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## A Study of Individual and Group Incentives in Total Quality Management Organizations

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LOYOLA UNIVERSITY CHICAGO

A STUDY OF INDIVIDUAL AND GROUP INCENTIVES  
IN TOTAL QUALITY MANAGEMENT ORGANIZATIONS

A THESIS SUBMITTED TO THE  
INSTITUTE OF HUMAN RESOURCES AND INDUSTRIAL RELATIONS  
IN CANDIDACY FOR THE DEGREE  
OF MASTER OF SCIENCE

BY

NINA LEIGH MOLL

CHICAGO, ILLINOIS

JANUARY 1993

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## CHAPTER I

### INTRODUCTION

#### Statement of the Problem

A potential conflict exists between emphasizing teamwork through total quality management (TQM) and traditional reward structures based on individual performance. This study focuses on employees' perceptions of TQM, teamwork, and compensation to determine a possible relationship between incentives and team performance in a major metropolitan medical center (Medical Center). In particular, this research deals with employees attitudes towards pay in environments emphasizing teamwork.

The general definition of TQM is a program consistently emphasizing various business strategies such as "focus on the customer, continuous improvement, total employee involvement, and the like."<sup>1</sup> With the globalization of most markets, companies are operating in an increasingly competitive arena. Providing a quality product at a low cost becomes an even greater concern for most organizations. As quality issues gain increased attention and a growing number of companies implement TQM, compensation managers face a challenge. This challenge is to develop compensation systems congruent with the overall structures of organizations including

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<sup>1</sup>Dennis C. Kinlaw, *Developing Superior Work Teams: Building Quality and the Competitive Edge* (Lexington, Massachusetts: Lexington Books, 1991), xvii.



decentralization and emphasizing team performance, both characteristics of TQM environments.<sup>2</sup>

Teamwork reflects the TQM principle of total employee involvement. Group success depends, in part, on information sharing horizontally and vertically within the organization. In vertically structured organizations, teams improve cross-functional and interdepartmental communication and cooperation. Teams in horizontal structures foster improved flow of information across departments and enhance creative energy.<sup>3</sup> Team initiatives help create long-term improvements through training employee groups to use innovative techniques and strategies for continuous improvement.<sup>4</sup> Inter-functional teams bring diverse perspectives to problem solving.

New approaches to quality improvements result when employees cooperate as a team in achieving a common purpose. Pay awards can act as a reinforcer for past behavior or an incentive for future behavior. While these are distinct roles, they are not mutually exclusive.<sup>5</sup> Monetary awards are one form of recognition. Award systems motivate and reinforce employees' performance and may serve as

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<sup>2</sup>Milkovich and Newman stress that compensation "coexists with other structures in the organization. An effective pay system cannot be designed without taking into account the nature of the organization, its business strategies, and other management systems." In George T. Milkovich and Jerry M. Newman, *Compensation*, 3d ed. (Homewood, Illinois: BPI/Irwin, 1990), 18.

<sup>3</sup>D. Keith Denton, *Horizontal Management: Beyond Total Customer Satisfaction* (New York: Lexington Books, 1991), 118.

<sup>4</sup>Kinlaw, 27.

<sup>5</sup>Monty Lynn, "Deming's Quality Principles: A Health Care Application," *Hospital and Health Services* 36 (Spring 1991): 116.

inducements for continued employment with the organization. By design, these systems influence employees' short- and long-term behaviors toward organizational objectives.<sup>6</sup>

Studies of TQM environments reveal that competition among individual team members detracts from primary objectives of the team. The objectives of incentive systems are to motivate and reward performance.<sup>7</sup> Studies show how compensation structures can improve or impede team functioning and assist in meeting organizational objectives.

Traditionally, compensation strategies focused on individual employees' experiences and performance not on teams', departments' or business units' performance.<sup>8</sup> Successful work team functioning is a central issue of TQM and factoring group performance into employees' compensation supports TQM objectives. In his recent book, *Strategic Pay*, Lawler identifies balancing incentives and team performance as essential to maintaining group cohesiveness.<sup>9</sup>

Compensation literature reports the prevalence of merit pay as a reward for additional effort. By definition, merit pay is a reward that is based on individual

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<sup>6</sup>Edward E. Lawler III, *Pay and Organizational Effectiveness: A Psychological View* (New York: McGraw-Hill Book Company, 1971), 79.

<sup>7</sup>Eric G. Flamholtz and John M. Lacey, *Personnel Management, Human Capital Theory, and Human Resource Accounting* (Los Angeles: Institute of Industrial Relations, 1981), 18.

<sup>8</sup>Milkovich and Newman, 2.

<sup>9</sup>Edward E. Lawler III, *Strategic Pay: Aligning Organizational Strategies and Pay Systems* (San Francisco: Jossey-Bass Publishers, 1990), 77.

employees' past work behaviors and achievements. The basis for merit pay increases are individual performance assessments. Well designed merit pay systems may detail behaviors eligible for rewards. Conversely, employees and their employers may not communicate perceived levels of employee performance prior to the assessment process. In the performance assessment process, often employee evaluations neglect employees' abilities to function effectively in a team or group.<sup>10</sup>

Recognizing past behaviors, as described above, has its place as one type of compensation strategy. However, potential conflict may exist between TQM and merit pay when the organization only rewards individual achievements. In addition, TQM operates with employees knowing organizations' specific organizational quality improvement objectives and having access to process and product information. Organizations communicating award systems subsequent to employees achieving objectives conflicts with the TQM position of proactive communication. Thus, TQM philosophy advocates that employers make award information available to employees at the outset of quality improvement efforts. This information includes any awards related to organizational objectives.

A second area of potential conflict develops in the process of distributing incentives or rewards. Lawler suggests that a fixed budget amount available to divide among team members based on individual contributions impedes the team work process. In such cases, individual performance, not the performance of the team,

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<sup>10</sup>Milkovich and Newman, 6.

continues to be the basis for rewards. This situation creates a competitive atmosphere.

In *Paying for Productivity*, Blinder discusses the impact of profit sharing strategies on productivity. He notes that profit sharing may or may not increase productivity. The determinate is employees' perceptions that it is in their best interest to cooperate rather than act separately.<sup>11</sup> Measuring and rewarding individual performance, where teamwork is the primary objective, may be counterproductive and may discount shared responsibility and accountability in teams.<sup>12</sup>

An important factor to consider is that certain work situations make observing and measuring the output of individuals or groups difficult. The characteristics of each environment should be recognized in the design of incentive systems. To illustrate this, consider an example where a department that rewards individuals based on measures of group productivity. As long as enough team members worked toward the goals of the group, performance would remain satisfactory. In this scenario, however, some employees may pursue personal goals and not strive to meet team objectives or the goals desired by management. Employees in the above example who shirk their responsibilities are free-riders who coast by on the performance of the employees working toward group goals.

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<sup>11</sup>Alan S. Blinder, *Paying for Productivity: A Look at the Evidence* (Washington, D.C.: The Brookings Institution, 1990), 100.

<sup>12</sup>Lawler, *Strategic Pay*, 77-78.

In TQM organizations, intra-departmental and cross-functional teams share responsibilities in managing their areas and organizing to formulate quality improvements.<sup>13</sup> The ultimate success of these teams relies on group cohesiveness and free exchange of ideas and information. Thus, it is essential that reward structures sustain team functioning.

There is a substantial amount of literature discussing issues specific to compensation management and total quality management. Anecdotal reports represent the majority of research addressing compensation strategies effectively supporting TQM principles. Theories of compensation management and motivational research thoroughly establish the important link between pay and work performance. Organizations' pay objectives include motivating employees to improve performance in meeting the stated goals of the organizations, such as TQM. Previous studies demonstrate a link between compensation strategies and employee motivation in achieving organizational objectives. This relationship warrants an investigation into the compensation practices of organizations specifically interested in supporting TQM principles.

This study reviews research on compensation systems that may support TQM principles and describes pay methods affecting achievement of TQM objectives. Research pays special attention to compensation strategies employed in health care organizations with TQM initiatives.

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<sup>13</sup>David L. Bradford and Allan R. Cohen, *Managing for Excellence: The Guide to Developing High Performance in Contemporary Organizations* (New York: Wiley, 1984),

The specific objectives of this study are:

- 1) Discuss the history of the quality movement from quality control to strategic total quality management
- 2) Review strategic approaches to total quality management
- 3) Discuss teamwork as a key dimension of total quality management
- 4) Evaluate individual and group incentives within the framework of total quality management
- 5) Examine previously existing data collected by one Medical Center's survey of employee opinions.
- 6) Interview and survey Medical Center employees to determine the employees' attitudes towards and preferences for various incentive compensation schemes within the framework of TQM.

## CHAPTER II

### LITERATURE REVIEW

#### Introduction

A review of the literature shows TQM plans gradually extending from traditional factory applications to non-manufacturing businesses such as banks, hotels, retail stores, insurance companies and hospitals.<sup>1</sup> TQM may introduce ideas and structures that conflict with ingrained organizational routines or procedures. Focusing on quality is a necessary business practice. Today, and in the future, service and quality will be at the forefront. In an age of increased expectations and quality-focused competition, partial quality management is not good enough.<sup>2</sup> Organizations must consider cultural changes resulting from implementing TQM. These changes include an emphasis on teamwork and the promotion of quality improvements corollary to successful team performance.

This chapter reviews research on compensation systems that may support TQM principles. The literature review addresses three concepts relevant to an analysis of compensation strategies employed in team environments. Section one recounts

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<sup>1</sup>Robert Reid, "You, Your People and Continuous Quality Improvement." *Manufacturing Systems* 7 (November 1989): 52.

<sup>2</sup>Jim Clemmer, "How Total is Your Quality Management?" *Canadian Business Review* 18 (Spring 1991): 41.

significant historical developments in the quality management field. Section two examines TQM as organizations approach quality from a strategic perspective. Section three discusses the relationship between teamwork and TQM. Section four examines positive and negative characteristics of individual and group incentives. This review explores applicable psychological and economic theories referred to throughout this paper.

### Historical Overview

The genesis of today's total quality management principles originated among American and Japanese quality specialists. Although both nations contributed to the theoretical body of knowledge, the Japanese were the first to apply sustained quality improvement principles in a practical sense. Japan, once known as a nation for producing shoddy goods, is now a respected producer as a result of using superior quality to gain a competitive edge. Japan's success story, according to Joseph M. Juran, deserves careful study by students of quality control practices.<sup>3</sup> Why did Japanese businesses restructure their management practices to center on improving quality? The reason is simple; World War II devastated Japanese industry. In the rebuilding process, Japan focused on strengthening its economic performance.<sup>4</sup>

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<sup>3</sup>Joseph M. Juran, *Quality Control Handbook*, 3d ed., eds. Joseph M. Juran, Frank M. Gryna, Jr., and Richard S. Bingham, Jr. (New York: McGraw-Hill, Inc., 1974), chap. 48, 6.

<sup>4</sup>Allan M. Mohrman, Jr. et al., *Large-Scale Organizational Change* (San Francisco: Jossey-Bass Publishers, 1989), 234.



Contributing to Japan's concentration on quality improvements was the formation of the Japanese Union of Scientists and Engineers (JUSE) in 1946. Kaoru Ishikawa, former Tokyo University professor, was one of the founders and later was president of JUSE. As an association, JUSE was instrumental in disseminating quality improvement activities among Japanese organizations as well as synthesizing the most successful quality improvement practices.<sup>5</sup>

A name closely associated with the quality movement in Japan is G. Edwards Deming. Deming, who has his Ph.D. in physics, brought his sampling and statistical quality control (SQC) theories to Japan in 1950 during his seminars on quality. In 1951, Japan established the prestigious Deming prize for quality, which companies continue to respect. Deming proposed that organizations should focus on improving all the processes within the organization. The characteristics of his systematic approach to problem solving, called the Deming cycle, are planning, doing, checking and taking action (P-D-C-A). In each component of the cycle the system repeats itself. This overlap ensures quality improvements at every level.<sup>6</sup> To succeed, management must create an environment promoting and supporting process improvements.

The road to a well developed sustained quality improvement strategy was rough. Although many results were positive, three major obstacles remained: 1) too

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<sup>5</sup>Ibid., 230.

<sup>6</sup>Naoto Sasaki, *The Japanese Approach to Product Quality*, eds. Naoto Sasaki and David Hutchins (Oxford: Pergamon Press, 1984), 115-117.

much attention placed on statistical quality control, 2) standardization procedures too formal, and 3) lack of upper management support.<sup>7</sup> Not until the late 1950's did Japan achieve a balance between SQC and sound management decisions.<sup>8</sup> As the Japanese refined their design of sustained quality improvement, they found high quality could help reduce costs. This concept was prevalent among American theorists, but industry in the United States had not applied the principles. Overall, the Japanese listened to U.S. advisors in their drive to change. David Garvin, author of *Managing Quality*, notes, "Quality control techniques have been one of America's most successful exports."<sup>9</sup> While the Japanese did draw from American management theory, they found, contrary to Western opinion, that total quality control (TQC) was necessary for the success of quality programs. Total quality control is based on the theory that all employees and departments are responsible for quality improvements.<sup>10</sup> With the notion of shared responsibility central to implementation strategies, the Japanese gradually decentralized their management structure. Decentralization encouraged the arrangement of work groups to share ideas and decision making responsibilities. JUSE promoted these work group activities since

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<sup>7</sup>Ibid., 1.

<sup>8</sup>On the topic of SQC, Cole elaborates: "We see some of that same overreliance on statistics in the United States today with the belief many firms display that the installation of statistical process control will solve their quality problems. This is a mentality all too prominent among American management personnel." In Mohrman et al., *Large-Scale Organizational Change*, 253.

<sup>9</sup>David A. Garvin, *Managing Quality: The Strategic and Competitive Edge* (New York: The Free Press, 1988), 180.

<sup>10</sup>Mohrman et al., *Large-Scale Organizational Change*, 236.

they improved productivity, quality, cost processes, human relations and other work place concerns.<sup>11</sup>

Before quality improvement programs became a primary objective in American industry, managerial concerns about quality control centered on product safety, threats of liability suits and government regulation. Being competitive meant not losing business due to poor quality and maintaining competitive pricing.<sup>12</sup> With the acceptance of sustained quality improvement ideas, American businesses refocused their attention to include competing successfully in the quality arena. The adjustment in management style was gradual. In the early twentieth century "quality control" was synonymous with "defect prevention."<sup>13</sup> American industry based many of their practices on Fredrick W. Taylor's "Scientific Management." The intention of Taylor's system was to improve productivity by separating planning and execution functions. Under this system, companies employed quality specialists to recognize and detect defects. This approach augmented businesses' awareness of quality issues, but impeded the formation of work teams. The hinderance of teamwork was the result of Taylor's system reducing the contribution of lower level employees.<sup>14</sup> In his book, *Shop Management*, Taylor writes, "The inspector is responsible for the quality of the work, and both the workmen and the speed bosses must see that the

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<sup>11</sup>Juran, *Quality Control Handbook*, chap. 18, 2.

<sup>12</sup>Ibid., chap. 48, 6.

<sup>13</sup>Ibid., chap. 2, 12.

<sup>14</sup>Ibid., chap. 48, 5.

work is finished to suit him."<sup>15</sup> The workers shared little responsibility for quality control, much less for quality improvement.

Similar to Japanese operation, SQC was gradually gaining attention in the United States several years before World War II. In 1931, W. A. Shewhart published *Economic Control of Quality and Manufactured Products*. His book explained that product variability was inevitable. Recognizing that some variation is inherent in the production process, businesses could focus on genuine problems.<sup>16</sup>

The concept of SQC did not immediately spread to a more general audience. The onset of World War II created the need for mass production of munitions with a high level of quality at an affordable cost.<sup>17</sup> The Office of Production Research and Development, Carnegie Institute of Technology and Stanford introduced SQC techniques to the business community. Associations that formed to promote quality control include the Society for Quality Engineers, which later became the American Society for Quality Control. The application of SQC limited business' perception of quality control as a multi-dimensional process. To fully reap the benefits of quality products, organizations were to target improving production process rather than post-production evaluations of product quality.

After the application of SQC, America achieved few new developments in the quality movement. Up until the 1950's American management operated under the

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<sup>15</sup>Frederick Winslow Taylor, *Shop Management* (New York: Harper & Brothers, 1919), 101.

<sup>16</sup>Garvin, 7.

<sup>17</sup>Ibid., 9.

traditional quality control technique of detecting defects. Industry lacked a system for calculating the costs of defective products. American theorists such as Juran and Armand Feigenbaum believed improvements in quality could reduce costs and the SQC was just one step in the process. Practical application of their views were yet to come.<sup>18</sup> Juran published the first edition of his *Quality Control Handbook* in 1951. The "*Handbook*" detailed how to classify quality issues into avoidable and unavoidable costs. His "gold in the mine" analogy represented organizations' avoidable costs such as scrapped materials, labor hour reworking and repairing, complaint processing and customer loss due to poor quality goods. Juran explained that if companies avoided these unnecessary costs they potentially would realize cost savings. In subsequent editions Juran included chapters on motivation and support considerations, as well as contributions by foreign authors related to quality improvements.<sup>19</sup> In 1956, Feigenbaum expanded Juran's ideas when he proposed *total* quality control. This system employed inter-functional teams. These teams exchanged ideas across departments and shared responsibilities for improving quality. Feigenbaum stated:

The underlying principle of this total quality view...is that, to provide genuine effectiveness, control must start with the design of the product and end only when the product has been placed in the hands of a

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<sup>18</sup>Mohrman et al., *Large-Scale Organizational Change*, 236.

<sup>19</sup>Juran, *Quality Control Handbook*, x.

customer who remains satisfied...the first principle to recognize is *that quality is everybody's job*.<sup>20</sup>

Companies constructed total quality responsibility matrices. These matrices depicted departmental responsibilities on the horizontal axis and departmental functions on the vertical axis. These diagrams depict the departmental overlap necessary to foster cross-departmental accountability and thereby improving quality. See Figure 2-1 for a matrix listing departmental responsibilities horizontally and required activities vertically. For example, in this matrix "establishing product reliability and quality policies" primarily is the responsibility of the General Management Department. However, this function involves all other departments to communicate appropriate measures on which to base product reliability and quality policies. This matrix provides a salient picture of departments or work groups both directly and indirectly involved with specific functions.

With the acceptance of these practices, new requirements were evolving. Management needed to plan, coordinate department activities, set standards, and provide measurements for total quality improvement programs.

Yet another approach to total quality improvement developed in the early 1960's. The concept of zero defects had its conception at the Martin Company, maker of Pershing missiles. After discovering an overabundance of defective military equipment, the company set itself apart from other defence suppliers by building a defect-free missile on time. Management instructed employees to build the missile

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<sup>20</sup>Armand V. Feigenbaum, "Total Quality Control," *Harvard Business Review* (November/December 1956): 94, 98, quoted in Garvin, 13 (emphasis in original text).

Figure 2-1

## A Typical Matrix of Quality Responsibilities

Activity/ Function	Group or Department							
	Gen. Mgmt.	Finance	Marketing	Engineering	Manufacturing	Quality Control	Purchasing	Service
Establish product reliability and quality policies	x	o	o	o	o	o	o	o
Analyze quality cost	o	x		o	o	x		
Perform in-process quality audits				o	o	x		
Ensure that new product designs meet the test of manufacturability and ease of service				x	x	o		x
Establish specifications for purchased parts and materials and quality vendors				x		o	x	

x indicates the departments primarily responsible for an activity.  
o indicates other departments that should be involved in an activity.

Source: Figure 2-1 adapted from A.V. Feigenbaum, Total Quality Control (New York: McGraw-Hill, 1961), 65, as cited in Garvin, 14.

right the first time, and they did. This occurrence lead management to believe that the expectation of perfection leads to its achievement. The zero defect system relied heavily on motivation, awareness and attention to detail. Philip Crosby, an early advocate of zero defects, felt "to err is human" was false and employee motivation could avoid or eradicate poor quality.<sup>21</sup> Other quality experts disagreed with this view claiming it erroneous to equate human error with lack of motivation and by doing so organizations may never address actual problems.<sup>22</sup>

Juran asserts what he sees as a flaw in the above argument in that the argument neglects organizational processes. Employee errors creating defects in good designs, does not equate to an absence of employee errors eliminating defects in bad designs. In addition, Juran states that many employee controllable errors do *not* result from lack of employee motivation.<sup>23</sup> Illustrating this point, Juran offers this analogy:

The golfer is obviously in a state of self-control. He knows very well what he is supposed to do. He can observe with his own senses what his actual performance is. He has tools identical to those used by experts. Why then are there so many golf balls in the lakes? Under conventional logic, the reason is that the golfer is not well motivated. Such a conclusion would be laughed at by anyone who plays golf...since few people are as intensely motivated as golfers.<sup>24</sup>

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<sup>21</sup>Juran, *Quality Control Handbook*, chap. 18, 8.

<sup>22</sup>Ibid.

<sup>23</sup>Ibid., 18-3 (emphasis in original text).

<sup>24</sup>Ibid.



Potential sources of non-human error are numerous. Sources may include inadequate resources, substandard materials, poor product design, inefficient manufacturing process, or insufficient employee training. To more accurately assess quality issues, Juran advocated considering the big picture versus one elements, such as only employees.

Regardless of the variations in philosophies, American business made great strides in managing quality over the course of about fifty years. Basically, concerns over quality laid the ground work for the evolution of TQM. Elements from various existing quality management theories blended to form TQM as practiced by organizations today. TQM is a philosophy or process that relies on the involvement of all the employees in an organization, requires greater delegation, greater sharing of power, greater equality, and greater development of people to improve the quality of processes, products and work life.<sup>25</sup>

### Total Quality Management

The latest movement in the quality management field involves every aspect of an organization, including every employee, in the strategic planning of quality improvements. The term total quality management (TQM) embodies these principles. In an examination of business trends, D. Keith Denton finds managers "recognizing the importance of quality and they are trying to implement quality philosophies like

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<sup>25</sup>Denton, 5.

TQM."<sup>26</sup> Several reasons exist for the evolution from inspection oriented quality control techniques towards continuous company-wide TQM.

First, factors influencing organizations' approaches to quality improvements include escalating foreign competition, increasing product liability suits and governmental pressures.<sup>27</sup> Next, as organization leaders became more interested in quality, the definition and importance of quality improvements broadened in scope. The interest of key management personnel in organization-wide quality rose as they realized the link between quality, profitability and competitive positioning. Management recognized the opportunity to utilize its existing human resources to spread quality objectives to every level of the organization.

Incorporating quality objectives into the strategic plans and mission statements of organizations is evidence of heightened interest by management in quality. Today, definitions of quality encompass customers' perceptions and satisfaction. In addition, quality improvements rely on total employee involvement and an above average level of performance.

TQM became more than just an acronym for another management fad in the mid 1980's. Today, numerous organizations apply at least some of TQM principles to their operational strategies.<sup>28</sup> This advancement in managing is a response to the changing business environment. As competition and technology changes, companies'

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<sup>26</sup>Denton, 24.

<sup>27</sup>Garvin, 21, 22.

<sup>28</sup>Eliyabu Goldratt, "Late-Night Discussions: VI - Time for Total Quality Management to Confront the Real Issues," *Industry Week* 240 (2 December 1991): 51.

definitions of quality need to continue evolving. Juran expresses the importance of planning in *Juran on Planning for Quality*.

There is a corresponding need to conduct periodic strategic planning for quality. A critical element in that planning is identifying those powerful forces [technology and competition] and examining their impact on customer's needs and their priorities. In the absence of such strategic planning, we overlook essential early warning and thereby encounter unpleasant surprises and crisis situations with resulting urgencies, wastes and irritations.<sup>29</sup>

Previous quality parameters such as quality assurance and SQC were too limiting.<sup>30</sup>

Some organizations' attempts for improvement resulted in "the program of the month" approach, which may realize short-term success to the detriment of long-term improvements.<sup>31</sup> The importance of a strategic approach is the incorporation of quality improvements into the long-term plans of organizations.

To achieve integration of quality improvement into the vision of the company requires including a commitment to quality in the mission statement. Another step is defining the goals, plans, and actions necessary to fulfill the quality mission. A strategic plan is essentially the "how to" for achieving this vision. The plan must be responsive and flexible to changes in competition, markets, customer preferences, as

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<sup>29</sup>Joseph M. Juran, *Juran on Planning for Quality* (New York: The Free Press, 1988), 58.

<sup>30</sup>Garvin, 24.

<sup>31</sup>Clemmer, 38.

well as other factors.<sup>32</sup> Additionally, areas for improvements must be addressed at their very foundation. Jim Clemmer asserts,

The basic problem is strategic, not tactical. Until the service/quality improvement effort changes the systems, processes, and daily work habits of the entire organization, the best training, inspiration, and planning in the world will have little lasting effect.<sup>33</sup>

Another important aspect of the strategic focus in contemporary TQM is that all levels of employees are partners on the path to improved competitive advantage and profits. Research shows employee participation increases organizational effectiveness. The level to which participation extends determines the effectiveness of the management program.<sup>34</sup> In a TQM environment, all the employees are producers, they are all performing tasks as part of an overall process. The results of every employees' efforts extend to their customers, who may be either internal or external. Thus, involving everybody in the quality improvement process is necessary.<sup>35</sup>

One of the central elements of TQM is the old adage that the customer is always right. The message of TQM is improvements in product quality, customer service, reliability, on-time performance and being responsive to customers' needs. Eliyahu Goldratt notes the revelation of TQM is:

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<sup>32</sup>Jeffery E. Disend, *How to Provide Excellent Service in Any Organization: A Blueprint for Making All the Theories Work* (New York: Lexington Books, 1991), 131.

<sup>33</sup>Clemmer, 38

<sup>34</sup>Edward E. Lawler, III, *High-Involvement Management* (San Francisco: Jossey-Bass Publishers, 1986), 22.

<sup>35</sup>Reid, 52.

The goal of the company is not to save money but to make money, and you can only make money through pleased customers. In short, the power of Total Quality Management stems from the fact that it set a new direction, or, more precisely, it rediscovered the old direction.<sup>36</sup>

The definition of quality comes from comparing quality to competitors' and customers' perceptions rather than measuring quality against internally specified standards. Since these connections are dynamic, organizations must continuously reevaluate their quality improvement objectives.

To achieve continuous quality improvements, all resources within an organization must cooperate. Cooperation entails a shared understanding and commitment to the organizations' quality improvement objectives. Further, management must view the employees as valuable resources and provide the tools they need for successfully applying TQM principles. TQM stresses disseminating information, knowledge, rewards, and power throughout the employee ranks.<sup>37</sup>

David Garvin explains the importance of a shared perception of TQM among all the employees.

To internalize a quality ethic often requires attitude change at various levels of the company. Otherwise, employees continue to view quality as the job of the quality department rather than a responsibility of their own. Broader understanding and personal involvement are usually necessary for improvement. Many companies have unknowingly fallen short here: They provide training in the tools of quality control but have failed to emphasize quality's connection with basic business objectives. The resulting programs have been long on technique but lacking in motivation and purpose.<sup>38</sup>

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<sup>36</sup>Goldratt, 51.

<sup>37</sup>Lawler, *High-Involvement Management*, 3.

<sup>38</sup>Garvin, 26.

The synchronization of an organizations' efforts positively impacts company performance in both the short- and long-term.

When an organization implements TQM it must establish an organization-wide culture supporting TQM principles. The "strategic approach to quality is more comprehensive than its predecessors, more closely linked to profitability and basic business objectives, more sensitive to competitive needs and the consumer's point of view, and more firmly tied to continuous improvement."<sup>39</sup> When implementing TQM, or any new business strategy, plan principles should be consistent with the organizational values. If management behavior is in opposition to the stated values, then the employees will not adopt those values as their own. By integrating quality management into strategic plans, employees can more specifically understand company objectives. Joseph Boyett and Henry Conn characterize strategic planning as such:

Good strategies are not only consistent with values but provide a focus for activities, without covering every operational detail. With a good strategy, employees should know the critical objectives of the organization as a whole but should retain considerable flexibility in determining how these objectives will be attained.<sup>40</sup>

Employee awareness of company objectives is what propels TQM success. If the employees do not share the objectives of the organization or their performance is

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<sup>39</sup>Ibid., 27.

<sup>40</sup>Joseph H. Boyett and Henry P. Conn, *Maximum Performance Management: How to Manage and Compensate People to Meet World Competition* (Macomb, Illinois: Glenbridge Publishing Ltd., 1988), 40-41.

poor, improvements in customer service, profitability and competitive position are nearly impossible. A discussion of employee teams and TQM follows.

### Teamwork

Underscored throughout the vast majority of related literature is the importance of teamwork in TQM initiatives. Whether organizations use TQM principles to focus on the customer, strive for continuous improvement, foster total employee involvement or any combination of these objectives, one practice occurs without exception - teamwork.<sup>41</sup> When implemented properly and supported by the company's culture, teamwork helps companies improve their efficiency and effectiveness in achieving the goals of the organization. As customers and consumers, we dislike receiving poor quality service and products. Conversely, we enjoy being the recipient of good service. This may sound obvious or simplistic, but a great deal of continuous effort and behind the scenes coordination goes into delivering quality. "When service is good, it's usually an indication that the manager has created a positive atmosphere and has put in place processes that allow workers to make decisions and offer suggestions without worrying what the boss might think."<sup>42</sup> Increasing numbers of companies are adding commitment to quality declarations to their corporate credos or vision statements. In a survey of fifty-one companies, the

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<sup>41</sup>Kinlaw, xvii.

<sup>42</sup>Donald E. Petersen and John Hillkirk, *A Better Idea: Redefining the Way Americans Work* (Boston: Houghton Mifflin, 1991), 181.

respondents "ranked 'quality products and services' as one of the most important benefits of team players."<sup>43</sup>

Numerous incarnations of teamwork exist in business. Donald Heany's *Cutthroat Teammates* presents the following uncomplicated distinction of teams versus another common business group.

QUESTION: What's the difference between a "committee" and a "team?"

ANSWER: A *committee* is made up of professionals, each of whom has a personal agenda and strives to advance it. A *team* consists of professionals who operate from a shared agenda and a common view of their assignment.<sup>44</sup>

Teams can be groups of employees discussing their problems and sharing ideas.<sup>45</sup>

Companies may employ the Japanese approach of quality control (QC) circles, which are essentially employee teams. Ishikawa outlines QC circles as follows:

The QC Circle is a small group to perform quality control activities voluntarily within the same workshop. This small group carries on continuously as part of company-wide quality control activities self-development and mutual development control and improvement within the workshop utilizing quality control techniques with all members participating.<sup>46</sup>

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<sup>43</sup>Glenn M. Parker, *Team Players and Teamwork: The New Competitive Business Strategy* (San Francisco: Jossey-Bass Publishers, 1990), 10.

<sup>44</sup>Donald F. Heany, *Cutthroat Teammates: Achieving Effective Teamwork Among Professionals* (Homewood, Illinois: Dow Jones-Irwin, 1989), 31 (emphasis in original text).

<sup>45</sup>Ibid.

<sup>46</sup>Kaoru Ishikawa, *What is Total Quality Control?: The Japanese Way*, trans. David J. Lu (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1985), 139-140.



Other definitions include self-directed work teams, which are "formal, permanent organization structures or units" comprised of "small groups of people empowered to manage themselves and the work they do on a day-to-day basis."<sup>47</sup> In *Developing Superior Work Teams*, Kinlaw makes several distinctions in approaches to employee involvement. These classifications are teamwork, work groups, work teams and superior work teams. First, he defines teamwork as a fluctuating state, occurring when the need arises for a group to perform a certain task. On completion of the task or objective the team may split apart. Organizations consider work groups a permanent part of an organization existing to perform specific tasks, which contribute to making a larger whole. These groups are at the baseline of the organization where "individual performance is no longer the primary determinant of success."<sup>48</sup> Work teams, according to Kinlaw, take work groups a step farther. Work teams cooperate completely in realizing their objectives, they share responsibility for planning, organization, goal setting and performance assessment as well as developing strategies and securing resources.<sup>49</sup> Finally, development within superior work teams is higher than in general work teams. Superior work teams' characteristics compound their achievements of distinctive results, use of work processes, feelings of cooperation, and leadership that fosters team development and team performance with achieving

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<sup>47</sup>Richard C. Wellins, William C. Byham, and Jeanne M. Wilson, *Empowered Teams: Creating Self-Directed Work Groups That Improve Quality, Productivity, and Participation* (San Francisco: Jossey-Bass Publishers, 1991), xv-xvi.

<sup>48</sup>Kinlaw, 2, 7, 8.

<sup>49</sup>Ibid., 13.

higher levels of consistency, intensity, and restless dissatisfaction.<sup>50</sup> In its many forms, teamwork through total employee involvement is the essence of TQM.

In addressing teamwork in TQM organizations, Wellins, Byham and Wilson note that organizations expect team members to be "quality experts." This includes initiating continuous quality improvements and practicing advanced interpersonal and communication skills. Interactive skills required for team effectiveness include "handling conflict, meeting leadership, negotiation requirements with suppliers and customers, and influencing others, particularly those in support functions."<sup>51</sup> TQM initiatives provide newly formed or existing teams the opportunity to focus on the positive resources they possess. These resources facilitate fulfilling the potential of work teams to achieving quality improvements rather than dwelling on the deficits or shortcomings of team performance. In addition, TQM supports long-term improvements by training teams to use new methods and strategies for continuous improvements.<sup>52</sup> The positive relationship between teamwork and TQM potentially establishes itself each time an organization adopts a TQM philosophy.

One of the key elements of TQM programs, continuous improvement, thrives in a team work environment. Kinlaw states, "all [TQM] techniques and processes require high levels of communication and contact, response and adaptation, and coordination and sequencing. They require, in short, the environment that can be

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<sup>50</sup>Ibid., 15.

<sup>51</sup>Wellins et al., 164.

<sup>52</sup>Kinlaw, 27.

supplied only by superior work teams."<sup>53</sup> The efforts of work teams may accomplish objectives such as improved customer service and satisfaction. This includes customers in and outside the organization. These findings support commonly accepted beliefs that teamwork is the central element of TQM.

Numerous organizational TQM applications underscore the role of teams as a key element in successful TQM initiatives. As competition over quality intensifies, the need for an emphasis on continuous quality improvement across each company department becomes ever greater. One example of team success in a variety of departments is Ford Motor Company. Ford uses employee involvement and work teams in both its manufacturing and services divisions. The teams focus on meaningful suggestions to improve productivity. Teams encompass clerical to finance departments. Improvements range from secretarial teams sharing information on the best way to organize their drawers and cabinets to the formation of interdepartmental teams comprised of employees from accounting, customer service, and treasury. A success of one of these cross-functional team was obtaining better interest rates. This improvement was the result of input from outside the treasury department suggesting Ford should put their financial business up for bids in attempt to secure lower interest rates. The improvement effort was effective and Ford continues to request banks to

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<sup>53</sup>Ibid., 43.

bid in loaning money to the company.<sup>54</sup> These teams are successful for several reasons.

1. Those closest to the work know best how to perform and improve their job.
2. Most employees want to feel that they "own" their jobs and are making meaningful contributions to the effectiveness of their organizations.
3. Teams provide possibilities for empowerment that are not available to individual employees.<sup>55</sup>

Ned Rosen discusses the important characteristics of effective work teams based on his extensive research in group development. In seeking to determine the group processes functioning in work teams, some of Rosen's findings include:

- Performance standards continue to develop and probably increase
- Group shared norms and attitudes solidify and a unique vocabulary characteristic of the group becomes evident;
- Teamwork and willingness to help each other are characteristic patterns;
- Group processes ... for allocating resources, resolving interpersonal conflict, disciplining members and dealing with the larger organizational environment, function smoothly with the full support of most group members; and

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<sup>54</sup>Petersen and Hillkirk, 182-183.; Jay W. Spechler, *Case Studies in Service Quality: When America Does It Right* (Norcross, Georgia: Industrial Engineering and Management Press, 1988), 263.

<sup>55</sup>Wellins et al., xvi.

- A clear, group-shared idea emerges on "who we are and where we are going."<sup>56</sup>

Rosen concludes, "Teamwork is a combination of behaviors and a shared mind state."<sup>57</sup>

Aside from TQM gaining acceptance as a viable and necessary business practice, some managers continue to believe "the myth that internal competition is the best way to achieve peak efficiency."<sup>58</sup> Incorporating teamwork in traditional management cultures may be difficult given American business' clinging dependency on individuality and singling out specific employees as "shining stars." An article in the "Harvard Business Review" presents the need for team versus individual contributions.

To the extent that we continue to celebrate the traditional myth of the entrepreneurial hero, we will slow the progress of change an adaptation that is essential to our economic success. If we are to compete effectively in today's work, we must begin to celebrate collective entrepreneurship, endeavors in which the whole of the efforts is greater than the sum of individual contributions. We need to honor our teams more, our aggressive leaders and maverick geniuses less.<sup>59</sup>

Individualistic outlooks may inhibit promoting teamwork.

Widely cited in the TQM literature is that managerial acceptance of the importance of teamwork is tantamount to survival of a team, much less team success.

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<sup>56</sup>Ned Rosen, *Teamwork and the Bottom Line: Groups Make a Difference* (Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1989), 42.

<sup>57</sup>Ibid.

<sup>58</sup>Heany, 235.

<sup>59</sup>R.B. Reich, "Entrepreneurship Reconsidered: The Team as Hero," *Harvard Business Review*, May/June 1987, 77-83., in Kinlaw, xvi.

There is evidence that deficiencies in or the break-down of teamwork has its roots in managerial practices. "Managers from another culture have shown that it is possible to convert U.S. workers who were impregnated with an anti-management philosophy into team *players* and produce cost-effective, high-quality products."<sup>60</sup>

Another prominent concept in the literature is that flaws in quality are traceable to ineffective and inefficient processes and systems. These processes may be the remains of long past company policies, which only serve as behavioral and creative roadblocks to improved quality. For success, all employees must recognize these impediments and be in the position to recommend a change. In companies highlighting individual achievements over the performance of the group the organizational culture will not sustain teamwork within TQM.

In conclusion, teamwork is a key element to TQM environments, and total employee involvement is essential to promote this element. The role of company culture and managerial support is a key factor in promoting and achieving successful work teams. Organizations need to recognize that successful work teams are tantamount to TQM initiatives achieving their objectives of continuous quality improvements, superior customer service, and total employee involvement.

The focus now turns to a discussion of the importance of another organizational structure critical to supporting TQM initiatives. Compensation management methods, in terms of incentives and rewards, impact the functioning of work teams and the sustainment of TQM. The emphasis is on the role of

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<sup>60</sup>Heany, 236.

compensation strategies that are congruent with teamwork in an attempt to promote the basic principles of TQM.

### Individual and Group Incentives

For decades management theorists advocated participative management for improving both organizational performance and the quality of work life.<sup>58</sup> To gain employee commitment to company objectives, organizations are increasingly implementing some form of employee involvement program.<sup>59</sup> Effective utilization of employee involvement could lead to substantial gains in companies' competitive positions and management skill as well as generating pride and power.

Several specific conditions exist in organizations with successful employee involvement programs. As mentioned earlier in this study and supported by Lawler, the conditions include total employee access to information, knowledge and power and rewards.<sup>60</sup> The characteristics of successful employee involvement plans are applicable to successfully developing incentive plans. Gainsharing or profit sharing style incentive systems incent employees by returning a percentage of cost savings or increased revenue to employees. Characteristics of gainsharing plans include three

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<sup>58</sup>Lawler, *High-Involvement Management*, 121.

<sup>59</sup>Michael White, "Linking Compensation to Knowledge Will Pay Off in the 1990s," *Planning Review* 19 (November/December 1991): 15.

<sup>60</sup>*Ibid.*, 4.

components: (1) philosophy of cooperation, (2) involvement systems, and (3) financial bonuses.<sup>61</sup> Each component reinforces the others.

Higher levels of cooperation foster information sharing and in turn employee involvement. Increased involvement encourages new behaviors that will improve productivity. Productivity improvements lead to financial bonuses designed to reinforce the philosophy of cooperation.<sup>62</sup>

In contrast to profit sharing, payments based on time such as salaries and wages have little effect on productivity because the rewards are independent of effort. In addition, the plan may not support cooperation. With profit sharing style plans there are behaviors that can benefit everybody. Pursuing these behaviors may be individually rational for the long-term benefits they yield.<sup>63</sup> In addition, work teams increase productivity when the existence of teams enhances information sharing within an organization, thereby promoting employee involvement. Psychological research maintains that increased participation is intrinsically rewarding, but employee participation initiatives in which employees do not have an interest or stake in the outcomes are often short-lived.<sup>64</sup> These examples support the importance of cooperation, involvement systems, and financial bonuses that Graham-Moore and Ross described.


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<sup>61</sup>Brian Graham-Moore and Timothy L. Ross, *Gainsharing Plans for Improving Performance* (Washington, D.C.: The Bureau of National Affairs, Inc., 1990), 3.

<sup>62</sup>Ibid., 4.

<sup>63</sup>Blinder, 99.

<sup>64</sup>Ibid, 186.





The growing number of organizations adopting TQM as a business strategy brings total employee involvement and teamwork to the forefront. TQM initiatives change companies' structures, work allocation, and employee organization to meet company objectives. These significant changes call for an examination of the organizations compensation management practices. Through group incentive compensation employees associate high quality with high bonuses. Graham-Moore and Ross found, "This outcome differs from that created by individual incentives because the gainsharing bonus is typically contingent on the quality produced by *all* the employees, not just one person."<sup>65</sup>

Traditionally, companies rewarded individuals based on their performance by awarding merit increases to employees' base salaries.<sup>66</sup> Questions arise as to successful application of merit pay in stimulating pay-for-performance relationships. A recent study conducted by Donald Schwab and Craig Olson examined merit pay policies and other company attributes as they influence employee performance and pay. The study acknowledges that policies linking individual pay to productivity confront formidable obstacles, but the authors do not elaborate on this point. Schwab and Olson found merit pay links pay to performance equally well as straight bonus systems when individual performance remains consistent over time.<sup>67</sup>

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<sup>65</sup>Ibid., 6 (emphasis in original text).

<sup>66</sup>Milkovich and Newman, 6.

<sup>67</sup>Donald P. Schwab and Craig A. Olson, "Merit Pay Practices: Implications for Pay-Performance Relationship," in *Do Compensation Policies Matter?*, ed. Ronald G. Ehrenberg (Ithica, New York: ILR Press, 1990), 249, 250.

Two arguments, addressed but not supported by their study, suggest bonus systems should relate pay to performance better than merit pay. First, since merit pay permanently impacts base pay, merit systems should diminish the relationship between recent pay increments and performance. Second, merit pay systems limit increases within salary ranges, weakening the pay and performance relationship.<sup>68</sup> Although merit systems may be appropriate in certain situations, an evaluation of merit pay within a TQM framework deserves attention under conditions similar to those used by Schwab and Olson.

Merit rewards potentially conflict with TQM and teamwork environments in several ways. Milkovich and Newman characterize merit pay as a compensation method focused on individual performance, typically not communicated before the payout, and "rolled into" base pay thereby permanently effecting labor costs.<sup>69</sup> Incongruencies between these characteristics of merit pay and TQM include the following.

First, TQM emphasizes the performance of the team or group over individual performance. Individual incentive systems measure individual worker performance against an established standard, whereas group incentives base incremental pay awards on some measure of group performance.<sup>70</sup> Conflict between incentive systems and

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<sup>68</sup>Ibid., 249. For examples of these arguments, Schwab and Olson recommend Edward E. Lawler III, "Merit Pay: Fact or Fiction," *Pay and Organizational Development* (Reading, Massachusetts: Addison-Wesley, 1981).

<sup>69</sup>Ibid.

<sup>70</sup>Ibid., 338, 343.

TQM principles may arise if organizations use individual plans exclusively, thereby neglecting to provide any incentive for teamwork and cooperation.

Second, with merit pay there is often a lack of prior communication and the company discloses award increase amounts only a short time in advance. This administrative practice conflicts with TQM principles in that TQM stresses open lines of communication among all levels of employees and departments. Kinlaw notes that secrecy about *pay*, promotions, *awards*, and job assignments serves to hinder the development of trust on work teams.<sup>71</sup> Communication includes disseminating organizational objectives, the impact of changes in quality has on the company, and the incentives available to employees involved in achievement of quality objectives.

Third, merit pay increases have a permanent effect on labor costs through their incorporation into base pay. Incentives are one-time awards employees re-earn, and therefore permanently effect labor costs.

One of the many goals of TQM is reducing costs. Labor accounts for at least 70% of an organization's total costs.<sup>72</sup> Given this high percentage, companies with TQM initiatives using base-pay increases exclusively would be in conflict with the objective of cost reduction included in TQM. As compensation managers redesign company reward systems, they strive to avoid practices that tend to feed inflation.<sup>73</sup>

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<sup>71</sup>Kinlaw, 123 (emphasis mine).

<sup>72</sup>Blinder, 2.

<sup>73</sup>Graham-Moore and Ross, 6.

The amount of research investigating group and individual incentive plans is extensive. Studies focus on the relationship between incentive plans and four organizational interests. These areas are teamwork, motivation, productivity, and performance. In combination these areas serve to form the basis for TQM principles. Obviously, key to TQM is product and service quality.

In his recent work, Ned Rosen drew upon his extensive experience as a consultant and researcher of organizations. His book, *Teamwork and the Bottom Line*, details the development of teamwork in task groups. Although Rosen's work does not specifically address TQM, his discussion of teamwork and employee participation is applicable to TQM environments. Rosen's statement concerning teamwork and organizational performance supports this generalization.

No extensive effort to increase productivity, employee commitment to customer service, quality and excellence, or to encourage innovation, competitiveness, and greater risk taking behavior is likely to achieve its potential in the absence of serious attention to group factors.<sup>74</sup>

Organizations may implement a reward or incentive system based on reasons other than what the company's environment will support. Numerous investigations suggest disparity between organizational programs, such as TQM, and corporate policies reduce program acceptance by employees. In addition, acceptance levels positively relate to congruence with values and motives of employees.<sup>75</sup> The

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<sup>74</sup>Rosen, xi.

<sup>75</sup>Graham-Moore and Ross, 129. For additional information see S.E. Seashore and D.G. Bowers, "Durability of Organizational Change," in *Organization Development: Theory, Practice, and Research*, eds. W.L. French, C.H. Bell, Jr., and R.A. Zawicki (Dallas: Business Publications, 1978); S.A. Mohrman, et. al. "A Survey Feedback and

organization-wide incentive literature reveals social and psychological outcomes, unrelated to bonuses, of these plans. Outcomes include changes in cooperation, participation, communication, and teamwork.<sup>76</sup> Rosen uses an example for the ineffective use of merit pay in an organization where employees participate in group processes. He finds "the inevitable result is some amount of friction and many lost opportunities to enhance performance through teamwork."<sup>77</sup> In work groups, Rosen finds comparative levels of pay are an important factor. That is, group members accept pay differentials if they perceive pay levels as logical and fair.<sup>78</sup>

If there is no incentive to cooperate, a group may become dysfunctional as a consequence of compensation systems stimulating inter-employee competition. Lawler reports a similar opinion. When departments divide compensation dollars among team members based on merit it becomes obvious that team performance does not matter but individual performance does.<sup>79</sup>

Literature published in 1951 recommended group compensation systems where several employees perform a single operation and measuring individual output is impossible. Group members' levels of skill determined the percentage of payment

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Problem Solving Intervention in a School District: 'We'll Take the Survey But You Can Keep the Feedback'," in *Failures in Organizational Development: Case Studies and Essays for Learning*, ed. P. Mirvis and D. Berg (New York: Wiley-Interscience, 1977).

<sup>76</sup>C.F. Frost, J.H. Wakely, and T.L. Ross, *The Scanlon Way to Improved Productivity* (New York: Wiley-Interscience, 1978), in Graham-Moore and Ross, 164.

<sup>77</sup>Ibid., 128.

<sup>78</sup>Ibid., 131.

<sup>79</sup>Ibid., 132.

received. In a discussion of advantages and disadvantages the report addresses the effects of group systems on work group functioning.<sup>80</sup> A disadvantage of differential pay to group members is jealousy over some members earning more than others.<sup>81</sup> In this case, the basis for incentives was a proportion of individual time rates or skill levels, rather than entire team performance. Although termed group incentives, this plan essentially was an individual incentive at pay-out time.

This compensation system puts team members in a competitive position. "Thus measuring and rewarding the performance of individuals in a team structure can be both difficult and counterproductive, because it can detract from the sense of shared responsibility and accountability."<sup>82</sup>

Pinhas Shwinger's 1975 book, *Wage and Incentive Systems*, examined monetary award compensation used as incentives for improved performance realized through increased output and improved performance.<sup>83</sup> As documented throughout the incentive literature, incentives are an appropriate compensation strategy in cases where the work results in a measurable output. Equally important is worker control over output, productivity, and performance levels. Shwinger states:

Much of the research on wage incentive systems has noted the human relations element which can act either as a limiting factor or as a

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<sup>80</sup>International Labour Organisation. *Payment by Results* (Geneva, Switzerland: International Labour Organisation, 1951), 25.

<sup>81</sup>*Ibid.*, 151.

<sup>82</sup>Lawler, *Strategic Pay*, 77.

<sup>83</sup>Pinhas Shwinger, *Wage Incentive Systems* (New York: Lexington Books, 1975), ix.

further motivation in determining how much output will be increased under a given wage incentive system.<sup>84</sup>

In terms of group incentives, Blinder reports that initial evidence suggests gainsharing, usually a department-wide group incentive system, strongly enhances productivity.<sup>85</sup> The General Accounting Office found that firms with established plans realize an annual labor cost savings of 29 percent.<sup>86</sup>

Employees do not respond to incentives in isolation. Employees do in fact make comparisons with the earnings of other workers in their organization.<sup>87</sup> These comparisons may be actual verbal discussions concerning pay or the comparisons may be of perceived pay amounts internally and externally. Perceived inequities in compensation practices create negative feelings and possibly destructive behaviors within the group.

Graham-Moore and Ross address three aspects in the award allocation process. These are the (1) nature of awards, (2) pay and performance link, and (3) reward distribution inequity.<sup>88</sup> In line with Graham-Moore's and Ross' analysis, additional literature focuses on the interdependence between worker productivity and compensation schemes.

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<sup>84</sup>Ibid., 107.

<sup>85</sup>Blinder, vii, viii.

<sup>86</sup>General Accounting Office, *Productivity Sharing Programs: Can They Contribute to Productivity Improvement?* (1981) in Blinder, 67.

<sup>87</sup>Ibid.

<sup>88</sup>Graham-Moore and Ross, 124.

The agency literature describes the pay/performance link. In agency literature a recurring theme is a divergence of interests between employers and employees (principals and agents) causes output to depend upon the contingent nature of compensation.<sup>89</sup> Other literature addressing principal-agent problems describe the difficulty in monitoring all aspects of an agent's performance. Evaluation of worker performance is often subjective when direct observation is impossible. This is particularly the case in team work environments.<sup>90</sup>

The above theories of pay/performance relationships and reward distribution are of particular interest to this study. An example illustrating potential inequities is a work group using cross-training. When each group member learned all the jobs, the entire group received a specific pay rate. The rate equalled that originally earned by the most experienced group members. Animosity flared between employees who spent years reaching this rate and the newly trained employees. The conflicts were resolved by balancing current pay practices and group incentives based on achieving set objectives.<sup>91</sup>

A recent report edited by Milkovich and Alexandra Wigdor analyzes contemporary research on the assessment of job performance and on the effectiveness

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<sup>89</sup>Edward Lazear and Robert L. Moore, "Incentives, Productivity, and Labor Contracts," in *Efficiency Wage Models of the Labor Market*, eds. George A. Akerlof and Janet L. Yellen (Cambridge: Cambridge University Press, 1986), 135.

<sup>90</sup>James M. Malcomson, "Work Incentives, Hierarchy, and Internal Labor Markets," in *Efficiency Wage Models of the Labor Market*, eds. George A. Akerlof and Janet L. Yellen (Cambridge: Cambridge University Press, 1986), 158.

<sup>91</sup>*Ibid.*, 125.



of performance-based pay systems. The report discusses merit pay as well as individual and group incentives. Although individual incentives have their place as a compensations strategy, they may not be the appropriate plan under every circumstance. Incentives based purely on individual performance are inappropriate where individual productivity is difficult to measure and when success depends on group effort. In addition, problems arise when organizations use individual incentives outside certain conditions. One of these problems is that individual incentives "clash with work group norms, resulting in negative social outcomes for good performers," for example social ostracism by the group.<sup>92</sup> Study findings reviewed in the report point to problems in using individual incentive plans for employees involved in interdependent work groups when cooperation is elemental to success.<sup>93</sup>

These findings support Shwinger's earlier research on incentives. Shwinger describes an objective of incentives as giving workers a share in organizational achievements, thereby fostering teamwork and identification with organizational objectives.<sup>94</sup> The objectives presented by Shwinger correspond with TQM objectives. Given this similarity, a notable issue is individual versus group incentives in the environments studied by Shwinger, which exhibit similar characteristics to organizations employing TQM. The research revealed the disadvantage of individual

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<sup>92</sup>George T. Milkovich and Alexandra K. Wigdor, eds., in collaboration with Renae F. Broderick and Anne S. Mavor, *Pay for Performance: Evaluating Performance Appraisals and Merit Pay* (Washington, D.C.: National Academy Press, 1991), 83.

<sup>93</sup>Ibid.

<sup>94</sup>Shwinger, 24.

incentives. Limitations include measurement difficulty of individual contributions to output and individual incentives may hinder cross-functional efforts and process improvements.<sup>95</sup>

Group incentives can encourage employee cooperation and communication among team members and between employee groups. "There is a shift in industry today...away from individual standards and incentives and toward small group standards."<sup>96</sup> Individual incentives applied to group settings promote competition.<sup>97</sup> Breakdowns in employee relations within groups are undesirable because they increase employee turnover, disrupt production, and create a negative work environment.<sup>98</sup> TQM strives to prevent these situations from occurring. Research reviewed by Milkovich and Wigdor suggests that organizations utilize group incentives to foster cooperation. They explain that group incentives avoid producing intra-group conflict in interdependent jobs requiring work group cooperation or in jobs emphasizing quality over quantity.<sup>99</sup>

Richard Hendersen's book, *Compensation Management*, discusses the purpose of incentive plans.

It is possible for a reward system to channel or modify employee behavior through either a positive or negative approach. A positive

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<sup>95</sup>Ibid., 23.

<sup>96</sup>Ibid., 115.

<sup>97</sup>Lawler, *Strategic Pay*, 77.

<sup>98</sup>Shwinger, 115.

<sup>99</sup>Milkovich and Wigdor, 83-84.

approach creates a motivational environment by providing incentives that employees see as being fair and just. Such an environment recognizes individual rights, stimulates high levels of individual effort and promotes willingness to cooperate in group activities.<sup>100</sup>

Shwinger found group incentives make workers more dependent on each other. This dependency may be negative if individualism is part of the culture.<sup>101</sup> Both Hendersen and Shwinger address individualism, a highly regarded attribute in North American culture. An important consideration in TQM as well as in incentive initiatives is the degree organizational culture supports individualism. As previously stated, TQM environments characteristically promote team performance over individual efforts.

Results of studies comparing individual and group incentive plans' sometimes conflict with one another. One manufacturing based study found individual incentives contributed to improved production over group incentives for both small and large work groups. A second study of a sales group found implementing group incentives eliminated many negative side effects created by individual incentives.<sup>102</sup> Negative side effects include perceived negative social and economic consequences for high productivity and competition between individual workers, which, of course is undesirable in cooperative situations.<sup>103</sup>

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<sup>100</sup>Richard I. Hendersen, *Compensation Management: Rewarding Performance*, 2d ed. (Reston, Virginia: Reston Publishing Company, Inc., 1979), 2.

<sup>101</sup>Shwinger, 119.

<sup>102</sup>Lawler, *Organizational Effectiveness*, 129.

<sup>103</sup>*Ibid.*, 126-127.

Essential to any discussion of group versus individual incentives is the free-rider problem. The free-rider problem arises when individual employee output is difficult to monitor. This gives employees an opportunity to shirk their responsibilities in a team.<sup>104</sup> Rewards dependent on group performance may improve group productivity, but also may result in shirking by individual group members. For example, a team with ten members may have included one employee who does not strive to meet the goals of the group. The consequence of this team member shirking may be that the other employees must work harder to fulfill the responsibilities of the shirker in order to meet team performance objectives. The group may approach a free-rider problem two ways. One, the team may absorb the "dead weight" of the free-rider, while he shares in the overall performance changes of the group. Two, the team may pressure the shirker to meet his responsibilities within the group by excluding him from the benefits of improved group performance until he contributes to the team.

A recent study by McAfee and McMillan analyzed incentives in teams with asymmetric information. Asymmetric information is an imbalance between what the employee knows about his ability and the extent to which an employer can observe this ability. The authors describe the need for a plan to replace individual incentive systems because synergy in teams may create situations where individual contributions are indistinguishable within the team's overall output. In these cases paying

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<sup>104</sup>Haig R. Nalbantian, ed. *Incentives, Cooperation and Risk Sharing: Economic and Psychological Perspectives on Employment Contracts* (Totowa, New Jersey: Rowan and Littfield, 1987), 19.

individual employees for their productivity is impossible because only group productivity is directly measurable.<sup>105</sup>

McAfee and McMillan found employers can compensate team members, while maximizing their own profit, equally well through monitoring individual contributions to team output or by basing payment on overall team output.<sup>106</sup> Their findings contradict the common free-rider wisdom. That is, each team member has greater incentive to shirk in a team environment where overall group performance is the basis for incentives. For example, if employees shirked their responsibilities one would expect overall group productivity to decrease. Following declines in group productivity, employers would realize less than maximum profits. This is in contrast to situations where employees work individually and their performance is easily monitored.

McAfee and McMillan offer several examples of incentive systems that reward group performance and factor in controls against shirking. The first, advanced by Holstrom, establishes a situation that creates peer pressure in a team where individual effort cannot be directly observed.<sup>107</sup> Holstrom proposes severe punishment to each team member arbitrarily whenever group output falls below a target level.

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<sup>105</sup>R. Preston McAfee and John McMillan, "Optimal Contracts for Teams," *International Economic Review* 32 (August 1991): 561.

<sup>106</sup>Ibid, 563.

<sup>107</sup>B. Holstrom, "Moral Hazard in Teams." *Bell Journal of Economics*, 13 (1982): 324-340, as cited in Ibid.

This Draconian approach requires an initial measure of team output to establish a baseline and target output level. The authors cite the problem that many combinations of team members' actions respond in accordance to this approach. That is, in this model if some team members shirk, other members benefit from increasing their output, thereby achieving the groups overall goal.<sup>108</sup> In this situation team members abandon the intended utilization of peer pressure to achieve target levels. In addition, theoretically, Holstrom's approach may control shirking within teams where incentives are based on overall group output. Actual application of this approach would probably be infeasible from a motivation, if not equity standpoint.

A second example consists of employers paying each team member (in a group with  $n$  members) some percentage of improvements, realized as a result of team efforts, while maintaining base pay at a conventional level.<sup>109</sup> An example of this approach is gainsharing incentive plans. Within gainsharing, departmental teams design group objectives and incentives for achieving the objectives. If by reaching a goal a departmental team saves \$50,000, the organization would distribute a percentage of the savings among employees in that department and return a percentage to the department's budget. As described by McAfee and McMillan, this situation incents each team member to exert effort but diffuses the risk associated with a pure marginal payment scheme because base pay is not at risk. The employer pays

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<sup>108</sup>McAfee and McMillan, 561.

<sup>109</sup>Ibid, 562.

less than full marginal value as a trade off for incomplete information about employee ability levels and their motivation to pursue company goals.

The authors offer a salient example to this approach.

The interdependencies among the agents' payment functions mean that an agent cares about his team-mates' abilities. The more able are his team-mates, the harder an agent will be induced to work; but this is more than compensated for by his increased payments.<sup>110</sup>

According to Blinder, the above example represents a kind of prisoner's dilemma game where if all members work hard, everybody has the potential to gain.<sup>111</sup>

In this example, principals ask team members to reveal their abilities by offering different contracts. In the contracts, the marginal rate of payment depends on reported individual ability and reported ability of all the other team members. Team members exert increased effort the greater his own ability and the greater the ability of all the other team members. This model encourages honest reporting of members' abilities.

The existence of enforceable agreements among group members as to expected effort levels would increase the motivational potential of group rewards.<sup>112</sup> Within these models the authors attempt to show that team work and the ability to measure only overall team output need not create a free-rider problem.<sup>113</sup>

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<sup>110</sup>Ibid, 563.

<sup>111</sup>Blinder, 99.

<sup>112</sup>Blinder, 154.

<sup>113</sup>McAfee and McMillan.

Blinder also addresses the issue of free-rider problem in team work environments. Repeated game scenarios create a situation similar to long-term relationships among workers. In game theory, all members are better off if everyone works hard and the firm pays competitive wages. Blinder continues,

Yet there is always a temptation for any single person to shirk because his reward will not be much affected as long as other members continue to work hard. The result is a noncooperative solution in which effort will be withheld to the degree allowed by monitoring. The noncooperative solution is privately rational for each person, but it is not optimal for the firms or for the workers.<sup>114</sup>

When group members cooperate and punish shirkers, there is a potential for increased productivity. Interdependent work teams, where pay is based on team output, use peer pressure to deter members from hurting the group by shirking, because free-riders are an observable cost to the group. Blinder offers the approach of, "workers may punish shirking workers by withholding their own effort or, if feasible, ostracizing the offending antisocial shirkers."<sup>115</sup>

Similarly, Nalbantian has proposed an approach that also relies on game theory. Nalbantian suggests a way to counteract free-rider behaviors is to implement an incentive system that transforms the process of team production into a cooperative game. With this approach group incentives could overcome free-rider problems through intra-group monitoring so that shirkers are detected, or by conferring social sanction and benefits in support of cooperative behavior.<sup>116</sup>

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<sup>114</sup>Blinder, 186.

<sup>115</sup>Ibid.

<sup>116</sup>Nalbantian, 20.



Whether or not shirking occurs may depend on an organization convincing its members that cooperation produces greater benefits than working separately. Blinder explains,

To get the productivity-enhancing effects, something more [than merely implementing a group-based reward system] may be needed--something akin to developing a corporate culture that emphasizes company spirit, promotes group cooperation, encourages social enforcement mechanisms, and so forth.<sup>117</sup>

The relationship between participation and cooperation affects commitment to organizational goals, trust in managers, and a sense of goodwill toward other employees. These characteristics foster improved morale and job satisfaction, thus potentially decreasing the free-rider problem and increasing productivity and effort.<sup>118</sup> In philosophy, TQM promotes the very corporate culture Blinder describes. Incentive schemes congruent with this philosophy would be communicated upfront along with expectations and standards of the organization. Work groups and management alike would know group production levels and their standing within the incentive scheme. In addition, incentive schemes that succeed in TQM organizations would foster "social enforcement mechanisms" that would create peer pressure within teams to control shirking.

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<sup>117</sup>Ibid, 100.

<sup>118</sup>Ibid, 187-188.

## CHAPTER III

### TOTAL QUALITY MANAGEMENT IN HEALTH CARE

TQM has been most frequently tried in manufacturing settings. Today, organizations practicing TQM include numerous service oriented businesses. Numerous health care organizations are implementing quality management plans in an attempt to improve their businesses. The old modes of managing and providing care and service no longer succeed when the emphasis is continuous quality improvement.<sup>1</sup>

Establishing total quality management principles in the health care field becomes increasingly compelling. According to Brent James, the success of TQM in the health care field requires all the employees to "understand the same quality terms, speak the same quality language, and share the same quality vision."<sup>2</sup> Health care professionals urge providers to leave behind their out dated cost control and quality assurance practices and utilize a cost-reduction strategy based on the theory of total quality management.<sup>3</sup>

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<sup>1</sup>Mary Jean Ryan, "Between the Predictable and the Possible," *Healthcare Forum Journal* 34 (March/April 1991): 55.

<sup>2</sup>Brent C. James, "Implementing Continuous Quality Improvement," *Trustee* 43 (April 1990): 16.

<sup>3</sup>"Modern Healthcare's Up & Comers," *Modern Healthcare* 19 (23 June 1989): 26.

This traditional approach is based on measurements of structure, process, and out-comes by physicians, nurses, hospital administrators, and other health care experts. Such a system may be a fairly effective way for providers to inspect the quality of a health delivery organization - the manpower, facilities, equipment, and supplies. But it is doubtful that this internal system alone - without patient views - can adequately assess both the process, which concerns how well service are delivered, and the outcomes, which are the consequences of health care as viewed by patients.<sup>4</sup>

Several reasons why TQM has become important in health care are customers' perceptions, increased competition, corporate and government pressures and changing demographics.

One of the primary reasons the health care field pursues TQM is increasing public awareness of the quality and cost of health care. This closer public scrutiny has a strong impact on how health care institutions perceive their customer service role. Operating under structures that do not emphasize customer satisfaction, health care providers will be ineffective and unresponsive to the changing demands of society.

Given the competitive marketplace, developing a positive public image by recognizing their users' needs for quality at a fair cost improves health care institutions' chance of survival. Whether organizations anticipate or actually experience public pressure, health care institutions are making quality improvement changes in line with customer perceptions.

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<sup>4</sup>Jay W. Spechler, *When America Does It Right: Case Studies in Service Quality* (Norcross, Georgia: Industrial Engineering and Management Press, 1988), 118.

To realize these changes, systems first internally encourage, support and reward improvements in customer satisfaction. With internal support for quality improvements established, organizations focus on their customers. Knowing customer perceptions is essential for health care providers to improve their image. In the past, the efforts of hospitals to measure quality ignored customer perceptions, which include patients, physicians, and payers.<sup>5</sup> Many providers conduct extensive customer satisfaction surveys, asking for service improvement suggestions. Going public with their desire to improve their services, the health care field shows they have made the commitment to quality.

Another factor in the pursuit of TQM by the health care industry is pressure from corporate America. Skyrocketing health insurance rates and medical claims are driving businesses to look for cost containment solutions. One place businesses are looking is at the providers themselves. Increasingly, corporate America challenges the health care industry to focus on cost containment strategies and quality improvements. Corporations are negotiating to shift some of the monetary risk of medical care onto the health care provider. Shifting risk entails corporations and health care providers negotiating set amounts for medical procedures. Any costs exceeding the negotiated rate becomes the responsibility of the provider. With the increase in risk, it is in the best interest of the provider to dispense quality care while controlling their costs. Some businesses are turning to alternate delivery systems if the costs are too high for the perceived level of quality. Eventually, as health care

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<sup>5</sup>Ibid.

costs for given levels of service become more similar, quality and value will distinguish one provider from another.<sup>6</sup>

The change in government reimbursement to health care providers from cost-plus reimbursement to the diagnostic related groups (DRGs) plan increases the importance of cost containment. Cost-plus allows the provider to charge the government the cost of a given procedure plus an additional amount above the actual cost. Therefore, the provider could make a profit. Under the DRGs plan, some health care providers stand to lose money from performing certain procedures. This plan sets a cap on what the government will pay for specified groups of procedures. More technologically advanced health care providers have greater overhead expenses than less sophisticated providers and their costs may be greater than the governments reimbursement cap. Providers may benefit financially by providing quality services as efficiently and effectively as possible.

The literature extensively documents changes in demographics. The impact of demographic shifts are far reaching. One issue concerning business is the shrinking numbers of entrants into the labor pool. As the number of entry level workers decreases, businesses will experience increased competition for qualified employees. This is particularly true in the health care industry where labor shortages continue to be severe. Another concern of the health care field is a potential increase in the demand for health care services as the population of the United States ages. These

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<sup>6</sup>Ibid.

changes will require that health care institutions provide more services with fewer resources.

In addition to external pressures, hospitals are experiencing internal challenges for quality improvements. In the past several years health care providers have come under intense financial pressures. As a result, these pressures force many providers either to close their doors or join hospital systems. According to the Associate Director of Human Resources for a major metropolitan health care network, the recent hospital closings are a kind of consolidation to a more efficient system.<sup>7</sup> In today's environment, that efficient system includes reward structures supporting TQM principles.

The key elements to TQM initiatives in health care settings include a long-range implementation plan to improve processes and a focus on customer satisfaction. For long-term gains, organizations continuously utilize information gathered from customer surveys, systematically refocusing and redesigning organizational processes.<sup>8</sup> Accomplishment of these objectives necessitates total employee involvement within the organization.

Clearly, the current health care environment indicates that providers are experiencing intense pressure to deliver quality service. Yet, resources and staff of health care organizations are bearing an increasing burden. As a result, more mistakes and errors in judgement will inevitably occur. The fact that human error is

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<sup>7</sup>Confidential interview, interviewed by author, 17 January 1992, Chicago, Illinois.

<sup>8</sup>Spechler, 121.

a factor when people take care of people, increasingly rampant litigation and skyrocketing malpractice insurance costs hinders the mission of the health care industry.

To reduce these problems, hospitals are targeting specific improvement areas and emphasizing a quality process.<sup>9</sup> Brent James says organizations must realize that employee motivators include pride in their jobs and need an outlet to express their pride through improved quality.<sup>10</sup> Total quality management plans can incorporate motivational and reward structures for their participants.

In order for TQM to be effective, an organization must have realistic expectations. This includes not rushing the process. A five year time line is average from the planning to the start-up stage. As with any new program, the organization allocates necessary resources. Additionally, health care providers develop short-term strategic planning and expectations. TQM strives to improve processes. Poor quality is often the result of flaws in service delivery. TQM principles encourage rewarding individuals and groups who strive to improve the process at every level of the organization.

Correcting flaws in the system leads to greater productivity and improved quality. This is in contrast to blaming individuals for quality problems or for the systems' weaknesses. State and federal governments, accreditation agencies and

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<sup>9</sup>William A. Schmitt, "Quality Assurance: A Shift in Focus," *Computers in Healthcare* 12 (May 1991): 16.

<sup>10</sup>James, 26.

quality assurance programs often employ regulatory approaches to quality. When organizations use these approaches they usually highlight and punish the bad versus focusing on improving quality.<sup>11</sup> Jim Clemmer, President of The Achieve Group a Canadian-based international performance improvement consulting firm, notes, "Many systems, procedures, performance measurements and product and service specifications are designed for the organization rather than to meet the customer's needs."<sup>12</sup>

In TQM settings, attention turns away from internal inspectors and onto the customers' perception of quality. The goal of TQM is to "eliminate deviation from customer expectations--whether the customers are patients, physicians, employees or payers and whether the expectations are optimal clinical outcomes or efficient services."<sup>13</sup>

The objective of TQM is to create a structure ensuring that quality values permeate every level of the organization. Robert Reid, President of Reid Associates, Sewell, NJ states, "we are all producers; we are all paid for performing a task; we all work in a process. And the results of our efforts are passed on to our customers. Therefore, it is time to involve *everybody*."<sup>14</sup> In quality improvement programs successfully working as a competitive tool the entire organization commits itself to

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<sup>11</sup>"Up & Comers," 32.

<sup>12</sup>Clemmer, 39.

<sup>13</sup>"Up & Comers," 32.

<sup>14</sup>Reid, 52.



TQM. This requires the involvement of employees at every level.<sup>15</sup> High quality depends on good, interactive leadership and a clear mission.

The collaboration mentioned above often manifests itself in employee work teams. Teamwork is the sine qua non of TQM initiatives.<sup>16</sup> TQM's objectives of high-quality, cost-effective service strengthen the need for cooperation within departments and across functions.<sup>17</sup>

The ways in which and organization is managed influences the general perceptions of employees about teamwork and the importance of teams within the organization. The acceptance of group goals and responsibilities by top management impact on the total organizational system.<sup>18</sup> Situations negatively impacting employee perceptions include:

- damaging conflicts between or among team members
- confusion about responsibilities or unclear roles and relationships among team members
- absence of clarity in goals or low commitment to goals
- communication deficiencies: group members do not speak up, do not understand how important it is to listen, and have not captured the art of conversation in business situations
- lack of trust -- the quintessential ingredient of it all<sup>19</sup>

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<sup>15</sup>"Managing for Quality," *Incentive* 62 (July 1988): 14.

<sup>16</sup>Employee of a major academic medical center, interviewed by author, 8 May 1992, Chicago, Illinois (name kept confidential).

<sup>17</sup>Adrian L. Webb and Martin Hobdell, *Teamwork in the Personal Social Services and Health Care: British and American Perspectives*, eds. Susan Lonsdale, Adrian Webb, and Thomas Briggs (Syracuse, New York: Personal Service Council, 1980): 97.

<sup>18</sup>Addison C. Bennett and Samuel J. Tibbitts, *Maximizing Quality Performance in Health Care Facilities* (Rockville, Maryland: Aspen Publishers, Inc., 1989):66.

<sup>19</sup>Ibid.

Health care TQM initiatives parallel TQM in other industries in that teamwork sustains achievement of TQM objectives.

Hospital TQM programs may focus on financial objectives, quality of care and employee performance measures. To continuously improve quality, employees need the freedom to track problems.<sup>20</sup> This access to information includes disseminating information, knowledge, rewards, and power throughout the employee ranks.<sup>21</sup> TQM objectives should be flexible enough to allow ongoing review and additions if employees discover an opportunity for improvement. Flexibility of specific goals support focusing on continuous improvement. In addition, adaptability fosters innovation and a sense of ownership for the individuals.

When setting objectives, the primary focus is on customers. Continuous monitoring of the level of service to patients and other customers is necessary, as well as reviewing historical data and identifying recurring patterns. These measurements provide structure to the organization when establishing or realigning quality objectives. Brent James explains the measurement systems required by continuous quality improvement. First, hospitals "track the moving goal of customer expectations" and second, "measure movement in relationship to that goal."<sup>22</sup> To monitor quality, hospitals define, measure, and demonstrate the quality of health care. Requirements include:

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<sup>20</sup>Reid, 53.

<sup>21</sup>Lawler, *High-Involvement Management*, 3.

<sup>22</sup>James, 16.

1. Collect patient data concerning:
  - a. diagnosis
  - b. treatment
  - c. outcome
  - d. cost
2. Organize this data in useable forms
3. Use the data on a timely basis to foster continuous quality improvement.<sup>23</sup>

Hospital use performance measures tied to finance, marketing and planning.

Also considered is the quality of care, which includes number of medical staff complaints, patient length of stay, patient satisfaction and the number and magnitude of new litigation cases.<sup>24</sup> Physicians will need to follow practice guidelines to reduce cost and inappropriate care. This will serve to help the physicians practice better medicine. If a physician's performance is below the norms, the hospital's quality assurance department will provide education and support.<sup>25</sup>

In the health care industry, wage inequity is a significant problem. The issue of wages often affects employee relations. Hospitals must consider employee perceptions when assigning bonus eligibility. As a result of perceived inequity, employees may seek third party assistance in the form of unions.<sup>26</sup>

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<sup>23</sup>Nancy Pope Nelson, "The Role of Information Systems in Managing Quality," *Healthcare Forum Journal* 33 (September/October 1990): 49.

<sup>24</sup>James Freundt, "Merit Increases for Top Execs to Average 5.2% in 1990," *Hospitals* 64 (5 September 1990): 37.

<sup>25</sup>David Burda, "Vt. Hopes Improved Quality Can Control Costs," *Modern Healthcare* 19 (16 June 1989): 38.

<sup>26</sup>Frank Cerne, "Will Wage Inequities Provoke Worker Walkout?," *Hospitals* 62 (5 August 1988): 71.

Currently, some HMOs are using a "carrot-and-stick" approach to physician reimbursement. Improved quality and cost-effectiveness is the goal of this approach. With the HMOs' success, hospitals are considering similar cost- and quality-based systems. The HMO, U.S. Healthcare in Blue Bell, Pennsylvania rewards physicians with bonuses of 12.5% to 25% if they score well on four cost and quality scales. As this system grows, U.S. Healthcare is developing objective data to weigh outcomes of care against costs for hospitals.<sup>27</sup> Av-Med Health Plan in Miami has that found bonuses motivate physicians better than withholdings. The system's structure collects physicians' quality scores and utilization data and they are assigned to one of five reimbursement categories. The organization reviews data biannually to continuously reward quality and cost-effectiveness.<sup>28</sup>

According to findings by Hay Consultants, there is a positive correlation between incentive pay and improved financial outcomes for hospitals. The relationship exists because the organization offering the better compensation package attracts the superior executive talent. Organizations use incentive plans to link compensation with improved quality of patient care, reductions in unnecessary costs and recruitment and retention of valuable employees. Experts agree that companies should keep incentive awards at a reasonable level and exclude employees who are eligible for awards from committees administering the incentive compensation

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<sup>27</sup>Julie Johnsson, "Physician Bonus: HMOs Reward High-Quality Care," *Hospitals* 63 (5 November 1989): 70.

<sup>28</sup>*Ibid.*, 71.

program.<sup>29</sup> A more equitable pay structure for nurses would include rewards based on experience and how well they meet the demands of their role.<sup>30</sup>

Incentive pay for nurses includes bonuses for individuals or teams who meet or exceed productivity (and quality) goals. As rewards, "incentives payments are cost effective because they reward the most productive employees without adding to fixed costs."<sup>31</sup> Louis Porn, partner in Ernst & Whinney's healthcare consulting group, says, "Incentive pay meets two needs that are lacking for nurses -- money and job satisfaction." Many nurses say that when organizations link incentives to patient care measurements they have a heightened sense of ownership into operations of the hospital.<sup>32</sup>

When an organization is undergoing cultural change, as is the case in implementing TQM, performance contingent rewards are an effective leadership tool. Effective performance appraisals and recognition and reward programs support cultural change. Today, there are numerous complaints and accusations of physicians ordering unnecessary tests and engaging in unnecessary procedures. Whether or not these concerns are accurate is an important question, but equally important is how the system supports the explosive growth of potentially unnecessary procedures.

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<sup>29</sup>David Burda, "IRS Ruling Clears Way for Incentive Pay Plans," *Modern Healthcare* 18 (12 February 1988): 39.

<sup>30</sup>Linda Perry, "Cross-training: Caught in the Cross Fire," *Modern Healthcare*, 21 (6 May 1991): 27.

<sup>31</sup>Ibid., 28.

<sup>32</sup>Burda, "IRS Ruling," 39.

Currently, health care providers compensate physicians based, in part, on how many tests they order. If organizations based compensation systems on the physicians actual work input, such as time spent with the patient, the number of tests would decrease.<sup>33</sup>

In most organizations the employees are self-motivated to do a quality job, but companies still need to provide an acceptable incentive system to reward the employees' efforts; a system compatible with the goals of the organization. Programs targeting quality improvements fail if they do not offer a balance of recognition and tangible rewards. These rewards must be available to all the employees.<sup>34</sup> Brandon Melton, director of the Society of Healthcare Human Resources Administration, American Hospital Association says health care providers need a change in corporate culture to improve hospitals' productivity. Typically, hospitals do not reward employees for outstanding service. Melton sees rewarding employees through incentives such as pay-for-performance as a way to improve quality and increase productivity. When organizations tie pay to the success of the hospital, they realize quality improvements.<sup>35</sup>

In developing reward objectives, there should be a balance between quantitative or financial measures and qualitative or subjective goals. Subjective goals

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<sup>33</sup>Michael Robinson, "Will This Man's Formula Revolutionize Medicine?" *Hospitals* 62 (20 November 1988): 71.

<sup>34</sup>"Managing for Quality," 16.

<sup>35</sup>Alden Solovy, "As Margins Fall, Executives Forge Survival Tools," *Hospitals* 62 (20 March 1988): 49.

include contribution to the mission of the organization, interpersonal skills and community relations. Setting objectives is not an end in itself.

Hospital compensation planning will continue to feel the impact of many pressures currently facing health care organizations. These include:<sup>36</sup>

- Recruitment for top executives is moving from a regional to a national level and is encompassing other industries
- Corporate efforts for cost control using negotiated discounts
- Government reimbursement controls
- Increasing competition for market share

The American Hospital Association's 1990 Compensation Survey forecasts the continued growth of annual incentives and a larger employee group will be eligible for these incentive plans. Incentive pay programs will extend downward from the executive level to include the entire work force. For employees to accept cross-training, hospitals need to change their compensation practices to award employees with a larger skill base.<sup>37</sup> Hospitals are turning to creative reward systems to improve recruitment and retention of talented hospital management by tying annual incentives or bonuses to performance.<sup>38</sup>

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<sup>36</sup>Freundt, 37.

<sup>37</sup>Perry, 29.

<sup>38</sup>Freundt, 33.

## CHAPTER IV

### RESULTS OF MEDICAL CENTER EMPLOYEE OPINION SURVEY

In the literature, research examining employees attitudes about the impact of TQM on their organization is limited. To compensate for this gap, the author reviewed data from one Medical Center's 1990 Employee Opinion Survey (Survey), which targeted employees' perceptions of their organization. This section presents results from that survey.

Examining the Medical Center Survey provides an overview of employees' perceptions about the organization and a broad baseline for future work in this area. The first purpose of the survey was to examine changes in employees' feelings towards their jobs specifically, and their work environment in general. The survey reports differences in results between the baseline survey, administered by the Medical Center in 1988, and the implementation of TQM. A second purpose was to provide a basis of comparison between employees' opinions throughout the Medical Center and specific employees' perceptions about teamwork, TQM, and incentive compensation. The Medical Center presented their findings in a report submitted to the division of Human Resources. A summary of findings from this report comprises the basis for this section.



In the summer of 1987, the Medical Center initiated organizational change by implementing TQM. The Survey sought to determine employee attitudes toward the TQM program by measuring job satisfaction, perceptions of organizational climate, and general work and organizational opinions. In addition the Survey evaluated the importance of and satisfaction with the Medical Center's employee benefits package from 1988 to 1990. The report emphasized observed divisional and occupational differences as well as the short-term impact of TQM.

Of a possible total of 7,382 employees, employed between June 1 and August 30, 1990 in six divisions of the Medical Center, 5,174 actually completed and returned the survey. This represented a overall participation rate of 70.8 percent. The 1988 Survey generated a similar response rate of approximately 4,800 employees or 70 percent of the work force.

The final instrument contained five major sections:

- 1) *Job Satisfaction*. Three scales that measure general, intrinsic and extrinsic satisfaction.
- 2) *Organization Climate*. Nine independent scales that assess perceptual dimensions of the work environment.
- 3) *General Opinions*. Twenty questions that assess specific components of the [Organization's] work environment and specific issues related to TQM.
- 4) *Background Data*. Ten questions regarding personal sociodemographic attributes, occupation, and TQM participation were included to assist in interpreting variations in the components listed above.<sup>1</sup>

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<sup>1</sup>Ibid, ii.

- 5) *Benefits and Services*. Employee evaluation of importance of and satisfaction with twenty-seven benefits and services.

Section one of the Employee Opinion Survey requested completion of twenty-one questions measuring satisfaction as described in number one above. Respondents used a five-point scale ranging from very satisfied to very dissatisfied.

In general, employees' perceptions of their work environment improved from 1988 to 1990. All *Job Satisfaction* (general, intrinsic, and extrinsic) scores increased over the two year period. Employees reported a 3.1 percent increase in general satisfaction, intrinsic satisfaction increased 2.2 percent, and extrinsic satisfaction increased 4.5 percent. Given the limited increases, changes due to chance or Hawthorn effects should be considered. Although changes were modest, implementation of TQM may attribute for increases realized in satisfaction. TQM encourages employee participation, which psychological research shows to increase satisfaction. The increase in extrinsic satisfaction is interesting and may be related to more frequent and widespread employee recognition programs. The presentation of interview data will address this issue further.

In section two, responses on all *Organizational Climate* questions reflected significantly increase satisfaction with the work environment except for questions measuring Risk. Increases in these scales reflect success in identifying areas of importance to employees and rewarding employees accordingly. The Survey report concluded that increases in organizational climate scores indicate improved "pay and

praise for good job performance; offering constructive assistance to employees; and fostering a friendly atmosphere."<sup>2</sup>

Employees' growing satisfaction with their organizational climate could be interpreted as a characteristic of environments with increased employee participation. Within TQM initiatives, organizations place a greater emphasis on rewards, communicating responsibilities and standards. Employees in these situations may identify more strongly with the organization, thereby perceiving the environment as supportive and friendly.

Of particular interest is the zero percent growth in satisfaction on the risk scale. The report does not address the reason employee satisfaction remained static on this measure. However, one might speculate that within TQM, organizations encourage employees to assume greater risk for their success. For employees who are risk intolerant, this shift in responsibility may be undesirable.

Section three measured employees' *General Opinions*. This scale reflected both positive and negative statistically significant changes from 1988 to 1990. Positive changes included employees increasingly recommending the Organization as a place to work, intention of continued employment with the Organization, and believing to be well informed.

Interestingly, employees' perceptions toward their level of pay as compared to peers in similar job settings decreased between 1988 and 1990. Office/clerical employees and technicians/technologists reported significant decreases in relative pay.

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<sup>2</sup>Ibid., iii.

At the same time, these two groups reported increased job satisfaction or improved perceptions of the Organization's climate. The Survey report concluded that employees perceive compensation at similar institutions improving to a greater degree than in their organization. In reality, market surveys place the level of compensation offered by the Medical Center competitive with similar institutions. The report does not address whether or not declining satisfaction with pay correlates with TQM. The possibility exists that employees feel TQM requires them to assume increased responsibility, which pay levels may not reflect.

Between 1988 and 1990, employees increasingly disagreed that management made effective decisions. TQM organizations provide the employees an environment to participate in decision making once reserved for managers. Given their more active role, employees may feel more comfortable questioning management systems. In fact, TQM encourages employees to target ineffective processes and procedures as areas for improvement. Employees become empowered to make changes when communication levels are high. As reported by the Medical Center, in 1990 employees perceive that they are far better informed about the Organization's activities than in 1988.

Section five showed the overall ranked importance of and satisfaction with *Benefits* remained very similar in 1990 and 1988. Interestingly, three benefits received high importance rankings but very low satisfaction rankings in 1990. These benefits were performance evaluation, retirement plans, and merit increases. Merit pay increase ranked fourth in terms of importance, but lowest in terms of satisfaction

in 1990 and 1988. Employees interviewed by the author discussed performance evaluations and merit increases at length. For a description see the following Employee Interview section.

The 1990 Survey included several TQM specific questions. The questionnaire asked whether or not employees were participants in TQM initiatives. Fifty-nine percent of employees indicated the involvement of their department in TQM, 11 percent stated that their department was not involved in TQM, and 30 percent reported they did not know. When asked about personal involvement, the numbers declined slightly. Fifty-two percent reported personal involvement in TQM, 31 percent believed that they did not participate in TQM, and 17 percent were unsure. Although the majority of employees reported personal or departmental participation in TQM initiatives, a substantial number of employees are unsure. An explanation for these results may be the newness of TQM within the Organization. As the TQM program becomes established and spreads throughout the Organization, participation uncertainty will probably diminish.

For analysis purposes, the Organization developed a broad measure of TQM participation. The Survey categorizes all employees into two groups: those reporting personal participation in TQM (52%) and those uncertain or uninvolved in TQM (48%). The report explains that this approach acknowledges employees exposed to TQM initiatives without their departments being involved. The data analysis focused on comparing these two groups across opinion measures and work attitude scales to ascertain effects of TQM on attitudes and perceptions.

The Survey report states TQM participants were more likely to recommend the Organization to a friend or family member for patient care and as a good place to work. Additionally, TQM participants reported high job satisfaction and were more likely to remain with the Organization. They agree more strongly that: employee opinion surveys contribute to positive changes in the Organization; they are well-informed as to the Organizations activities; and they were more confident in upper-management's capabilities in responding to current challenges in the health care industry.

The Survey reported no significant difference on the employees perceptions toward their pay as compared to comparable jobs. This may be explained within a TQM framework in two ways. First, TQM may be in the development stages and as it become established the Organization will reevaluate compensation strategies. Second, the Organization may have in place non-monetary rewards supporting TQM.

The 1990 Survey contained ten new general opinion questions pertaining to TQM in terms of goals, customer service orientation, emphasis on teamwork, and empowerment. The Survey report indicates employees involved in TQM agreed more closely that: customers come first; continuous improvement is necessary; they are involved in decision making; the Organization emphasizes teamwork; and the Organization communicated the 1988 Survey results well.

Survey analysis compared the two groups across the three job satisfaction scales. TQM participants reported higher intrinsic job satisfaction, but no significant difference in terms of extrinsic or general job satisfaction.

Within the framework of TQM, these results are expected. Currently, the Organization emphasizes employee participation and increased responsibility. These conditions "empower" employees to increase their organizational contribution. Under these conditions, employees' pride in their job and work increases, thus bolstering intrinsic satisfaction. No significant difference on the extrinsic satisfaction scale may indicate that the Organization does not link pay or benefits to TQM objectives. If employees perceived a strong relationship between pay and achieving TQM objectives, extrinsic satisfaction may increase for TQM participants.

TQM participation did not significantly impact the organizational climate scales of Structure, Warmth, Responsibility, Reward, Risk-Taking, Support, Conflict Management, and Identity. The almost equal division of TQM participants and non-participants may account for the lack of differences on this scale.

The Medical Center's analysis of Employee Opinion Survey data found TQM favorably impacting how employees perceive the Organization and their jobs. The study recognizes that, under applied conditions, individual's random assignment to treatment (TQM initiatives) is infeasible. The possibility exists that employees responding as TQM participants perceived the Organization and their jobs more favorably prior to TQM's implementation. In general, the Organization reports limited, yet positive effects of TQM.

## CHAPTER V

### METHODS

#### Sample

This chapter reports methods used to survey employees from the same medical center that provided survey results reviewed in the previous chapter. The sample for this study consisted of one employee from each of the following departments (n=10). These departments were: Laboratory Services, Nursing, Library Services, Training and Development, Emergency Room Services, Employee Relations, Dietary Services, Anesthesiology, Medical Center Engineering, and Compensation and Benefits. Nine of the ten participants reported that they were in management positions. Three females and seven males participated. All of the participant met the selection criteria describe below.

The study ensured representation within the organization because, although the final sample was small, it was purposefully drawn from a larger population of employees participating in TQM work team. The criteria used for selecting participants included:

- 1) Workers employed by the organization before and continuing after TQM's implementation
- 2) Employees participating on work teams with quality objectives



### 3) Employees from a cross-section of departments

This study utilized a health care environment because TQM principles are relatively new in the service industries, as opposed to manufacturing. In addition, the size of the Medical Center provided a large pool of employees from which to select a sample. For data collection, this study targeted a specific major metropolitan medical center considered to be an innovator in applying TQM to a health care institution.

### Procedures

The author contacted the Associate Vice-President of Human Resources (Vice-President), who is involved in TQM initiatives at the Medical Center, as to any interest in participating in a study of incentives in TQM organizations. The discussion included the Medical Center's commitment to TQM, quality service and performance measures, compensation strategies, and general interest in the study. The author then contacted the TQM department to obtain a list of potential participants from a cross-section of the organization. The TQM department supplied the names of twelve employees. Ten employees were selected, all of whom met the criteria stated above, and were available to participate within the time frame of this study.

After the sample was determined, data collection began. Ten employees were interviewed and completed survey questionnaires. The author told participants the general focus of this study and had them sign a consent form. Sources of data collection were a Teamwork Questionnaire, a Compensation Attitude Survey, and

individual interviews. Each interview lasted between forty-five minutes to one hour. The questionnaires were coded to match their departments.

### Measures

The survey measures used included a Teamwork Questionnaire, a Compensation Attitude Survey, and interviews.

#### Teamwork Questionnaire

The Teamwork Questionnaire was internally divided into five sections regarding work team processes. Employees responded to questions on a five-point scale ranging from "completely agree" to "completely disagree." For example, survey questions included:

- "We celebrate the successes of our whole team as much as we do the successes of individual team members." and
- "I derive a great deal of personal satisfaction from being part of our team."

In the analysis stage, responses were grouped into three categories: positive, undecided, and negative. Positive responses include responses ratings five and four, strongly agree and agree respectively. Undecided responses equal rating number three. Negative responses include ratings two and one, which are disagree and strongly disagree respectively.

Section one of the Team Questionnaire included ten questions, one through ten, pertaining to feelings of inclusion. Kinlaw asserts that both functional and symbolic qualities of a team's environment create and maintain inclusion. For

example, privileges or advantages must have salient functional purposes within the framework of teamwork. Kinlaw describes this as "When anyone gets special treatment on a team, the reason for the treatment must be clearly connected to the person's performance and value to the team."<sup>1</sup> The author replicated a teamwork questionnaire from Dennis Kinlaw's *Developing Superior Work Teams*. Using this questionnaire was appropriate given Kinlaw's assertion that "people involved in special initiatives--like Total Quality Management--intended to improve total organizations through improved work teams."<sup>1</sup>

In section two, questions eleven through twenty focused on commitment. Kinlaw defines commitment as the degree to which employees focus on a goal and the level of sacrifice employees will make to achieve that goal. In describing the relationship between commitment and quality Kinlaw states,

A commitment to quality on the part of every single person who touches a process, a product, or a service is the only proven way to ensure outputs that are 100 percent fit to use, 100 percent of the time. No organization has ever shown that levels of quality could be achieved by quality inspectors and engineers. There is simply no contest between teams that develop commitment in their members and those that depend on the grudging compliance of members to achieve results.<sup>2</sup>

Organizations successfully sustaining TQM disseminate organizational objectives, goals and priorities.

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<sup>1</sup>Ibid, 116.

<sup>1</sup>Kinlaw, 1.

<sup>2</sup>Ibid, 188.

The third section, questions twenty-one through thirty, addresses loyalty, which is team members' feelings toward each other. Loyalty affects commitment, trust, pride, and inclusion. For example, lack of loyalty within group occurs when forces inside or outside the team encourage circumventing group processes, thereby creating negative feelings. Kinlaw describes manifestations of loyalty as team members working to ensure each others' success and giving the benefit of the doubt to members who fail to meet an obligation. The latter characteristic denotes that team members strive for success and mistakes or problems are unintentional, not that teams condone shirking.

Section four, questions thirty-one to forty, measures pride. Kinlaw characterizes pride as the interaction of work and self-worth. Pride in a job well done heightens an employees sense of self-worth thereby increasing the likelihood that the employee will continue to perform superior work. Teamwork environments further elevate the relationship between performance and personal worth. This occurs because employees associate their worth based on their individual efforts as well as their value within the work team.

Section five, questions forty-one through fifty-five, addresses trust. Situations that establish and sustain trust among employees in teams include open communication, empowerment to perform their jobs, and a clear understanding of requirements for awards.

### Compensation Attitude Survey

Administration of the Compensation Attitude Survey followed employees completion of the Team Questionnaire. The author read six questions to the participants, who verbally responded to the given choices. Examples of questions and responses included:

- While everyone thinks they should earn more, thinking about the company you work for and other comparable companies and comparable jobs, would you say you are paid...About Right, Too Little, Too Much, Don't Know.
- Given a choice of pay systems would you...Prefer to be paid on an individual incentive basis, like a salesman, Prefer to be paid on a company-wide incentive basis, Prefer to be paid on a department-wide incentive basis, Prefer to be paid on a team-based incentive basis, Don't Know.

See Appendix A for a sample of the instrument. Participants shared their attitudes towards compensation practices used in the Medical Center before and after the implementation of TQM. The author replicated incentive questions from the Bureau of National Affairs 1988 compensation attitude survey.<sup>3</sup> The author selected this questionnaire for its focus on incentive compensation. The intent of these interviews was to address a broader range of issues touched upon in the Medical Center Survey questions and to stimulate discussions on the relationship between various compensation systems and teamwork in TQM environments.

Finally, in interviews, participants responded to open-ended queries regarding their involvement, experiences, attitudes, and perceptions of TQM teams in their organization and in general. First, interviews clarified and verified the employees'

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<sup>3</sup>Bureau of National Affairs, K-6.

responses on the written questionnaires. Second, interviews targeted employees' attitudes as to a possible relationship between incentives and teamwork, which may include compensation schemes not currently offered by the Medical Center. Additionally, the informal, one-on-one interviews allowed employees the opportunity to discuss TQM and incentive issues particular to their department or unit and eliminated some of the subjectivity and bias inherent in interpretation of written narrative responses. The interviews also served in broadening the scope of the Medical Center Employee Opinion Survey responses.

The interviews used a loosely structured set of interview questions, based upon the data collected through both the Team Questionnaire and the Compensation Attitude Survey. In addition, interview questions focused on areas the author thought warranted further clarification or development. Basically, the interviews used the same set of questions with each participant.

Interviews were conducted privately in the employee's office and lasted approximately forty-five minutes. One interview was held during the employee's scheduled time to answer the department's phones. Fortunately, interruptions were minimal and the employee felt free to respond openly.

### Limitations of the Study

The concern of this study is the potential conflict between individual versus group incentive compensation strategies through their application in TQM environments. The author made the choice to study teamwork as it pertains to TQM

organizations for two reasons. First, the importance of teamwork in sustaining TQM is well documented in the literature. Second, traditional individual incentive plans are most likely to create conflict in situations emphasizing group performance.

Therefore, generalizations resulting from the current study do not apply to non-TQM organizations or environments that do not promote team performance.

The literature clearly communicates that a choice of compensation schemes affects team output. In this study directly manipulating pay systems was impossible. Therefore, the study examines employee attitudes toward the existing compensation structure and perceptions of other pay systems.

The type of instrumentation used poses additional limitations. In both written questionnaires and in-person interviews, the researcher must rely on the honesty and perceptions of the respondent. Even assurance of anonymity of the participants does not resolve this potential problem. Further, the researcher's own biases can affect interpretation of both written and interview responses. Sometimes fine shades of meaning elude discernment. Also, particularly during an interview, environmental factors or participant's characteristics may influence the researcher, thereby clouding otherwise objective data. These potential limitations makes utilizing more than one type of data collection desirable.

Finally, limits on data measurement include opinions expressed at the time participants completed the surveys or questionnaires or participated in interviews. Since the process of determining attitudes and opinions is one of approximation, the accuracy and extent of meaning cannot be fully guaranteed. There is the possibility

that other, non-related events occurred just prior to completion of surveys, questionnaires, or interviews. These events may affect the respondent's attitudes as being expressed differently than what is typical for that individual.



## CHAPTER VI

### RESULTS

#### Team Questionnaire Results

Prior to administering the Compensation Attitude Survey or conducting interviews, the ten study participants completed the Team Questionnaire. See Table 6-1 for a summary of responses.

##### Section One - Inclusion

Sixty percent of employees studied responded positively (strongly agree or agree) to feeling a sense of inclusion in their teams. Forty percent neither agreed nor disagreed to the statements on the inclusion scale. Overall, no participants disagreed to a sense of inclusion in their teams. Nine out of ten times employees positively answered the statement, "My input is taken seriously when the team sets priorities." The question rated most negatively (disagree or strongly disagree), at a forty percent rate, was, "There are no cliques that create divisiveness."

##### Section Two - Commitment

Seventy percent of employees studied responded positively that their group is committed to achieving the objectives of the team. Twenty percent reported that they neither agree nor disagreed with the statements on the commitment scale. Ten percent of employees disagreed that their teams is committed to team objectives. The

literature describes high levels of commitment associated with organizations communicating goals and priorities. The Medical Center began disseminating TQM information in 1987, which has now reached every organizational level. The Medical Center Employee Opinion Survey reported similar results and drew similar conclusions regarding employee participation. The Medical Center Survey notes within a TQM environment communication of responsibilities and standards increases. Of the employees surveyed by the Organization, those involved in TQM initiatives reported higher job satisfaction and commitment to the Organization.

### Section Three - Loyalty

Sixty percent of employees studied responded positively to feeling a sense of loyalty toward their team. Thirty percent of participants neither agreed nor disagreed to statements on this scale. Ten percent answered that they did not feel a sense of loyalty to their team. The general feeling of these employees is that their fellow team members assist each other to achieve group objectives. The only statement rated less favorably was, "I never hear one team member criticizing another team member to a third party." Employees responded to this statement negatively four out of ten times. A possible explanation for this may be that the teams approach to resolving internal disagreements is not fully developed or successful. Organizational structure may encourage third party input in conflict resolution. As the teams mature, disputes increasingly may be addressed within the team.

### Section Four - Pride

Eighty percent of employees studied responded positively on the pride scale. These results reflect the intrinsic importance of teamwork. Ten percent of participants responded neither agree nor disagree. The same percentage, ten percent, disagreed to statements on this scale. Employees take pride in their teams' performance from an organizational perspective as well as a personal one. The Medical Center Survey reported similar findings in that TQM participants felt a greater sense of empowerment and pride in their jobs.

The statements "Team members typically take any criticism of our team as a possible opportunity to improve" and "We know exactly how well we are doing at all times" ranked slightly lower than the average response to this section. These responses may reflect the feeling that criticisms are sometimes discussed with a third party rather than within the group, as was reported on the previous scale.

#### Section Five - Trust

Seventy percent of employee studied responded positively to feeling a sense of trust in their teams. The responses reflect a relatively open line of communication within the teams. For example, eighty percent of participants answered positively that, "When a team member doesn't agree with another team member, he/she will let the other member know - regardless of the other member's position or rank." Also, ninety percent responded positively that, "When a team member gives the team bad news, we never 'shoot the messenger.'" In addition, there is a belief that each member wants to contribute their share to the success of the team as reflect on the commitment scale.

Table 6-1 provides a results summary from the five sections of the Team Questionnaire. On the whole, participants feel positively about the work teams in which they participate. One participant stated she rarely responded to any survey question with 'strongly agree', as a result her responses averaged 1.5 points lower than the other participants. Responses to all five team development scales parallel feelings reported by successful, well-developed work teams.

On the whole, the respondents share similar beliefs about the critical areas of TQM. Important areas of agreement include employees feeling that their input is listened to, an understanding of group goals, a strong commitment to quality, and a sense of personal satisfaction derived from being in a team.

Although most responses were consistent among the participants, responses in several areas revealed a divergence of opinion. These areas include within group cliques, reluctance to make personal sacrifices or to set personal feelings aside for the good of the team, and perceiving group performance as representing individual performance.

Employee response ranges are as follows:

Table 6-1

Responses to Team Questionnaire

	RESPONSES (n=10)		
	POSITIVE	NEITHER AGREE NOR DISAGREE	NEGATIVE
Inclusion	60%	40%	0%
Commitment	70%	20%	10%
Loyalty	60%	30%	10%
Pride	80%	10%	10%
Trust	70%	20%	10%

### Compensation Attitude Survey Results

Table 6-2 summarizes responses to the Compensation Attitude Survey. Eighty percent reported their compensation level is about right, whereas twenty percent perceive their compensation as too low. The results of this question differ from the Medical Center Survey. In the Survey, employees' perceptions toward their comparative pay level decreased between 1988 and 1990. The small sample size of the current survey may account for this difference. In addition, the participants may have a better concept of competitive salary levels than do the overall population of employees. Interestingly, although the pay satisfaction rate is eighty percent, the majority of respondents expressed dissatisfaction with the current merit pay structure in the interviews. Employees described the merit pay plan as too confining when they distribute the increase pool among their employees. These feelings coincide with the literature in that merit pay style plans may force managers to artificially rank their employees.

Fifty percent of the employees surveyed reported their bosses are paid about right. Forty percent responded that their boss' pay is too low. One employee could not answer the question. Indirectly corresponding to this area is employee confidence with management's decision making effectiveness.

Only one of the employees reported receiving incentive pay. Several respondents described their pay as fluctuating based on the success of the Medical

Table 6-2

## Responses to Compensation Attitude Survey

n = 10	YES	NO
MANAGER	90%	10%
INCENTIVE PAY	10%	90%
FAIR PERFORMANCE ASSESSMENT	90%	10%

n = 10	ABOUT RIGHT	TOO LITTLE	TOO MUCH	DON'T KNOW
CURRENT WAGE	80%	20%	0%	0%
BOSS' WAGE	50%	40%	0%	10%

PREFERABLE INCENTIVE SYSTEM	n = 10
INDIVIDUAL	20%
COMPANY-WIDE	0%
DEPARTMENT-WIDE	20%
TEAM BASED	60%
DON'T KNOW	0%

Center, but not as a direct response to their performance. Employees expressed the desire for incentives, but only based on areas of their direct control. For example, maybe employees selected individual or small group incentives over company-wide incentives because they feel they have direct impact on their performance or their unit's performance.

Employees would prefer individual incentives at a thirty percent rate.

Employees selecting individual incentives perceived their effort as being greater than the general effort in their team or department. These employees prefer having individual responsibility impact their earnings. In addition, employees selecting individual incentives were not involved in well developed, consistently operating teams. Several employees reported individual incentives discourage free-rider problems in teams. The discussion of interviews expands on this issue. This belief follows the conventional wisdom presented in the literature. No employees selected company-wide incentives as a preference.

Twenty percent of the participants preferred department-wide incentives. A majority, sixty percent, of employees chose team based incentives. Thus, eighty percent of respondents reported a preference to some type of group incentive.

Reasons given for this choice include:

- A combination of group and individual incentives enhance team performance.
- A complete individual incentive systems would be detrimental to TQM.
- Team incentives reinforce the Organization's commitment to TQM.
- Equal incentive pay for team members is an incentive to delegate work to fellow team members.



Several employees said they would like to experience team incentives, but they were unsure if group incentives would have an impact on their personal performance.

Ninety percent responded favorably to their boss' abilities in evaluating their work performance fairly. Where the response was negative, the employee explained a personality conflict exists between the employee and the supervisor. As evident in the literature, satisfaction with performance evaluations are integral to perceived fairness in award allocation.

### Employee Interview Results

The first interview question concerned the employee's involvement in work teams. Eight of the ten employees participated in established teams. Two employees were not directly or consistently involved in teams. Of these two employees, one was a team sponsor, but was not on a management team. As a sponsor, the role of this employee was to make sure the team functioned and continued to progress towards goals and objectives developed by the team. The employee received communications from the team concerning team meetings and the need for additional resources or direction. The employee felt a hands off approach allowed employee leadership to develop within the team and served to further shared responsibility among team members. The employee described a loosely structured management group comprised of sponsors from each shift. The group is "not set up, nor do we categorize ourselves as an operating team." The employee lacked an explanation as to why he was not involved on teams.

The second employee believed that teams had little success in the department.

The solution [to problems within the department] was supposed to come out of working as teams. What I found by having the team here is that the issue wasn't how to improve something, but how to tear down what management had done. When a decision was made to attack a problem, then everybody's solution to the problem was the right solution.

When teams existed, the employee felt if he was not the team leader, then meetings were never called. From this employee's accounts the author had the impression that employees in this particular department misunderstood the TQM process. Another problem may be employees and managers in the department lacked training in TQM principles and their application in the work place. This manager made the comment that his employees had a "what's in it for me" attitude and equated TQM with additional work without additional gains.

Those responding positively to team membership had varied experiences.

Team involvement ranged from large inter-department teams to small intra-department groups. Several employees were TQM facilitators and felt very strongly that teams are the "sine qua non" of TQM. Other employees felt they worked as a team when necessary, but overall they coordinated and were responsible for their own work. These responses coincided with the Team Questionnaire responses that, in general, employees felt involved and satisfied with their team role and the role of the team in the organization.

Several employees elaborated on their team experiences. Not surprisingly, examples ranged from the very positive to the very negative. Participants described work team success as including cutting costs by fifty percent, decreasing time spent

on projects by sixty hours a quarter, and decreasing repeats of a procedure from sixteen percent to zero. One employee described the department as a team in that they exchange information as a type of cross-training. The employee believed this open line of communication enabled the department to better serve it's internal and external customers.

A particularly negative experience involved a cross-departmental project during the early stages of TQM implementation. The employee describes the situation as follows:

There were so many people involved and it was potentially a great application of TQM inter-departmental working teams. Unfortunately, there were problems identified that could have been prevented and were not...[The problems] were identified six months in advance. Finally, [the project was completed] and was a horrible set back for the institution. It was so labor intensive and took about a year to come out of the mess. It could have been prevented. However, the same folks who were responsible to do something then were the first ones to point a finger that our department was not doing what it needed to do. They decided to approach it from a TQM problem solving approach. What I have seen is some people will sit back when a problem is identified and let it fail and then come along and look like a hero under the auspices of a TQM approach to further their agenda.

The employee said a valuable lesson was learned from this experience, TQM needs management support. As the problem unfolded, upper management made "a few phone calls" versus meeting with the responsible parties. TQM literature stresses the importance of top down support. When a TQM philosophy is clearly adopted by upper management, other levels of employees are more likely to follow their lead.

The second question addressed perceived organizational changes since the implementation of TQM. Overall, employees agree TQM implementation is a slow,

gradual process that requires continued maintenance as new employees enter the organization. This step by step process is evident in the Medical Center Survey results presented in Chapter IV. For example, in 1990 fifty-two percent of the respondents reported their personal participation in TQM activities, whereas forty-eight percent were uncertain or uninvolved in TQM efforts. The literature confirms that the implementation of TQM should be gradual. This allows extensive communication about TQM throughout an organization and enables employees to become comfortable with a TQM philosophy.

In addition, departments apply TQM principles to fit their needs and are flexible to changing environments. Employees described several positive changes they believe resulted from the implementation of TQM:

- Decreased absenteeism and attrition
- Improved communication and employee empowerment
- Increased communication among employee groups
- More responsive management
- Acceptance of TQM principles in a health care environment
- Understanding improvement requires continuous effort

To exemplify how TQM is enmeshed in departments, one respondent gave this description:

[TQM] takes a lot of maintenance. Every time a new person walks in the door you have someone else you have to train and to change their culture. We're getting all these polluted people who come in with these ideas from jobs where they were told what to do in the superior/subordinate mode. They were told 'don't think, do what I tell you and I have the responsibility and I have the authority and don't change anything unless you ask me first.'

TQM practices increasingly empower employees and encourage taking responsibility, but employees reported an "ebb and flow of enthusiasm and discouragement." These

feelings are not surprising given the potentially radical cultural change brought about by implementing TQM. A participant described TQM as an "enhancement." Within that perspective, TQM should not be touted as a cure-all, but a way of doing business that enhances the roles of employees, thereby benefiting an organization overall.

The third question related to employees' perceptions towards organizational current pay practices and impressions of incentive compensation. Overwhelmingly, employees expressed their dissatisfaction with merit pay. These results parallel those from the Medical Center Survey in that employees were dissatisfied with merit pay although they rated it as an important benefit.

Some employees believed across the board cost of living type increases were preferable. Other employees felt merit pay, as currently structured, had little impact on team functioning. Employees were aware performance assessments included team work criteria. Responses differed as to a direct link between the teamwork criteria and merit increases in the minds of managers or in the minds of employees. The general complaint toward merit pay was summarized by the following statement.

"When I give merit raises I try to work it...I have to juggle numbers." Interview responses agreed with the literature that limited pay increase budgets may force managers to artificially rank employees. Corresponding to merit pay issues, employees felt feedback should occur throughout the year not solely during an annual review. When asked to elaborate, employees reported that they give frequent feedback to their employees so they know where they stand. Because so many

reported the importance of frequent feedback, the author is unsure if the Organization communicated feedback as an element of TQM.

Employees' responses to the idea of incentives varied. Some employees differentiated between monetary and non-monetary incentives. Overall, some form of recognition was important, whether group or individual based. An argument offered against monetary incentives was:

I think tying money to [TQM] is a bad idea because then you get people doing it for the money and then you can't always be sure that their data is valid...you go back into a checks and balance system. That's not quality improvement, that's quality assurance. You're back to checking to see if they're telling the truth and if their figures are really that bad to begin with and whether or not they made that much of an improvement.

This employee further stated that intrinsic motivation was preferred and that mere recognition would be motivating. The Organization has established events to recognize employees' achievements. In addition, the Organization held a "quality day" that enabled teams to present the objectives and outcomes. Several employees mentioned the importance of these types of events. To improve attendance, employees suggested that managers encourage their staff to come and celebrate other teams' efforts. These public relations type events positively communicate the potential of TQM initiative throughout an organization.

General responses to incentives were positive. Employees believed incentives are vital to accomplish objectives created at any level or by anyone. One employee stated, "Its something that's not taking place at our institution. It certainly would have a direct impact on people's performance in a team or individually. It certainly

would be a strong motivator for people to be more involved in the teams."

Additional comments include:

I think incentives would make a lot of sense for the overall performance of the teams. I think that it is one thing that is missing. I think we're left to use our creativity in providing incentives through other indirect methods, like employee of the quarter or other ways that don't have a dollar figure attached.

Corresponding to the above beliefs, one participant responded that they incorporated special incentives within their departments. Employees earn these informal incentives through their individual performance and by assisting fellow unit members. Situations where formal incentives are not established or financially infeasible may give rise to "unwritten" incentives as a means to award and motivate work toward departmental objectives.

As reported on the Compensation Attitude Survey, a majority of employees preferred group incentives such as team based or department based incentives.

Reasons focused on TQM's emphasis on teamwork. Responses include:

If someone came up to me and said if [my department] generates X amount of revenue during the year, then I'll receive an incentive bonus, then I'd like to have it based on the department's performance.

I think team incentives takes the onus off the individual people. Without a team you have a bunch of individuals competing for rewards. People climb over each other to get individual recognition...It promotes an individualistic environment. But, I don't think a team means you lose your individuality or you submerge to the lowest level...If you emphasize the team then the low performers will pay more attention to trying to raise their performance so not to take the team down.

The latter response raises several issues highlighted in the literature. First, whether or not competition increases in teams employing individual incentives

exclusively. Employees addressing this issue agreed with the prevailing thought in the literature that a competitive atmosphere develops in team rewarding individuals versus the group.

Secondly, a question is, do teams stifle individuality. Both the literature and the employees surveyed find this point debatable. The consensus is that to avoid diminishing individual creativity, employers should provide individual recognition while monetarily incenting the team as a whole. One employee noted:

I think it would be more difficult to prove and convince people toward the team incentive approach. The individual approach is what people are used to. I think that by being a member of a well operating team, I still like to be recognized for what I do.

Third, the employee addresses the team performing at the level of the lowest common denominator. The literature and the participants agree that teams require internal monitoring to prevent "dead weight" from impeding the team's performance. Interview questions regarding free-rider problems address this issue.

Interview questions asked employees about their experiences with and attitudes towards free-riders and how they approached the potential problem. A majority of the employees were unaware of or had not experienced team member shirking. The author attributes this to the predominance of individual incentives over group incentives.

Employees facing free-rider problems dealt with the matter within the team.

One employee offered this approach:

Everybody on the team has a responsibility and must fulfill that responsibility. We take the minutes and publish each member's progress and whether or not the team is on schedule. If a team



member is shirking, that is visible in the minutes. The team addresses the problem and sets deadlines. The shirker is asked why their work is unfinished and how other team members can help.

The employee expressed that the team member would remain on the team because once an employee is given a responsibility they should follow through. Another employee using a similar approach would offer the free-rider to switch to a different team if there was a scheduling problem. In either case, free-riders continued in teamwork situations. Retaining all employees, whether they are star performers or shirkers in teams, imparts the message that teamwork is an integral element of the organization's environment.

Within the context of the employee interviews, the importance of teamwork in TQM environments became apparent. Factors affecting teamwork, identified by the employees through interviews and questionnaires, include the support of management and awards or recognition. Participants noted the positive impact of TQM on the Organization as the philosophy extended throughout the Medical Center. The employees perceive TQM as a continually evolving management style. As employees refine their application of TQM principles they strive to be flexible in meeting new challenges. This study addressed several potentially challenging situations. Successful solutions to issues such as compensation systems, competition, shirking require awareness and communication between employees and management.

## CHAPTER VII

### CONCLUSION

#### Conclusions

Research for this study focused on employees' *perceptions* toward TQM, teamwork, and compensation to discern a possible relationship between incentives and team performance in a major metropolitan medical center. Conclusions from the study concerning TQM and the relationship between teamwork and reward structures are:

1. Employees are cognizant of TQM's importance as a management philosophy and process. They are aware that TQM features employee involvement, improved communication, and teamwork to improve performance and increase productivity while emphasizing service to internal and external customers.
2. Although employees perceive teamwork as an integral element of TQM, not all apply this principle to their departments. Some managers find it difficult to gain employees' acceptance of work groups.
3. Employees differ on the perceived benefits of teamwork. Managers in the current study reported two conflicting views: A) TQM work teams encourage shared responsibility thereby empowering employees. B) TQM burdens employees with the

responsibility of correcting management's mistakes, thereby increasing employees' work without added compensation or other benefit.

4. Employees participating in TQM initiatives are more likely to perceive management favorably in terms of encouraging communication throughout the organization and making effective organizational decisions.

5. Employees in TQM environments rank recognition, whether monetary or non-monetary, group or individual, as an important motivator in their pursuit of achieving TQM objectives.

6. Employees are dissatisfied with annual merit pay increases. Employees believe merit pay structures force the artificial ranking of employees as constrained by increase budget amounts. The average four to five percent increase are inadequate motivators. Narrow increase ranges prohibit sufficient distinction between overall levels of performance, much less satisfactory team contribution.

7. Managers are uncertain as to employees' perceived link between their merit increase amount and their contribution to the team. The managers believe, in some cases, the performance assessment criteria of team contribution is under-utilized or under-developed.

8. Not all employees agree that group incentives provide a greater benefit over individual incentives in TQM organizations. Some employees believe individual incentives in teams create unproductive competition among group members. Other employees feel team based incentives would be too subjective and employees prefer traditional individual recognition systems.

9. A majority of employees prefer group incentives when institutionalized by the organization and adequate resources exist to support consistent awards.

10. Employees participating in TQM teams receiving traditional merit increases, versus structured team based incentives, do not experience free-rider problems.

### Recommendations

The data generated from employee attitudes towards TQM, teamwork, and incentives form the basis for the following recommendations for the improved success of work teams in TQM environments.

1. Top management should continuously communicate, apply, and encourage TQM principles thereby fostering a general acceptance of TQM throughout the organization. Additionally, upper management should be receptive to employees' recommendations.

2. Organizations should provide training to all levels of employees on TQM philosophy and the implementation process. This specific education may ease the "culture shock" during the transition to TQM.

3. Organizations should provide training to all levels of employees working on teams. This training would facilitate employee effectiveness when a situation warrants applying a team approach.

4. Managers should encourage shared responsibility among team members.

In conjunction, team members should be aware that when an individual has a

responsibility to a team, that individual and the team must ensure the responsibility is met.

5. The organization should offer suggestions for possible group incentives and how to apply incentives in work teams. These incentives may be either monetary or non-monetary. Top down support for group incentives may increase their acceptance rate among employees hesitant to venture from traditional individual recognition programs.

6. Organizations should be aware of employees' perceptions of and attitudes towards existing pay schemes. If compensation practices do not support TQM principles (teamwork, communication, shared objectives), then the organization should realize the consequences. Pay schemes incongruent with teamwork may create competition between employees, decrease productivity gains and quality improvements, and inhibit communication between departments.

7. The organization should develop a compensation system comprised of both individual and group incentives to balance out conflicts resulting from pure compensation schemes. Individual incentives would serve to promote individual achievement and growth. Group incentives would motivate inter- and intra-departmental work team cooperation toward the organization's TQM objectives.

8. With the application of group incentives, the organization should educate employees as to potential costs and benefits. For example, employees should be aware that cooperation can increase productivity and improve quality, but teams may be at risk to free-riders if teams lack an internal monitoring system.

9. A compensation scheme that would improve quality efforts in work teams is described as follows:

- Departments document a baseline measure of their productivity and quality.

This is communicated to all the employees involved so the starting point is generally understood.

- Employee work groups develop team objectives congruent with organizational objectives to improve productivity and quality. Based on their objectives, work teams develop a matrix of responsibilities, which maps out how each member contributes to achieving the team's goals.

- A compensation matrix ties each objective with an incentive amount. For example, reaching the "target" improvement may result in a payout of \$1000 for each team member. The matrix sets "threshold" and "maximum" amounts as well.

Changes that fall short of the threshold do not qualify for incentives. The organization explains that while individual team members have specific responsibilities, successfully achieving quality objectives relies on a cooperative effort, therefore group productivity affects incentive distribution.

- To manage free-rider issues, teams use intra-group peer pressure in motivating shirkers to fulfill their responsibilities. Peer pressure is effective when a clear link exists between group effort and compensation.

Work teams maintain open lines of communication throughout this process to encourage feelings of inclusion and understanding. This incentive scheme combines

TQM principles (communication, shared responsibility, quality improvements) with a clear link between performance and pay as preferred by the employees interviewed.

This scenario assumes team members' salaries are similar so that \$1000 is not five percent of one employee's salaries and two percent of another's.

### Suggestions for Further Research

Based on the results of this study, the relationship between work teams and reward structures warrants further research.

1. Replicate this study using a larger employee sample in order to determine if participants of the current study are representative of employees in the organization as a whole.
2. Replicate the current study drawing the participant sample from industries other than health care to determine if teamwork and reward structure relationships are similar across industry types.
3. Replicate this study with non-managerial employees to determine if there is a difference between management and non-management perceptions of team work and incentive compensation.
4. Conduct an experimental oriented study manipulating subjects involvement in work teams and their receipt of individual or group incentives to determine if incentive systems affect group production and quality.

## GLOSSARY OF TERMS

The following definitions serve to clarify major concepts as used in this study.

*Customer* Any one, internal or external to an organization, who is impacted by processes and products.

*Free Rider Problem (Shirking)* A moral hazard in which a team member exerts a substandard level of effort in meeting group objectives.

*Gainsharing* A process of sharing productivity gains or cost savings with employees as an incentive for improved performance or productivity. Usually applied to departments or other large groups.

*Game Theory* An paradigm that analyzes the effectiveness of alternative strategies for maximizing benefits and minimizing costs in a decision making context with two or more people.

*Group Incentive* An incentive plan that ties wages to some measure of group output or costs.

*Incentive* An inducement, monetary or non-monetary, offered in advance to influence future high and/or continued performance above a certain standard.

*Individual Incentives* An incentive plan based on the individual employee's actual performance as it relates to a specific standard of performance. Particularly appropriate when individual output is measurable and employee efforts can stand alone.



*Merit Pay* A compensation system serving as a reward recognizing outstanding past performance.

*Motivator* Some force that stimulates and maintains an activity of an employee.

*Performance Assessment* An evaluation of an employee's or group's progress based on some standard criteria.

*Quality* Product or service performance that results in customer satisfaction; freedom from defects or deficiencies.

*Statistical Quality Control (SQC)* The use of statistical methods to measure actual performance and compare it with a specific performance standard.

*Team* A group of employees who operate from a shared agenda and a common view of their assignment.<sup>1</sup>

*Total Quality Control* The use of a variety of regulatory process techniques used to measure actual performance and compare it with specific performance standards.

*Total Quality Management (TQM)* A philosophy or process that relies on the involvement of all the employees in an organization, requires greater delegation, greater sharing of power, greater equality, and greater development of people to improve the quality of processes, products and work life.<sup>2</sup>

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<sup>1</sup>Heany, 31.

<sup>2</sup>Denton, 5.

## APPENDIX A

## TEAM QUESTIONNAIRE

In my team:	Completely Agree			Completely Disagree	
1. My input is taken seriously when the team sets priorities.	5	4	3	2	1
2. I am regularly consulted before changes are made that affect me.	5	4	3	2	1
3. There are no cliques that create divisiveness.	5	4	3	2	1
4. We make sure that members are properly acknowledged for their performance.	5	4	3	2	1
5. We celebrate the successes of our whole team as much as we do the successes of individual team members.	5	4	3	2	1
6. People with the less glamorous jobs are shown as much appreciation as those with the more glamorous jobs.	5	4	3	2	1
7. The team members who are closest to a problem typically get the first shot at fixing it.	5	4	3	2	1
8. We pay a lot more attention to what our members know than we do to their rank or position.	5	4	3	2	1
9. We typically get all the information we need to do our best work.	5	4	3	2	1
10. We treat every team member's ideas as having potential value.	5	4	3	2	1
11. I am quite clear about my team's major goals.	5	4	3	2	1

In my team:	Completely Agree			Completely Disagree	
12. We are all fully committed to building our team into the best one possible.	5	4	3	2	1
13. I am quite clear about our teams's immediate priorities.	5	4	3	2	1
14. We are all committed to the highest possible standards of quality in everything we deliver for someone else to use.	5	4	3	2	1
15. Team members rarely let their personal feelings get in the way of getting the job done.	5	4	3	2	1
16. Our team members rarely work by the clock; they do what's necessary to do the job right.	5	4	3	2	1
17. When we face a problem, everyone jumps in and works until it's resolved.	5	4	3	2	1
18. We all believe that what we are doing is truly important.	5	4	3	2	1
19. Our team members often make significant personal sacrifices to insure the team's success.	5	4	3	2	1
20. Our team members are typically optimistic that we can get the job done -- regardless of the obstacles.	5	4	3	2	1
21. It's easy to get help from other team members, when I need it.	5	4	3	2	1
22. We go out of our way to ensure the success of our fellow team members.	5	4	3	2	1

In my team:		Completely Agree			Completely Disagree	
23.	I never hear one team member criticizing another team member to a third party.	5	4	3	2	1
24.	We spend a lot more time praising the work of team members than we do finding fault with it.	5	4	3	2	1
25.	When one team member has a personal problem and wants help, he/she can count on help from other team members.	5	4	3	2	1
26.	We never surprise a team member in public with comments that might embarrass the member.	5	4	3	2	1
27.	When any team member can't carry his/her share of the workload, other team members will always jump in and take up the slack.	5	4	3	2	1
28.	We regularly help each other to learn new competencies.	5	4	3	2	1
29.	When we do get into conflicts, we typically resolve them right away.	5	4	3	2	1
30.	We never take credit for someone else's work.	5	4	3	2	1
31.	We pride ourselves on doing a job better than most people typically expect.	5	4	3	2	1
32.	We never take credit for someone else's work.	5	4	3	2	1
33.	Our members feel strongly that everything our team does represents each member personally.	5	4	3	2	1

In my team:	Completely Agree			Completely Disagree	
	5	4	3	2	1
34. We expect that we will completely satisfy our customers and users (within and outside the company).	5	4	3	2	1
35. I derive a great deal of personal satisfaction from being a part of our team.	5	4	3	2	1
36. Team members typically take any criticism of our team as a possible opportunity to improve.	5	4	3	2	1
37. We are our own most severe critics.	5	4	3	2	1
38. We know exactly how well we are doing at all times.	5	4	3	2	1
39. I am very clear how our team contributes to the total success of the organization.	5	4	3	2	1
40. We are typically very positive to others about our team's performance.	5	4	3	2	1
41. When a team member says he/she will do something, you can always count on it.	5	4	3	2	1
42. My fellow team members typically give me information that is 100 percent accurate.	5	4	3	2	1
43. When team members don't know something, they will always tell you they don't and not act like they do.	5	4	3	2	1
44. When a team member doesn't agree with another team member, he/she will let the other member know -- regardless of the other member's position or rank.	5	4	3	2	1

In my team:	Completely Agree			Completely Disagree	
45. Our team members always keep sensitive team business within the team.	5	4	3	2	1
46. Our team members typically demonstrate the highest form of personal honesty and integrity.	5	4	3	2	1
47. Team members rarely conceal anything from another member that they feel the member should know.	5	4	3	2	1
48. When a member gives the team bad news, we never "shoot the messenger."	5	4	3	2	1
49. Our team members always assume that there are very good reasons if any member fails to fulfill a commitment.	5	4	3	2	1
50. You can get a straight answer from anyone about anything you want to know.	5	4	3	2	1

Source: Kinlaw, 178-183.

## COMPENSATION ATTITUDE SURVEY

Businesses may structure pay systems where workers' pay is based partly on how well the company or department is doing, or on how hard the employees work. I'm going to ask you a few questions about pay practices.

1. Which category best fits your job, managerial or non managerial?
 

	_____
--	-------
  
2. While everyone thinks they should earn more, thinking about the company you work for and other comparable companies and comparable jobs, would you say you are paid...
 

ABOUT RIGHT	_____
TOO LITTLE	_____
TOO MUCH	_____
(DO <u>NOT</u> READ) DON'T KNOW	_____
  
3. Most people probably think their boss makes too much. But in comparison with comparable companies and comparable managers, would you say your boss is paid...
 

ABOUT RIGHT	_____
TOO LITTLE	_____
TOO MUCH	_____
COULDN'T SAY: I DON'T KNOW HOW MUCH MY BOSS MAKES	_____
(DO <u>NOT</u> READ) DON'T HAVE A BOSS	_____
(DO <u>NOT</u> READ) DON'T KNOW	_____
  
4. While most people earn a straight wage or salary that might change once or twice a year, some people are paid on an incentive basis. For example, many salespeople are paid a small salary plus a commission that changes from month to month, depending on how much they sell. At some companies, every worker's pay goes up or down each month, depending on how well you, your department, or your company is doing?



Are you currently paid on an incentive basis? That is, does your pay regularly rise and fall depending on how well you, your department, or your company is doing? (DO NOT READ LIST)

YES, I AM PAID ON AN INCENTIVE  
BASIS \_\_\_\_\_

NO, I AM NOT PAID ON AN INCENTIVE  
BASIS \_\_\_\_\_

DON'T KNOW \_\_\_\_\_

5. Given a choice of pay systems would you...

PREFER TO BE PAID ON AN INDIVIDUAL  
INCENTIVE BASIS, LIKE A  
SALESMAN \_\_\_\_\_

PREFER TO BE PAID ON A COMPANY-WIDE  
INCENTIVE BASIS \_\_\_\_\_

PREFER TO BE PAID ON A DEPARTMENT-WIDE  
INCENTIVE BASIS \_\_\_\_\_

PREFER TO BE PAID ON A TEAM-BASED  
INCENTIVE BASIS \_\_\_\_\_

(DO NOT READ) DON'T KNOW \_\_\_\_\_

6. With many jobs it is hard to measure objectively how well someone is doing form month to month. For example, how do you measure exactly how good a job an artist is doing? The judgement is at least partially subjective, and it probably would be left up to the employee's boss. Would your boss make a fair determination about how good a job you are doing?

YES \_\_\_\_\_

NO \_\_\_\_\_

DON'T KNOW \_\_\_\_\_

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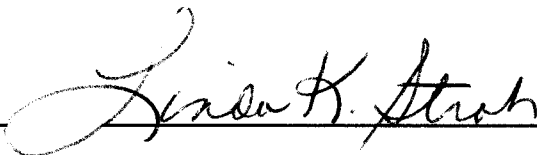
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Dr. Stroh examined the final copy and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is, therefore, accepted in partial fulfillment of the requirements for the degree of Master of Science in Human Resources and Industrial Relations.

11/30/92

Date

A handwritten signature in black ink that reads "Linda K. Stroh". The signature is written in a cursive style with a large, looping initial "L".

Director's Signature