leadership – planning, communicating a QM vision, motivating staff and leading by example – and generally not being committed to QM are frequently cited in the literature as inhibiting the full-scale evolution of an organisation's move towards a quality culture (The University of New South Wales 1996). A recent study by Hartley (1996), which looked at leadership styles in middle managers, found that rural health managers were fairly limited in the range of leadership styles used to achieve change. Using self-analysis, the managers found their leadership behaviours to be entrenched, inflexible and overall less effective than they might otherwise be – findings hardly conducive to an organisation serious about its commitment to QM. It would appear that when executives consider management initiatives, quality more often than not tends toward the lower end of the scale of competing priorities. We might well ask why.

Certain values, traditions and historical experiences of the Australian health care industry and of hospitals per se work against the successful introduction of a QM culture. Not the least is the concept of top management as cheer leaders and quality advocates conflicting with the Australian tradition which distrusts zealots of any kind. QM is about teamwork but, typically, members of our medical profession have been poor team players. The pursuit of autonomy by all health professionals, which has become institutionalised in the structure of health care organisations, also mitigates against the teamwork required for QM. And there lingers the 'rotten apple' approach of blaming individuals, inherent in QA, which continues to contribute to a distrust of QM (Degeling 1994).

In spite of these barriers there remain many processes within the health care system characterised by waste, rework and unnecessary complexity, the solutions to which lend themselves to multidisciplinary teamwork. Applied to everything from preparing the operating room for the next patient to the choice of antibiotics in severe infections, industrial QM science would seem to have considerable potential to improve health care delivery at both the quality and

Table 3: Suggestions offered as to how to get quality management working in rural health services

Suggestions	Frequency
Staff education in total quality management	25
More resources (money/staff)	15
Time	13
Commitment from executive	10
Commitment from managers	10
Cultural change	11
Commitment from staff	6
Others:	20
Including visiting medical officer commitment, appointment of quality manager, cooperation, other education for managers and staff, recognition and success with total quality management, stability.	

Table 4: Suggestions offered as to how to get quality management working in urban health services

Suggestions	Frequency
Staff education in total quality management	13
More resources (money/staff)	6
Time	1
Commitment from executive	15
Commitment from managers	4
Cultural change	13
Commitment from staff	6
Others:	11
Including visiting medical officer commitment, appointment of quality manager, cooperation, other education for managers and staff, recognition and success with total quality management, stability.	

cost-efficiency level. With regard to the latter, American research shows that up to 35 per cent of health care expenditure is due to waste, needless procedures and inefficiency (Cassalou 1991). It is further touted that QM reduces costs from between 3 to 5 per cent of total expenses (Anderson & Daigh 1991). Another account of QM claims a reduction in operating expenses by 1 per cent, or $2 million (Burda 1991). Further evidence of the viability of QM comes from the Australian literature which outlines successful QM project teams improving the delivery of health services at both the quality and efficiency levels (Burnett 1993; Turner & Dennis 1995). As the data from this study suggest, educating staff on the benefits of QM, for example, in experiential workshops, and marrying this to management commitment through leadership could open the way to reconstructing health care along pragmatic QM lines.

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