QUALITY MANAGEMENT PRACTICES IN HEALTH CARE SERVICES

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Abstract This paper reports the findings from a research study of quality management in the Australian healthcare sector. The study suggests that quality management is what hospitals require to become more cost effective and efficient. The research also shows that to implement quality management successfully requires efficient teamwork through productive teams, effective communication throughout the hospitals and high employee satisfaction. Training and empowerment of employees can enhance the team operating efficiency. Furthermore, employee satisfaction increases if the hospital has appropriate communication channels.

Keywords: healthcare, quality, management, involvements

INTRODUCTION

Health care system in Australia is facing the problem of increased demand for health care service and escalating health care costs. The expenditure in the health care sector has increased dramatically over the last few years. Factors influencing this growth include raised incomes, population aging and increased access. It is generally considered effective in terms of health outcomes, consumer satisfaction and cost. However, the customers expect higher quality of service for the dollars they spend for health care. Many health care organizations have been following good quality management practices. Some of them have been using the philosophy of Total Quality Management (TQM).

The aim of this research is to investigate the quality management practices in the health care system in Australia and find out to what extent it applies the TQM philosophy to improve the quality of service it provides to the patients. The investigation will concentrate on four main areas:

- 1. The benefits the healthcare organizations have gained and the barriers they faced in implementation of Quality Management.
- 2. The importance of forming teams and working together through teamwork.
- 3. Empowerment and training received by the employees to increase their ability in problem solving and decision making.
- 4. Satisfaction of employees towards their jobs by looking at the working environment and workload.

RESEARCH METHODOLOGY

Literature search and surveys are carried out to investigate the benefits that the organizations have gained from it, and the barriers they have found. In other words, to find out what impact quality management practice has on solving the problems in the health care sector.

As part of the investigation of the quality management practice in the health care sector, a survey was conducted. The aim of the survey is to find out to what extent do the hospitals in Australia practice quality management. A questionnaire was prepared to collect various information about quality management practices such as reasons to develop quality initiative, benefits and obstacles from the implementation of TQM, the types of quality improvement groups adopted by the hospitals and their effectiveness, performance measurement of quality improvement teams, the amount of training and empowerment the employees received and the satisfaction of employees. A mailing list of 450 public and private hospitals was prepared. The questionnaire was mailed in August 2000 and within six weeks 150 responses were obtained. Of these, 138 replies were usable. The overall reply rate for public hospitals is 36% and that for private hospitals is 29%.

SURVEY RESULTS

Systematic Approach and Benefits

Finding that emerge from the result indicate that in regard to the systematic approach for quality, the percentage of Continuous Quality Improvement(CQI) and Accreditation are 81% and 85.5% respectively followed by benchmarking and clinical audit with 67.4% and 64.5% respectively. Details are given in Table 1.

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Table 1: Systematic approach for quality

Systematic approach	Percentage
Total quality Management	22.5
Continuous quality improvement	81
Quality assurance	33.3
Benchmarking	67.3
Accreditation	85.5
Clinical audit	64.5
Quality assurance officers	26.8
Quality specialized consultant	14.5
Others	9.4

It appears that continuous quality improvement is one of the most popular systematic approaches; it is also part of the philosophy of total quality management. It is not easy to successfully implement TQM in a short time and observe any obvious result of improvement. CQI can at least have some short time feedback, and the results to monitor, and can be easier to motivate people to carry out further improvement.

So although only a small percentage of hospitals adopted the TQM philosophy, there are still the majority who are heading in the TQM direction. Some hospitals have been practicing quality management for more than 30 years. Accreditation and clinical audit should be the result of government requirement, as TQM is a philosophy and cannot use some standardized criteria to check the results and do comparisons. So it is much easier for government to develop a set of rules and requirement for the hospital to follow and for the government to monitor. New hospitals tend to adopt quality management once they are established. Quality management has been implemented in the healthcare sector for nearly 10 years. The number of qualified and experience experts in healthcare quality management practice has increased during this 10 years.

The main reasons causing the hospitals to develop quality initiatives are due to the decisions of senior management and pressure from government. These two reasons contribute 50% of the total reasons. Details are given in Table 2.

Table 2: Reasons for Developing Quality Initiatives

Tuble 2. Reasons for Developing Quanty initiatives		
Reasons	Frequency	
Customer demand for quality	20	
Rivalry among existing competitors	26	
Threat of substitute service	8	
Increase the bargaining power	27	
Pressure from the government	49	
Decision of senior management	69	
Others	42	

The main benefits of quality management implementation are increase in service quality (94%), better customer satisfaction (83%), improved work efficiency (72%), and higher productivity (48%). Details are given in Table 3.

Table 3: Main Benefits after implementation of Quality Management

benefits	Percentage
Increase the service quality	94
Reduce the cost	51
Increased customer satisfaction	83
Improve the reputation	67
Increase the efficiency in working	72
Increased the productivity	48
Others	12

The main obstacle in the implementation of quality management is the employee resistance to behaviour change (104 respondents). Lack of training, underestimation of quality management (52 respondents each), ineffective communication (61 respondents) and ineffective teamwork (50 respondents)

Types of Teams and Teamwork

The most favourable quality improvement group is special purpose problem solving groups. More than 60% of hospitals have quality improvements and 30% of hospitals possess project management teams. 50% of hospitals have quality circles. Self managed work teams which under Self-managing group are also adopted by 30% of hospitals.

12.1% of General-purpose (GP) teams, 22.9% of special purpose teams and 15% of Self-managing teams meet weekly. 9.1% of general-purpose team, 18.1% of special purpose teams and 15% of self-managing teams meet fortnightly. As we can see, special purpose group meet more often than the other two groups. Special purpose teams again have the best attendance out of three different quality improvement groups. The reason for low attendance was dominated by work pressure. Team members involved in other committees and lack of interest in the project were the other t main causes of The unsatisfactory attendance. best member involvement team is the GP groups, as 62% of respondents claimed the member involvement of this group was 90% or higher. The main cause of low member involvement was due to some team member's lack of commitment and not fully understanding the project.

Training and Empowerment

A total of 132 hospitals answered the questions regarding employee training. 85.6% of respondents provide different training courses for their employees. Physicians received the least training with a mean of 9.55 hours per year. Nurses and supervisors have 14 hours of training per year. The top and middle management groups receive the longest training period, about 20 hours per year. The training courses offered by the hospitals also vary. The most common courses provided to nurses and physicians are 'understanding the requirement of their customers', 'principles, benefits

and importance of quality management', and 'awareness and commitment to quality'. The three high frequency courses received by supervisors are 'leadership', 'communication skills', and 'explanation of their role and responsibility in the quality system and teamwork'. For middle and top management group, the regular courses are 'leadership', 'design, reveal and deployment of quality management', 'managing change'. However, seven quality tools and statistical process control (SPC) happen to be the lowest frequency of courses provided to all the three groups of employees.

50% of respondents stated that their training courses were conducted in house by internal department and senior staffs with quality improvement knowledge. 41% of respondents indicated that the employees were trained by an external organisation. 22% stated the training was carried out in house by full time quality staffs. 16% indicated that the training courses were held in-house by employing part-time specialist and another 9% by full time specialist

21% of the respondents stated that percentage of employee involved in training is 80%, 26% of the respondents said that the percentage of staffs involved in training course was 10% or less. One of the important points for training should be to train the necessary skill for particular job requirement, and the employee can effectively apply the learned knowledge in their work area, so the resources can be adequately utilized but won't be wasted on some unnecessary aspects. From the survey we can see that the employees applied only 50% to 70% of their barned knowledge in their work area. Furthermore, 29.4% of respondents indicated their employees applied 50% or less of the learned knowledge. Only a small proportion, 2.9% of the respondents indicated their employees applied more than 90% of the learned knowledge in their work field. There is a problem for employee to apply their learned knowledge; possible reason is that the reality is far more complex than what they are taught in the training courses. After they finish training, they might find it difficult to apply their knowledge. 34.6% of hospitals trained their employees based on a 'Just in time', method; they will train their employees for particular skills when they are needed to carry out a particular task.

Empowerment is closely related to training, as the management can only empower the employees if they have the knowledge and ability to handle the task and make the right judgement. It is also much more efficient and effective if an employee gains the authority to make certain decisions within their talent. The mean value for the empowerment of all level of employee is 4.02 (on a five-point scale, 1- strongly disagree to 5- strongly agree). The question about the resources and policy for empowerment has the mean value of 3.58. This means most of the respondents were moderately satisfied with the existing system. There should have been some more

effort to improve such awareness of the importance of empowerment for the top management.

72% of respondents stated that the obstacle in implementation of empowerment was 'resistance to behavioural change'. Around 30% of respondents said that the obstacles were from 'underestimation of empowerment', 'failure of adopt continuous learning', 'ineffective communication'. About 25% of respondents stated the obstacles were 'lack of management commitment'. and 'too much bureaucracy'. The details are given in Table 4.

Table 4: Possible obstacles in the implementation of empowerment

Obstacles	Percentage
Lack of management commitment	25
Underestimation of empowerment	33
Resistance to behavioural change	72
Failure to adopt continuous learning	31
Ineffective communication	33
Too much bureaucracy	26

The main benefit of training is higher ability to tackle problem in workplace, and more willingness to put an effort beyond standard requirement. The details are given in Table 5.

Table 5 Benefits received after training courses

Benefits	Percentage
Higher discipline in work	10
Increased loyalty to the hospital	19
More efficient to work with other staffs	35
Higher ability to tackle problem in workplace	66
More willingness to put an effort	54
beyond standard equipment	

Communication and Employee Satisfaction

The majority of respondents indicated that the main problem that affect communication efficiency was due to the communication between upper and lower level of management, and communication between same levels of staff. The possible cause was due to personal attitude (54%). This can be solved by communication skill training, as 66.9% of the respondents claimed that their hospitals had facilities for improving communication skill. These two results seem to be consistent with each other as 33.1% of hospitals do not have training for communication skills and the mean value for employees using the facilities is 41.8%. Although, there is no obvious communication problem between patients and employees, but as the patient is the main customer of hospitals it should try harder to reduce the barrier to increase the customer satisfaction and the service quality. As a conclusion the problem of ineffective communication is due to the personal attitude of those who did not use the existing facilities to improve the communication skills.

Table 6 shows the details about communication problems.

Table 6: Communication problem

Problem	Percentage
Communication between same level	43
of staffs	
Communication between upper or	45
lower level of management	
Communication with the patients	13
Lack of proper communication	14
channel	
Personal attitude	54

For the employment conditions there are four investigated items having the mean score less than 3 and the lowest one is 1.5. The level of employee satisfaction is somehow correlated with the employment condition and working condition. Improvement should be made in the opportunities of promotion, workload, and welfare and in particular the child care service availability. Details of employment condition are provided in Table 7

The average working conditions are higher than the employment conditions; the mean scores are all more than 3.6 for each of the investigated events. There are good working atmospheres(Mean 3.73) and employee relationships(3.73). The management considers suggestions of employees(3.84). Out of the five items, the one that needs more improvement is employees help each other to solve problem'(3.61), as this is one of the important criterion for good teamwork. 70% of the respondents stated the turnover rate is less than 6%. 21% of respondents indicated the turnover rate is between 6 to 20%.

Table 7: Employment condition

	Minimum	Maximum	Mean
There are sufficient	1.00	5.00	3.89
breaks			
Facilities for	1.00	5.00	2.96
promotion			
Frequency of	1.00	5.00	2.75
overwork is low			
Clarity of rules and	1.00	5.00	3.54
instruction			
Childcare service	1.00	5.00	1.54
availability			
Welfare is adequate	1.00	5.00	2.82
Satisfaction with the	1.00	5.00	3.14
pay level			

DISCUSSION AND CONCLUSIONS

The majority of hospitals in Australia have been using Accreditation, Clinical Audit, Continuous Quality Improvement (CQI) to improve their service quality, and a small number of hospitals have adopted Total Quality Management (TQM) philosophy. As regards reasons to develop quality initiative, only a small proportion of hospitals (20%) stated customer requirement for quality as the core reason to adopt quality management. Other reasons are due to top management decision (69%) and government pressure (49%). In a similar study (Ennis and Harrington, 1999), management enthusiasm was the main driver of quality management in 87 percent of the hospitals with customer demand as important in 50 percent of the

One of the main benefits after implementation of quality management is increased service quality (94%). This finding corresponds with other research studies (Monks *et al.*, 1996, Marchington *et al.*, 1993). Other main benefits of quality programs included increased customer satisfaction (83%) and increased work efficiency (72%). The main obstacle is the employee resistance to behavioral change (75%), which is a common problem with many quality programs (Wilkinson et al., 1997). Other barriers are ineffective communication (44%) followed by underestimation of quality management (37.6%) and lack of training (37.6%).

Special purpose improvement groups such as quality improvement teams are widely set up among the hospitals. These teams have the best attendance rate, the reasons for absences were work pressure and members involved in more than one committee. Overall team-operating efficiency of hospitals is above average but improvement should be introduced to increase the efficiency for better outcomes. More specific factors affecting outcome of teamwork are climate of creativity and the amount of preparation done by team members for meetings, team objective and goal, and supporting materials.

More than 85 percent of hospitals provide training for their staffs, and the middle and top management group receive the longest duration of training per year. Physicians receive the least training per year. However, most of the hospitals did not cover 'Seven Quality Tools' and 'Statistical process Control' (SPC) techniques in the training course. Reasons for low team operation efficiency may be due to large number of employees not applying their learned knowledge in their work area.

Employees found that they have difficulties in communicating with the upper and lower levels of management or the same level of staff. This is mainly due to the personal attitude and non-availability of communication training courses, as 33 percent of hospitals did not have any communication resource provided for their employees. Employment and working conditions can affect the level of satisfaction of employees. For employment conditions, most of the hospitals are lacking childcare services. Facilities for promotion, workload, welfare, payment and frequency of breaks show a moderate satisfaction level. Generally most of the hospitals have a good working atmosphere and employee relationship, but employees have a low encouragement to help each other to solve problems in the workplace.

To implement quality management successfully requires efficient teamwork through productive teams, effective communication throughout the hospitals and high employee satisfaction. Training and empowerment of employees can enhance the team operating efficiency. Employee satisfaction increases if the hospital has appropriate communication channels.

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