## TRUST AND COMMITMENT: INTANGIBLE DRIVERS OF INTERORGANIZATIONAL PERFORMANCE <sup>☆</sup>

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## ABSTRACT

Non-traditional performance indicators have gained broad acceptance in recent years. We continue this discussion and contribute to the knowledge base by employing trust and commitment as two critical intangibles existing between organizations that directly and indirectly influence performance metrics. Each interorganizational contact creates a transactional history that influences cumulative perceptions of trust, that then guide outcome behavior. Using an interdisciplinary foundation, we test a causal model where formal and informal interorganizational relationship structures impact trust and commitment, which then stimulates performance outcomes. The healthcare industry provides the field context where we empirically test our model. A survey was administered to physician practice professionals to measure the theoretical dimensions of the dyad's relationship structure, including antecedents to the mediating variables, trust and commitment, and the resulting outcome constructs.

<sup>\*</sup>Data availability: The survey administered in this study is available upon request.

Advances in Management Accounting, Volume 15, 293–325 Copyright © 2006 by Elsevier Ltd. All rights of reproduction in any form reserved ISSN: 1474-7871/doi:10.1016/S1474-7871(06)15013-3 *Results demonstrate that relationship dynamics are vital drivers of tangible outcomes. Trust and commitment emerge as variables to be explicitly managed to improve performance.* 

## **INTRODUCTION**

Virtually all companies rely on some form of interorganizational alliance for efficiency, expertise, or risk sharing (Williamson, 1975). A global economy is accelerating the opportunities for inter-firm arrangements as diverse as outsourcing to jointly managed operations. As outsourcing and other interorganizational partnerships become a larger part of organizations' strategy the interest in the drivers of success become a more relevant avenue for investigation.

Management accounting has increasingly been focused on the causal linkages between inputs and outputs all along the value chain (Ittner & Larcker, 2001). For instance, strong evidence exists that customer metrics drive organizational performance (e.g., Kaplan & Cooper, 1998; Kaplan & Narayanan, 2001; Banker, Potter, & Srinivasan, 2000; Anderson, Fornell, & Lehmann, 1994; Ittner & Larcker, 1998; Smith & Wright, 2004). Customer constructs such as complaints (Banker et al., 2000), customer loyalty and its antecedents; product quality, image, viability, and post sale service (Smith & Wright, 2004) and overall satisfaction defined as quality, price, and expectations (Anderson et al., 1994) have demonstrated links to various profitability indicators. By managing these intangible customer metrics the company can make strategic decisions about the types of customers they need to attract and retain while clearly recognizing the profit impact. Equally important is the recognition that customers demand resources from the firm in the form of various service requests and among customers their demands are heterogeneous (Kaplan & Narayanan, 2001). These results provide the foundation for extending the customer – performance findings to explore the value drivers within interorganizational arrangements. Just as customers consume organizational resources differently, suppliers and other interorganizational partners place differing levels of resource demands on the firm. Similar to the elements that motivate customers to engage in positive interactions with the firm, there are critical attributes in the interorganizational partnership that impact profitability. Therefore, with the rise in such interorganizational arrangements, analysis of the value drivers becomes similarly important to explore. Only when a firm understands "the

chain of activities that lead to outputs" (Simons, 1999, p. 63) can they begin to create an effective control system to strategically structure interorganizational partnerships.

The number of value drivers present within interorganizational relationship is vast and can be idiosyncratic. At the core of interorganizational arrangements are basic drivers of trust and commitment (Cooper & Slagmulder, 2004). Company to company interactions occur at the individual transaction level. Over time, the culmination of these transactions builds a history that leads to a relationship that spans the continuum of success. It is at this subtle, intangible level where the foundation is built that guides the course of inter-firm transactions. Identifying the role of such intangible relationship characteristics in driving value for the organization offers the opportunity to transform unobservable constructs to measurable phenomenon by monitoring the causally linked antecedents (Cooper & Slagmulder, 2004).

Intuitively, trust and commitment are underlying elements in relationship dynamics. Often trust and commitment are such subtle forces that persons involved do not recognize their elements or their impact on the organization until a problem surfaces or financial performance is impaired. At that point the relationship elements are in place and difficult to change. A model that not only measures the antecedents to the development of trust and commitment but also identifies the resulting outcomes, including financial implications, has several advantages. First, it helps bring trust and commitment issues to the forefront where managers can actively begin to anticipate and develop positive interorganizational relationships. Second, control and performance measurement systems can be adapted to incorporate antecedents and consequences of trust and commitment (Birnberg, 2004). Thus, as interorganizational arrangements are becoming more prevalent as efficient means for achieving strategic goals, the need to clearly identify the underlying performance motivators becomes acute. Our research fills this gap by modeling antecedents to trust and commitment with the resulting outcome implications for performance. The causal model is built on the theory that trust and commitment lead to cooperative behaviors that yield efficient and effective outcomes (Cote & Latham, 2004; Cannon, Achrol, & Gundlach, 2000; Morgan & Hunt, 1994). Using the healthcare industry as our setting, we investigate how trust and commitment influence both financial and non-financial performance outcomes.

The health care industry is at cross roads now and many are looking for novel solutions to their seemingly intractable problems. The level of interorganizational trust and commitment is of paramount importance and relationship quality varies dramatically. The dynamics among employerpaid health insurance, physician practices, and patients complicates the efficient delivery of healthcare. Many physician practices are devoting increased resource levels to administer the authorization and receivable activities within their organizations (Sharpe, 1998a, b). To successfully manage in this environment, the practice must be alert to the heterogeneous demands presented by insurers and actively manage each relationship. We propose that the degree of trust and level of commitment are key elements in this equation. At the extreme, where the cost and frustrations peak, physignification size and the second sec with health insurance companies (Shute, 2002). Terminating the relationship is a major strategic decision because it can severely limit the type and number of patients who can be served under a fee for service model. This termination decision is analogous to a manufacturing setting where management decides to opt for a vertically integrated value chain. If the costs to maintain the horizontal value chain exceed the benefits measured in money, time, or talent, the company will take the costly measures necessary to change the process. In the health care industry, most delivery systems are horizontally integrated and the tensions among the various partners in the delivery chain are ripe and dynamic. It is thus, within this industry that we find a rich context to empirically test our model.

A clear analogy exists that links the physician-insurer partnership to other more traditional channel relationships. Mohr and Nevin (1990) define interorganizational transactions as discrete or relational. When the transactions between organizations are part of an ongoing, integrated, and cooperative social system the two organizations are acting within a distribution channel. In this channel dyad each provides specialized expertise or resources designed to achieve mutual benefit rather than a series of independent transactions (Frazier, 1999). The physician-insurer arrangement is consistent with this conceptualization of interorganizational channel partners. Cote and Latham (2003) specifically address the correspondence between the physician-insurer relationship and the traditional channel dyad. Using both key informant interviews and an analysis of patient level data, they found sufficient mapping between the characteristics of the physicianinsurer relationship and the typical channel dyad to conclude that this segment of the healthcare delivery chain functions as a distribution channel. Each bring specialized expertise, with neither able to function optimally within the relationship without mutual cooperation. With the elements of the physician-insurer relationship exhibiting a substantial correspondence with the traditional channel partnerships, the findings in this healthcare

setting have the ability to transfer to other interorganizational relationships and other industry settings.

Employing 166 physician practice managers and staff at 29 data collection sites, we tested the construct linkages within the causal model. Trust and commitment are positioned as mediating variables through which the antecedent constructs link to outcome variables. The antecedents to trust and commitment are modeled as legal bonds, termination costs, benefits, communication, and opportunistic behavior are shown to significantly impact the level of trust and commitment in the dyad. Significant relationships are then evident between the two mediating variables, commitment and trust, and all six of the outcome variables: acquiescence, propensity to leave, cooperation, financial consequences, functional conflict, and decision-making uncertainty. These findings support the view that relationship dynamics are vital drivers of tangible outcomes. Trust and commitment emerged in our study as variables to be measured and monitored within performance measurement systems to explicitly manage the impact they have on financial and non-financial results.

The rest of this paper is organized as follows. The second section summarizes relevant prior research, describes the trust and commitment model of relationship quality and provides hypotheses tested. The third section articulates the experimental method, including descriptions of the measurement instrument used. The results are then presented, followed by discussion and future research sections.

## LITERATURE REVIEW

Inter-firm relationship dynamics are viewed from two main perspectives. The first is the formal structure (e.g., Cannon et al., 2000; Baiman & Rajan, 2002; Cooper & Slagmulder, 2004), where the contractual agreements define the relationship but where the relational context defines the successful execution of the legal bonds. Most arrangements with external organizational partners are formalized with contracts specifying revenue and cost items having a tangible impact on firm profit. The explicit designation of these items allows managers to develop and set targets more readily, enhancing the ability to reach a positive outcome. However, contracts occasionally break down or generate negative financial implications. Cannon et al. (2000) integrate cooperative norms that guide the social workings of the exchange with legal bonds to assess the impact on performance. They find creating a governance structure that monitors the relational aspects of the

exchange leads to performance superior to that achieved with a sole focus on the contractual relationship. Thus, when examining drivers of successful interorganizational arrangements, it is necessary to capture these often subtle, hidden factors that influence relationship economics. Baiman and Rajan (2002) also explore the formal structure and introduce trust as a variable that gains relevance when contracts are incomplete. They demonstrate that in these settings trust affects accounting information system design choices. Trust mitigates the need for costly monitoring systems to insure that one side of the dyad is not exploiting the other. Cooper and Slagmulder (2004) investigate the role that qualitative decision factors play in make or buy decisions. They find that trust serves multiple roles within inter-firm interactions from willingness to acquiesce to demands from either side of the dyad to the development of longer term commitment to mutual performance outcomes. They conclude that trust is a "stronger and more encompassing" dimension driving inter-firm partnerships. These views conclude that the legal contract alone is rarely sufficient to ensure successful outcomes.

The second perspective incorporates the informal or relational aspects of the arrangement (e.g., Morgan & Hunt, 1994). Here the accumulation of individual interactions builds a relationship; the quality of such relationship then defines the ultimate performance of the dyad. Symmetrical trust and commitment reduces uncertainty resulting from opportunistic behavior, minimizing the demand for extensive control procedures (Birnberg, 2004; Morgan & Hunt, 1994). Morgan and Hunt (1994) direct their efforts toward the mechanisms by which productive and effective behaviors lead to high functioning relationships. It is trust and commitment that motivate the dyad participants to work cooperatively and view decisions with a long term lens rather than a short term opportunity to maximize a one-time gain. Other contextual variables can also have an impact on dyad performance. Power, for instance, is a force that coerces behavior. However, power can create unproductive and ineffective processes and outcomes. Hence, Morgan and Hunt (1994) view trust and commitment as the central constructs in a high functioning inter-firm relationship. These two viewpoints, contractual and relational, are merged into the model that describes the critical tangible and intangible links that define the role trust and commitment have in the interorganizational dvad.

Figure 1 illustrates the causal interactions that impact interorganizational relationship quality. It identifies antecedent variables comprised of contracting and normative, tangible and intangible: legal bonds, relationship termination costs, relationship benefits, shared values, and communication.

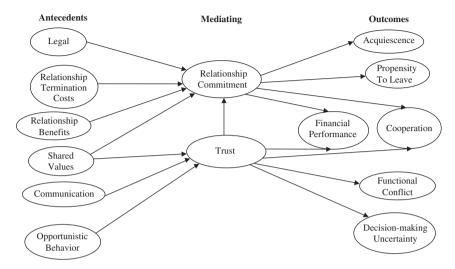


Fig. 1. Trust and Commitment Model of Interorganizational Performance.

These constructs are the building blocks for commitment and trust between organizations (Zineldin & Jonsson, 2000). Attention to building these values is expected to lead to a trusting and committed relationship, which in turn will lead to the outcomes. As Fig. 1 illustrates, trust and commitment are comprised of positive cooperation, acquiescence, intentions to maintain the relationship, and financial benefits, with minimal conflict, and uncertainty. Each construct is defined in more detail below.

#### Commitment and Trust: Mediating Variables

Morgan and Hunt (1994) posit that the key mediating variables in a relational exchange are commitment and trust. Relationship commitment is defined as "an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it; that is, the committed party believes the relationship is worth working on to ensure that it endures indefinitely" (Morgan & Hunt, 1994, p. 22). Relationship trust exists when one exchange partner "has confidence in an exchange partner's reliability and integrity" (Morgan & Hunt, 1994, p. 23). Morgan and Hunt (1994) further note that trust is a determinant of relationship commitment, that is, trust is valued so highly that partners will commit to relationships which possess trust, i.e., higher levels of trust generate greater commitment to the relationship. Further, they theorize that the presence of both commitment and trust is what separates the successful from the failed outcomes. Building commitment and trust to reach successful partnerships requires devoting energies to careful contracting, specific cooperative behaviors, and other efforts that both partners invest. These two constructs are positioned as mediating variables in the model. They serve as the mechanism by which the antecedents influence inter-firm performance (Baron & Kenny, 1986). We now turn to our discussion of these antecedents.

#### Antecedents

#### Legal Bonds

Legal bonds or legal contracting refers to the extent to which formal contractual agreements incorporate the expectations and obligations of the exchange partners. A high degree of contract specificity, as it relates to roles and obligations, places constraints on the actions of exchange partners. It is this specificity and attention to detail that typically supports a willingness by partners to invest time in an exchange relationship. Exchange partners who make the effort to work out details in a contract have a greater dedication to the long term success of the partnership (Dwyer, Shurr, & Oh, 1987).

To be successful, physician practices must contract with a broad selection of insurance providers. Each insurer has unique procedures and systems requiring separate legal contracts that detail the terms of the relationship. The contract forms the basis for each interaction requiring substantial investment from both sides to negotiate terms (Cannon et al., 2000; Leone, 2002). It is through this process that the physician practice and insurer define the legal level of commitment. Thus, a higher degree of contract specificity is expected to have a positive influence on relationship commitment.

#### Relationship Benefits and Termination Costs

Firms that receive superior benefits from their partnership relative to other options will be committed to the relationship. Morgan and Hunt (1994) propose that dyads with more or stronger benefits demonstrate higher levels of relationship commitment. It is then expected that as the benefits to the relationship increase, relationship commitment will be stronger.

Relationship termination costs refer to the expected losses from dissolution and such costs are widely defined in the literature. In essence, relationship termination costs are switching costs. A higher measure of switching costs presents a deterrent to ending the relationship and strengthens the perceived value of committing to the relationship. Hence, relationship termination costs will have a positive correlation with relationship commitment.

Relationship benefits and termination costs become relevant constructs for physicians and insurers. From the physician's perspective, the larger insurers cover a substantial fraction of the patients within their geographical area, necessitating willingness for the physician practice to invest substantial efforts to ensure that the relationship is successful. Likewise, there are often large physician groups that insurers need to be associated with in order to compete within a geographical area. These environmental characteristics create substantial termination costs and relationship benefits that motivate the physician and insurers to develop a long term, committed relationship.

#### Shared Values

Shared values are "the extent to which partners have beliefs in common about what behaviors, goals, and policies are important or unimportant, appropriate or inappropriate, and right or wrong" (Morgan & Hunt, 1994, p. 25). Shared values are shown to be a direct precursor to both relationship commitment and trust, that is, exchange partners who share values are more committed to their relationships. Relationships between physicians and insurers often break down or endure substantial friction due to mis-matched values. Expectation gaps concerning procedure authorization, reimbursement, and general patient care are evidence that the physician and insurer do not completely share each others' values in healthcare delivery. When it occurs physician practices often must make repeated oral and written contact to convince insurers to acquiesce to their position. As this conflict is replicated over a series of patients, trust begins to deteriorate and the physician practice begins to assess their level of commitment to the insurer. When values are aligned, both the insurer and physician practice are confident that judgments made by one side will be accepted by the other and the interactions are relatively seamless.

#### Communication and Opportunistic Behavior

Communication refers to the formal and informal sharing of "meaningful and timely information between firms" (Anderson & Narus, 1990, p. 44). Mohr and Nevin (1990) note that communication is the glue that holds a relationship together. Anderson and Narus (1990) see past communication as a precursor to trust but also that the building of trust over time leads to better communication. Hence, relationship trust is positively influenced by the quality of communication between the organizations.

Opportunistic behavior is "self-interest seeking with guile" (Williamson, 1975, p. 6). Opportunistic behavior is problematic in long term relationships affecting trust concerning future interactions. Where opportunistic behavior exists, partners no longer can trust each other, which leads to decreased relationship commitment. We therefore expect a negative relationship between opportunistic behavior and trust.

Trust in the physician-insurer relationship is influenced both by communication and opportunistic behavior. Communication occurs frequently through procedure authorizations, receivable claims and periodically through practice management advice, processing updates, and office visits. Some insurers provide consistently accurate responses to physician practice inquiries, leading the practice to trust the insurer (Cote & Latham, 2003). Others give conflicting advice, dependent on the insurance representative responding to the inquiry. This destabilizes the relationship, forcing the practice to make multiple inquiries to a single issue and document each interaction precisely. Opportunistic behavior is exemplified in claims processing experiences. Receivable turnover is legally defined, in number of days, by most state insurance commissioners. An insurer must remit payment on a "clean claim" within the statutory period. Clean claims are those with no errors, regardless of the source of the error. If an error is detected, the statutory time period is reset to the beginning. Insurers acting opportunistically will return claims to the physician practice frequently with small errors or errors emanating from their own electronic processing system, thus extending the statutory receivable turnover period. When this happens consistently with an insurer, the physician practice begins to doubt the sincerity of the insurer's behavior.

In summary, trust and commitment are functions of specific efforts both organizations invest in the relationship to improve the value they derive from the arrangement. When a long term association is expected many organizations recognize the benefits that come from developing a strong bond of trust and commitment. For the effort to be worthwhile both must recognize substantial benefits from their joint association and have some common views related to the values they employ in business conduct. Perceptions of opportunism on either side will dampen the potential for trust within the relationship. Alternatively, where switching costs related to developing substitute relationships are substantial, partners will make more concerted efforts to maintain commitment to the existing dyad. Energies devoted to legal contracting and communication then serve to strengthen the commitment and trust bonds. We now turn to the outcomes observed through the presence of trust and commitment in the relationship.

#### Outcomes

Relationship performance is judged by financial and non-financial outcomes. Strains to the relationship, either due to financial disadvantages or operational conflicts create friction that impairs the arrangement. At the extreme, the relationship terminates. For instance, there is a trend whereby physician practices eliminate their relationships with insurers, creating a practice structure that is analogous to a law firm (Sharpe, 1998a, b; Pascual, 2001; Shute, 2002). Patients pay a retainer for immediate access to the physician. The physician accepts cash for services and patients must seek insurance reimbursement on their own. This represents the extreme case where trust and commitment have dissolved and the physician has refused to acquiesce to insurers' demands and completely left the system. Most physician practices have not resorted to such extremes, yet are still influenced by the model's outcomes.

#### Acquiescence

Acquiescence is the extent to which a partner adheres to another partner's requests (Morgan & Hunt, 1994). This is an important construct in relationship quality because when organizations are committed to successful relationships, they recognize that the demands made by each other are mutually beneficial.

#### Propensity to Leave

Commitment creates a motive to continue the relationship. The investments to create the committed relationship, described as the antecedents in the model, directly impact the perceptions that one or both partners will dissolve the relationship in the near future. Partners in relationships expected to terminate in the near term behave differently than those that perceive that both are invested in the relationship for the long term. Thus propensity to leave, resulting from the level of relationship commitment, is an outcome variable with performance implications.

#### Financial Consequences

Activity based costing has successfully demonstrated that business relationships have heterogeneous effects on profitability (e.g., Kaplan & Narayanan, 2001; Shapiro, Rangan, Moriarty, & Ross, 1987). Intuitively most managers recognize differential financial impacts among their third party interactions and recently many have begun to strategically structure terms with these organizations to enhance the financial benefits (Morton, 2002). Similarly, relationship quality can be expected to have direct and indirect effects on revenues and expenses. Specifically, we propose that the levels of trust and commitment will be positively correlated with financial indicators.

Trust has been previously defined as "confidence in an exchange partner's reliability and integrity" (Morgan & Hunt, 1994, p. 23). With a trusting relationship, the partners do not need to continually verify adherence with agreed upon arrangements and procedures. Hence costly monitoring systems are avoided in favor of simpler procedures to detect innocent errors. Likewise, commitment or "the enduring desire to maintain a valued relationship" (Morgan & Hunt, 1994, p. 22), can create financial consequences. When a longer term relationship is expected, there are incentives for organizations to provide each other with favorable terms. For instance, favorable pricing, delivery, or service terms may be present within committed relationships because the partners are confident that throughout the relationship a variety of benefits will flow in both directions (Walter & Ritter, 2003). Alternatively, when relationship commitment is low fewer incentives exist to offer favorable financial terms or services. This behavior is evident in situations where one exchange partner is considered a backup supplier, contacted only when other more favorable exchange partners are not available (Kaplan & Narayanan, 2001). In these circumstances, managers must either negotiate to improve relationship commitment or they must evaluate the implications for creating an alternative working relationship.

Practice administrators acknowledge revenue and cost heterogeneity among insurers (Cote & Latham, 2003). For instance, approval for a particular medication, termed formulary, must be obtained from each insurance company to assure that it will be a covered expense. Some insurers require extensive paperwork prior to formulary approval, whereas others use a more streamlined approach. Claims approval and accounts receivable collections are other examples where demands from insurance companies vary. Time and paperwork create a measurable financial statement impact for the physician practice. As the level of monitoring and compliance procedures escalates, physician practices must expand their administrative staff to accommodate insurance company demands. Relationship quality as indicated by the levels of trust and commitment built within the relationship are often factors affecting the ease with which such exchanges are accomplished.

Measuring the full cost of an interorganizational partner level can be complicated and is rarely captured by organizations even though it has strategic importance. When attempting to use an intangible value driver to disentangle the effect of constructs such as trust and commitment on costs, the process is even more complex. One-time transactions where trust is confirmed or disconfirmed have negligible impact on expenses. Rather, intangible value drivers have a cumulative and often perceptual impact on profitability. It is only through a history of repeated interactions that a measurable profit impact is detectable. For instance, repeated communication problems take additional time to resolve and when accumulated, may require hiring additional support staff. Perceptions also impact profitability in a subtle but potentially profound way. Even if the partner is not measuring the full cost to support a relationship with an external entity, the perception that they are costing them resources, whether time or money, has implications for the strategy used to monitor them. Walter and Ritter (2003) in their study of German suppliers and their customers confront the challenges of linking trust and commitment to interorganizational financial performance. Without access to individual supplier profitability analyses, they rely upon participant's perceptions regarding profit margins, volume and other non-financial variables to assess the connection that trust and commitment have in creating value for an organization. Perceptions are often judged relative to interactions experienced with other similar entities. For instance, one physician interviewed during our preliminary investigations claimed that an insurer was much more costly than the others due to the amount of time and paperwork they demanded for seemingly routine patient care. This perception of higher cost then impacted contracting and resource allocation decisions. Cote and Latham (2003) in their study of patient level data found insurers place heterogeneous demands on physician practice resources. Insurers names were disguised and ranked based on their historical receivable age and reimbursement patterns. This ranking was identical to the ranking provided by practice managers at the data collection site when asked to identify their perceptions of the relative resource demands from each major insurer in their contracting pool.

#### Cooperation

Cooperation refers to the exchange parties working together to reach mutual goals (Anderson & Narus, 1990). Cannon et al. (2000) use the term "solidarity" which encompasses "the extent to which parties believe that success comes from working cooperatively together versus competing against one another" (Cannon et al., 2000, p. 183). Though both are outcome variables, Morgan and Hunt (1994) point out that cooperation is proactive in contrast to acquiescence which is reactive. Organizations committed to relationships and trusting of their partners, cooperate to reach mutual goals. Once trust and commitment are established, exchange partners will be more likely to undertake high-risk coordinated efforts (Anderson & Narus, 1990) because they believe that the quality of the relationship mitigates the risks.

#### Functional Conflict

The resolution of disputes in a friendly or amicable manner is termed functional conflict which is a necessary part of doing business (Anderson & Narus, 1990). Morgan and Hunt (1994) show that trust leads an exchange partner to believe that future conflicts will be functional, rather than destructive. When an organization is confident that issues which arise during the conduct of their arrangement with the other organization will be met with positive efforts to reach a mutual solution, they anticipate tangible benefits.

#### Uncertainty

Decision-making uncertainty encompasses exchange partners' perceptions concerning relevant, reliable, and predictable information flows within the relationship. The issue relates to whether the exchange partner is receiving enough information, in a timely fashion, which can be then used to confidently reach a decision (Achrol, 1991; Morgan & Hunt, 1994). Cannon et al. (2000) conclude that uncertainty creates information problems in exchange. Morgan and Hunt (1994) support a negative relationship between trust and uncertainty. The trusting partner has more confidence that the exchange partner will not act in an unpredictable manner.

Cooperation, functional conflict, and decision-making uncertainty are ever present in the physician-insurer relationship. As stated earlier, the relationship is symbiotic; each needs to cooperate with the other to provide patient care. Often the physician practice administrators can trace specific issues related to cooperation and conflict back to the level of trust with the insurer (Cote & Latham, 2003). Patient care is complicated, with each patient having unique needs. In a trusting relationship where there is a high degree of confidence that the insurer is reliable and will respond faithfully to patient cases, the physician practice can predict how certain treatment options will be handled. Without trust, there is a degree of randomness in the responses from the insurer, making it difficult for the practice to prepare inquiries to the insurer and anticipate their success. In summary, prior literature demonstrates how trust and commitment are linked to performance outcomes in interorganizational associations. We present a model that combines findings from the contract and relational literatures to link the antecedents to outcomes through trust and commitment. From a performance measurement perspective, this model provides managers with the framework for diagnosing the root causes of observed performance metrics. This model has implications for many inter-firm relationships. In this study we explore the model from the health care industry vantage. With its extended dependence on a network of interorganizational alliances, the health care industry can illuminate the strength and nuances of this model. Findings in this industry can serve as a guidepost for other industries where the extent of interorganizational interaction may not be as highly structured.

On the basis of the preceding discussion, the following hypotheses are developed.

**H1.** Interorganizational partners having a higher degree of contract specificity have a greater commitment to the relationship.

**H2.** Interorganizational partners having a higher measure of relationship termination costs have a greater commitment to the relationship.

**H3.** Interorganizational partners having a higher measure of relationship benefits have a greater commitment to the relationship.

**H4.** Interorganizational partners possessing a higher measure of shared values have a greater commitment to the relationship.

**H5.** Interorganizational partners with a higher measure of shared values have greater relationship trust.

**H6.** Interorganizational partners with an appropriate degree of formal and informal communication have greater trust.

**H7.** Interorganizational partners where a higher degree of opportunistic behavior exists have less trust.

**H8.** Interorganizational partners possessing a higher degree of trust have a greater commitment to the relationship.

**H9.** Interorganizational partners who have higher measure of relationship commitment are more willing to make relationship-specific adaptations.

**H10.** Interorganizational partners who have a higher measure of relationship commitment are less likely to end the relationship.

**H11.** Interorganizational partners who have a higher measure of relationship commitment are more likely to cooperate.

**H12.** Interorganizational partners who have a higher measure of relationship commitment are more likely to have a relationship with a positive financial impact.

**H13.** Interorganizational partners who have a higher measure of trust are more likely to have a relationship with a positive financial impact.

**H14.** Interorganizational partners who have a higher measure of trust are more likely to cooperate.

**H15.** Interorganizational partners who have a higher measure of trust are more likely to resolve disputes in an amicable manner (functional conflict).

**H16.** Interorganizational partners who have a higher measure of trust are less likely to have decision-making uncertainty.

## **RESEARCH METHOD**

## Survey Administration

Participants were those personnel from physician practices who interact with insurance companies in the course of their work. Most were involved in the billing and authorization functions, but also included physicians, nurses, financial and operations managers. Most participants were met during a regular staff meeting or break period, taking approximately 15–20 min to complete the survey. There were 166 participants with visits to 29 collection sites within the U.S. Pacific Northwest. Respondents were predominately female (89.7%) which represents a typical gender breakdown in the health-care industry in the personnel positions captured (92% administrative or nonclinical, 8% clinical). On average, survey participants had been employed in the healthcare industry for 14.2 years, in their current position 6.5 years, with their current organization 6.1 years and described themselves as very familiar with insurance company policies, procedures, and practices (6.32 where 7 is most familiar).

A survey instrument was administered to test the extent to which the six antecedents impact the trust and commitment of the physician practice toward health insurance providers as well as how these two constructs then influence the outcome measures. Each participant chose one insurance company that they have substantial experience with in their regular duties. Each participant was then instructed to use the chosen insurer as the referent for their responses. Because one goal is to have responses that represent relationship quality across a broad spectrum, we emphasized that the insurer should be one with which they are most familiar and have a longer term history rather than one they like or dislike the most.

#### Construct Measurement

The questionnaire consisted of several sections with items using seven points anchored on one of the following scales: (a) "Strongly disagree" (1) and "Strongly agree" (7), (b) "Significantly below expectations" (1) and "Significantly above expectations" (7), (c) "Completely inaccurate description" (1) and "Completely accurate description" (7), (d) "Never confident" (1) and "Completely confident" (7) and (e) "Worse than all other insurers" (1) and "Better than all other insurers"(7). Five items were anchored on a ten-point, 0–100 probability scale. Items employed to measure the various constructs of interest were either adapted from the literature or based on interviews with one representative physician practice management team. The items used are contained in the appendix<sup>1</sup>, which also contains the average composite reliabilities of the reflective scales. The average composite reliabilities of the individual measures range from 0.60 to 0.89 indicating the constructs' convergent validity is adequate (Fornell & Larcker, 1981).

Specifically, the measures were developed as follows.

#### Trust (Mediating Variable)

Reliability and integrity are the key constructs that define trust (Morgan & Hunt, 1994). Similar to the approach in Morgan and Hunt (1994), we assessed trust with five items that measure the respondent's perception of the insurer's honesty, integrity, fairness, consistency, and reliability.

#### *Commitment (Mediating Variable)*

Commitment exists when there is the belief that the relationship is worthy of substantial effort to ensure its continuation. Both Morgan and Hunt (1994) and Mowday, Steers, and Porter (1979) employ commitment measures.

From these two scales we developed a four-item measure of commitment that elicits the respondent's perception of the extent to which the physician practice expects to continue the relationship and the level of effort they are willing to exert to make the relationship successful.

#### Legal Bonds (Antecedent)

Cannon et al. (2000) measured the extent and nature of legal bonds between parties in the supply chain. Their measure was adapted and combined with physician practice management features to develop a scale that measures legal bonds from the perspective of respondent's perception of their fairness and flexibility or adaptability in a two-item measure.

#### Relationship Termination Costs (Antecedent)

Termination costs are analogous to switching costs. If a physician practice terminates a relationship with an insurer, they may lose patients as well as expend substantial effort to develop alternative insurer arrangements. Termination costs were identified through interviews with physician practice management staff. The four-item measure addressed the respondent's perception of lost income that would accrue if the relationship was terminated, the alternative insurers available and the level of investment physician practices have committed to facilitate a working relationship with the insurer.

#### Relationship Benefits (Antecedent)

Similar to relationship termination costs, relationship benefits were determined through interviews with physician practice management. Morgan and Hunt (1994) demonstrated the need to measure context specific benefits to activate a meaningful link to commitment. The benefits to the physician practice that comprise the seven-item measure of this construct are breadth of coverage, claims processing, flexibility, technical support, continuing education, formulary, and referring capabilities. Subjects were asked to evaluate the working relationship with the insurer relative to their expectations.

#### Shared Values (Antecedent)

To assess shared values we followed a procedure used by Morgan and Hunt (1994). We developed value statements from our practice management interviews that reflect the primary values of a typical physician practice. Concern for the patient and ethics were the values included in the measure. We then asked participants to record both their agreement with these values and then record their perception of the insurer's belief in these values. Both

were scored on the seven-point Likert-type scale and the measure was a difference score where zero means they share the same values, positive score implies participant has places higher values on these characteristics and a negative score indicates the insurer places higher value on these characteristics.

## Communication (Antecedent)

Communication is expected to influence trust. As past communications accumulate, the parties begin to develop a level trust in each other. Adapting measures from Morgan and Hunt (1994), Mohr and Nevin (1990), and Anderson and Narus (1990) our four-item measure of communication elicited the respondent's view of the extent to which information sharing occurs and rapport has been built.

## **Opportunistic Behavior** (Antecedent)

Opportunistic behavior, or "self-interest seeking with guile" (Williamson, 1975, p. 6), occurs when one party takes actions that puts the other party at a disadvantage. Both Morgan and Hunt (1994), and Anderson and Narus (1990) measure opportunistic behavior within interorganizational relationships. Four items measured the respondent's perception of the extent to which the insurer alters facts, makes unfulfilled promises, distorts information and exaggerates their needs.

## Financial Consequences (Outcome)

A series of interviews with physician practice managers was instrumental in developing the measure of financial statement impact, which is comprised of nine items. Factors such as claim processing speed, ease, and percentage of disputed claims were considered important measures of cost. Time was another factor that drives the costs necessary to work with an insurer. Monitoring or checking up on submitted claims, complaints from patients, and flexibility to accommodate patients with complex medical cases all create demands on staff and/or physician time. These time demands have a cumulative effect that adds administrative staff (Cote & Latham, 2003). Similar to Kumar, Stern, and Achrol (1992) this construct was measured relative to other insurers with whom they have established relationships.

## Acquiescence (Outcome)

Acquiescence, or the willingness to comply with other's requests, is a forward looking measure. We measured it using a ten-point probability scale to assess perceptions concerning conformity with requests from the insurer. Procedures and advice are the primary components of acquiescence measured in this study.

#### Propensity to Leave (Outcome)

Expectations regarding continuation of the relationship are measured similarly to Lusch and Brown (1996). We elicited this propensity with three items that explore expectations regarding whether the relationship is a long-term alliance and whether contract renewal is virtually automatic.

#### Cooperation (Outcome)

Three items defined our measure of cooperation. Adapted from both Heide and John (1992) and Anderson and Narus (1990), we assessed whether the practice respondents view problems as being solved jointly, whether there is commitment to improvements that benefit the relationship as a whole, or whether reciprocal favors exist.

#### Functional Conflict (Outcome)

To measure functional conflict we assessed respondent's perceptions of the extent to which conflict exists in the relationship (Kumar et al., 1992). Three items were used to measure this construct.

#### Decision-Making Uncertainty (Outcome)

Decision-making uncertainty measures whether the physician practice has sufficient information to make routine decisions in a manner acceptable to both parties. Using data from our interviews, we created this measure to assess respondent's views of the extent to which participants were confident in their ability to make future decisions. Routine decisions such as medical procedure coverage, processing a complex claim, reimbursement timing, and problem resolution were included in this four-item measure.

#### RESULTS

#### Structural Equation Model Analysis

We use structural equation modeling (SEM) (using EQS<sup>TM</sup> 6.0 SEM software), with maximum likelihood estimation technique, to test the structural model presented in Fig. 1 and our specific hypotheses. The SEM process centers on two stages, validating the measurement model using confirmatory factor analysis and fitting the structural model through path analysis with

latent variables. It permits us to examine the full model simultaneously, as opposed to one path at a time, as well as to examine the hypothesized causal relations among the six antecedents, trust and commitment, and six performance metrics. In addition to the benefit of testing the model overall rather than coefficients individually, other advantages of SEM are greater flexibility of assumptions than multiple regression, the use of confirmatory factor analysis to reduce measurement error and the ability to model mediating variables. Our findings are presented in Table 1 and Fig. 2. Fig. 2 illustrates the model and identifies the results of the structural equation analysis. It provides the path coefficients for each causal link and the  $R^2$  coefficient for each mediating and outcome construct. Table 1 presents the construct correlation matrix to provide an alternative method for evaluating the causal associations.

Various fit indices may be used to evaluate descriptively whether the estimated model is not different than the hypothesized model (Carmines & McIver, 1981). Table 2 presents the fit statistics. The overall model has an adequate goodness of fit index (Comparative Fit Index (CFI)) of 0.898 (Bollen IFI = 0.900), given the complexity of the model and the substantial number of constructs, indicators and paths (Williams & Holahan, 1994; Bollen, 1989). An alternative measure,  $\chi^2$ , indicates the difference between the estimated and observed correlation matrix. A low  $\chi^2$  (high *P*-value) indicates there is no difference, that is, the specified model recaptures the observed correlation matrix completely. Conversely, a high  $\chi^2$  and low Pvalue, as is evident here ( $\chi^2 = 512.0857$ , *P*-value = 0.000), suggests there is a statistical difference between the observed and estimated correlation matrix indicating the model is not perfectly capturing the observed correlation matrix. Because of statistical power, however, a low  $\chi^2$  is achieved infrequently.<sup>2</sup> When N is large and there exists a greater potential for problems with the traditional  $\chi^2$  test, the use of the ratio of the  $\chi^2$  estimator divided by its degrees of freedom as a measure of fit is appropriate (Bollen, 1989). Bollen (1989) presents support for an adequate fit as a value less than 3.<sup>3</sup> Our model achieves an acceptable 1.695.

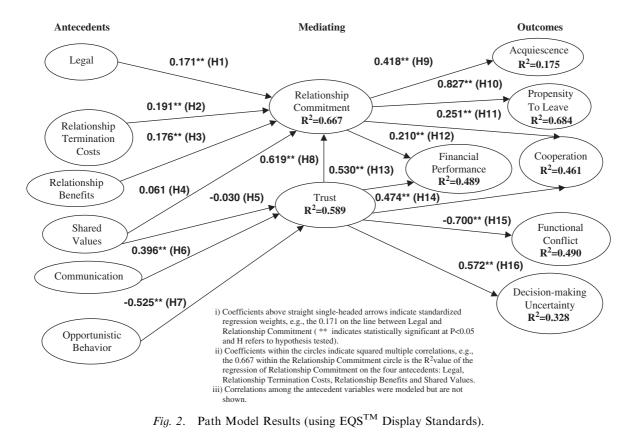
#### Tests of the Causal Hypotheses

Breckler (1990) emphasizes the key importance of evaluating the fit of individual equations within the model in addition to testing the global fit. All of the individual path coefficients are significant at P < 0.05 except for those paths involving shared values. The results for strength of the individual antecedents leading to our mediating variables, trust and commitment, are

	e	Termination Costs	Benefits		Commu- nication	Opportun- istic Behavior	Commit- ment	Trust	Financial Perform- ance	Acquiesc- ence	Propensity to Leave	Cooper- ation	Functional Conflict	Decision Making Uncertainty
Legal	1													
Termination costs	0.040													
	(0.519)	1												
Benefits	0.482	0.168												
	(5.574)**	(2.128)**	1											
Shared values	-0.200	0.176	-0.197											
	$(-2.522)^{**}$	(2.229)**	$(-2.477)^{*}$	* 1										
Communication	0.298	0.097	0.502	-0.121										
	(3.665)**	(1.241)	(5.749)**	* (−1.542	) 1									
Opportunistic	-0.242	0.095	-0.475	0.125	-0.359									
behavior	$(-3.041)^{**}$	(1.171)	$(-6.264)^{*}$	(1.556	)(-4.598)**	* 1								
Commitment	0.526	0.229	0.682	-0.061	0.593	-0.528								
	(6.875)**	(2.794)**	(9.504)**	<sup>∗</sup> (-0.732	) (7.937)**	* (-8.123)*	* 1							
Trust	0.531	-0.031	0.724	-0.152	0.554	-0.644	0.761							
	(7.186)**	(-0.390)	(10.618)**	* (-1.911	) (7.553)**	* (-12.605)*	* (18.559)**	<sup>6</sup> 1						
Financial	0.507	-0.046	0.681	-0.094	0.438	-0.312	0.609	0.695						
performance	$(5.809)^{**}$	(-0.586)	(7.234)**	* (-1.199	) (5.156)**	* (-3.958)*	* (8.211)**	(10.052)*	* 1					
Acquiescence	0.381	0.075	0.230	0.002	0.197	-0.127	0.393	0.302	0.313					
	(4.202)**	(0.799)	(2.481)**	* (0.024	) (2.121)**	* (-1.313)	(4.380)**	(3.343)*	* (3.416)**	* 1				
Propensity to	0.451	0.100	0.574	-0.069	0.420	-0.500	0.827	0.639	0.538	0.477				
leave	(5.727)**	(1.209)	(7.595)**	* (-0.832	) (5.290)**	* (-7.411)*	* (21.646)**	(11.706)*	* (7.028)**	* (5.599)*	* 1			
Cooperation	0.441	0.113	0.525	-0.044	0.571	-0.470	0.602	0.640	0.439	0.289	0.551			
	(5.179)**	(1.443)	(5.968)**	<sup>∗</sup> (-0.569	) (6.369)**	* (-6.179)*	* (8.101)**	(9.033)*	* (5.162)**	* (3.135)*	* (7.231)**	1		
Functional	-0.412	0.051	-0.549	0.073	-0.473	0.524	-0.585	-0.659	-0.558	-0.352	-0.626	-0.646		
conflict	$(-4.898)^{**}$	(0.651)	$(-6.181)^{*}$	* (0.936	)(-5.490)**	* (7.001)*	* (-7.816)**	(-9.376)*	*(-6.261)**	* (-3.858)*	* (-8.451)**	$(-6.971)^*$	* 1	
Decision-	0.382	0.118	0.573	0.031	0.472	-0.387	0.563	0.533	0.453	0.368	0.495	0.535	-0.567	
making uncertainty	(4.585)**	(1.500)	(6.388)**	(0.395	) (5.487)**	* (-4.987)*	* (7.461)**	(7.215)*	* (5.300)**	* (4.042)*	* (6.374)**	(6.059)*	* (-6.332)**	1

Table 1. Correlation Matrix.

\*\*Indicates statistically significant at P < 0.05.



Comparative fit index (CFI)	0.898
Bollen index (IFI)	0.900
$\chi^2$	512.0857
<i>P</i> -value	0.0000
Degrees of freedom (d.f.)	302
$\chi^2/d.f.$	1.695

Table 2. Structural Equation Model Fit Statistics.

also presented in Fig. 2. A trust model comprised of communication, opportunistic behavior and shared values has a  $R^2$  of 0.589 implying that 58.9% of the variance in the level of trust expressed by participants can be explained by the three antecedent variables. The primary drivers of the level of trust the participants expressed for insurance providers are opportunistic behavior from a negative perspective and communication. A commitment model, comprised of trust, legal bonds, relationship termination costs, relationship benefits, and shared values is statistically significant with an  $R^2$  of 0.667 or 66.7% of the variance explained. The strongest association exists between trust and commitment.

As hypothesized there are significant relationships evident between the two mediating variables, commitment and trust, and all six of the outcome variables, acquiescence, propensity to leave, cooperation, financial consequences, functional conflict, and decision-making uncertainty. Commitment has the strongest influence on propensity to leave (0.827), which captures an entity's interest to remain in a relationship ( $R^2 = 0.684$ ). A higher level of commitment also supports greater acquiescence (0.418) or agreement for the well-being of the relationship, improved financial consequences (0.210) and increased cooperation (0.251). All of the path coefficients leading from trust exceed 0.45 with the strongest impact being on functional conflict (-0.700) and reducing the uncertainty in decision-making (0.572). Similar to commitment, as predicted, trust positively influences cooperation (0.474) and enhances financial consequences (0.530).

Further analysis of the insignificant relationships between shared values and trust and shared values and commitment reveal a potential measurement issue. Descriptive statistics on shared values indicate a lack of variance in the construct (average = 5.93, minimum = 4, maximum = 7, standard deviation = 0.63). The correlation matrix (Table 1) supports a lack of relationship between shared values and any of the other constructs.

Overall, the results taken together suggest strong support for H1 through H3 and H6 through H16 and a lack of support for H4 and H5. Key to our

primary research question, commitment and trust are mediating variables, which specify the determinants of performance outcomes. This finding is consistent with the proposition that a high level of trust and commitment within the interorganizational alliance is rewarded.

## DISCUSSION

This study investigates the antecedents to trust and commitment and in turn the impact that trust and commitment has on the performance of interorganizational relationships. With the increasing reliance on partnering and outsourcing, understanding how successful relationships between organizations can be developed and performance assessed is critical to their long run sustainability. The physician practice – insurance company relationship is the source for our data to test the model developed in this paper. This is a relationship that is highly controversial, with varying levels of success. Such outcome variability makes this context relevant for model development and testing, as well as important to the healthcare industry.

We tested a complex model that hypothesized four antecedents to commitment, three antecedents to trust, and six outcome measures. Even with several constructs and a complex causal expectation, the data were supportive of the model. Of the 16 hypotheses, all but two were supported. Only one of the constructs, shared values, was not a significant antecedent to the mediating variables. The model has substantial explanatory power, as do most of the individual causal paths. Taken together, the model presents convincing evidence that performance within interorganizational relationships is highly dependent on the building of trust and commitment between the dyad.

The shared values construct was not supported by the data. Interviews with key healthcare personnel indicated that it is a driver within the relationships. Therefore, we look to measurement explanations to explain the lack of support. Shared values was operationalized similar to the method in Morgan and Hunt (1994). Subjects responded to several values statements by expressing both the strength of their beliefs and then expressing how strongly the insurer believed in these values. A difference score was generated that indicated the extent of agreement between the physician practice employee and the insurance provider on each value statement. A review of the individual observations found that many subjects had trouble evaluating the insurer's beliefs. Future research needs to create an alternative method to measure shared values that captures the belief structure of both sides of the interorganizational alliance.

One unique finding is the influence that trust and commitment have on financial consequences. Where many managers might understand that trust and commitment make a relationship more pleasant, that attribute alone is often unlikely to direct attention to the issue. Demonstrating that trust and commitment also impact profitability creates motivations for managers to actively develop strong relationship bonds with partners or contractors.

Most managers implicitly recognize the relationship dynamics inherent in interorganizational arrangements, but without an understanding of the antecedents and outcomes or empirical evidence it is difficult for them to structure a coherent plan to improve trust and commitment with external partners. The implications that trust and commitment have on the dyad are subtle and cumulative. They build through individual transactions and interactions. It is only when events accumulate that relationship quality emerges as a tangible force affecting performance. At that point in time it is quite difficult to alter the relationship dynamics. Our study provides a foundation for managing the relationship. All too often a contract is established and both parties assume the relationship will succeed based on the pre-arranged terms. However, especially in settings where all contingencies cannot be specified in advance, the contract alone will not ensure a high functioning relationship (Cannon et al., 2000; Cooper & Slagmulder, 2004). Our contribution has been to provide evidence that trust and commitment are key elements affected by the alliance structure and that drive consequent outcomes. This evidence has the capacity to raise relationship dynamics from managers' subconscious to a measurable, interconnected level. When recognized as essential, positive actions can be proactively initiated to improve commitment and trust, and ultimately the organization's financial performance rather than reacting to negative consequences. It is evident that a strong contract in conjunction with active relationship management is necessary to achieve optimal interorganizational effectiveness.

## **FUTURE RESEARCH**

This research blends the disciplines of accounting, healthcare issues, relationship marketing, and organizational behavior. We believe that our willingness to draw from these disparate disciplines to address interorganizational performance represents a significant contribution to the knowledge

base. The next phase of research should emphasize both measurement and structural enhancements.

As in most research settings, a number of decisions were made that could potentially limit the generalizability of these findings. Common method bias (e.g., Podsakoff, MacKenzie, Podaskoff & Lee, 2003; Cote & Buckley, 1987) challenges all construct measurement efforts to develop valid measures. Careful consideration was taken to minimize exposure to common method bias, from the design to analysis stages. However, since all studies contain complicated tradeoffs, some risks inherent in construct development and measurement are unavoidable. In addition, this study was limited to one industry in one geographical region. To the extent that the interorganizational issues under study are industrially or geographically unique, the ability to generalize from these findings to new contexts may be affected. With replication in a variety of settings the full impact that trust and commitment have on organizational performance between inter-firm partners can be wholly represented.

Structurally, future research should search for constructs that enhance the comprehensiveness of this model. For instance, power within the relationship was modeled implicitly in this study. Future research may incorporate one of the many definitions of power (Frazier, 1999) to explicitly assess its impact on interorganizational performance. The opposite side of the interorganizational partnership, the insurance company in this case, needs to be examined to assess the strength of the constructs from differing value chain partners. The distribution channel literature underscores the importance of investigating both sides of an interorganizational alliance as a means of identifying and understanding both compatibilities and incompatibilities between partners (Morgan & Hunt, 1994). This will provide a comprehensive representation of the elements both exchange partners expect in a healthy, high functioning relationship.

#### NOTES

1. The survey instrument is available upon request.

2. Bentler and Chou (1987) note that in large samples, "even the best model may not fit, since the sample-size multiplier that transforms the fit function into a chisquare variate will multiply a small lack of fit into a large statistic" (97). Breckler also states that the  $\chi^2$  test is sensitive to small differences between observed and estimated data in large samples (1990).

3. Carmines and McIver (1981) suggest a ratio as high as 5 is acceptable.

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## **APPENDIX: CONSTRUCT MEASURES**

#### Trust (reflective indicators, average composite reliability: 0.89)

- 1. The level of trust with this insurer is
- 2. This insurer is honest.
- 3. This insurer can be counted on to do what is right.
- 4. This insurer has high integrity.
- 5. This insurer treats us fairly.

## **Relationship Commitment (reflective indicators, average composite reliability:** 0.79)

- 1. The relationship deserves maximum effort to maintain.
- 2. The relationship is something we are very committed to.
- 3. The relationship is one we expect to continue indefinitely.
- 4. We are willing to put in a great deal of effort, beyond that normally expected.

#### Legal Bonds (formative indicators, a summated scale was used)

- 1. The contracts with this insurer are fair to both parties.
- 2. Our formal contracts are responsive to unusual and infrequent circumstances.

#### Relationship Termination Costs (formative indicators, a summated scale was used)

1. We have made significant investments in software and training dedicated to this insurer.

- 2. This insurer has some unusual standards and practices, which have required adaptation.
- 3. We have invested a lot of time and effort to learn the ins and outs of this insurer's systems.
- 4. If our relationship with this insurer were terminated, we would suffer a significant loss in income.

## Relationship Benefits (formative indicators, a summated scale was used)

Evaluate the working relationship with insurer on the following

- 1. Coverage of medical procedures.
- 2. Claims processing.
- 3. Flexibility to accommodate patients with complex medical cases.
- 4. Technical support.
- 5. Continuing medical education for providers and staff.
- 6. Referring specialists and facilities.
- 7. Formulary (i.e., medications covered).

## Shared Values (formative indicators, a summated scale was used)

With respect to the following statements, please indicate the degree to which you agree with them and you believe that this insurer agrees with them

- 1. The primary concern is for the patient.
- 2. Under no circumstances will unethical behaviors be tolerated.

## Communication (formative indicators, a summated scale was used)

- 1. Any information that might help the other party will be provided to them.
- 2. Exchange of information in this relationship takes place frequently.
- 3. Parties will provide proprietary information if it can help the other party.
- 4. We keep each other informed about events or changes that may affect the other party.

# **Opportunistic Behavior (reflective indicators, average composite reliability:** 0.86)

- 1. Sometimes this insurer alters the facts slightly.
- 2. Sometimes this insurer promises to do things without actually doing them later.
- 3. Sometimes this insurer distorts information to us in order to protect their interests.

4. Sometimes this insurer exaggerates their needs in order to get what they want from us.

## **Financial Consequences (formative indicators, a summated scale was used)** Relative to other insurers, please rate this insurer on the following cost and revenue dimensions

- 1. Demands for physician and/or staff time.
- 2. Ease of processing claims.
- 3. Costs to process claims.
- 4. Speed at which they remit payment.
- 5. Percentage of disputed claims.
- 6. Percentage of reimbursement relative to billed charges.
- 7. The need to monitor or check up on the insurer.
- 8. Complaints from patients about this insurer.
- 9. Process for credentialing a new physician.

## Acquiescence (reflective indicators, average composite reliability: 0.60)

- 1. In the future, we will likely conform to this insurer's accepted procedures.
- 2. We intend to adopt future practice management advice offered by this insurer.

## Propensity to Leave (reflective indicators, average composite reliability: 0.74)

- 1. We expect our relationship with this insurer to continue a long time.
- 2. Contract renewal with this insurer is virtually automatic.
- 3. Our relationship with this insurer is a long term alliance.

## Cooperation (formative indicators, a summated scale was used)

- 1. Problems that arise in the course of this relationship are treated by the parties as joint, rather than individual responsibilities.
- 2. The parties are committed to improvements that may benefit the relationship as a whole, and not only to the individual parties.
- 3. This insurer helps us out in whatever ways we ask.

## Functional Conflict (formative indicators, a summated scale was used)

- 1. The relationship with this insurer can be best described as tense.
- 2. Significant disagreements occur within this relationship.
- 3. We frequently clash on issues relating to our practice management systems.

# Decision-Making Uncertainty (formative indicators, a summated scale was used)

With this insurer, how confident are you in your ability to make future decisions regarding

- 1. What medical procedures are covered.
- 2. The procedures for processing a complex claim.
- 3. When payment will be received regarding a processed claim.
- 4. Who to talk to when you have a question concerning a claim 1.