

# DIVERSIFYING PHYSICIAN RISK THROUGH CONTRACT

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## I

### INTRODUCTION

A physician's ability to earn a living depends significantly on her investments in capital. But unlike a manufacturer, whose primary investments are in physical assets, the physician principally invests in human capital—skills, reputation, and the like—which cannot be transferred easily to alternative uses. The non-redeployability of her assets makes her particularly vulnerable to unforeseen circumstances. As unanticipated events occur she cannot, for instance, protect herself by simply entering the spot market, selling the investment, taking her profits or losses, and putting the money elsewhere. Protecting her human capital investment from unforeseen risks will require a more complex institutional mechanism than simple spot markets. This article explores a multi-party contractual solution to the physician's risk problem. This article argues that, handled correctly, the contracting implicit in the large, multi-specialty group practice provides an important opportunity for physicians to diversify and protect their portfolio of human assets.

This is not, however, an article on contract drafting. I do not attempt to design an ideal contract document. Nor, for that matter, do I assert that all physicians must diversify their risks. Instead, I suggest that those who are interested in diversifying their risks should consider carefully the potential advantages afforded by the multi-party contracting available through group practice. Similarly, I suggest that physicians already participating in a group practice or a health maintenance organization ("HMO")<sup>1</sup> consider structuring

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1. An HMO is essentially an insurance arrangement. As with conventional medical insurance, the patient pays periodic fixed premiums to the HMO. Unlike the conventional insurer that reimburses a client for his medical expenses, the HMO actually provides a broad spectrum of medical services directly to its patients. In a world of increasing complexity, information growth, and technological change, no physician is capable of providing the full range of services potentially required by a patient. To offer the comprehensive service required by the HMO, the skills of a wide range of physicians must be integrated both horizontally and vertically. This article argues that this integration provides an opportunity for physicians to diversify the risks associated with their investments in human capital.

some portion of the practice to take advantage of its risk diversification potential. As will be seen, achieving risk diversification is conceptually straightforward. Because the solution requires a *productivity-neutral* compensation scheme, however, it raises important enforcement and incentive compatibility issues. Consequently, most of this article is devoted to using transaction cost analysis to examine the institutional structure required to support the underlying contract.

This approach is taken because, although contracting parties may carefully consider the wording of their documents, they often ignore the practical institutional ramifications of their proposals. Especially if they are inexperienced, contracting parties are apt to pay scant attention to the mechanisms by which they intend to enforce, monitor, and adapt their agreements over time. But there is more to a contract than the wording of the document. The institutions and relationships supporting the words of an agreement often influence the actual outcome of the contracting more than do the words themselves.<sup>2</sup>

I refer to the institutional structure associated with the contract as a governance mechanism. It provides the method by which the parties enforce, monitor, and adapt their agreement. Good governance structures make for smooth transactions; the failure of contracting parties to address governance issues adequately can adversely affect transaction costs. After discussing the nature of the physician's risk problems and a proposed contractual solution, this article will demonstrate how physicians or their advisors can accurately assess governance requirements.

The governance structure necessary to support the multi-physician contracting described below also illustrates the phenomenon of private orderings—that is, private government. Most of the health care and contracting literature implicitly assumes that contracts will be enforced by courts or markets. But many of the “laws”—that is, norms—that govern agreements are private in the sense that the parties develop their own contractual regulations. The literature often fails to distinguish adequately the circumstances that demand customized, private governance from those where more generally applicable structures like markets or courts will suffice.

Obviously, not all transactions require specially tailored norms. Certainly courts and markets provide adequate governance mechanisms for numerous situations, and neither courts nor markets are derived privately by the parties to the specific contract. This article argues that the necessity for private lawmaking in the physician context can be traced back to the nature of the transaction costs faced by the contracting parties.<sup>3</sup> Transaction costs, quite

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2. See generally Macaulay, *Non-Contractual Relations in Business: A Preliminary Study*, 28 AM. SOC. REV. 55 (1963); Macneil, *The Many Futures of Contracts*, 47 S. CAL. L. REV. 691 (1974); Palay, *A Contract Does Not a CONTRACT Make*, 1985 WIS. L. REV. 561 (1985).

3. Palay, *Relational Contracting, Transaction Cost Economics and the Governance of HMOs*, 59 TEMP. L.Q. 927, 934-38 (1986).

literally, are the “costs of running the economic system.”<sup>4</sup> They are “the economic equivalent of friction in physical systems”<sup>5</sup> and refer to the human<sup>6</sup> and environmental<sup>7</sup> conditions that make contracting (potentially) costly. The existence of transaction costs makes governance structures necessary and requires parties to give thought to the types of governance structures they use.

The precise nature of the governance mechanism is predictable from those characteristics of the transaction that give rise to the contracting frictions.<sup>8</sup> In short, parties will devise or choose the least costly governance arrangement that best facilitates their exchange. Below, sections of this article identify the transaction costs faced by physicians, and briefly discuss reasons why private lawmaking is required to support physicians’ diversification agreements.<sup>9</sup> This article then describes in some detail the nature of the private law required to guarantee physician contracts.

It has been suggested that, in order to effectuate private law of the nature here described, the parties will require the organizational structure of a firm.<sup>10</sup> Part V of this article examines organizational alternatives for

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4. JOINT ECONOMIC COMM., 91ST CONG., 1ST SESS., *THE ANALYSIS AND EVALUATION OF PUBLIC EXPENDITURES: THE PPB SYSTEM* 48 (Joint Comm. Print 1969) (Arrow, *The Organization of Economic Activity: Issues Pertinent to the Choice of Market Versus Nonmarket Allocation*).

5. O. WILLIAMSON, *THE ECONOMIC INSTITUTIONS OF CAPITALISM: FIRMS, MARKETS, AND RELATIONAL CONTRACTING* 19 (1985).

6. First, human decisionmakers are only rational within limits. They cannot see the future and have only qualified problem-solving capabilities. In short, they possess what Simon terms “bounded rationality.” See H. SIMON, *MODELS OF MAN: SOCIAL AND RATIONAL; MATHEMATICAL ESSAYS ON RATIONAL HUMAN BEHAVIOR IN A SOCIAL SETTING* 196-200 (1957); H. SIMON, *ADMINISTRATIVE BEHAVIOR: A STUDY OF DECISION-MAKING PROCESSES IN ADMINISTRATIVE ORGANIZATION* 39-41, 80-83 (2d ed. 1961).

Second, human decisionmakers can and do act opportunistically. They seek their own self-interest, and generally prefer more rather than less of most things. They possess a restricted capacity for gathering, evaluating, and storing information. On the one hand, human beings attempt to exploit the advantages that may be attained from the making of “false or empty, that is, self-disbelieved, threats and promises” concerning future conduct. E. GOFFMAN, *STRATEGIC INTERACTION* 105, 85-145 (1969). On the other hand, they distort or selectively disclose information. O. WILLIAMSON, *MARKETS AND HIERARCHIES: ANALYSIS AND ANTITRUST IMPLICATIONS* 26-27 (1975) [hereinafter O. WILLIAMSON, *MARKETS AND HIERARCHIES*].

7. The environment in which these actors interact is often uncertain and complex, yet the actors are constrained by their bounded rationality in coping with this environment. In addition, the world of contract is often populated by only a small number of potential buyers and sellers. Where the participants are few, markets either cannot be relied upon to work correctly, or situations akin to monopolistic competition develop. Of special interest to transaction cost economists are those circumstances where a large number of buyers and sellers exist at the outset, but the number is reduced substantially once initial bargains are set. A situation that appears initially to have the requisite number of buyers and sellers for a well-functioning market devolves into some form of monopolistic or small-numbers bargaining environment. O. WILLIAMSON, *MARKETS AND HIERARCHIES*, *supra* note 6, at 22-23.

8. Williamson, *Transaction-Cost Economics: The Governance of Contractual Relations*, 22 J. L. & ECON. 233, 245-54 (1979) [hereinafter Williamson, *Transaction-Cost Economics*]; Palay, *supra* note 3, at 934-38; Palay, *Organizing an HMO by Contract: Some Transaction Cost Considerations*, 65 NEB. L. REV. 728, 736-38 (1986) [hereinafter Palay, *Organizing*].

9. A reader interested in a more detailed discussion of this subject should look to Palay, *supra* note 3, at 938-47; Palay, *Organizing*, *supra* note 8, at 742-46.

10. Gilson & Mnookin, *Sharing Among the Human Capitalists: An Economic Inquiry Into the Corporate Law Firm and How Partners Split Profits*, 37 STAN. L. REV. 313, 338-39 (1985).

developing the governance structure necessary to support physician diversification agreements. This article contends that any type of integrated medical practice will suffice, but that HMO's are particularly well suited to the task. Finally, this article concludes that integration can be achieved either formally through a firm, as with a group practice HMO, or informally through relational contracting, as in an individual practice association ("IPA").

## II

### THE RISKS OF PHYSICIAN INVESTMENT IN HUMAN CAPITAL

To earn a living a physician expends resources on three types of human capital. First she invests in her technical medical skills. These investments include her initial medical education, her internship, residency, any post-residency fellowships, the experience gained from practice, and any continuing education programs and seminars she attends.

Second, and perhaps as important, is a physician's investment in her professional reputation. Reputation provides a mechanism for communicating and marketing skills and other attributes.<sup>11</sup> A physician's reputation also provides information to patients and other doctors about her qualifications, skill, temperament, and medical philosophy, as well as about how communicative, responsive, and sensitive to pre-existing doctor-patient relations she is. For instance, reputation plays an important role in helping a physician choose a covering physician<sup>12</sup> or specialist. Alternatively, the quality of care a specialist or consulting physician provides reflects upon the primary physician's judgment, affects the care her patient receives, has an impact on her work load, and can influence the patient's desire to remain with the referring physician or clinic. Finally, reputation acts as an *ex ante* indicator of the covering physician's standards, skills, demeanor, practice skills, and medical philosophy. As such, it suggests to the referring physician the confidence she should have in the consultant's advice, information, second opinion, or services.

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11. Formally, the physician services have many of the characteristics of what Satterthwaite defines as a reputation good:

Each seller's product is differentiated from every other seller's product.

Product quality is consumer-specific, that is, one perfectly informed consumer may prefer seller *i*'s product over seller *j*'s product, while a second perfectly informed consumer may prefer seller *j*'s product over seller *i*'s. This results from the fact that different consumers value each seller's product's attributes differently, rather than the fact that different consumers perceive the attributes of a seller's product differently.

The attributes of each seller's product can only be fully evaluated by experience with the product over a significant length of time.

The product is important to consumers; each consumer is willing to expend significant effort to find a seller offering a product that is, according to his particular preferences, of high quality and reasonable price.

Satterthwaite, *Consumer Information, Equilibrium Industry Price, and the Number of Sellers*, 10 BELL J. ECON. 483, 485-86 (1979).

12. The term "covering physician" refers to a doctor who would cover the calls of a colleague on a regular basis—for example, every Tuesday night or every third weekend.

Similarly, the reputation of a referring physician influences the consultant. The consulting physician needs to know that the referred patient has had an adequate medical examination. Without this assurance, the consulting physician may be compelled to order a second examination or a second set of tests. Besides the obvious monetary costs involved in duplication, a reputation for unnecessarily redoing initial examinations can lead to disruptive disagreements between physicians as well as to fewer referrals.

Finally, physicians also make human capital investments in developing a relationship with their patients. On the one hand, the doctor-patient relationship helps to perpetuate a physician's reputation. On the other hand, this relationship helps a physician in treating the patient. In order to understand, diagnose, and treat a patient's health problems, a physician requires the patient's help and cooperation. The process of developing such cooperation begins with the taking and digesting of the patient's medical history. The physician invests not only in taking the history, but in recording it in a manner understandable to herself and to other practitioners. Patients provide information to doctors imprecisely and in code. The doctor, to be effective, must discover how to interpret that code. Similarly, the physician must learn whether she can rely on the patient's information. For instance, how likely is it that the patient actually has the problem about which he is complaining? A physician also needs to determine just how much information about diagnoses, prognoses, and techniques the patient needs, understands, and can psychologically absorb. Finally, whether a patient continues on a prescribed regimen of medication, diet, exercise, or the like depends in part on the degree to which she trusts the doctor's diagnosis and judgment.<sup>13</sup>

As with any capital asset, the value of human capital is subject to risk. Risk, meaning the likelihood that an actual outcome will vary from an expected one,<sup>14</sup> can be conveniently divided into two types: systematic and unsystematic. Systematic risk refers to the risk associated with holding any asset, and is determined by those events that have a universal impact on investments. Events with this impact can include general economic adjustments, changes in regulatory policies, foreign affairs initiatives, or domestic political activity. Unsystematic risk is the risk associated with holding a given asset; that is, it refers to changes that affect only particular assets.

Physicians face at least five types of unsystematic risk. First, they risk having patients' tastes or demands for medical services change in unexpected ways. For example, a sudden fitness craze might lead patients to increase

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13. As David Mechanic observed,

The effectiveness of medical care depends on the patient's cooperation. The patient must be able and willing to provide information, to conform with medical advice, to return to the physician, to take medication properly, and to carry out numerous other tasks. Failures in communication and empathy not only harm a vital function of medical care, but diminish the opportunities for technical quality and effectiveness.

D. MECHANIC, *THE GROWTH OF BUREAUCRATIC MEDICINE* 11 (1976).

14. J. VAN HORNE, *FINANCIAL MANAGEMENT AND POLICY* 31 (7th ed. 1986).

their visits to orthopedists dramatically and reduce their need for cardiologists. Second, physicians risk the obsolescence of familiar technology or their particular skills. For instance, the development of a new and safer technique for surgically correcting scoliosis will only affect those physicians who have investments in the now obsolete techniques for treating the disease. Third, there is risk in the fact that changes in regulatory or reimbursement policy will affect some specialists differently than others. For example, an employer might announce that it will no longer pay for health insurance that covers psychiatric examinations. Alternatively, changes in government policies for reimbursement of medical costs may make it more lucrative to treat a particular disease with surgery than with medication, placing greater demands on surgeons and fewer on internists. Fourth, doctors risk having an unexpectedly large number of new physicians enter their area of expertise and specialization. This can adversely affect a physician's market position and, therefore, her income. Finally, physicians risk that their specialty will become subject to unexpected changes in liability. A common practice among a class of specialists might later be shown to be unreasonable or defective. Or, given the vagaries of juries, certain specialties might become vulnerable to unexpectedly high malpractice awards, especially for pain and suffering.

Portfolio theory suggests that risk-averse investors will attempt to structure their investments so as to lower their overall risk without reducing the return they receive.<sup>15</sup> To do so the parties will choose investments with desirable risk/return characteristics.<sup>16</sup> But in choosing their investments they must remain cognizant of the fact that markets only compensate parties for *unavoidable* risk. That is, markets pay no premium for assuming risks that could be eliminated at no reduction in return. Since unsystematic risk is the risk one takes that a particular event will affect the value of only certain assets, markets assume that the parties can eliminate this type of risk by investing in assets with a countervailing reaction to the particular event. In other words, markets will not compensate for unsystematic risk, because risks of this type can be eliminated through diversification.<sup>17</sup>

Where investments are in assets such as common stock or bonds, eliminating unsystematic risk can be achieved by buying shares in companies with countervailing characteristics. Where the primary investment is in human capital, however, as is the case with physicians, the problem is more complicated. A physician only receives a return on her investment if she is actually working. She cannot, for instance, buy shares in numerous different types of medical practices or sell shares in her own practice. Institutional

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15. For a more detailed discussion of portfolio theory, see R. BREALEY & S. MEYERS, *PRINCIPLES OF CORPORATE FINANCE* 117-63 (1981); J. VAN HORNE, *supra* note 14, at 55-95; *see generally* W. SHARPE, *PORTFOLIO THEORY AND CAPITAL MARKETS* (1970).

16. For any given level of risk, a risk-averse investor will prefer more return over less. Similarly, for any given level of return, that investor will prefer less risk to more.

17. *See, e.g.*, R. BREALEY & S. MEYERS, *supra* note 15, at 123-26; J. VAN HORNE, *supra* note 14, at 67-72; Modigliani & Pogue, *An Introduction to Risk and Return: Concepts and Evidence*, *FIN. ANALYSTS J.*, Mar.-Apr. 1974, at 68, 73-76.

constraints, such as codes of ethics, state regulations, and monitoring problems, prevent her from doing so. In addition, she cannot usually diversify her risks by becoming proficient in numerous countervailing specialties, such as pediatrics and geriatrics. Technical constraints generally prevent her from specializing in more than one or two fields, and the modern trend in medicine is toward greater specialization, as opposed to diversification, of skills.

### III

#### DIVERSIFICATION THROUGH POOLING

While a physician cannot diversify her investments by purchasing shares in other practices, a group of physicians could pool and share the return on their respective investments in different medical specialties. That is, the physicians could enter into an agreement to affiliate their practices, contribute all their earnings to a common pool, and later distribute that income to the various participants. Taken alone, each physician would be subject to the unsystematic risk endemic to her specialty. By pooling the return associated with various specialties, however, the physicians would effectively create a mutual fund of financially complementary physician assets. Assuming proportional representation from the entire spectrum of basic medical specialties, the fund would represent a diversified portfolio of physician investments in human capital. The physicians could then divide up the fund among themselves on the basis of a predetermined sharing rule. Each physician would receive not only part of the return on her own investment, but a percentage of the return on the other physicians' investments as well.

In theory it should be possible to devise a pooling arrangement that allows the physician to diversify her risk effectively by sharing in the returns of her colleagues' investments in human capital. To effectuate the arrangement at least two terms must be specified. First, the parties require a method of dividing the pooled funds that will pass on to individual physicians the risk-diversification advantages of the pool. Second, because devising a compensation scheme is difficult, the physicians will require a specialized governance structure to enforce the underlying agreement.

Conventional economic theory, which is devoid of transaction cost considerations, would suggest that the compensation formula should reflect the marginal contribution of each physician;<sup>18</sup> that is, each physician should "eat what she kills."<sup>19</sup> A rule that emphasizes marginal productivity, however, will suffer from two problems. First, measuring marginal product in an imperfect world is complicated and imprecise. Consequently, the formulas that are used are only approximate reflections of actual productivity. The divergence between actual and approximated productivity can give rise to many of the incentive compatibility problems discussed below. In addition, each party is likely to work to maximize her own benefits under the formula.

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18. Pauly, *Efficiency, Incentives, and Reimbursement for Health Care*, 7 *INQUIRY* 114 (1970).

19. One can only hope that no physician takes this prescription literally.

If the formula does not reflect actual productivity, then individual maximization will not lead to firm (social) maximization.

Second, if a physician's share of the mutual fund is based on a productivity-based index, such as the income she herself generates or the number of patients she sees, she would be subject to the same unsystematic risk she would have faced in solo practice. If something unexpectedly caused her to lose patients, her income would drop accordingly. To diversify risk effectively, a physician must share in her colleagues' productivity, and they must share in hers. Marginal productivity-sharing rules will compensate her only for her own productivity. Effective risk sharing requires the parties to distribute the pooled income on the basis of some productivity-neutral index such as age, seniority, years out of school, or perfect equality.

While a compensation scheme of this nature permits effective risk diversification, it can also lead to severe *ex post* incentive compatibility problems. In particular, these problems include those that can arise when one or more parties to a contract decides that the agreement negotiated earlier no longer comports with their own best interests. Problems of this nature arise in all contracting. At the time of the initial bargain the future is uncertain. As events unfold and additional information comes to light, the parties can determine whether the original bargain can be improved. For example, in the risk-diversification context the parties initially agreed to share their productive years with a group of colleagues in exchange for a share of the others' productivity. The objective was to reduce the variance associated with their future stream of earnings. If, from the outset, a physician knew with absolute certainty that her practice would remain fully profitable throughout her lifetime she would have no risk-diversification incentive to enter into the sharing arrangement. Similarly, as the future unfolds, a physician can discover just how productive she has been and whose skills are unneeded or problematic. As the future becomes known, initial bargains can begin to look less advantageous, and one party can become dissatisfied with the agreement as she discovers that she was compensated at a level below the value of her full marginal product. At this juncture, parties have an incentive to act opportunistically.<sup>20</sup>

In the physician contracting context, opportunism takes one of three forms.<sup>21</sup> First, opportunism can refer to the failure to produce the promised quantity or quality of medical care. Implementation of the risk-sharing agreement requires each physician to promise to produce at least as much as she would in the absence of a sharing arrangement. Distribution of the mutual fund, however, depends upon something other than the physician's marginal productivity. Consequently, she will have an incentive to act

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20. O. WILLIAMSON, *MARKETS AND HIERARCHIES*, *supra* note 6, at 79-83.

21. In describing the various types of opportunism, I have borrowed a set of classifications used by Gilson & Mnookin, *supra* note 10, at 330-39. Although my earlier work on physician opportunism, see Palay, *supra* note 3, captures many of the same ideas expressed by Gilson and Mnookin's labels, I have a strong interest in standardizing transaction cost jargon. In addition, these two authors' further decomposition of opportunism provides potentially interesting analytic insights.



opportunistically by shirking—producing less than she would if she retained the entire product of her efforts.

Second, once the future has been revealed, the parties can act opportunistically by demanding a larger share of the risk pool than they originally agreed to. When the parties establish a formula for sharing the returns on their respective investments, no one knows what the future holds. That is, after all, the principal impetus for a risk-sharing agreement. Later, the world is revealed, and at least some of the physicians are likely to find that their share of the compensation pool is less than their marginal product. These physicians will have an incentive to attempt to grab more income than they originally agreed to accept. Physicians in high-income specialties such as surgery or radiology often come to believe that they are subsidizing the primary care provider members of the group. This often leads to attempts to renegotiate the compensation formula.

Third, as the future unfolds and actual productivity becomes known, a physician who felt she was receiving less than her productivity warranted could also exit. That is, she could act opportunistically by leaving or threatening to leave, taking her skills, her patients, and other physicians' patients with her.

#### IV

#### INSTITUTIONAL RESPONSES

To diversify risks, the physicians require an institutional arrangement that effectively eliminates the incentives to shirk, grab, or leave. In other words, the physicians must create or find some mechanism—a governance structure—to monitor behavior, adapt the contract to changed circumstances, and ensure that agreed upon exchanges are actually performed. They presumably want the least costly arrangement possible. The specific nature of the physicians' contracting problems, however, limits the available institutional alternatives.

Under traditional economic analysis one option might be to imbed the entire governance structure in the initial contract. For example, the physicians might try to address and resolve all potential problems at the outset and devise an efficient contract. Many of the conditions that place physician capital at risk, however, also make self-enforcing contracts costly or impossible. For instance, the existence of complexity and uncertainty eliminates the possibility of comprehensive planning or once-and-for-all contracting for all contingencies.<sup>22</sup> Complexity and uncertainty make it difficult, if not impossible, to contract for every possible contingency, response, or probability associated with a given situation.

Adaptive sequential contracting—learning by doing—and market guarantees both provide obvious alternatives. However, adaptive sequential

22. Williamson, *Franchise Bidding for Natural Monopolies—In General and with Respect to CATV*, 7 BELL J. ECON. 73, 79 (1976).

contracting requires that the parties be able to rely upon their partners' promises to act in good faith during any renegotiation.<sup>23</sup> Protecting oneself during renegotiation is not difficult where market substitutes are readily available. If markets actually exist, then a surgeon who becomes dissatisfied with the risk-sharing agreement would be able to leave the group and start her own practice or join another clinic. Similarly, the partnership could simply replace the surgeon with another physician who had made similar investments in human capital.

However, there are both structural and institutional limits on the fungibility of the physician's human capital.<sup>24</sup> First, investments in training and specialization are not easily altered. A psychiatrist who enters a particular risk-diversification pool will be unlikely to become a surgeon without great cost. Similarly, the pools' training of physicians in the philosophy, practice patterns, and procedures of the group are not alterable without cost. Second, the reputation that made a physician attractive to a particular pool may also limit the physician's future alternatives. A particular reputation may make the doctor attractive to only a limited number of pools. The extent to which the initial choice of pools molds one's reputation, practice patterns, and medical philosophy further limits future alternatives. Once other physicians become aware of the attributes represented by a reputation, a physician who wishes to change her reputation will need to expend considerable resources to develop and communicate those changes. Third, a physician's investment in her relationships with her patients are not transferrable. She will be unable to use her familiarity with Patient A's personal traits to treat Patient B. To the extent that specific patients cannot follow a physician who leaves, those investments are lost. This risk is most applicable to primary care physicians, such as internists or pediatricians, who make more substantial investments in patients than do specialists, such as surgeons or radiologists. Finally, institutional constraints, such as agreements not to compete, are common in the contracts between affiliated physicians<sup>25</sup> and limit the redeployability of physician assets. Similarly, medical plans that tie patients to practices, not doctors, make it difficult for a physician to leave a practice without great cost. If she were to leave without her patients, then any investment in doctor-patient relations would be lost.

Where the parties must make non-redeployable investments to effectuate their contract obligations, any markets that might have existed during the initial bargaining will disappear once the agreement is set.<sup>26</sup> Instead, the parties will find themselves, *ex post*, in a small-numbers bargaining situation where they become subject to opportunistic conduct. Under these circumstances, standard market solutions, such as dissolving the partnership

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23. Williamson, *supra* note 22, at 79-90.

24. Palay, *supra* note 3, at 935-37.

25. Getty, *Enforceability of Noncompetition Covenants in Physician Employment Contracts: Confusion in the Courts*, 7 J. LEGAL MED. 235, 235-39 (1986).

26. O. WILLIAMSON, *MARKETS AND HIERARCHIES*, *supra* note 6, at 28-30.

and redeploying the assets, or other general purpose governance schemes, put the investments in non-redeployable assets at severe risk. Dissolving the partnership agreement places the physician in the same position she would have been in had she never attempted to enter a pooling arrangement and the feared state of nature had actually occurred. But the inability to dissolve the agreement places her in an inferior bargaining position *ex post* and subjects her to opportunistic conduct. Markets will not protect her. Thus the physician will be unwilling to enter into the pooling arrangement unless some method can be found to protect her investment in human capital adequately.

For adequate protection of their investments in idiosyncratic capital and for provision of the requisite incentives for completing the agreements, the parties require a governance structure that will foster cooperative and adaptive behavior.

#### A. Institutional Responses to Grabbing and Leaving: Of Knights and Kings and Hostage-Taking

Sometimes the old ways are the most reliable. Remember how the wicked king would promise the good knight his freedom if the knight would perform some specified service? And remember how the king would take the knight's young child or trusted servant hostage to ensure that the knight did not simply disappear? A modern counterpart to the king's taking of hostages can insure against the problems of grabbing or leaving. A mutual hostage-taking will assure all bargainers that there are real losses associated with opportunistic conduct.

Rather than the leaving of one's youngest child with one's contracting partners, the Physician-hostage exchange takes a more subtle form. The organizational equivalent of the hostage is investment in assets that either cannot be easily removed from the firm or will be destroyed if the partnership breaks up. The rationale is relatively simple. One's incentive to grab or leave is based upon a perceived divergence between the *ex ante* compensation formula and *ex post* marginal product. But a physician's *incentive* to leave depends upon her ability actually to receive this marginal product elsewhere. If the parties can devise a method by which one's marginal product will always be greater within the firm than elsewhere, they effectively will keep a physician from grabbing or leaving. Firm-specific capital<sup>27</sup> provides the requisite hostage mechanism. A partner's ability to grab more income for herself is ultimately dependent upon the viability of her threat to leave if she does not get what she wants within the firm. The more dependent a partner's marginal product is on firm-specific assets, the less viable is her threat to grab or leave.

In the physician context, firm-specific capital can take several forms. First, it can be found in a stable patient base that is tied to the partnership and not

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27. Gilson and Mnookin define firm-specific capital as "the capitalized value of the difference between a firm's earnings as an ongoing institution and the combined value of the human capital of its individual partners, if this human capital were deployed outside the firm in its next most productive use." Gilson & Mnookin, *supra* note 10, at 354.

to individual physicians. Employer health benefits that provide 100 percent of the premium of only the lowest cost health insurance plan, health plans that require minimum enrollment periods or long waiting periods prior to full coverage, and excellent associated physicians, facilities, or other benefits can all lock patients into plans, not particular primary care physicians.

In addition to its role in the hostage exchange, the stable patient base is also a desirable asset because of its enhancement of marginal productivity and its promotion of efficient task-structuring through the provision of a predictable and consistent flow of work.<sup>28</sup> With a stable patient base, schedules can be coordinated, staffing can be rationalized, and specialists need not worry about their sources for patients. A stable patient base also permits the physician to fully amortize the fixed, up-front costs associated with developing a doctor-patient relationship. These costs include gathering information about the patient's medical record, understanding the imprecise code in which the patient provides information, and developing a trust relationship with the patient.

A second form of firm-specific capital can be found in the reputation of the physician group as a whole. The firm reputation provides patients with a reliable indicator of the quality of covering or consulting physicians. It is costly and difficult before choosing a physician, and often even afterwards, for a patient to seek information about the quality of care offered by his own physician. An important source of quality-of-care information is the reputation of the physician's practice which, then, also becomes a mechanism for quality assurance. When a physician leaves a practice, she loses the advantages of her association with that reputation. More significantly, she risks the potential stigma that she left because she could not meet the standards demanded by the group.

Finally, a third form of firm-specific capital can be found in the quality of the patient base. Precisely who uses a particular group of physicians, and how sophisticated the users are as consumers of medical care, can be important signals to potential patients of the quality of the practice. If the patient base is relatively stable, then a doctor who attempts to grab or leave will be unable to take her investments with her.

## B. Attenuating Shirking: Social Control

To implement the diversification agreement, the parties also require a governance structure that weakens the incentive to shirk. To be effective the governance structure must deal with two problems. First, the structure must be sufficiently discriminating to distinguish between legitimate and illegitimate reductions in work effort. The purpose of the diversification agreement is to protect the physician from events beyond her control that affect her special set of skills and that prevent her from realizing the full

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28. *Id.*; see also F. SCHERER, INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE 89-91 (1980).

return on her investment in human capital. The intent of the contract would be nullified if the governance structure sanctioned a physician for reductions in productivity caused by the presence of a risk she hoped to mitigate through diversification. Thus the problem is to develop a method of accurately screening reduced work efforts. For example, to support the diversification agreement, the governance structure must accurately distinguish between the drop in an obstetrician's productivity attributable to unexpectedly low birth rates and that due to shirking.

Though the need to distinguish legitimate from illegitimate productivity reductions complicates the traditional monitoring problem, the solution is reasonably straightforward. The solution involves comparing individual physician work effort to that of other members of the same specialty cohort.<sup>29</sup> For example, obstetricians would be compared to other obstetricians and internists to other internists. If the work level of an individual was reduced below the minimum acceptable level of his cohort, the assumption would be that he was shirking. But if the entire cohort showed a reduction, it would be safer to assume that one of the risks that led to the diversification agreement in the first place—lower birth rates, for example—had come to pass.

But any monitoring scheme is only as good as its ability to measure performance accurately, and this limitation raises the second problem: devising a governance structure sophisticated enough to encourage not only a quantity of work, but a quality of effort as well. The problem medicine, and for that matter any profession, faces is finding a summary statistic that accurately reflects both quantity and quality of performance. First, there is the problem of measuring the amount of work effort. Measuring work effort raises questions about evaluation criteria: whether the physicians should use hours seeing patients, number of hours spent in the office, number of patients seen, gross income generated, net income generated, or any number of other measurements. There is also the problem that whatever measure of work effort is used, it is only an approximation for what it is the physicians want to measure—the level of quality and effective medical service offered. In short, monitoring actual activity provides only part of the answer to preventing shirking.

The full solution to the shirking problem involves instilling the group with a common "work ethic"<sup>30</sup> by combining prospective monitoring with a complex system of social control.<sup>31</sup> Prospective monitoring is the careful

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29. Gilson & Mnookin, *supra* note 10, at 373-75.

30. Gilson and Mnookin refer to this process as the development of a firm culture. *Id.* at 375. My notion is quite similar, though I differ in my understanding of the mechanics of the process. Consequently, I refer to it by what I consider to be a more descriptive name.

31. The motivation to do good work comes, in the first instance, from one or more of three sources. First, the physician's personality, training, and past interactions with role models may provide the primary motivating force. Second, the physician may strive to meet certain standards because of a concern that her peers may disapprove or no longer respect her. Finally, the physician can take her primary motivation from material self-interest. E. FREIDSON, *DOCTORING TOGETHER: A STUDY OF PROFESSIONAL SOCIAL CONTROL* 188-89 (1975). Where the motivation comes from is irrelevant, so long as the normative standard it produces comports with those agreed to at the outset.

selection of contracting partners to reduce the need to monitor actual contract performance.<sup>32</sup> The idea is to find a group of doctors who have a reasonably homogeneous set of characteristics and motivations, which reduces the need for explicit monitoring in the future. These characteristics will have been developed in complex ways through family life, schooling, training, and past employment. It is impossible to specify the qualities for which a particular group should look. Because shirking is a relative concept, dependent upon the definition of the expected norm, the key to successful prospective monitoring is locating like-minded individuals who agree *ex ante* on the definition of acceptable behavior.

Prospective monitoring, by reducing the probability of conflicting norms existing within the group, provides only a starting point for development of an effective group work ethic. If *ex post* observations always confirmed *ex ante* representations and impressions, governance structure would be unnecessary. Because during contract execution the world often looks different than the parties originally imagined, a complex system of social control is also required.

Social control refers to "those processes in the social system which tend to counteract the deviant tendencies."<sup>33</sup> Within a medical practice, social control requires more than simple economic incentives.<sup>34</sup> Social control can be derived from either formal or informal elements. The formal aspects of social control are manifested in administrative rules and a hierarchical authority structure. Ostensibly, minimum levels of productivity could be established by administrative rule. For example, an administration could establish a minimum number of hours that the physician would have to be in her office, seeing patients or doing paperwork, and the type of verification she must provide. Rules could also be established to specify the elements of good practice under specified conditions—for example, a physician who sees a twenty-eight-year-old male patient who is complaining of a rash and fever should perform a particular examination and order a prespecified battery of laboratory tests. Formal sanctions—running from administrative reprimand, to financial penalties, to dismissal—could be used to penalize doctors who offend the administrative standards.

Formal authority can also involve elements of a "hierarchy of titles and offices,"<sup>35</sup> with lower units subordinate to the upper levels of administration. For example, medical groups often have a hierarchically organized central administration run by of an administrator and a medical director in charge of specified areas of the practice. Below them will usually be an executive committee, the specialty group heads, and the remaining physicians. In theory, each upper unit has the authority to implement by fiat a policy that affects members of subordinate units.

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32. Palay, *supra* note 3, at 945-46.

33. T. PARSONS, *THE SOCIAL SYSTEM* 297 (1951).

34. Palay, *supra* note 3, at 938-47.

35. E. FREIDSON, *supra* note 31, at 105.

The motivation to do good work can also come from informal elements of social control. Informal controls are more likely where either the holders of authority are, for some reason, reluctant to exercise their powers or the associated practitioners are unwilling to grant the titular bosses legitimacy.<sup>36</sup> As with formal methods of social control, the informal process requires the development, monitoring, and enforcement of normative standards. Unlike the more formal structures, though, informal means of social control are rarely promulgated, codified, or officially administered. Informal social control requires each physician to compare her colleagues' actions to the set of norms specified at the outset.

The evaluation of her colleagues' work will be guided by the physician's assumptions about herself and her preconceptions about physicians in general. Most physicians believe that they and their associates are mature, ethical, conscientious, competent, and highly individualistic.<sup>37</sup> They believe, therefore, that other physicians will be self-motivated to achieve excellence and unlikely to change. Thus, before a physician will sanction another physician, even informally, she is likely to require a variety of different types of compelling information.

Unlike the system of formal methods, the requisite information for informal control is not likely to be gathered in a systematic manner. Instead, the information is likely to be compiled sporadically and impressionistically. As a first step, most physicians will evaluate a colleague by looking at her formal credentials; that is, her education, post-medical school training, and her board certifications.<sup>38</sup> Next, a physician will evaluate her colleague's productivity from the information she picks up from patients they have in common.<sup>39</sup> Information also comes from what other physicians say about a particular doctor.<sup>40</sup> Though this source amounts to little more than lunch room and hallway gossip, it provides an important source of corroborative evidence. A fourth type of evaluative information can come from shared patient charts and medical records. These can tell an interested physician something about her colleague's work habits, productivity, and quality of care.<sup>41</sup> The final, and perhaps most important, source of data comes from a physician's own experiences and relationship with the other doctor.<sup>42</sup> This last category of information can be generated from either formal consultations,<sup>43</sup> informal consultations,<sup>44</sup> or casual shoptalk.<sup>45</sup>

When information causes a physician to believe that her colleague is shirking, she has the option of sanctioning that behavior in one of two ways.

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36. *Id.* at 105-19.

37. *Id.* at 121-24.

38. *Id.* at 139-41.

39. *Id.* at 141-42.

40. *Id.* at 142-45.

41. *Id.* at 167-85.

42. *Id.* at 145-49.

43. *Id.* at 151-54.

44. *Id.* at 154-57.

45. *Id.* at 157-60.

On the one hand, she can withdraw favors in areas in which cooperation is optional.<sup>46</sup> She can, for instance, refuse to look in on the shirking colleague's patient or, alternatively, she could stop asking him to consult on particularly interesting cases.<sup>47</sup> On the other hand, a physician has the option of openly complaining about the behavior of her colleague.<sup>48</sup> Criticisms of this nature can be made openly either to the offending physician, to other physicians, or to a review committee.

## V

### ORGANIZATIONAL ALTERNATIVES

To this point, this article has argued that a group of physicians willing to share their productivity can diversify the risks associated with their investments in human capital. Doing so ultimately requires the development of a governance structure that attenuates problems of shirking or grabbing and leaving. However, the organizational forms that will produce the requisite governance arrangement have not yet been discussed. The purpose of this section is to argue that either internal organization or relational contracting will suffice.

In the context of other professions, some have argued that devising the requisite governance structure requires the development of internal organization, that is, a firm.<sup>49</sup> They have argued that without the structure of a firm, the relationships between the parties will be too unstable to support the efficient development of firm-specific capital, enforceable norms, and peer interaction. For physicians, this argument implies that diversification requires the formation of a group practice. A group practice entails the merging of physicians financially, administratively, and physically into one vertically and horizontally integrated firm; in most instances, the doctors share a single building, support staff, laboratory, and diagnostic service.

Clearly, the group practice provides a mechanism for pooling. A desire to diversify risks might in fact explain the growing popularity and prevalence of salary-based compensation<sup>50</sup> in group practices. To the extent that compensation is productivity-neutral, there exist the rudiments of a diversification agreement. Freidson's vivid description of group practice makes it clear that the physicians have the capability of developing the social control necessary to mitigate the inclination to shirk.<sup>51</sup> Firm reputation, as

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46. *Id.* at 206-09.

47. *Id.* at 208.

48. *Id.* at 209-10.

49. Gilson and Mnookin suggest that contracting will prove inadequate as a mechanism for sharing human capital. Gilson & Mnookin, *supra* note 10, at 338-39. But this view ignores both the role of relational contracting, *see* Palay, *supra* note 3, at 938-47, and the ability of contracts to incorporate elements of hierarchy, *see* A. STINCHCOMBE & C. HEIMER, ORGANIZATION THEORY AND PROJECT MANAGEMENT: ADMINISTERING UNCERTAINTY IN NORWEGIAN OFFSHORE OIL 155-66 (1985).

50. Of course, compensation by salary per se is not an indication of risk diversification. If salary is based upon a formula that accounts for productivity or if a significant percentage of total compensation is based upon a productivity bonus, the risk-diversification goals will be lost.

51. *See supra* Part IV. B.



opposed to individual reputation, can provide some, but not all, of the requisite hostages necessary to stem grabbing and leaving. If the physicians want to attenuate opportunistic behavior, they need to find some technique for tying patients to the group rather than to individual doctors. The solution is simple enough if benefit plans are written to hinder patient mobility. One possibility, in the context of an HMO, is for the contract with the patient to require a minimum enrollment period. Alternatively, the employer might be encouraged to enter into a medical services contract with only a single provider. Finally, where an employer offers more than one health plan, employees might be permitted to switch either only during prespecified open enrollment periods or with long waiting periods for full coverage.

However, the assumption that only a group practice, or a firm, can provide the requisite governance structure to support a risk-diversification agreement ignores twenty years of relational contract theory.<sup>52</sup> Relational contract theory views contracting as a process of continuous interaction, not as a discrete event with fixed terms and contingencies. I have argued elsewhere that relational contracting and quasi-integration can achieve many of the same diversification benefits of a firm.<sup>53</sup> Properly conceived clinics without walls and individual practice associations could provide convenient vehicles for diversifying risk without resort to internal organization.

The individual practice association ("IPA") is a particularly appropriate vehicle for risk diversification. An IPA is an administrative entity to which independently affiliated physicians with geographically dispersed practices have agreed to provide services. The IPA then sells the collective product of the doctors to an HMO.<sup>54</sup> Thus, the IPA is a set of contracts between unaffiliated physicians who want to integrate some proportion of their total product without physically merging their various practices into a centralized firm.

The physicians are likely to find that in order for the IPA to succeed, irrespective of the basis for compensation and the desire for risk diversification, they must develop a governance structure similar to that required to support a productivity-neutral sharing rule. In particular, the governance arrangements used to handle the wide range of potential contracting problems faced by an IPA must be internally derived and created by the parties themselves for the particular set of transactions at hand.<sup>55</sup>

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52. See generally Macaulay, *supra* note 2; Macneil, *supra* note 2; Palay, *supra* note 3; Symposium, *Law, Private Governance, and Continuing Relationships*, 1985 WIS. L. REV. 461-757.

53. Palay, *Organizing*, *supra* note 8. The remainder of this section is based on this earlier article.

54. *Id.* at 730.

55. Ironically, what I term a "proper" governance structure requires that the participating physicians give up at least some of the autonomy that they anticipated retaining. The result is that a well-functioning IPA will differ from the group practice more in degree than in kind. Admittedly the IPA and the group differ in their governance arrangements. The former tends to be more formalistic and rule-oriented. In the IPA, communication and information exchanges tend to involve both formal settings (meetings) and channels (memos). The group practice is able to take advantage of the close proximity of the physicians to foster a strong social structure and communications network. Interaction can be more informal in such an environment and norms are more likely to be

The argument set forth in this article stems from an analysis of the contracting underlying the formation of an IPA.<sup>56</sup> In short, the problems the physicians face in organizing an IPA are similar to those they must overcome in devising a risk-sharing agreement. The source of these problems is the physician's need to protect her investment in human capital.<sup>57</sup> Standard financially based incentives and market solutions—that is, dissolving the partnership and redeploying the assets—put physician investments in non-redeployable assets at severe risk. The doctors are likely to resist using third-party governance schemes, such as courts or arbitration, to enforce their contracts and protect their investments in transaction-specific capital because arrangements of this nature are expensive and tend to produce outcomes that are beyond the control of the parties.<sup>58</sup>

Because of these contracting problems the parties organizing an IPA will require a governance structure that is internal<sup>59</sup>—that is, customized by the

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established by example rather than by fiat. However, despite the emphasis on informal interaction, the evidence indicates that the group practice is the more likely of the two to be hierarchical and subject to a powerful medical director. But the differences witnessed between the IPA and the group tend to be more in degree than in kind. The differences are a product of the variations in the communications and social structure developed by the two organizations. Despite these differences, both types of HMO's maintain fundamental control over their governance arrangements. Both organizational forms can develop their own governance structure; internal control is the primary determinant of whether a governance structure is transaction-specific.

Consequently, it is possible to develop an internalized governance structure even if the parties choose not to organize themselves as a firm. Parties that are more loosely associated, as in an IPA, can effectively develop the necessary governance mechanism, but only if they are prepared to become "quasi-integrated."

Quasi-vertical integration refers to a situation where independent parties, associated by contract, develop a relationship that is so close that, at least with respect to a particular transaction, they approximate vertically integrated firms. See, e.g., Blois, *Vertical Quasi-Integration*, 20 J. INDUS. ECON. 253 (1972); Blois, *Supply Contracts in the Galbraithian Planning System*, 24 J. INDUS. ECON. 29 (1975); Kessler & Stern, *Competition, Contract, and Vertical Integration*, 69 YALE L.J. 1 (1959); Klein, Crawford & Alchian, *Vertical Integration, Appropriable Rents, and the Competitive Contracting Process*, 21 J. L. & ECON. 297 (1978).

56. Palay, *Organizing*, *supra* note 8, at 738-41.

57. The existence of uncertainty and complexity makes impossible both comprehensive planning and once-and-for-all contracting. Adaptive sequential contracting provides an alternative. However, renegotiating the contract requires that the parties act in good faith at the contract renewal phase or that markets guarantee the recontracting. Unfortunately, physicians, like everyone else, can act opportunistically, and the investments in transaction-specific human capital drastically reduce the availability of substitutes during renegotiation.

58. Macaulay found that "as one businessman put it, 'You can settle any dispute if you keep the lawyers and accountants out of it. They just do not understand the give-and-take needed in business.'" Macaulay, *supra* note 2, at 61.

59. This is not to say that a governance structure must be internally generated to be transaction-specific. One could imagine an external agency of some sort that specialized in enforcing only a certain class of transactions. Williamson offers the infrequency of interaction as one explanation for why parties to transactions involving idiosyncratic capital might want specialized, external agencies to develop. Williamson, *supra* note 8. Regulatory agencies like the Federal Communications Commission or the Interstate Commerce Commission might be classified as specialized. However, because a large number of different transactions must be handled by an agency of this sort, they are relatively less transaction-specific than governance structures that are derived by the parties themselves. In fact, parties to transactions involving idiosyncratic investments can find that even specialized agencies are inadequate and may look for means to avoid their auspices. Palay, *Avoiding Regulatory Constraints: Contracting Safeguards and the Role of Informal Agreements*, 1 J. L. ECON. & ORGAN.

parties—to the transaction.<sup>60</sup> As with the system of social control required to permit diversification, the primary purpose of the IPA governance arrangement will be to foster cooperative and adaptive behavior.

Internal organization, vertical integration, and hierarchy, which are characteristics of the group practice, are all typical examples of specialized governance structures.<sup>61</sup> Properly conceived, the governance structure of the IPA can achieve similar results. Where the group practice relies upon the geographic proximity of the participating physicians to foster social cohesion, a team-orientation, informal interaction, interdependence, and hierarchy, the IPA must find specialized governance through “quasi-integration.” Quasi-integration is characterized by a contractual relationship where nominally independent parties are so closely related that they approximate a vertically integrated enterprise.<sup>62</sup>

Geographic dispersion, infrequent physician contact, and a strong countervailing desire by the physician to maintain autonomy result in a less cohesive and homogeneous underlying social structure in the IPA than in the group practice. Therefore, the parties in an IPA will need to develop and monitor a penalty-and-reward structure that emphasizes the more formal mechanisms of social control: formalized peer interactions and expressed norms.<sup>63</sup> The former will include joint decisionmaking, consultation, meetings, review activities, and overall reinforcement and scrutiny that constitutes the environment within which the physician works.<sup>64</sup> Thus, where the peer interaction in the group practice can be carried out in the halls and while sharing charts,<sup>65</sup> the IPA requires relatively regularized and scheduled meetings, peer-review proceedings, and administrative procedures.

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155 (1985). Therefore, the existence of an internally generated governance structure indicates transaction-specificity. The reverse need not be true.

60. Not only does this indicate the degree to which the transaction remains autonomous from outside governance, but internally generated incentive systems are also not easily transferred to other parties or exchanges. Thus, they are indicative of a transaction-specific governance structure.

61. O. WILLIAMSON, *supra* note 5, at 78, 85-102.

62. *See supra* note 55.

63. As Meier and Tillotson concluded:

As is true with preadmission certification, formal concurrent review programs are likely to be more effective in an IPA setting, where practice patterns vary widely among physicians and the physician/HMO interaction may be less frequent. Concurrent review can occur informally in group practice settings, where physicians commonly discuss hospital cases; a formal concurrent review may add little. The larger and less interactive the group becomes, the more effective a formal program may be. Of the five HMOs employing concurrent review, Health Maintenance Plan/Cincinnati was the only group practice; here the review portion was viewed as a program of major importance.

Meier & Tillotson, *Physician Reimbursement and Hospital Use in HMOs* 58 (Sept. 1978) (unpublished monograph).

64. *Id.* at 73, 75, app. B.

65. In the group practice, peer interaction is much more informal than that required by the IPA. Interactions can occur naturally in the course of watching what others do, through contacts in the hall, over lunch, through conversations in the doctors' lounge, or during similar unstructured activities. Real resources are expended both in developing the trust relationships required by an informal process and in the numerous small blocks of time used for consultations and other meetings.

Social control in an IPA will also need to emphasize the development of administratively devised norms. For the most part these centrally created rules and procedures are a means of communicating standards and establishing benchmarks of behavior. The rules must be reinforced by sanctions that can range in severity from gentle reminders to monetary penalties,<sup>66</sup> or, in extreme cases, to termination.

To support a long-term contractual relationship effectively, the IPA governance structure must produce information concerning the status of transactions and the behavior of contracting parties. The data are required both to promote planning and ensure compliance. To generate the requisite information an IPA will need formalized, sophisticated, and technically complex feedback systems.<sup>67</sup> Some monitoring can be achieved prospectively by carefully choosing the physicians with whom one contracts, thereby reducing the future need to do compliance monitoring. Historically group practices have been more successful at screening and selecting physicians than have IPA's.<sup>68</sup> Some IPA's, though, do have successful physician selection programs.<sup>69</sup>

If the organizers of an IPA choose to develop a governance structure of this nature, they will find that they have already developed much of the governance required to attenuate the shirking that is potentially associated with a risk-sharing agreement. As with a group practice, the IPA can control grabbing and leaving by making reputation and patients into firm-specific assets. Thus the IPA has the opportunity to use the HMO as a mechanism to diversify risk at little additional institutional cost. There is nothing wrong with marginal productivity pricing if the parties are uninterested in risk diversification. But if they are interested in diversifying their investment in

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66. For example, the HMO could make the physician personally liable for a percentage of any revenue shortfall suffered by the practice or for the costs incurred by the practice when the physician recommends care that is later determined to be unnecessary or inappropriate.

67. The Franklin Area Health Plan ("FAHP")—a Maine-based IPA—provides an example of one such system. First, a committee conducted an *ex post* review of the admissions practices and ambulatory care patterns of the participating physicians. A series of HMO and individual physician performance indicators were generated from the review. This information was both transmitted directly to the doctors and used in internal enforcement proceedings. Meier & Tillotson, *supra* note 63, at B-7. Besides the formal retrospective review, FAHP also generated and processed informal information on concurrent review. For instance, the medical director received a continuous flow of updated data on current hospitalizations. He reviewed and discussed the cases with the admitting physician in an effort to minimize unnecessary hospital days. *Id.* at B-6.

68. The latter have faced competing objectives: (1) containing costs by careful selection of physicians, and (2) broadening the patient base by maximizing the number of participating physicians. For marketing reasons they have tended to reconcile these objectives in favor of increasing the number of physicians. Thus they tend to be less selective in choosing physicians and are often forced by their organizers (especially when the local medical society is an organizer) to accept any physician who applies. This constraint can mean having to hire physicians who are high utilizers or are not cost effective.

69. For instance, in the New Mexico Health Care Corporation "all physicians are reviewed annually for cost and quality of care in order to qualify them for reappointment as a participating provider. In the past, some have been refused reappointment." Meier & Tillotson, *supra* note 63, at 55.

human capital they can easily do so by basing at least part of their compensation structure on a sharing rule.

To put the point a different way, it is possible to develop an internalized governance structure even if the parties choose not to organize themselves as a firm. Parties that are more loosely associated—as in an IPA—can effectively develop the necessary governance mechanism; however, this development is possible only if they are prepared to become quasi-integrated. Of course, one of the attributes of quasi-integration is the degree to which the contracting parties give up their autonomy. They agree, more or less, to subordinate their individual interests to the joint interests of the organization as a whole. This effect on autonomy will certainly have an impact on a physician's HMO practice patterns. In addition, to the extent that a physician is unprepared to maintain two practice patterns—one for the HMO and one for her individual patients—her non-HMO health care services will also be influenced. Thus, physicians who want to participate in an HMO must be prepared to give up some of the autonomy that they have traditionally cherished.

## VI

### CONCLUSION

This article has argued that a physician can use contract to diversify the risks associated with her investments in human capital. By agreeing to integrate her practice with physicians who possess complementary skills, a physician can effectively eliminate much of the unsystematic risk she faces. The physicians must agree to pool the income from their practices and then distribute it among themselves on the basis of a productivity-neutral formula. The terms of the contract are conceptually quite simple; any competent attorney or experienced health care consultant could draft an agreement that would achieve the goals set forth above. The key to a successful contract resides not in the parties' skill at drafting an ironclad agreement, but in their ability to devise or otherwise locate the proper governance mechanism.

In this instance, the characteristics of the transaction and the nature of the proposed solution require the parties to devise their own governance structure. By exploring the institutional detail of that arrangement, this article has attempted to provide insight into the process of private government. An understanding of, and sensitivity to, the process of forming private agreements is important for attorneys, policy analysts, and consultants alike. Contracting parties are not limited to using formal institutions to regulate their contracting. Incorrectly assuming that formal institutions are required can lead attorneys to advise their clients improperly.

