# **Evidence on Complex Structures of Physician Joint Ventures**

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Physician ownership of health care facilities has become a controversial issue in the national debate over how to control rising health care costs. Proponents of physician ownership contend that investment by physicians in health care facilities broadens access to health care by increasing the financing available for such facilities. Critics of physician ownership contend that such ownership arrangements lead to higher prices for medical services and more frequent use of unnecessary medical procedures, without improving the quality of care. In this Article, Professors Mitchell and Scott review the current debate and present new empirical evidence based on their study of more than 2600 health care clinics in Florida. The evidence presented here indicates that physician investment in health care clinics is more widespread than previously believed. The evidence also indicates that physician investment tends to increase both the frequency of referrals to the clinics and the cost of the services provided by the clinics. In light of this evidence, the authors argue that current legislation which prohibits or restricts physician joint ventures is inadequate. They recommend that future legislation be strengthened to include stronger prohibitions and restrictions on indirect physician investment.

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#### Introduction

Significant changes have occurred in the health care sector during the last decade. Among the most important are the implementation of the Medicare prospective payment system for hospital inpatient services, the emergence of competitive alternative delivery systems, and the development of new technologies that can be used in nonhospital settings. Another important change is the increasing number of physicians who invest in or receive compensation from health care facilities to which they make referrals. Federal regulations provide for severe penalties to physicians who accept payments for patient referrals. Nonetheless, physician ownership of health care businesses to which they make referrals is not illegal if these ownership arrangements, known as joint ventures, meet certain criteria. Under joint venture arrangements, physicians may

<sup>1.</sup> For a more detailed discussion, see Judith R. Lave, The Impact of Medicare Prospective Payment System and Recommendations for Change, 7 YALE J. ON REG. 499 (1990).

<sup>2.</sup> See generally U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, FINANCIAL ARRANGEMENTS BETWEEN PHYSICIANS AND HEALTH CARE BUSINESSES: REPORT TO CONGRESS (1989).

<sup>3.</sup> See Medicare and Medicaid Programs: Fraud and Abuse OIG Anti-Kickback Provisions, 54 Fed. Reg. 35,952, 35,984 (1991) (codified at 42 C.F.R. § 1001 (1991)). For a discussion of the anti-kickback provisions, see John K. Iglehart, The Debate Over Physician Ownership of Health Care Facilities, 321 NEW ENG. J. MED. 198 (1989).

<sup>4.</sup> See Marianne Lavelle, Doctor Ownership, 14 NAT'L L.J., Oct. 21, 1991, at 1. Joint ventures that are established to facilitate investment by physicians in health care facilities take a wide variety of forms. Some joint ventures consist simply of contractual arrangements between physicians and the owners of health

participate in the ownership of clinical laboratories, radiologic imaging centers, ambulatory surgical facilities, physical therapy centers, home health agencies, durable medical equipment and oxygen suppliers, lithotripsy centers, renal dialysis centers, radiation therapy centers, home infusion businesses, and substance abuse treatment centers.<sup>5</sup>

Physician ownership of freestanding health care facilities has attracted considerable attention in the medical literature, 6 in the popular media, 7 and among government policymakers.8 Indeed, recent increases in the number of referring physicians who own health care businesses have attracted the attention of regulators and lawmakers at both the state and federal levels.9 Critics of physician ownership cite conflict of interest<sup>10</sup> and diminished competition<sup>11</sup> as reasons for concern, while proponents argue that such investments by physicians expand access to and lower the cost of health care services.<sup>12</sup> To date, both groups have relied on limited and usually anecdotal evidence to support their arguments. This Article presents findings from a comprehensive study of joint ventures involving referring physicians. The results indicate that physician ownership of health care facilities is far more pervasive than previous studies have shown.<sup>13</sup> The findings also indicate that physicians have often established more complex ownership arrangements than nonphysician owners, and that at least part of the reason for the complexity is to circumvent laws and regulations that restrict physician ownership. Our findings thus suggest that it may be difficult to design legislation to regulate physician referrals of patients to a health care business in which the physician or an immediate family member has an ownership interest. The survey results also illustrate how ownership

care facilities; others involve ownership by physicians of interests in partnerships or closely held corporations which own and operate health care facilities. See Joseph T. Sebastianelli, Health Care in the '90s and Beyond: Practice Structure, Competition, Government Regulation, and Malpractice Concerns, ALI-ABA COURSE OF STUDY (Sept. 1989) (describing structure of physician joint ventures).

<sup>5.</sup> See Jean M. Mitchell & Elton Scott, Joint Ventures Among Health Care Providers in Florida, Volume II (Sept. 1991) (unpublished report prepared for the Florida Health Care Cost Containment Board, on file with the authors).

<sup>6.</sup> See, e.g., U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES, supra note 2; John K. Iglehart, Congress Moves to Regulate Self-Referral and Physicians' Ownership of Clinical Laboratories, 322 New Eng. J. Med. 1682 (1990).

<sup>7.</sup> See, e.g., Walt Boganich & Michael Waldholz, Warm Bodies: Doctor-Owned Labs Earn Lavish Profits in a Captive Market, WALL St. J., Feb. 27, 1989, at A1; Robert Pear & Erik Eckholm, When Healers Are Entrepreneurs: A Debate Over Costs and Ethics, N.Y. TIMES, June 2, 1991, at A1.

<sup>8.</sup> See, e.g., Omnibus Budget Reconciliation Act of 1989, § 6204, Pub. L. No. 101-239, 103 Stat. 2106 (1989); see also Iglehart, supra note 6.

<sup>9.</sup> See Laurie M. Grossman, Florida May Curb Doctors' Referrals to Linked Clinics, WALL St. J., Oct. 28, 1991, at B6.

<sup>10.</sup> See, e.g., Arnold S. Relman, Dealing with Conflicts of Interest, 313 NEW ENG. J. MED. 749 (1985).

<sup>11.</sup> See, e.g., Iglehart, supra note 3, at 204.

<sup>12.</sup> See, e.g., Robert H. Rosenfeld, Market Forces Set Off Skyrocketing Interest in Hospital-Doctor Ventures, MODERN HEALTHCARE, May 1, 1984, at 60.

<sup>13.</sup> For results of previous studies, see U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES, supra note 2, and Physician Ownership of Health Care Facilities, PHYSICIAN MARKETPLACE UPDATE (Am. Med. Ass'n), Mar. 1991, at 1 [hereinafter Physician Ownership].

of joint ventures has been structured to allow physicians to profit from referrals without violating existing anti-kickback laws. Consequently, this evidence offers some important insights into more effective ways legislation may be structured to prevent such referrals. The evidence suggests that legislation that fails to recognize the complexities of joint venture arrangements and to identify the individual ultimately controlling the nominal owners of these businesses will be ineffective at curtailing the abuses associated with the practice of physician self-referral.

In Part I of this Article we present the debate on physician joint ventures. We summarize existing federal and state laws on joint ventures and the anti-kickback laws, and outline the current dispute over the adequacy of present regulation. Also in Part I, we review previously available data on the prevalence of physician involvement in joint ventures. In Part II, we describe our survey and present the survey results. We describe the scope of existing joint venture arrangements and compare the relative frequencies of complex ownership arrangements among physician and nonphysician owners. We also describe in detail two of the more complicated ownership arrangements we observed. These arrangements highlight the difficulties involved in identifying owners and in controlling referrals by the ultimate beneficial owners of health care facilities. In Part III, we present our policy recommendations based upon the evidence we obtained.

# I. The Debate Over Physician Ownership: Arguments and Evidence

Critics maintain that physician joint ventures increase costs, create conflicts of interest, and lead to over-utilization of services.<sup>14</sup> Critics also contend that joint ventures decrease access to services because these facilities "cream skim," treating only patients with extensive insurance coverage, thereby shifting the burden of care of indigent patients to competing non-joint venture health care providers.<sup>15</sup> Critics further argue that these ownership arrangements create a captive referral system which limits competition by non-joint venture providers.<sup>16</sup> This lack of competition may adversely affect the quality of services rendered and result in higher charges to consumers.<sup>17</sup>

The potential conflict of interest arising from joint venture ownership is illustrated by the case of an investor-owned diagnostic imaging center that faces intense competition for patients. In order to compete with hospitals that offer similar services, freestanding facilities frequently offer ownership interests to

<sup>14.</sup> See Pear & Eckholm, supra note 7, at A1.

<sup>15.</sup> See Joint Venture Study: Hearings Before the Florida Health Care Cost Containment Board (Sept. 25, 1991) (testimony of Mr. T.R. Ruda and Ms. Trinidad) (transcript on file with authors) [hereinafter Hearings on Joint Venture Study].

<sup>16.</sup> See Iglehart, supra note 3.

<sup>17.</sup> See Iglehart, supra note 3.

neurologists, orthopedic surgeons, and other physicians that refer patients for diagnostic imaging procedures. Although each physician's ownership compensation is not directly determined by the number of patients he or she refers to the imaging center, total profits, and hence individual distributions paid to the physician-owners, are contingent on both the total number of referrals and the number of procedures ordered by the physician-owners. The owner-physician's economic interest in referrals may conflict with his professional medical interest in proper patient care. <sup>18</sup>

Proponents of joint ventures, however, maintain that these arrangements are necessary adjustments to the reimbursement and practice style changes that occurred in the health care sector during the last decade.<sup>19</sup> Advocates argue that joint ventures increase access to new technology,<sup>20</sup> increase access to services to persons in medically underserved areas, provide economies of scale and scope, improve access to capital financing, and allow diversification of project risks.<sup>21</sup> Proponents also contend that physician-owners can better monitor the quality of services and that joint ventures enhance competition.<sup>22</sup>

In a recent public hearing on this issue, a physician group which supports such ownership arrangements reported an example of a joint venture increasing access to services. Following the experimental success of a lithotripter unit at Shands Medical Center in Gainsville, Florida, a group of urologists in the Tampa Bay area invested \$20,000 each to raise \$1 million in equity. The physicians then borrowed an additional \$3 million to purchase the lithotripter and to establish the business. The physician investors claimed that no one in the area was willing to offer this service and that their venture therefore made this new technology available to patients in the Tampa Bay area. As a result, patients saved transportation costs and were charged lower fees as well. The business was so successful that the \$3 million loan was paid off in less than two years and the equity investors were subsequently paid \$20,000 annually for each \$20,000 that they had invested.<sup>23</sup>

<sup>18.</sup> See Relman, supra note 10.

<sup>19.</sup> See Rosenfeld, supra note 12.

<sup>20.</sup> Arguments for increased access to new technology are generally predicated on the assumption that Certificate-of-Need regulations limit or prohibit the introduction of such new services by hospitals and other providers. Certificate-of-Need programs review and regulate expenditures by hospitals for physical facilities, equipment, and services. They are intended to coordinate and restrict these investments based on what is deemed appropriate for the community. Certificate-of-Need legislation would prevent the elimination of services or facilities from certain unprofitable regions and would also suggest which regions should be permitted to expand their facilities and services. For general background on Certificate of Need programs, see James F. Blumstein & Frank A. Sloan, Health Planning and Regulation Through Certificate of Need: An Overview, 1978 UTAH L. REV. 3.

<sup>21.</sup> See Rosenfeld, supra note 12.

<sup>22.</sup> Memorandum from Federal Trade Commission, Bureaus of Competition, Consumer Protection, and Economics, to Department of Health & Human Services 15 (Dec. 18, 1987) (comment concerning regulations issued pursuant to anti-kickback statute) (on file with authors).

<sup>23.</sup> See Hearings on Joint Venture Study (Sept. 25, 1991), supra note 15 (testimony of Dr. York). See also Hearings on Joint Venture Study (Sept. 13, 1991) (testimony of Mr.Thomas Mills and Dr. John

Similar examples were reported for diagnostic imaging facilities and radiation therapy centers. <sup>24</sup> In each instance, critics responded that other non-physician investors would have provided the capital necessary to establish these highly technical services in any area of need. These critics reported that, contrary to the proponents' arguments, physician investors in diagnostic imaging centers were primarily concerned about the monetary returns on their investments and were not concerned about the quality of equipment and services provided at these centers. <sup>25</sup>

This Part provides an overview of the struggle to identify and address the potential abuses of physician joint ventures. The first section describes the history of legislative action in this area. The second section summarizes the current dispute over the need for more extensive measures. The third section reviews the limited empirical evidence that was available to assist decision-makers in their deliberations prior to our survey.

## A. Regulation of Physician Referrals and Ownership Arrangements

Numerous laws and regulations reflect the public concern over physician joint ventures. This Section summarizes the major laws and regulations that pertain to physician self-referral.

## 1. Federal Law and Regulations

Since the inception of Medicare and Medicaid, federal policymakers have expressed concern over the potential conflicts of interest created by joint ventures between physicians and health care entities to which they make referrals. The Social Security Amendments of 1972 were the first explicit policies aimed at preventing inappropriate provider referrals. These amendments outlawed payments for referrals under the Medicare or Medicaid programs. The penalties for violations of the law included a misdemeanor conviction, a sentence of up to a year in prison, and a \$10,000 fine. Nevertheless, the law did not directly regulate ownership of health care businesses.

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<sup>24.</sup> See Hearings on Joint Venture Study (Sept. 25, 1991), supra note 15 (testimony of Dr. Richard Sorace and Mr. Ken Scott).

<sup>25.</sup> See id. (testimony of Ms. Hope Foster, Mr. Zachary Diechtman, and Mr. Robert Karl).

<sup>26.</sup> Social Security Amendments of 1972, Pub. L. No. 92-603, § 242(b), 86 Stat. 1329, 1419 (repealed by Medicare and Medicaid Patient and Program Protection Act of 1987, Pub. L. No. 100-93, § 4(e), 101 Stat. 689).

<sup>27.</sup> Section 242(b) of the Social Security Amendments of 1972, *supra* note 26, added § 1877(b)(2) to the original Social Security Act.

#### a. Amendments to the 1972 Law

The Medicare-Medicaid Anti-Fraud and Abuse Amendments of 1977,<sup>28</sup> strengthened and further expanded the scope of this law five years later. The amendments made it a felony to solicit, receive, offer, or pay any remuneration in return for referrals of patients or business under either the Medicare or Medicaid Programs. Such transactions were punishable by up to five years in prison and a maximum fine of \$25,000.<sup>29</sup> However, this amended law contained ambiguities about intent that prompted Congress to revise it in 1980. The revisions stipulated that such conduct was illegal only if the referrals were made knowingly and willingly.

In interpreting these statutes, courts generally have ruled that physician ownership of health care entities does not entail a per se violation of the anti-kickback laws.<sup>30</sup> Nevertheless, excessive returns on investment in a health care facility might constitute a violation of these laws in circumstances where such returns are provided to induce referrals. In the authoritative case on this issue, United States v. Greber, the court found that such transactions violate the Medicare fraud statute if one of the purposes of the payments to a physician from a diagnostic center is to induce referrals.<sup>31</sup> This reasoning was supported in recent rulings by two federal appeals courts.<sup>32</sup> In both cases, the defendants were found guilty of violating anti-kickback laws even though there were several purposes for the payments, only one of which was to induce referrals.

In 1987, Congress adopted legislation authorizing the Inspector General to institute civil proceedings to exclude violators of the anti-kickback statute from federal health programs.<sup>33</sup> Previous attempts to prosecute providers who were suspected of violating the anti-kickback laws had been unsuccessful because the government attorneys lacked the necessary administrative authority to achieve their objective. This law also required the Secretary of the Department of Health and Human Services to publish regulations identifying those practices

<sup>28.</sup> Pub. L. No. 95-142, 91 Stat. 1175 (codified as amended in scattered sections of 42 U.S.C.).

<sup>29. 42</sup> U.S.C. §§ 1320a-7b(b) (originally codified at 42 U.S.C. § 1395nn).

<sup>30.</sup> U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES, supra note 2.

<sup>31.</sup> United States v. Greber, 760 F.2d 68 (3d Cir. 1985).

<sup>32.</sup> See United States v. Bay State, 874 F.2d 20 (1st Cir. 1989) (concerning a hospital employee who reviewed bids and awarded contracts for ambulance services while providing consulting services to one of the bidders); United States v. Kats, 871 F.2d 105 (9th Cir. 1989) (involving a diagnostic lab and a community clinic that agreed to share payments for patient referrals made by the clinic). A broad interpretation of the anti-kickback laws was also adopted in United States v. Lipkis, 770 F.2d 1447 (9th Cir. 1985). The court in Lipkis determined the value of the alleged services (collecting specimens, spinning down blood, and carrying insurance) was worth far less than the payments from the independent lab; hence, these payments were viewed as "kickbacks" for referrals. See id.

<sup>33.</sup> Medicare and Medicaid Patient and Program Protection Act of 1987, Pub. L. No. 100-93, 101 Stat. 680 (codified at scattered sections of 42 U.S.C.).

and arrangements that would not be classified as violations of the anti-kickback statutes.<sup>34</sup>

In April 1989, the Inspector General released a "fraud alert" on joint ventures.<sup>35</sup> This document stated that any investment interest, whether or not it was directly tied to referrals, could violate the anti-kickback laws. The document highlighted three areas of concern: the method of selecting and retaining investors, the nature of the ownership entity (whether it was set up as a "shell" or holding company that provided no services directly), and the amount invested by each physician, as well as the rate of return on the investment.

With respect to the first area of concern, the Inspector General noted that suspect joint ventures include arrangements where physicians are chosen as investors because they are likely to refer patients to the facility. An indication of unlawful activity is a provision stipulating that the physician-investor will divest ownership if he ceases to practice in the service area.

The second area of concern relates to the business structure of joint ventures. Specifically, the Inspector General meant to target arrangements between two health care providers in the same line of business. For example, in the case of clinical laboratories, a suspect situation would exist where one entity is an established provider that acts as a referring lab, and the other provider is essentially a "shell" lab which performs little or no testing on site. Although the "shell" lab bills Medicare or some other third-party payer directly for these tests, the procedures are performed at the referring lab.

The third concern relates to financing and profit distribution. Frequently, physicians invest only a nominal amount (ranging between \$500 and \$1500), but they receive large returns on these investments, often exceeding 100% per year. Such arrangements are questionable because the physicians are often able to borrow even the nominal amount they invest from the health care entity in which they are "investing" and they often repay the "loan" entirely through deductions from subsequent profit distributions.

Despite these concerns, the only federal regulation that explicitly prohibited physician ownership and self-referral of patients prior to 1989, pertained to home intravenous (IV) drug therapy treatments and home health agencies. The Medicare Catastrophic Coverage Act of 1988, 36 prohibited a home IV therapy provider from rendering services to a Medicare patient if the services had been ordered by a physician who had an ownership interest in the provider agency. However, Congress subsequently repealed this provision. 37

<sup>34.</sup> Id. at § 14(a), 101 Stat. 680, 697 (codified at 42 U.S.C. § 1320(a)-7b).

<sup>35.</sup> See Iglehart, supra note 3.

<sup>36.</sup> Medicare Catastrophic Coverage Act of 1988, Pub. L. No. 100-360, § 203(c)(1)(F), 102 Stat. 683, 722 (codified at 42 U.S.C. § 1395m).

<sup>37.</sup> Medicare Catastrophic Coverage Repeal Act of 1989, Pub. L. No. 101-234, 103 Stat. 1979.

## b. The Ethics in Patient Referrals Act

Because joint venture arrangements among health care providers have proliferated in recent years, some members of Congress contend that existing anti-kickback laws are not sufficient to prohibit the increasing prevalence of fraud and abuse in the health care sector. This concern prompted Representative Fortney H. (Pete) Stark, chairman of the House Ways and Means Subcommittee on Health, to introduce a bill known as the "Ethics in Patient Referrals Act" in February of 1989.<sup>38</sup> This bill addressed the problem of conflicts of interest attributable to "self-referrals," that is, the referral of a patient to a health care facility or provider with whom the physician has a financial relationship.<sup>39</sup>

The original Stark bill would have prohibited a physician from referring Medicare patients to any health care entity in which the physician or an immediate family member of the physician had an investment interest. This prohibition on referrals also covered any facility with which the physician had a compensation arrangement. The measure would have further prohibited the health care entity from billing Medicare, the patient, or any other insurer for services rendered through referrals from physician investors.

The bill was amended in June of 1989 to gain additional support in Congress. The revised bill contained a grandfather clause which exempted physician-owned entities that existed prior to March 1, 1989. 40 However, the conference committee which finalized the legislation dropped this provision. The final version, which Congress passed as part of the Omnibus Budget Reconciliation Act of 1989, 41 prohibits physicians who have ownership interests in or compensation arrangements with clinical laboratories from referring Medicare patients to these entities for testing. This ban on physician referrals, which became effective January 1, 1992, also covers labs in which a physician's immediate family member has an investment interest.

The law prohibiting self-referrals exempts certain arrangements. The exemptions include labs located within physicians' offices, group medical practices or health maintenance organizations (HMOs), labs in hospitals where the referring physician maintains staff privileges (provided that his or her investment interest is in the entire hospital as opposed to the clinical lab), and laboratories located in rural areas or in hospitals in Puerto Rico. Physicians may

<sup>38. 135</sup> CONG. REC. H240 (daily ed. Feb. 9, 1989) (statement of Rep. Stark).

<sup>39.</sup> In his statements endorsing the bill, Rep. Stark commented: "the payment of any remuneration, directly or indirectly, overtly or covertly, in cash or kind... is illegal.... Unfortunately, clever deal makers have found a loophole. Referrals schemes are being disguised as 'legitimate' business arrangements, most commonly as 'partnerships' involving referring physicians, but also as 'consulting' or similar arrangements. The general intent is quite clear: to 'lock in' referrals by creating a web of financial relationships binding the referring physician to the provider." Iglehart, supra note 3, at 200.

<sup>40.</sup> See Iglehart, supra note 3, at 201.

<sup>41.</sup> Pub. L. No. 101-239, § 6204, 103 Stat. 2137, 2236 (codified at 42 U.S.C. § 1395nn). See Iglehart, supra note 3, for details.

also own stock in and refer patients to labs that are publicly traded corporations with assets exceeding \$100 million.<sup>42</sup> These exemptions could limit the impact of the law.

The law further exempts from the ban on self-referrals certain compensation arrangements between physicians and laboratories. These exemptions include payments from a hospital to a physician employee, payments for leasing office space (provided such payments are not determined by the number of referrals), and payments by a hospital to a physician to attract the physician to relocate within the hospital market area (provided such payments are not tied to the number of referrals). Finally, the prohibition does not apply to lab tests requested by a pathologist for another physician if that pathologist supervises the testing.<sup>43</sup>

The Stark legislation further requires all health care entities that bill Medicare to report the names and Medicare-provider numbers of all physician-owners and of all physicians whose immediate family members are owners. Facilities which fail to report this information are subject to civil penalties of up to \$10,000 per day of violation. Similarly, all claims for referred services must list the name and Medicare identification number of the referring physician. The information gleaned from these reporting requirements will reveal which health care entities are physician-owned and the number of patients referred to these facilities by physician-owners. The most significant weakness in the data collection procedure is that the survey form does not require disclosure of indirect ownership interests.

Penalties for violations are substantial. Persons who submit claims for illegal referrals and referring physicians who fail to refund payments for any illegal referrals are subject to civil penalties of up to \$15,000 for each service rendered. Cross-referrals schemes and similar arrangements established between health care providers to lock-in referrals are illegal and are subject to civil penalties of up to \$100,000 for each such arrangement. Any physicians engaging in such violations may also be excluded from the Medicare program.

Since the Stark legislation and the reporting requirements do not explicitly prohibit referrals by-indirect owners, it may be possible to circumvent these laws through complex indirect ownership arrangements. Although compensation in such situations is not directly linked to the number of referrals, aggregate profits of the venture are contingent on price, total referrals, and utilization.

<sup>42. 42</sup> U.S.C. § 1395nn(c)(2) (1992).

<sup>43.</sup> Id. at § 1395nn (1992).

<sup>44.</sup> Id. at § 1395nn(g)(5).

<sup>45.</sup> See Iglehart, supra note 6, at 1684.

<sup>46. 42</sup> U.S.C.A. § 1395nn(g)(3) (1992).

<sup>47.</sup> Id. at § 1395nn(g)(4).

<sup>48.</sup> See Iglehart, supra note 6, at 1684.

Since the referring physicians can usually control all of these factors, individual ownership compensation does depend indirectly on referrals and utilization.

## c. The "Safe Harbor" Regulations

"Safe harbor" regulations were originally outlined in a Notice of Proposed Rulemaking published in the *Federal Register* on January 23, 1989.<sup>49</sup> In the draft document, the only stated "safe harbor" with respect to physician-ownership was investments at fair market prices in large corporations (those with assets in excess of \$5 million and a minimum of 500 stockholders).<sup>50</sup> "Safe harbors" were also proposed for compensation arrangements involving space and equipment rentals as well as management services that fell within guidelines specified to limit abuse.<sup>51</sup> Ownership or compensation arrangements that did not satisfy these criteria would have constituted a violation of the anti-kickback laws.

After the Office of the Inspector General revised the proposed "safe harbors" on the basis of public comment, the Department of Health and Human Services issued the final version of the regulations in the *Federal Register* on July 29, 1991, which became effective immediately.<sup>52</sup> Under the new rules, investors in secondary health care service-providers may be subject to prosecution and exclusion from the Medicare program unless they meet specific criteria. First, no more than 40% of an entity's investors may be doctors or hospitals in a position to refer patients to the enterprise.<sup>53</sup> Second, no more than 40% of the enity's revenue may come from referrals by such investors.<sup>54</sup> However, physicians investing in large publicly traded corporations with at least \$50 million in assets and who were not offered a special deal to invest would be granted protection.<sup>55</sup>

The new rules also limit space and equipment rentals, personal services, management contracts, referral services, warranties, sale of practices, discounts, group purchasing organizations, and the waiver of beneficiary deductibles and coinsurance.<sup>56</sup> Yet, as with of the Stark legislation, the definition of "ownership" may not capture indirect investment through parent corporations.

<sup>49.</sup> See Medicare and Medicaid Anti-Kickback Regulations, supra note 3, at 3090-93.

<sup>50.</sup> Id. at § 1001.952(a).

<sup>51.</sup> Id. at § 1001.952(c).

<sup>52.</sup> See Medicare and Medicaid Anti-Kickback Regulations, supra note 3, at 35,984.

<sup>53.</sup> Id. at § 1001.952(a)(2)(i).

<sup>54.</sup> Id. at § 1001.952(a)(2)(vi).

<sup>55.</sup> Id. at § 1001.952(a)(1).

<sup>56.</sup> Id. at §§ 1001.952(b)-(k).

## 2. State Regulation

The increasing number of joint venture arrangments between health care entities and physicians who make referrals to and receive compensation from these facilities has attracted legislative attention in many states. For example, thirty-six states have laws that prohibit physicians from receiving or paying monetary or in-kind compensation for referrals.<sup>57</sup> These laws are generally analogous to the federal prohibitions on payments for referrals of Medicare and Medicaid patients. However, the state anti-kickback statutes are broader than the federal law since they protect all health care purchasers.

A few states restrict physician referrals to health care facilities in which the physician has an ownership interest. Michigan, for example, prohibits physicians from referring their patients to any health care entity in which the practitioner has a financial interest. However, although this law has been in effect for several years, it has never been strictly enforced. Pennsylvania recently adopted similar legislation, but its law pertains only to patients receiving state medical assistance. Under Delaware law, it is illegal for physicians to refer patients to physical therapy centers in which they have an investment interest. The Delaware law further prohibits physical therapists from working for physicians as salaried employees within the physician's practice setting. New Jersey lawmakers adopted legislation banning self-referrals for nearly all types of health care facilities. However, existing joint venture arrangements were "grandfathered in" and thus were allowed to continue operating subject to disclosure requirements. The only exempt facilities are radiation therapy facilities, lithotripsy centers, and renal dialysis centers.

While Michigan is the only state with a complete ban and no grandfather clause on physician referrals to facilities in which they have ownership interests, many states have laws or regulations that prohibit physicians from exploiting patients for financial gain. Under California law, for example, referrals that are medically unnecessary, and that are made only because the practitioner has an ownership interest in the facility, are illegal.<sup>62</sup>

A number of states mandate that patients have freedom of choice as to where they receive services. For example, a physician in Missouri can have her

<sup>57.</sup> U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES: FINANCIAL ARRANGEMENTS BETWEEN REFERRING PHYSICIANS AND HEALTH CARE BUSINESSES: STATE LAWS AND REGULATIONS 6 (1989).

<sup>58.</sup> Michigan's Public Health Code forbids physicians from "directing or requiring an individual to purchase or secure a drug, device, treatment, procedure or service from another person, place, facility or business in which the licensee has a financial interest." MICH. COMP. LAWS ANN. § 333.16221(e)(iv) (West 1979).

<sup>59.</sup> See 35 PA. CONS. STAT. § 449.22 (1988); PA. STAT. ANN. § 1407.

<sup>60.</sup> See DEL. CODE ANN. tit. 24, § 2616(a)(8) (1983) (relating to the practice of physical therapy).

<sup>61.</sup> S. 3251, 204th Leg., 2d Reg. Sess. (introduced by Senator Richard Cody to amend Section 2 of Pub. L. No. 1989, C. 19).

<sup>62.</sup> CAL. BUS. & PROF. CODE § 650 (West 1990)

license revoked if she requires, as a condition of the patient-physician relationship, that the patient receive drugs, devices, or other professional services directly from facilities either owned by the physician or associated with her practice.<sup>63</sup>

Several states require physicians to disclose their financial interests in medical facilities to patients under certain circumstances. These states include Arizona, California, Delaware, Florida, Massachusetts, Nevada, Pennsylvania, Virginia, Washington, and West Virginia.<sup>64</sup> The stringency of the disclosure laws, however, varies significantly among the states. In Pennsylvania and Virginia, the disclosure laws apply to any financial interest in a health care facility to which the physician makes a referral. Physicians must also inform their patients that they may obtain services at another facility if they so choose.<sup>65</sup> Under Florida law, referring health care practitioners are required to disclose any financial interest in a joint venture involving the provision of medicinal drugs or physical therapy to their patients in advance and in writing.66 Florida law also contains a general disclosure law for physicians. However, this statute only applies to equity interests exceeding 10%.<sup>67</sup> Minnesota law also requires physicians to disclose financial interests to their patients in advance and in writing.<sup>68</sup> The Minnesota law further stipulates that the disclosure statement must inform the patient that he is free to obtain care elsewhere.<sup>69</sup> The effectiveness of all these state requirements is limited because the laws apply only to equity ownership in the business that exceeds threshold levels of 5 or 10%70

#### B. The Current Debate

#### 1. Current Deliberations by Policymakers

Congress is currently conducting hearings to examine the possibility of extending the prohibition on the referral of Medicare patients to physician owned clinical laboratories to include other health care facilities. However, at the time of publication, no bills that would further restrict physician self-referral have been introduced at the federal level. Concurrently, some states are contemplating the adoption of a similar prohibition on physician referrals at the state level. For example, the Florida legislature recently passed a bill which prohibits

<sup>63. 1989</sup> Mo. Legis. Serv. 334.100(2)(21) (Vernon).

<sup>64.</sup> U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES, supra note 57, at 5.

<sup>65. 35</sup> PA. CONS. STAT., at § 449.22 (1988); VA. CODE ANN. § 54.1-2964 (Michie 1991).

<sup>66.</sup> FLA. STAT. ANN. ch. 455.25 (Harrison Supp. 1991).

<sup>67.</sup> Id. at ch. 458.327(2)(c).

<sup>68.</sup> MINN. STAT. ANN. § 147.091(p)(3)-(4) (West 1989).

<sup>69.</sup> Id. at § 147.091(p)(4).

<sup>70.</sup> See U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES, supra note 2.

centers, physical therapy facilities, and radiation therapy facilities in which the physician or an immediate family member has either a direct or indirect ownership interest. Under the new law, physician owners of existing joint ventures in these designated health care facilities must either divest their ownership interests or cease referring to these facilities prior to October, 1995. The legislation also caps fees for designated services at 115% of the Medicare limiting charge for non-participating physicians providing such services. Hence, these guidelines now impose limitations on the number of referrals and the percentage of revenues generated by physician owners. Finally, the new law imposes severe monetary penalties for violations. He New York and California legislatures will be considering similar bills which would prohibit physician referrals to any health care facility in which the physician or an immediate family member has an investment interest. The continuing widespread attention regarding issues surrounding physician self-referral is unlikely to diminish until policymakers make more progress toward solving the problem.

## 2. The Position of Physician Organizations

The American Medical Association (AMA) initially opposed Representative Stark's Ethics in Patient Referrals Bill. <sup>76</sup> The AMA pointed out that most of the evidence cited by Stark was anecdotal. Although the AMA expressed concern about the ethical conflicts of interest presented by physician self-referral, they opposed a complete ban on physician investment in such circumstances. The AMA contended such prohibitions were anti-competitive, could curtail access to care, and could adversely affect quality. Instead, the position of the AMA was that the referral of patients to facilities in which the physician had an investment interest was allowable subject to specific criteria. First, the physician was required to notify the patient of her investment interest. Second, the physician was required to inform the patient that the recommended services could be obtained at another facility. Third, the physician's primary concern had to be for the patient; exploitation for financial gain was considered contrary to the ethics of the medical profession. <sup>77</sup>

<sup>71.</sup> See Fla. H.R. 955, 1992 Reg. Sess. (codification no. 92-178) (creating Patient Self-Referral Act of 1992).

<sup>72.</sup> Id. at § 15.

<sup>73.</sup> Id. at § 16; see also id. at § 11(2) (codified at § 407.60 Fla. Stat.) for regulation dealing specifically with fee cap for radiation therapy procedures.

<sup>74.</sup> Id. at §§ 7(e) and (f).

<sup>75.</sup> Robert Pear, Florida Expected to Ban Referrals by Doctors to Clinics They Own, N.Y. TIMES, Apr. 6, 1992, at A20.

<sup>76.</sup> See Iglehart, supra note 3, at 203.

<sup>77.</sup> See James S. Todd & Janet K. Horan, Physician Referral—The AMA View, 262 JAMA 285, 395-96 (1989).

In December 1991, the AMA adopted a new policy regarding the practice of physician self-referral. The current policy is that physicians with investment interests in health care businesses outside their office practice should not refer patients to these facilities unless the physician provides care or services at that facility, or unless "there is a demonstrated need in the community for the facility and alternative financing is not available."78 In adopting this policy, the AMA emphasized that a physician's professional obligation is to the wellbeing of his or her patients and that the financial interest created by joint ventures results in at least the appearance of a conflict of interest. The only joint ventures permissible under the new AMA guidelines are facilities established because there is a demonstrated need in the community and alternative financing is not available. In such exceptional circumstances, the guidelines provide strict limitations on the allowable monetary returns to physician-owners and stringent requirements for disclosure to patients, third party payers, and eligible investors. In adopting this policy, the AMA cited the Florida study as persuasive evidence of the problems that may arise when referring physicians own health care businesses.<sup>79</sup>

Representatives of both the American College of Surgeons and the American College of Radiology opposed the practice of self-referral in medicine during the 1989 Congressional hearings. 80 Both groups argued that referral for profit is unethical and is not in the best interest of the patient. Both organizations supported legislation banning the practice of self-referral. 81 Dr. Arnold Relman, former editor of the New England Journal of Medicine, adamantly expressed similar views. 82 He argued that since the physicians do not supervise or provide these services directly, self-referrals encourage unnecessary duplication and over-utilization of facilities and service, thereby adding significantly to the costs of health care. 83

#### 3. Positions of Other Health Related Organizations

Many consumer groups, nonphysician health related professionals, health insurers, and health care businesses have expressed concern over the conflicts of interest arising from the practice of physician self-referral. Most of these organizations favor the enactment of more encompassing legislation to prohibit physician owners from referring patients to health care facilities in which they have an investment interest. These organizations include the American Physical

<sup>78.</sup> AMERICAN MEDICAL ASSOCIATION, REPORT OF THE COUNCIL OF ETHICAL AND JUDICIAL AFFAIRS 6 (1991) (unpublished report, on file with the author).

<sup>79.</sup> See id. at 2.

<sup>80.</sup> See Iglehart, supra note 3, at 203.

<sup>81.</sup> *Id*.

<sup>82.</sup> Id. at 204.

<sup>83.</sup> Id.

Therapy Association, the Blue Cross-Blue Shield Association, the Health Insurance Association, the National Association of Medical Equipment Suppliers, and the American Association of Retired Persons.<sup>84</sup> They oppose physician ownership of freestanding health care facilities because it creates a captive referral system between physician-owners and these entities. These groups maintain that under such circumstances, non-joint venture facilities find it difficult to compete, even though they may offer lower prices and comparable or superior care.<sup>85</sup>

## C. Existing Evidence on Joint Venture Ownership

#### 1. Federal Studies

Two congressionally-mandated studies have evaluated the prevalence and effects of physician ownership of health care entities to which they make referrals. Both studies collected information identifying Medicare-provider physician-owners of health care entities. Such information is not available from Medicare carriers, state governments, or the federal government.

## a. The Office of the Inspector General's Study

The Office of the Inspector General (OIG) conducted two surveys of health care providers in eight states to determine the prevalence, nature, and impact of physician ownership of medical businesses to which they make referrals. <sup>86</sup> The states examined were Arkansas, California, Connecticut, Florida, Michigan, New York, West Virginia, and Missouri. The survey of physicians indicates that 12% of the physicians who bill Medicare have ownership interests in facilities to which they make referrals. <sup>87</sup> The results further suggest that about 8% of the physicians who bill Medicare have some non-ownership type of compensation arrangement with one or more of the health care facilities to which they make referrals. <sup>88</sup> The percentage of physician owners in Florida was the highest of the eight states surveyed; over 20% of the physicians in Florida were estimated to have ownership interests in facilities to which they refer patients. <sup>89</sup>

The OIG study included a separate survey of health care businesses that provide services to Medicare patients. Estimates calculated from the data show that, nationally, referring physicians have ownership interests in at least 25%

<sup>84.</sup> Id.

<sup>85.</sup> See id. .

<sup>86.</sup> See U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES, supra note 2, at 8-9.

<sup>87.</sup> Id. at 11.

<sup>88 14</sup> 

<sup>89.</sup> Id. at app. B, Table B1.

of freestanding clinical labs, 8% of durable medical equipment suppliers, and 27% of freestanding physiological labs or imaging centers. 90 In the eight states examined, Medicare patients of referring physicians with ownership interests received significantly more clinical laboratory services and significantly more diagnostic imaging services than the general population of Medicare beneficiaries. 91 Although this study reported no overall difference in utilization rates of durable medical equipment between Medicare patients of physician owners and the general population of Medicare beneficiaries, significant variation was found on a state by state basis. 92

# b. The General Accounting Office Study

During the congressional hearings on the Stark bill, Michael Zimmerman, director of Medicare and Medicaid issues for the General Accounting Office (GAO), presented preliminary results from a study focusing on physician referrals to clinical laboratories and diagnostic imaging centers in Maryland and Pennsylvania. Preliminary figures suggested that about 18% of the freestanding clinical labs and imaging centers in Maryland are owned by one or more physicians in specialties not providing consultative services for these health care entities (pathologists render clinical laboratory consultative services and radiologists interpret X-rays and scans at imaging centers). In Pennsylvania, referring physicians own about 29% of the freestanding labs and imaging facilities in part or in their entirety. In Maryland, about 8.6% of the physicians who bill Medicare have an ownership interest in either a clinical lab or diagnostic imaging facility. Similar estimates for Pennsylvania were not available at that time.

#### 2. The American Medical Association Survey

Results from a 1990 survey by the American Medical Association show that about 8% of the 4,000 physicians surveyed indicated they had ownership interests in private health care facilities.<sup>97</sup> Physician owners were more likely to be surgical specialists and have net incomes in excess of \$150,000.<sup>98</sup> Physi-

<sup>90.</sup> Id. at 14-15.

<sup>91.</sup> Id. at 18-21.

<sup>92.</sup> Id. at 21.

<sup>93.</sup> Referring Physicians' Ownership of Laboratories and Imaging Centers: Hearings Before the Subcomm. on Health of the House Comm. on Ways and Means, 101st Cong., 1st Sess. 363 (1989) [hereinafter Subcomm. on Health] (testimony of Michael Zimmerman).

<sup>94.</sup> See id. at 383.

<sup>95.</sup> Id. at 383-84.

<sup>96.</sup> Id. at 384.

<sup>97.</sup> See Physician Ownership, supra note 13, at 2.

<sup>98.</sup> Id. at 2.

cians in the South and those in states with regulation or legislation affecting ownership were more likely to have investment interests in health care facilities to which they refer patients.<sup>99</sup> Physicians were most likely to have ownership interests in magnetic resonance imaging (MRI), radiology, or clinical laboratory facilities.<sup>100</sup>

# II. The Florida Health Care Cost Containment Board Survey

We recently conducted a comprehensive study, mandated by the Florida legislature, to evaluate the effects of physician joint ventures on access, costs, charges, and utilization of health care services in Florida. The Florida Health Care Cost Containment Board contracted us to conduct the study. When we began the study in February 1990, the limited available empirical evidence suggested that nationally from 7 to 12% of referring physicians had an investment interest in health care facilities to which they referred patients for services. We found that physician joint ventures were much more pervasive in Florida; more than 40% of the physicians involved in direct patient care had an investment interest in a health care business to which they referred patients for services. On the physicians involved in direct patient care had an investment interest in a health care business to which they referred patients for services.

The results of our study provide compelling evidence that, on average, utilization, charges, and profits are higher, while access to poor persons is more limited, when referring physicians own certain types of facilities (clinical laboratories, diagnostic imaging centers, and physical therapy and rehabilitation facilities). <sup>103</sup> Further, our study found no evidence that joint ventures increase access to underserved groups. We should note that, with the exception of physical therapy services, we did not evaluate differences in the quality of services. However, in the case of physical therapy and rehabilitation facilities we found that physician joint ventures generally provide lower quality service. This conclusion is based on evidence that shows that licensed physical therapists spend less time with patients at each visit in those facilities. <sup>104</sup>

Our results and the evidence from previous studies clearly indicate that physician joint ventures have deleterious effects on the provision of diagnostic imaging services, clinical laboratory testing, and physical therapy services. We conclude from these results that physicians who have investment interests in

<sup>99.</sup> Id. at 2.

<sup>100.</sup> Id. at 2.

<sup>101.</sup> See Todd & Horan, supra note 77, at 395.

<sup>102.</sup> See Mitchell & Scott, supra note 5, at I-14.

<sup>103.</sup> These three facility types account for over 60% of physician investors, and for 60% of all joint ventures in Florida. For other facility types the results were either inconclusive (ambulatory surgical centers, durable medical equipment suppliers, home health agencies, and radiation therapy centers) or physician ownership had no deleterious effects (hospitals and nursing homes). See id. at Table 1.3.

<sup>104.</sup> See id. at IX-5-6.

such health care businesses should be barred from referring their patients to those facilities. In our study we found that physician joint ventures were routinely structured as complex ownership arrangements. Therefore, in order to be effective, any legislation designed to regulate physician joint ventures must account for such complex indirect ownership arrangements.

## A. Survey Design and Data Collection Procedures

The results we report are based on data we collected for our study commissioned by the Florida Legislature. Since information concerning the owners of facilities which provide health care services in Florida is not reported to the state, we designed questionnaires to obtain data on the ownership and financial characteristics of health care businesses in Florida. The Survey Research Laboratory at Florida State University, the staff of the Florida Health Care Cost Containment Board, and an advisory panel of experts assisted us. We compiled mailing lists for ambulatory surgical facilities, clinical laboratories, diagnostic imaging centers, durable medical equipment suppliers, home health agencies, acute care hospitals, mental health treatment centers, nursing homes, physical therapy-rehabilitation centers, psychiatric hospitals, and radiation therapy centers. The survey process consisted of three mailings staged over a three-month period. We conducted an intensive effort of telephone follow-up calls to responding facilities to obtain missing data and to correct inconsistent information reported on the questionnaires.

## 1. Overall Response Rates

We mailed questionnaires to over 3,000 health care facilities providing services in Florida. Deleting the "not applicable" and "return to sender" facilities from the mailing lists resulted in 2,669 eligible facilities. Altogether, 82.4%, or 2200, of the eligible facilities submitted surveys with usable and consistent information describing the nature of their ownership arrangements. The final response rates for the individual facility groups were: ambulatory surgical facilities (90.7%), clinical labs (80.1%), community mental health centers (85.1%), diagnostic imaging centers (72.7%), durable medical equipment businesses (66%), home health agencies (78.3%), hospitals (95.4%),

<sup>105.</sup> The Florida Legislature required in 1989 that the Health Care Cost Containment Board conduct a study to determine the scope and nature of joint ventures between health care providers. Under the enabling legislation, a joint venture is defined as any "ownership or compensation arrangement" that exists between health care providers. The law requires that the study yield data-based conclusions regarding the impact of joint ventures among health care providers on costs, quality, access, and utilization of medical services in Florida. See 1989 Fla. Laws ch. 354.

<sup>106.</sup> See Mitchell & Scott, supra note 5, at I-3.

nursing homes (97.1%), physical therapy centers (83.7%), psychiatric hospitals (95.7%), and radiation therapy centers (71.8%).<sup>107</sup>

In order to evaluate non-response bias, we conducted a telephone follow-up survey with non-respondents from the three facility groups that initially had response rates ranging between 50 and 60%: physical therapy and/or rehabilitation facilities, diagnostic imaging centers, and durable medical equipment suppliers. The telephone follow-up of non-respondents revealed that non-responding facilities were more likely to have referring physician owners. 108

## 2. Complex Ownership Arrangements

A significant percentage of the responding health care facilities indicated that they were wholly-owned subsidiaries of a parent corporation or parent partnership. Since such parent organizations may be owned by health care professionals or health care entities, we surveyed all such parent organizations to obtain information about their ultimate controlling owners. The follow-up survey revealed that many of the individual shareholders and partners of these parent organizations actually are health care professionals or health care entities. <sup>109</sup> Failure to recognize the complex ownership structure of these health care facilities would substantially understate both the total number of individual physician investors and the number of health care facilities involved in joint venture arrangements.

# B. Characteristics of Owners of Health Care Facilities

The composition of the health care professionals and health care entities who own the responding health care facilities is presented in Table 1. The first column of Table 1 shows the number of direct owners of each facility type, while the second column contains the number of ultimate owners of these facilities through a parent corporation. Column three indicates the total number of owners (the sum of the direct owners and the ultimate owners through parent corporations.) Of the 10,295 health care professionals and entities identified as owners (either direct or ultimate), 78.8% or 8112 are physicians. Of the 8112 owners who are physicians, about 21% are indirect owners. Professional associations owned by physicians are estimated to account for 6.3% or 647 of all owners; 400 of these professional associations are direct owners of the facilities, while the other 247 professional associations are the ultimate owners through a parent organization. Another 3.4% or 351 are health care entity

<sup>107.</sup> See id. at I-1.

<sup>108.</sup> See id. at I-2.

<sup>109.</sup> See id. at I-5 and Table 1.3.

Table 1
Owners of Health Care Entities who are
Health Care Professionals<sup>a</sup>

OWNER TYPE	NUMBER OF DIRECT OWNERS	NUMBER OF PARENT CORPORATION OWNERS	TOTAL NUMBER OF OWNERS	PERCENTAGE OF TOTAL OWNERS
Physician <sup>b,c</sup>	6389	1723	8112	78.8%
Physician Members of Professional Associations <sup>d</sup>	400	247	647	6.3%
Associations	400	241	047	0.3%
Nurses (R.N.s or L.P.N.s)	124	4	128	1.2%
Physical Therapists	197	7	204	2.0%
Other Therapists	112	6	118	1.2%
Licensed Technicians	72	1	73	0.7%
Pharmacist	68	1	69	0.7%
Health Care Administrators	363	41	404	3.9%
Health Care Entities	351	_	351	3.4%
Other	167	27	194	1.9%
TOTAL	8243	2052	10,295	100%

Notes: "The term "Health Care Professional" includes immediate family members who have ownership interests in these health care entities.

This category includes medical doctors, osteopaths, chiropractors, podiatrists and dentists. These numbers exclude professional association owners.

These numbers are estimates based on 230 professional association direct owners and 118 professional association parent corporation owners. A survey of professional association owners indicate an average of 2.09 physician owners per professional association.

owners. Except for health care administrators, the remaining groups of health care professionals each account for less than 3% of all the owners identified.

Table 2 shows the number of physician-owners by specialty group. The first column contains the number of direct owners, while the second column indicates the number of physicians who own through parent corporations. Column three shows the total number of owners. These numbers reflect individual owners only and exclude professional association owners.

Only 9% of physician-owners are in specialties that primarily provide services on a consultation basis (pathology, anesthesiology, and radiology). Since these specialists are generally not in a position to make referrals to their own facilities, they are classified as non-referring or consultation physicians. The number and percentage of total physician/owners in these three groups are: pathology - 154 (1.9%), anesthesiology - 114 (1.4%), and radiology - 471 (5.8%). Although other physician specialties provide services on a consultation basis, these specialties account for relatively few owners.

The remaining 91% of the physician-owners are concentrated in specialties which are likely to refer their patients for surgery, diagnostic testing, and other ancillary services or equipment. A large percentage of these owners, about 35%, specialize in internal medicine. General practitioners account for 11.4% of the physician investors, while surgeons and orthopedists each represent about 8%. Specialists in obstetrics/gynecology and neurology account for 6.8% and 5.0% respectively. With the exception of the "other doctor" category, each of the remaining specialty groups accounts for less than 3% of all physician owners.

When one examines only those physicians with direct ownership interests, one sees that less than 8% (497) of the 6,389 direct physician owners are pathologists, radiologists or anesthesiologists. Among the 1,723 physicians identified as indirect owners, about 14% are classified as consultation physicians. Thus, over 92% of the physicians with direct ownership interests and 86% of those identified as indirect owners are concentrated in specialties which are likely to refer their patients for surgery, diagnostic testing, and other ancillary services or equipment.

Table 2
Specialties of Physician Owners of Health Care Entities<sup>a</sup>

SPECIALTY	Number of Direct Owners	NUMBER OF PARENT CORPORATION OWNERS	TOTAL NUMBER OF OWNERS	PERCENTAGE OF ALL PHYSICIAN OWNERS
General Practice	796	125	921	11.4%
OB/GYN	454	97	551	6.8%
Internal Medicine	2354	495	2849	35.1%
Surgery	462	178	640	7.9%
Orthopedics	592	, 73	665	8.2%
Neurology	314	90	404	5.0%
Ophthalmology	146	52	198	2.4%
Pathology	105	49	154	1.9%
Radiology	343	128	471	5.8%
Oncology	177	37	214	2.6%
Anesthesiology	49	65	114 .	1.4%
Pediatrics	115	66	181	2.2%
Podiatry .	20	2	22	0.3%
Chiropractor	9	_	9	0.1%
Other Doctor	453	266	719	8.9%
TOTAL	6389	1723	8112	100%

Notes: 
Physicians include medical doctors, osteopaths, chiropractors, podiatrists and dentists.

Physician owners include immediate family members of physicians who have ownership interests in these health care entities.

# C. An Empirical Test of Physicians' Choice of Ownership Structure for Joint Ventures

Individuals who own businesses generally structure the organization as a corporation or limited partnership in order to limit their personal liability. While these ownership structures add to organizational and operating costs for the business, the benefits of limiting personal liability presumably offset such costs. They often establish separate legal entities for each operating unit of a business with the purpose of isolating the risks for each unit. In such cases, the owners may establish a holding company to provide administrative services at lower costs to the individual operating companies. Absent such cost savings, it does not make economic sense to establish holding companies, since direct ownership of the operating units via a corporation or limited partnership structure would already provide the benefit of limiting personal liability. Establishing multiple levels of legal entities would only add to the costs and would not provide any apparent offsetting benefits to owners.

The data presented in Table 1 therefore raise questions as to the frequency of "parent corporation" ownership arrangements. Most of these parent corporation arrangements involve multiple layers of legal entities that necessarily add to costs, whereas most of the facilities are independent single businesses. Such complex ownership structures may be a response to laws and regulations which specifically limit both *direct* ownership by referring physicians and *direct* compensation to referring physicians.

Table 3
Choices of Ownership Structures by Physicians and Other Health Care Professionals

GROUP	DIRECT OWNERSHIP	COMPLEX OWNERSHIP	TOTAL
Physicians*	6789	1970	8759
Other Licensed Health Care Professionals	573	19	592
TOTAL	7362	1989	9351
Chi-Square	39.92 (p < .001)	•	

Notes: 
Physicians include medical doctors, osteopaths, chiropractors, podiatrists and dentists.

Physician owners include immediate family members of physicians who have ownership interests in these health care entities.

We tested the premise that physicians are more likely to establish complex ownership arrangements by using the survey data for non-physician, licensed health care professionals as a benchmark. The null hypothesis was that the choice of direct versus complex ownership structure is independent of the physician versus non-physician health care professional status of owners. The alternative hypothesis was that the choice of ownership is statistically dependent on the physician versus non-physician status of owners of health care facilities.

Table 3 presents a cross-classification of ownership structure by type of health care professional. The computed Chi-square statistic is 39.92, which leads to rejection (p < .005) of the hypothesis that the choice of ownership structure is independent of the physician versus non-physician status of the licensed health care professional owners. The data suggest that the proportion of physicians who choose complex ownership arrangements is significantly higher than the proportion of non-physician owners who choose complex ownership arrangements. While these results do not prove that these choices are influenced by existing regulations on direct ownership by referring physicians, the results tend to support this premise. The next section provides details on some of the more complex structures. These structures provide anecdotal evidence that existing regulations on direct ownership by referring physicians influence physicians' choice of ownership arrangements.

## D. The Structure of More Complex Joint Venture Arrangements

Identifying the individual owners of health care entities can be difficult because the ownership structure is sometimes complex. Multiple levels of incorporation or partnership can make it difficult to identify the individual owners of the parent organization. Failure to recognize the complexity of some joint ventures and to obtain information on the owners of the parent organization means that both the prevalence and scope of joint venture arrangements are underestimated.

We describe two examples of complex joint venture ownership arrangements, which we observed through data collection, to provide some insights into how intricate these arrangements can be. While we have changed the names of the organizations in these examples, the structure of the ownership arrangements accurately describes existing joint venture arrangements. These examples illustrate the problems encountered in determining the beneficial owners of subsidiary health care facilities.

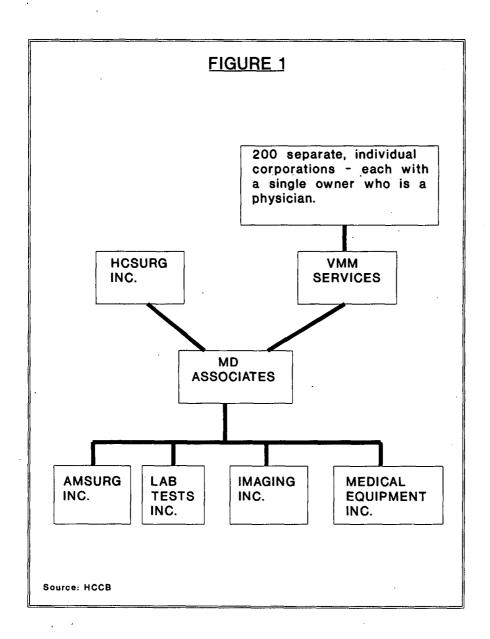


Figure 1 presents the first example. The corporation MD ASSOCIATES owns four health care entities that provide services in Florida: an ambulatory surgical facility (AMSURG, INC.), a clinical laboratory (LAB TESTS, INC.), a diagnostic imaging center (IMAGING, INC.), and a durable medical equipment business (MEDICAL EQUIPMENT, INC.). MD ASSOCIATES is a joint venture between two corporations: HCSURG, INC. and VMM SERVICES, INC. While the ownership structure of HCSURG, INC. has not been determined, over 200 separate corporations own VMM SERVICES. Each of these 200-plus corporations has a single stockholder who is a physician.

If the objective of this complex structure was to limit each physician's personal liability, they could have owned the parent corporation (MD ASSOCIATES) directly. Direct ownership would eliminate the costs of establishing and maintaining the 200-plus corporations. Instead, this complex arrangement avoids direct ownership and makes it difficult to identify the controlling owners of these four health care businesses.

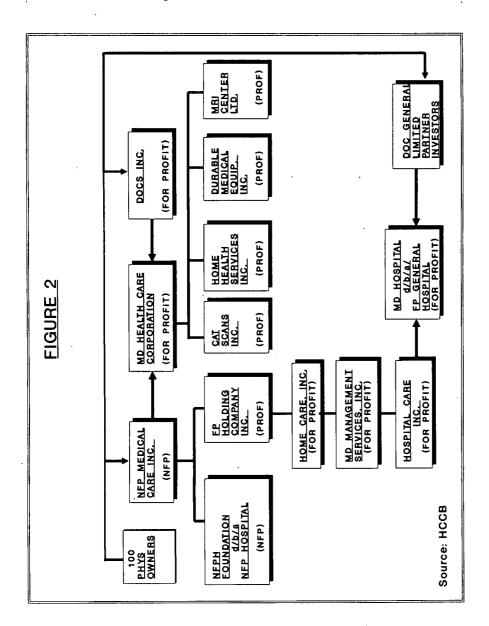


Figure 2 presents an even more complex ownership structure. Three paths of ownership arrangements can be traced to NFP MEDICAL CARE, INC., a not-for-profit corporation with a board of directors composed of 100 physicians. First, NFP MEDICAL CARE, INC. is the parent corporation of NFPH FOUN-DATION, a not-for-profit hospital operating under the name NFP HOSPITAL. Members of the board also direct the activities of a trust that raises money from the public to support the activities of the hospital.

The second ownership arrangement is more complex. NFP MEDICAL CARE, INC. and a for-profit corporation, also with 100 physician investors, known as DOCS, INC., jointly own a for-profit entity called MD HEALTH CARE CORPORATION. Many owners of DOCS, INC. serve as directors of NFP MEDICAL CARE, INC. The structure of the joint venture is further complicated by the fact that MD HEALTH CARE CORPORATION owns four health care providers: CAT SCANS, INC., HOME HEALTH SERVICES, INC., DURABLE MEDICAL EQUIPMENT, INC., and MRI CENTER, LTD. Each of these entities is a for-profit corporation. Since Medicare currently reimburses health care facilities for outpatient services, this ownership arrangement allows the hospital to allocate the overhead costs of providing outpatient services to the Medicare program.

The third ownership path is also complex. NFP MEDICAL CARE, INC. owns a for-profit holding company named FP HOLDING COMPANY, INC. This company in turn owns three for-profit businesses: a home health agency (HOME CARE, INC.), a management company (MD MANAGEMENT SERVICES, INC.), and HOSPITAL CARE, INC. HOSPITAL CARE, INC. is the general partner in a joint venture with DOC GENERAL LIMITED PARTNER INVESTORS. This general partner and these limited partners jointly own MD HOSPITAL, a for-profit institution that operates under an alternative name, FP GENERAL HOSPITAL. Furthermore, although not apparent from the chart in Figure B, some shares of FP GENERAL HOSPITAL are owned by DOCS, INC., the corporation controlled by the 100 physician-investors.

The individuals who control these businesses are the 100 physicians who 1) are members of the board of directors of the not-for-profit corporation (NFP MEDICAL CARE, INC.) that controls the not-for-profit hospital; 2) are the owners of the for-profit corporation (DOCS, INC.) that is the partner of the not-for-profit corporation; 3) own four freestanding outpatient facilities in conjunction with the not-for-profit parent corporation (NFP MEDICAL CARE, INC.); and 4) own limited partner shares in the for-profit hospital (FP GENERAL HOSPITAL) that, through several intermediaries, is controlled by the not-for-profit parent corporation (NFP MEDICAL CARE, INC.).

The managers of these organizations reported that the not-for-profit foundation raises funds from the public to support the not-for-profit hospital. The situation becomes more complicated because the not-for-profit hospital purchases services from, and sends patients to, its for-profit subsidiaries. While these transactions were described as arms-length, the tax-exempt hospital can use money raised by the hospital foundation to purchase services from the for-profit joint ventures at inflated prices.

## III. Policy Recommendations

Recent federal legislation, enacted to address the problem of physician joint venture arrangements, prohibits physicians from referring Medicare patients to health care businesses in which the physician or an immediate family member has an investment interest.<sup>112</sup> Additionally, state lawmakers in Florida, California, Tennessee, Maryland, and elsewhere are now considering legislation to limit or ban physician joint ventures.<sup>113</sup>

This article presents data that show that, relative to other licensed health care professionals, referring physicians are significantly more likely to choose complex ownership structures. Our data, obtained in a recent survey in Florida, demonstrate that complicated ownership structures are common and that such structures make it difficult to identify the beneficial owners of health care businesses. These results have important implications for policy makers who must design regulations to address the problems associated with physician self-referral.

If regulation is meant to restrict referrals to for-profit health care facilities, then the legislation must clearly define investment interests, ownership structures, and compensation relationships to include both direct and indirect ownership arrangements. Failure to recognize indirect ownership and compensation arrangements will limit the impact of any regulation that attempts to prohibit the practice of self-referral. Florida recently adopted legislation which defines "Investor" as "a person or entity owning a legal or beneficial ownership or investment interest, directly or indirectly, including, without limitation, through an immediate family member, trust, or another entity related to the investor within the meaning of 42 C.F.R. § 413.17, in an entity." This legislation makes some progress towards recognizing the problem. However, we suggest

<sup>110.</sup> This information was received through confidential telephone conversations.

<sup>111.</sup> Id.

<sup>112.</sup> See Iglehart, supra note 6, at 1682.

<sup>113.</sup> See Pear, supra note 75.

<sup>114.</sup> See 1992 Fla. Laws, supra note 71, at § 7(3)(k)(4)(1); see also 42 C.F.R. § 413.7 (1991) (regulations issued by Health Care Financing Administration (HCFA) regarding reimbursement of costs for treatment of end-stage renal diseases).

that inserting the terms "holding company or subsidiary entity" after the word "trust" would strengthen the wording.

Legislatures should refrain from setting a minimum ownership threshold below which disclosure is not required. For example, Florida law previously set an ownership threshold at 10%. 115 This level was too high since ownership share appears to have a negligible impact on whether physicians refer patients to the health care facilities in which they have ownership interests. A small slice of a very large compensation pie could influence referral practices even though each individual physician owns only a "small" percentage share. Physicians may refer patients to the business to generate larger profits even though compensation paid to owners is not directly tied to the number of referrals. One complex ownership arrangement described herein involves several health care businesses and more than 100 physician owners, who each own less than a 1% share of the parent corporation. The net effect of the complicated ownership structure is that each physician owns less than .5% of each of the operating companies. Aggregate profits such companies generate could reach several million dollars per year and tens of thousands of dollars per physician. Since the financing arrangements for joint ventures involve only nominal investments by physicians and large amounts of borrowed funds, one could conclude that the rate of return on physicians' actual investment is excessive.

In some states, existing regulations require disclosure of direct ownership. However, for disclosure requirements to be effective, the physician-owner must be required to disclose both indirect and direct ownership interests regardless of share size. Disclosure of a seemingly insignificant ownership interest in a health care facility could be misleading to patients. Patients, third-party payors, and state authorities would find disclosure of the amount of the physician's investments, aggregate profits of the businesses, and payments to the physician owners to be more useful and informative.

Finally, legislation must address the problem of not-for-profit corporations that are controlled by referring physician board members. Physicians can use such corporations to generate profits by establishing a for-profit business that is jointly owned by the not-for-profit corporation and by a for-profit corporation the physician board members own. Funds that a tax-exempt foundation raises to support a not-for-profit hospital can be used to purchase services from the for-profit joint ventures at inflated prices. Such purchases increase the profits the joint venture businesses generate and ultimately enrich the joint venture owners.

Furthermore, since Medicare pays for outpatient services on a cost basis, such ownership structures allow the hospital to allocate some of the overhead

<sup>115.</sup> FLA. STAT. ANN. ch. 458.327(2)(c) (Harrison Supp. 1991); FLA. STAT. ANN. ch. 458.331(1)(gg) (Harrison Supp. 1991).

costs of providing outpatient services to the Medicare program, thereby increasing profits to the joint venture owners. In the arrangement described in Figure B, for example, the not-for-profit home health agency served only Medicare patients and the for-profit home health agency served only non-Medicare patients. Overhead costs allocated to the not-for-profit Medicare agency were proportionately higher than overhead costs allocated to the for-profit agency, which increased profits at the for-profit agency. These arrangements call into question the underlying reasonableness of preferential tax treatments currently given to not-for-profit corporations.

#### Conclusion

Physician ownership of health care businesses to which the physician refers patients has proliferated in recent years. These arrangements present conflicts of interest and lead to over-utilization of services and higher health care costs. Current legislation addresses this problem through regulation of direct ownership by physicians. Our study, however, shows that indirect ownership circumvents the intent of such legislation. In order to be effective, future laws and regulations must explicitly address complex ownership structures.