A MODEL OF PHYSICIAN
GOAL COMMITMENT

by
Toni Lee Hardy

Presented to the Public Administration Faculty
at the University of Michigan-Flint
in partial fulfillment of the requirements for the
Master of Public Administration Degree.

September 1994

First Reader

Second Reader
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ABSTRACT

The Physician Goal Commitment Model provides a framework, based on prior research, in which to explore the resulting conflicts between physicians' personal goals and the organizational goals of managed care providers. The utility of this model is to provide information regarding total commitment and to identify specific conflict situations, using group specific scenarios, presented in survey or questionnaire form. Successful resolution of conflicts by physicians will indicate areas contributing significantly to higher overall commitment, while unsuccessful resolution of conflicts suggest barriers to a cooperative, efficient, and effective care delivery system.
I gratefully acknowledge the vision, wisdom, patience, and moral support of my advisor and friend, Dr. Patricia House. My research was simply a continuation of her initial theory.

I would like to acknowledge Dr. Tevfik Nas for reviewing this paper, providing insight and for making Public Expenditure Analysis a dynamic course.

Lastly, I must thank my husband, Dr. Phillip H. Hardy, Jr., for reading every single draft, providing reality based scenarios, preventing my loss of perspective, and "enabling" the completion of this project.
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INTRODUCTION

Years ago physicians worked out of their homes or offices and made house calls. Their motivation came from commitment to provide good patient care and to achieve personal goals. Today, physicians contract with multiple organizations, hospitals and managed care facilities, and each requires a level of commitment to organizational goals. Often the goals set by organizations are economic in nature, focusing on provision of cost effective or cost efficient care. Today, also, when organizational goals are in conflict with physicians personal goals, the resulting atmosphere often places health care providers in adversarial roles. This results in conflicts between what the physicians want and need and what the organizations want and need.

The purpose of this paper is to present the Physician Goal Commitment Model, a framework in which to explore resulting conflicts between physicians' personal goals and the organizational goals of managed care providers and to discuss the implications of these conflicts. Successful resolution of conflicts by physicians will indicate areas contributing significantly to higher overall commitment by physicians. Unsuccessful resolution of conflicts will suggest potential barriers to a cooperative, efficient and effective care delivery system.
Health care providers are beginning to study costs of health services relative to benefits gained. This knowledge allows organizations to make economically sound decisions regarding patient services. These decisions frequently create friction between providers and physicians. This friction may be most pronounced in the managed care system, in that managed care operates with an explicit directive to physicians: provide good care as cheaply as you can (Rosenbach, Harrow and Hurdle, 1988). It is important to understand the factors that affect motivation and goal commitment and the interaction of conflicting goals. It is necessary for physicians to resolve conflicts between personal goals and those of an organization, and for organizations to address the barriers that exist. The outcome of a cooperative association will result in providing quality patient care in a manner consistent with scarce resources. The underlying theory in the Goal Commitment Model is that a physician's level of commitment to an organization's goals affects his or her performance as a member of that organization, and thus, affects the success of an organization.

The theoretical base for this paper is Organizational Behavior. Organizational behavior is a field of study in social and management science which explores the behaviors, attitudes, and the performance of people within an organization. Organizational behavior research tries to answer questions important to managers in understanding motivation and predicting behaviors. Within the field of
organizational behavior Edwin A. Locke and Gary P. Latham (1990) developed a theory of goal setting in an attempt to understand work motivation, and to explain why people perform differently on similar tasks, regardless of prior ability and knowledge. The theory seeks to specify the factors affecting goals and how these factors relate to job-related action and performance. Briefly, goal setting theory essentially asks: Is there a relationship between goals and actions, and if so, what factors affect this relationship? Within the field of organizational behavior, goal setting theory looks at the factors influencing goal choice and goal commitment.

Goal-commitment, the locus of the Physician Goal Commitment Model, is a construct of goal-setting theory, and postulates, that the strength of a worker's commitment to organizational goals affects a worker's performance. According to Locke, Latham and Erez (1988, pp. 27-28), an employee's commitment is a function of many determinants. These determinants fall into three categories: external (influence from authority figures and peers, and external rewards); interactive (participation and competition); and internal factors (expectancy and internal rewards).

How does this relate to physicians under contract with a managed care provider who are not employees? A physician must weigh the use of available treatment modalities against a set of criteria, developed by a managed care provider, determined to be cost-effective care. The decision to use a bone marrow transplant to
improve a patient's chances of survival during chemotherapy for breast cancer is a good example. From the physician's perspective, attempting to increase the chance of survival for a patient (an internal factor) clashes with the organization's goal of cost containment or cost-effective care. Ethical considerations aside, the physician must make decisions balancing attainment of personal goals with those of the organization contracting for services.

A body of knowledge already exists supporting the connection between goal commitment and action for individuals and for organizations. It is important now to explore the interaction of sometimes conflicting motivators, especially apparent in the contractual arrangements that exist between managed care providers and physicians. The Physician Goal Commitment Model provides the theoretical framework by identification of potential conflicts.

The first section of this paper provides support for the selection of determinants of human behavior. The second section of the paper is a discussion of the selected determinants useful in exploring physician commitment and the potential conflicts. The third section of this paper proposes a mechanism by which to identify and measure physician commitment and the resolution of conflicts.
LITERATURE REVIEW

Goal-setting theory asks whether there is a relationship between an individual's goals and actions, and if so, asks what factors affect this relationship. It also looks at those factors influencing choice of goals and commitment to those goals. Locke and Latham, the theory's so called "inventors", credit T. A. Ryan (1970) for initiating their investigation. Goal setting theory has evolved from hundreds of studies conducted by both social scientists and psychologists. Over a twenty-five year period Locke and Latham, and others, have systematically reviewed research supporting and refuting the multitude of variables related to goal setting and motivation.

Much of the previous research, whether from a social science or psychological perspective, centers on workers within an industrial organization or individual motivation and commitment (Terborg and Miller, 1978; Bandura, 1982; Gist, 1987; Luthans, Baack, and Taylor, 1987; Mento, Steele, and Karren, 1987; Meyer, Paunonen, Gellatly, Goffin, and Jackson, 1989; Oliver, 1990). In 1988, Glisson and Durick began looking at human service organizations, differentiating between job satisfaction and organizational commitment. Both are "affected by a unique hierarchy of predictors" (Glisson and Durick, 1988, p. 61), which were separated into characteristics of the job, the worker, and the organization. The study showed that leadership and the organization's age, both organizational characteristics, were the
best predictors of organizational commitment. Education, a worker characteristic, was found to significantly affect commitment as well.

Application of behavioral theories to health service providers is relatively new. Recent claims of waste, vague policy statements, and inefficiency have prompted a more "business-like" approach for the health care system. In the 1980's, the introduction of diagnosis related groups (DRG's) and other methods of cost containment directed the spotlight on physicians as key players in driving up health care costs (Eisenberg, 1986). Suggestions for containing health care costs have come from federal and state governments, insurance companies, health maintenance organizations, hospital boards and administrators, as well as from the business community. In a 1989 study, physicians themselves agreed there was a need to improve educational efforts related to cost containment (Green, et al., 1989). Unfortunately, changes in reimbursement mechanisms designed to control costs have been met with great resistance (Stearns et al., 1992) or by circumvention.

Managed care, a generic term for a health delivery system designed to control costs and improve the quality of care to patients, has added a new dimension to the study of motivation and commitment to goals. A managed care provider can be a hospital or an independent organization, and there is a mix of physician as employees and contracted services with physicians in private practice. Recently, researchers have begun to look at whether managed care
really does control health care costs (Wallack, 1991; Schroeder and Cantor, 1991; Bailit and Sennett, 1991; Schwartz and Mendelson, 1991). Many writers claim the physician's abuse of the system is at fault and that the physician is the key to cost containment (O'Connor 1993).

At this time, however, no one has explored the impact physicians may have on a managed care organization's "bottom line" by looking at goal commitment and situations where personal and organizational goals collide. Very little research exists regarding physician beliefs, attitudes, or interactions with organizational goals. Several studies address physicians attitudes toward cost containment (Green et al., 1989) and other imposed restrictions by managed care providers (Rosenbach, Harrow, and Hurdle, 1988). Not surprisingly, most of the current health literature focuses on the changing climate of our health care delivery system and its impact on various players and patients (Wallack, 1991). If physicians are such an important element, it is imperative to explore the impact of physician commitment relative to the changing organizational structure of our health care delivery systems.

History of Goal Setting Theory

The foundation of goal-setting theory is the early 1900's. Research in the relatively new discipline of psychology explored mental processes, specifically a subject's response to an assigned task
At approximately the same time that Ryan was studying the psychological aspects, Frederick W. Taylor's contribution to the field of management added another precursor to goal setting theory (Locke and Latham, 1990). Taylor's work with tasks, a key concept in what he called Scientific Management, also led to Management by Objectives (MBO), a system of motivation and goal setting. Scientific Management encouraged the division of labor into tasks which could be measured, analyzed and improved (Taylor, 1913). The belief that "the worker was primarily an economic animal who would work solely for money" (Shafritz and Hyde, 1992, p. 117), influenced management styles and behavior.

For many years the focus of organizational goal setting and work motivation was primarily task oriented. It was believed that workers were driven solely by need for money and fear of losing their jobs. The classic Hawthorne experiments, Maslow's theory of human motivation (Shafritz and Hyde, 1992) and later works of Herzberg, McGregor and Argyris succeeded in shifting the focus from viewing the worker as a machine toward a greater understanding of the motivation and actions of workers and their impact upon organizations. Argyris claimed there is conflict between the personality of a mature adult, their needs and the needs of modern organizations (Argyris, 1957). McGregor made the break even cleaner; he proposed, given certain circumstances, we may find "unimagined resources of creative human energy . . . within the
organizational setting" (McGregor, 1957, p. 217). Researchers have since studied worker motivation from every angle to determine the effects of variables such as monetary incentives (Terborg and Miller, 1978), whether self-set goals are more effective than assigned goals (Latham and Marshall, 1982) and if participative decision-making has greater motivational impact than setting goals for employees (Latham and Steele, 1983).

Locke, Latham and Erez (1988) reviewed previous studies and theories related to goal commitment and the impact they have on employee performance. This examination definitely indicated that the level of commitment to an organization (regardless of the specific definition) affected employee performance. This coincided with Latham and Marshall's (1982) conclusion that it was not so important how a goal was set (self set, participative or assigned), but that a goal was set at all.

Goal Commitment

Locke and Latham's goal setting theory encompasses many of the variables affecting a worker's commitment. They stated in 1990 that, "goals and intentions are viewed as immediate precursors and regulators of much, if not most, human action" (Locke and Latham, 1990, p. 8). Goal-setting theory is a model of human action. It has explored almost every aspect contributing to motivation, the setting and communication of goals and the relationship to tasks. Albert
Bandura (1990, p. xi), a psychologist studying human behavior, described Locke and Latham's work as a mechanism to study the "motivational mediators that govern the selection, activation, and sustained direction of behavior."

In other words, what people do and how well they perform is partly influenced by goals. Action and performance are classified into the concepts of goal-directed action. Goal-directed action can be either nonconscious (vegetative actions such as photosynthesis or digestion) or conscious purposeful actions, as shown in Figure 1. Regardless of the nature of goal-directed action, both share three characteristics. Goal-directed action is self-generated, has value significance, and is initiated by goals. When action is purposeful, it is the individual's idea or desire for a goal that initiates action. If nonconscious action, it is the individual's need to sustain life (Locke and Latham, 1990, p. 3).

Goal commitment is a key element of goal-setting theory. Effective goal setting assumes there is commitment to goals (Locke, Latham and Erez, 1988, p. 23). The strength of a worker's commitment to organizational goals, in turn, affects a worker's performance. According to Locke, Latham and Erez (1988, pp. 27-28), an employee's commitment is a function of many determinants. They place these determinants into three categories: external (influence from authority figures and peers, and external rewards); interactive (participation and competition); and internal
Figure 1  Overview of Goal Setting Theory
factors (expectancy and internal rewards). Descriptions of these three categories follow.

**External factors:** External factors are perceptions of authority, trust in authority, peer influence, values, incentive and external rewards. Compliance with legitimate authority or power plays a role in goal commitment (French and Raven, 1959). People generally follow (obey) an authority figure. They judge the request or assignment to be legitimate and accept a manager's right to direct them. According to Oldham (1975), the legitimacy of a supervisor affects the intent to work hard toward assigned goals and that a worker's perception of trust toward management is significantly related to the worker's intent to strive toward an assigned goal.

Peer influence is well established as having an impact on commitment. Peer influence is considered an external influence relative to its impact on a worker's perceptions of authority and the impact of role modeling by peers. Bandura (1986) found commitments involving responsibility to others often results in social pressures to strive toward goals. Peer influence can be positive, encouraging greater efforts or have a negative impact by deliberately slowing down productivity (Taylor, 1967). An example of negative peer pressure is when there is a conflict between group goals and those proposed by management. A worker may be in agreement with the goals set by management, but fear ostracism by co-workers if they
appear to support management. An example of positive influence is group cohesiveness toward organizational goals or a team leader providing a role model for the work group. Current empowerment or participative decision making strategies rely on these concepts.

Values, incentives, and rewards are the final determinants in the external factor category. If workers see value in an outcome and it is probable that their effort will lead to that outcome, their commitment is enhanced. Locke, Latham and Erez (1988, p. 30) stated that monetary rewards can increase the level of goal commitment and performance for some. They also suggested that commitment to higher goals (unless perceived to be unreachable) is related to higher performance. Although there is much controversy in the research dealing with monetary incentives, it is important to remember the multiple interactions of external factors. When money, as an incentive, is shown to be of little or no importance, it may be that the goal set, in order to receive a reward, was thought to be unreachable.

As intuitively clear as it seems, the measurable connection between monetary incentives and performance is cloudy. There are as many studies supporting a relationship between money and performance (Pritchard and Curtis, 1973; Terborg and Miller, 1978; Pritchard, Jones, Roth, Stuebing and Ekeberg, 1988) as there are studies denying a connection or effect (Kleinbeck, 1986; Das, 1982). These studies involved various levels of monetary rewards and situations where the incentives interacted with goal difficulty, making
it difficult to make comprehensive conclusions. Research into the proportionate importance of determinants, when there are conflicting elements, still needs to be conducted. Of real importance is the impact of something of value upon commitment to a goal.

**Interactive factors:** Interactive factors refer to those describing a worker's interactions with the organization, such as participation and competition. Of these, participation is another area for which the results of research are in conflict. There are studies claiming that participation in goal setting increases productivity and others claiming there is no difference. Latham and several colleagues conducted nine studies examining the effects of participative and assigned goal setting. Eight out of the nine studies, both field and laboratory, found no difference (Locke, Latham and Erez, 1988, p. 31).

Erez then ran a series of studies, the results of which, in contrast to Latham's, favored participation over assigned goals. Erez and Latham agreed to conduct joint experiments to resolve the conflict, with Locke functioning as a moderator (Latham, Erez and Locke, 1988). Prior to this joint investigation there was agreement that participation was effective in goal setting. Locke and Latham's previous work indicated that assigning goals to workers was equally effective, while Erez's previous research did not. The significance of this joint venture was the discovery of a distinction in how the goals
were assigned. Subjects in Locke and Latham's groups were assigned goals and sold on their validity. Erez's study groups were simply assigned goals. Therefore, the selling of a goal made Locke and Latham's findings for assigning goals more effective.

It is clear from review of these studies that input and encouragement by management is important in both participative or autocratic environments. Recent trends in health care management indicate greater interest in participative management, quality circles, and self-governance, as methods to improve communication of organizational goals to employees (Marks, 1986; Swiss, 1992; Keehley, 1992; Kaluzny, McLaughlin and Simpson, 1992). This makes participation an important component of a theory which explores physician-organization relationships.

Competition, a peer-related factor, occurs in situations where performance is compared to group norms, by posting performance scores publicly, or simply telling an employee that their performance is being evaluated. Competition has been found to encourage the setting of higher goals, thereby increasing performance (Locke, 1968). Much of the past research looked at competition in terms of goal difficulty. The argument was that competition resulted in workers or managers setting higher goals, and that setting higher goals resulted in higher commitment to goals and performance. Therefore, competition will result in higher commitment (if higher goals were set). From the literature, it is not clear that competition has the same effect when
goals are assigned by management or are self-set (Locke, Latham and Erez, 1988, p. 32). Further research is necessary in order to determine a direct link between competition and commitment because physicians, as a group, traditionally have self-set goals.

**Internal factors:** Internal factors, such as self-efficacy and self-administered rewards, are essentially the components within an individual which encourages them to work. Bandura (1982, p. 122) defines self-efficacy as "how well one can execute courses of action required to deal with prospective situations." Self-efficacy is also described as being "related to expectancy of success" (Locke, Latham and Erez, 1988, p. 32). If a worker expected or believed she would succeed, her commitment was higher (Mento, Steele and Karren, 1987). Combining the expectation of success with the capacity to perform a task (Gist, 1987) results in higher commitment to goals. Researchers have explored self-efficacy in relation to health behaviors (Bandura, 1977; Bem, 1967), but no link was made to health care professionals.

**Summary and Implications of Goal Commitment**

In theory, past research supports the relationship between commitment and performance. How does this translate into reality for managers? A key determinant of goal commitment is legitimate
authority (Locke, Latham and Erez, 1988, p. 33). Legitimate authority is not simply possession of a title or position of superiority. The true effect of authority on commitment lies within the acceptance of that authority by subordinates (Barnard, 1938). Acceptance depends on clear communication between supervisor and worker. The directions given should be consistent with the organization's mission and the worker's personal interests. Also, it is very important for the worker to be mentally and physically capable of completing the assigned task (resources available).

Clear and compelling communication of goals, from managers to employees, requires the manager to both understand and believe in the goals they are assigning. Disinterest, lack of enthusiasm, or commitment is transmitted to employees and will affect their commitment to assigned goals. Actions by managers, such as role modeling and participation, will contribute to the manager's perceived authority and hence, their effectiveness. Although the approach to motivating employees is not quite this simplistic, it is crucial to develop and integrate programs designed to address trust, self-efficacy, and the other key elements of worker commitment. Application of these concepts to administration continues to point toward improved communication and institution of methods to better understand the worker's perspective.

The determinants of commitment are not isolated measures to be interpreted and analyzed independently. Monetary incentives fail
when offered to an employee with poor self-efficacy or insufficient resources. Peer influence can overshadow legitimate authority if goals are set too high, or goals are set without mechanisms in place to achieve these goals. For example, a conflict of factors results from the assignment of a goal to improve productivity by ten percent, coupled with a request for higher quality standards. A manager compounds the problem by failing to discuss or explain to his employees the underlying reason for these changes. There is a strong possibility that this manager will be faced with resistance. Asking employees to produce more with less, combined with possible threats to job security and failed communication, most likely will reduce productivity.

Research supports the effects of many determinants on worker commitment to organizational goals, leading to changes in behavior. It is essential for administrators to develop goals which they believe are attainable and valid. These goals must be communicated to employees with enthusiasm and with a clear description consistent with the organization's overall mission. These challenges are difficult enough when lines of authority are clear. When organizations contract with physician to provide services, not only are the lines of authority less clear, there are inherent conflicts in commitment to goals.
THE PHYSICIAN GOAL COMMITMENT MODEL

Locke and Latham's theory of goal setting, or more specifically the construct of goal commitment, provides the framework for the investigation of physicians "true beliefs" and commitment to an organization (House, 1993, p. 1). The proposed model of Physician Commitment, represented in Figure 2, guides this study.

The research conducted by Locke, Latham, Erez, Bandura and other colleagues provided a wealth of knowledge regarding individual commitment and individual interaction with the organizations providing employment. Unfortunately, previous research does not address the effects on commitment when the individual, such as a physician, is not an employee but is under contract to provide a service. Researchers have not yet explored the impact potential conflicts may have on independent individual's commitment to organizational goals.

The basic premise of the Physician Goal Commitment Model is that to be committed to an organization a physician must show that it is possible to reconcile conflicts between personal goals and organizational goals. It follows that a physician's "belief in an organization is equivalent to Commitment to that organization's goals" (House, 1993, p. 3). Justification for using several of Locke and Latham's determinants of commitment to explore physician commitment lies in the soundness and acceptance of past research supporting their model. What follows is a description of the determinants chosen to explore physician commitment and a discussion of
Figure 2. Physician Commitment model
the potential conflicts and implication for use. Figures 3a and 3b provide an overview of previous research conducted, connected with the key determinants. These charts are not an exhaustive list but they do reflect the overall distribution of studies. Locke and Latham reviewed over 500 studies prior to writing *A Theory of Goal Setting & Task Performance* (1990).

**Determinants of Physician Commitment**

**External determinants:** Appropriate to the physician-organization relationship, the external determinants are *trust in authority* and *external rewards*. Trust and the intent to strive toward an assigned goal is closely intertwined with a clear understanding of organizational goals. As stated earlier, Latham, Erez and Locke (1988) found that assignment of goals by the "tell and sell" method was most effective. Selling a goal entails convincing that the goal is obtainable, as well as giving a reasonable explanation of why the goal exists or why it is important. For example, when screening guidelines are issued and the rationale is clear to physicians, trust should be high. High trust in an organization leads to greater commitment.

External rewards for physicians are incentives and tangible rewards (eg., salary, bonus payments or fees). In 1985, Huber found that when goals were set, assigned goals plus goal-contingent pay was one of the more effective incentive combinations. The better these rewards are perceived to be, the higher the commitment. Goal-contingent pay is frequently used for primary care providers as a mechanism to curb over utilization of medical services. Often, when goals are set in such a way that they are perceived to
Figure 3a. Overview of prior research efforts.

<table>
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Figure 3b. Overview of prior research efforts.

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be unreachable or too difficult, they will be rejected. Often, pay for performance or setting more moderate goals will prevent goal rejection (Locke and Latham, 1990, p. 143).

**Interactive determinants:** Factors which describe the worker/organization environment are called interactive determinants. The factors applicable to contracting physicians are *participation* and *peer pressure*. Participation in setting organizational goals and the extent to which physicians perceive the organization to value their input impacts their level of commitment. Suppose a Managed Care provider determines quantitatively what is "cost-effective" care. Physicians are asked to "participate" by rank ordering this list. In this scenario physicians are not only excluded from determining the original list, they may also view the request to participate as a token gesture.

This hypothetical situation represents two potential conflicts for physicians. First, they must balance what they believe to be the best care for their patients (internal factors) with a dictated protocol (interactive factors). Second, there is a possibility the physicians will not agree with the organization's list (a failure to "tell and sell"). Failure to see value in an outcome (external factors) combined with disbelief in their ability to follow the guidelines will affect their commitment to organizational goals.

Competition or comparison to group norms is applicable to physicians in terms of setting goals. Generally it is the health care organization which sets economic goals. External monetary rewards and incentives exist for capping costs, but at this time research has not clarified the direct link
between competition between physicians and goal commitment. Therefore, competition is not included as a determinant of physician commitment.

**Internal determinants:** Internal determinants include *self-efficacy* and *self-administered rewards* and are important elements affecting physician commitment. They are also the least studied, as indicated by the absence of check marks in Figure 3b. In order to relate self-efficacy and self-administered (internal) rewards to physicians, it is important to differentiate between the two. Statements reflecting self-efficacy might include: "I have the ability and skill to do this," and "it is reasonable to expect the results or outcome to be favorable." Statements reflecting internal rewards would be "I did it, I made a difference in the patient's recovery," or "this resident will practice better medicine because of my input." The distinction is subtle, but definite. It is the difference between a physician saying to themselves, prior to surgery, that they are capable of doing the surgery, and if they do the surgery, it will probably be successful. This is self-efficacy. An internal reward would be the same surgeon, following surgery, mentally saying "I just saved this patient's life."

**Summary**

In summary, this model proposes that there are six key areas which contribute positively or negatively to a physician's commitment to organizational goals. Application of Locke and Latham's determinants of commitment to physicians further demonstrates the conflicts encountered. Unavoidable conflicts occur which require the physician to weigh the
benefits and costs (tangible and intangible) of achieving personal goals or organizational goals. The Physician Commitment model attempts to define the elements impacting physician commitment to multiple organizations, as well as exploring the inherent conflicts that occur. The interaction or combination of these motivators may provide a mechanism to determine the level of a physician's commitment to an organization.

Conflict and Conflict Resolution

At this point in describing the Model, it is important to understand conflict in terms of human behavior. Conflict has been defined as "perceived incompatible differences resulting in some form of interference or opposition" (Robbins, 1984, p. 394). According to Schermerhorn (1984), there are several types of conflict. Conflict can exist within an individual, between individuals, between groups in an organization, and between organizations. The conflict identified in the Physician Goal Commitment Model is the conflict within an individual when required to make a choice.

C. Argyris (1957, p. 39) describes conflict as an event which occurs when someone is unable to act in certain situations. More specifically, Argyris stated that there are opposite needs acting simultaneously. The individual must decide whether to take action at all or make a decision between two potential situations. Four types of conflict were identified. The first occurs when one is faced with two options, both of which are desirable. The second is a situation where one is faced with two options, both of which are undesirable. Third, an individual is faced with the choice of doing something they like, knowing that this choice carries a risk of punishment or
loss. The fourth conflict involves making choices when both (or all) choices carry some risk of punishment or loss.

The benefits of understanding conflict are numerous. Traditionally, conflict was viewed as something bad that needed to be eliminated (Lyles and Joiner, 1986, p. 188). Conflict is inevitable and must be understood and managed. A constructive approach to conflict management on an organizational level, is to attempt resolution of the conflict in a manner that is good for the individual and the organization (win-win conflict). A win-lose conflict occurs when one group or individual gains and the other loses. In the current managed care-physician interaction this is often the case.

**Conflict and the Physician Goal Commitment Model**

There are fifteen possible combinations (conflict pairs) of the six determinants identified in the Physician Goal Commitment Model. However, every combination will not apply to an examination of physician commitment. A pair of factors where both reflect personal goals, such as Self-efficacy vs. Internal Rewards, would not yield information worthwhile in determining commitment to organizational goals. A good example of a potential conflict pair is Trust In Authority vs. Self-Efficacy. Here a physician must decide whether to follow guidelines set by an organization or a course of treatment he or she feels would bring the greatest chance of success (if the treatments differed). The total list of appropriate combinations are:

- Trust vs. Peer Influence
- Trust vs. External Rewards
- Trust vs. Participation
Trust vs. Self-Efficacy  
Trust vs. Internal Rewards  
Peer Influence vs. External Rewards  
Peer Influence vs. Participation  
Peer Influence vs. Self-efficacy  
Peer Influence vs. Internal Rewards  
External Rewards vs. Participation  
External Rewards vs. Self-Efficacy  
External Rewards vs. Internal Rewards  
Participation vs. Self-Efficacy  
Participation vs. Internal Rewards

Many of the listed combinations reflect situations where organizational goals will unavoidably conflict with personal goals. For example, Trust vs. Peer Influence depicts a situation where a physician may be in agreement with the well communicated goals of a managed care provider to control health care costs. Unfortunately, the physician's partner or colleagues believe it is unacceptable for an outside agency to determine what is acceptable patient care. If the physician fails to resolve the conflict, adopting the partner's beliefs, organizational commitment decreases. If the physician decides to follow the organization's guidelines (because he believes them to be sound), choosing to de-emphasize the co-worker's input, he has resolved the conflict favorably. His commitment to the organization is greater.

External Rewards vs. Self-Efficacy is another conflict between personal and organizational goals. For instance, a managed care provider in the Midwest recently sent a memo to all its contracted physicians stating it will no longer pay for procedures falling outside a recommended protocol. A
specialist, receiving the memo, was angered because the repeated use of ultrasound had enabled him to diagnose problems or ease a patient's fears. As a result of the memo, when a patient is referred by this organization, the physician must decide whether to do an ultrasound and forego payment, perform the test and require out-of-pocket payment by the patient, or not to do the test. A resolution favorable to higher organizational commitment would be the specialist's decision to follow the recommended protocol regardless of past practice. An unresolved conflict would be the choice to forgo the test.

The above scenario introduces two other conflicts, Participation vs. Self-efficacy and Trust vs. Participation. When the organization determined the guidelines for cost-effective care, it requested input from all the participating physicians. In the first of these conflicts, a physician must be willing to change his or her practice patterns, if necessary, before deciding to participate in the process (Participation vs. Self-Efficacy). In the second, the physician must believe the organization genuinely wants his or her input and that physician recommendations not only will be respected but also upheld in conflicts between the organization and other physicians (Trust vs. Participation).

These are just a few of the potential conflicts which impact a physician's commitment to an organization. Some of the conflict pairs, in fact, create different kinds of dilemmas for the physician. For example, a physician in a solo, rural, practice may not view Peer Pressure vs. External Rewards in the same manner as a member of a large, multi-physician urban practice. The rural physician might place greater emphasis on the payment
mechanisms in order to maintain his practice. The large metropolitan practice physician may encounter greater pressure from colleagues and have a payor mix that shifts the emphasis away from financial incentives. Obtaining information from a particular geographic area, or a specialty group may indicate, with greater specificity, areas encouraging or impeding physicians commitment to organizational goals. The use of conflict pairs, with a mechanism to measure or identify resolution of conflicts, will provide information useful to both physicians and managed care providers.

Measurement
Measuring physician's organizational commitment can not be done simply by observation, but must be captured in perceptions. Measuring the relationship between prior causal factors and the resulting performance can be done in three ways. One way would be to define each conflict (from the previous list), present the list to physicians and ask them to choose the conflicts which apply to them. For example, a short description of the Peer influence vs. External Reward conflict might be: Difficulty deciding between the additional money cooperation with managed care would bring and the comments made by cohorts regarding loss of autonomy. If the physician perceives this description as a conflict he experiences, he would select it. Unfortunately, identification of conflicts will not show what impact the conflict had on organizational commitment.

The second method to measure commitment would be to employ perception or attitude scales to assess each individual component. Using Likert-type scales, a physician would rate the importance of a single
determinant on a scale of weak-to-strong. The researcher may assume, when combining two factors, that a combination of weak to weak or strong to strong would indicate a potential conflict. An illustration of this measurement perception would be that of a physician rating the impact of Self-Efficacy on his behavior as "strong" and the impact of Participation as "weak". In this particular case choosing between the two would not create a conflict for him. In contrast, a combination of rating External Rewards as "strong" and Self-Efficacy as "strong" would create a conflict. This measurement approach could be assessed by using confirmatory factor analysis. Unfortunately, using attitude-type scales relies on the physician's intuition of his own beliefs and presents both internal and external validity issues.

A third method would be to create scenarios in which each conflict is described. The physician is asked to "side" with one of two scenario outcomes, which indicate how the physician resolved the conflict. A possible scenario measuring Trust vs. Self-Efficacy is this:

Dr. Casey has a 64-year-old stroke patient. The costs of her care have surpassed a managed care provider's threshold, so Dr. Casey is no longer financially at-risk for her care. Although the managed care company's case management department has recommended the patient be placed in a nursing home with rehabilitation facilities, Dr. Casey has referred her to an inpatient stroke rehabilitation center. His rationale is that the program offered by the stroke rehabilitation center would provide the structured care his patient required.
The physician, reading this scenario, is required to choose between "this scenario is close to my thinking", or "this is not close to my thinking". By choosing the former answer it is clear how he resolved this conflict. Self-Efficacy (ability to care for a patient) was more important to him than his belief that the organization's recommendations were reasonable or that the patient's well-being was motivating the standard set by the organization. By choosing the latter, "not close to my thinking," he is indicating that trust in the organization is paramount.

In review, the first two methods of measuring a physician's commitment rely upon the physician subjectively choosing what he "believes" motivates his actions. Simply identifying a conflict, however, does not really show the specific impact (or a cumulative impact) of a physician's commitment to organizational goals. It is more important to look at the nature and strength of the conflict. A somewhat distant analogy is to ask a person on a diet, "Why did you eat that candy bar?" The dieter may answer that she or he was hungry, although this person, in reality, felt depressed and eating the candy bar made her feel better. The point is, it is not always clear to individuals what truly motivates their behavior.

Direct observation also fails to provide the answer. For example, chart reviews (a pervasive measure of physician behavior) may indicate that a physician consistently "strays" outside a managed care provider's established protocol. This review would not discover why the physician chose this course of action, nor would it identify the conflict between the physician and the provider.
It is necessary, then, to devise a mechanism to explore each potential conflict pair. By determining whether a physician resolves a specific conflict in a manner favorable to either increased or decreased organizational commitment, it will be possible for an organization to address potential problem areas. Anticipating and addressing conflicts can be accomplished in the third measurement approach, described above. By creating scenarios in which each conflict is present, and by asking physicians to side with one of two outcomes, conflict resolution is defined.

Unfortunately, the time necessary for personal interviews, problems encountered in scheduling and the large volume of requests for physician input make physicians a difficult group to approach for quantitative measurement. Therefore, mailed surveys are often the method used for physicians. There has been a great deal of research conducted to determine the most appropriate method and incentive to encourage physician response to mailed surveys (Berry and Kanouse, 1987; Dillman, Sinclair and Clark, 1993; Maheux, Legault and Lambert, 1989; Tambor, et al., 1993). All of these sources agree that, in general, whatever the mechanism used, it must be clear, concise, non-threatening and easy to complete.

A questionnaire addressing key conflict pairs, using reality based scenarios, and requiring a simple response would be the approach of choice. The Physician Goal Commitment Model identifies the potential conflicts. It would not be enough to simply identify the conflicts and acknowledge that they exist. The next step would be to understand the impact these conflicts have had on patient care.
CONCLUSION

The relationship between a physician and a managed care provider is a unique one. Although both strive to provide quality patient care, the goals of an organization and the personal goals of a physician often clash. The Model of Physician Goal Commitment integrates elements of existing theories to explore physician commitment.

Previous research has provided great insight into work motivation, goal setting, and goal commitment. Clearly, an individual's commitment to organizational goals affects performance. It is now time to examine situations where the employee/employer relationship is not so clear, specifically the physician under contract to provide services for a managed care provider. How does the physician's level of commitment impact efficient, effective delivery of care?

The Physician Commitment Model identifies potential conflicts between a physician's personal goals and the organization's goals. The utility of this model is to provide information regarding total commitment and to identify specific conflict situations. It is necessary to develop a tool to identify specific conflict situations and measure the impact on physicians.

Development of group specific scenarios, presented in a survey or questionnaire format, can provide insight into the particular situations that create the greatest conflict for that physician group. Utilization of this model will enable managed care providers and physicians to address many existing barriers that prevent cooperative, efficient and effective delivery of patient care.
The key elements in the delivery of health services are people and communication. The ability to adapt to changing times and needs requires communicating the processes, changes and necessary actions to all within the organization. The effective administration of change involves utilizing all employees to the fullest to achieve a company's goals. In health care, as well as other industries, both management and employees need to understand the organization's mission and direction, plus the role each of them play. This may necessitate looking at personal defense mechanisms, behaviors and employee resistance to change. Clear communication, with information gathered from a model such as proposed here, is an essential element for success in modifying organizational and physician goals.
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