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## The Myth of the Independent Physician: Implications for Health Law, Policy, and Ethics

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# THE MYTH OF THE INDEPENDENT PHYSICIAN: IMPLICATIONS FOR HEALTH LAW, POLICY, AND ETHICS

*Jessica Mantel*<sup>†</sup>

## ABSTRACT

Physicians increasingly are moving away from solo and small group practices to join large organizations, a trend now accelerating with the implementation of health care reform. Because physicians control as much as ninety percent of all health care spending, understanding how health care organizations influence physicians' treatment decisions is of fundamental importance, particularly for policymakers, scholars, and ethicists concerned with the quality, cost, and rationing of health care. Informed by research in the fields of psychology, sociology, and behavioral economics, this Article argues that physicians employed by or affiliated with health care organizations are part of organizational dynamics that profoundly influence their treatment decisions. Unfortunately, much of health law, policy, and ethics narrowly focus on the individual physician, failing to appreciate the powerful link between organizational culture and physicians' clinical decisions. Scholars, policymakers, and ethicists therefore must give greater attention to the organization. Of particular concern are health organizations with cultures that bias physicians' clinical decision making in ways that lead to the provision of poor-quality or inefficient care or the withholding of necessary care. This Article concludes with a discussion of possible ways to promote more virtuous organizational cultures that minimize these risks while respecting community standards of compassion and fairness.

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INTRODUCTION

In guaranteeing access to health insurance for millions of Americans, the Patient Protection and Affordable Care Act<sup>1</sup> (“Affordable Care Act”) brings us closer to the goal of universal access to medical care. To make universal access sustainable in the long term, however, policymakers must go beyond increased access to care and address both rising health care costs and deficiencies in the quality of care provided to patients. In addition, impending changes in the way insurers and government health care programs pay for care raises new challenges.<sup>2</sup> By placing health care providers on a budget

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1. Pub. L. No. 111-148, 124 Stat. 119 (2010) (codified as amended in scattered sections of the U.S. Code).

2. For example, under global payments, or full capitation, providers receive a single payment from a payor for each patient they care for. The global, or capitated, payments frequently cover all of the cost of treating patients over the course of year, although sometimes certain categories

for patient care, these payment reforms will lead to health care providers rationing medical care.<sup>3</sup> This raises important questions regarding how best to ensure that they do so in a manner that is both reasonable and equitable and that patients are not unfairly denied medically appropriate care.<sup>4</sup>

With physicians controlling as much as ninety percent of all health care spending,<sup>5</sup> addressing cost, quality, and health-rationing concerns requires an understanding of how physicians make clinical decisions. Importantly, the issue of physician decision making must be considered against the backdrop of a rapidly transforming health care system that has seen a steady decline in the number of physicians practicing in solo and small group practices and an increase in physicians affiliating with large organizations.<sup>6</sup> Informed by research

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of care are carved out, such as pharmaceuticals or hospital care. In other words, the provider assumes the entire financial risk of treating the patient population and thus must work within a budget. See JEFF GOLDSMITH, PHYSICIAN'S FOUNDATION, *THE FUTURE OF MEDICAL PRACTICE: CREATING OPTIONS FOR PRACTICING PHYSICIANS TO CONTROL THEIR PROFESSIONAL DESTINY* 38 (2012) (explaining global risk). Similarly, bundled payment systems—which employ a single fixed payment for an episode of care that is allocated among all providers treating a patient—force providers to provide care within a fixed budget. See *infra* note 42 and accompanying text. Finally, shared savings and shared risk payment models also incentivize providers to work within a budget by rewarding those who meet or exceed targeted cost savings or penalizing those who fail to do so. See Jessica Mantel, *Accountable Care Organizations: Can We Have Our Cake and Eat It Too?*, 42 SETON HALL L. REV. 1393, 1411 (2012) (explaining the shared savings and shared risk models for accountable care organizations).

3. See Mantel, *supra* note 2, at 1427 (arguing that payment reforms such as shared savings that require providers to lower costs will necessitate “gatekeeping,” with providers determining which services should be provided to individual patients).
4. See *id.* at 1427–28, 1436 (describing the need for regulatory oversight of providers who assume financial risk in order to ensure providers appropriately balance cost and quality considerations and do not inappropriately withhold care).
5. See John Eisenberg, *Physician Utilization: The State of Research About Physicians' Practice Patterns*, 40 MED. CARE 1016, 1016 (2002) (noting that physician decisions govern as much as ninety percent of how health care dollars are spent); ALAN SAGER & DEBORAH SOCOLAR, BOS. UNIV. SCH. OF PUB. HEALTH, *HEALTH COSTS ABSORB ONE-QUARTER OF ECONOMIC GROWTH, 2000–2005*, at 29 (2005) (stating that physicians' decisions “control fully 87 percent of the personal health care dollar”).
6. See, e.g., Stephen L. Isaacs et al., *The Independent Physician—Going, Going . . .*, 360 NEW ENG. J. MED. 655, 655–57 (2009) (stating that “[t]he percentage of U.S. physicians who own their own practice has been declining at an annual rate of approximately 2% for at least the past 25 years” and that the percentage of physicians in small practices—practices with ten or fewer physicians—“decreased by nearly 15%

in the fields of psychology, sociology, and behavioral economics, this Article is the first to provide a comprehensive theory of how the organizational cultures of these health care organizations (HCOs) powerfully influence physicians' clinical judgments. The Article also discusses the implications of this new theory for health law, policy, and ethics.

Many health law scholars, policymakers, and ethicists conceptualize patient care as being provided at the level of the individual physician, as opposed to by the HCO. The focus on the individual physician reflects the fact physicians retain a high degree of autonomy over their patients' care given the inherent nature and complexity of medicine.<sup>7</sup> Yet despite their professional autonomy, physicians employed by or affiliated with HCOs are part of organizational dynamics that powerfully influence their treatment decisions. In particular, an HCO's organizational culture—its shared norms, values, attitudes, and patterns of behavior—influence both how a physician perceives a patient's situation and the thought patterns, assumptions, and values that guide the physician's clinical decision making. Focusing on the deeds of individual physicians and ignoring the influence of the organization thus leads to a factually inaccurate account of patient care upon which to base health care policy.

In recognition of the organization's role in shaping physicians' treatment decisions, some areas of health law, policy, and ethics have broadened their focus to include the HCO, particularly in the area of payment policy.<sup>8</sup> Unfortunately, other areas of health law, policy, and

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between 1996 and 2004"). Indeed, most physicians believe that "the traditional model of independent private practice is either 'on shaky ground' or 'is a dinosaur soon to go extinct.'" MERRITT HAWKINS, HEALTH REFORM AND THE DECLINE OF PRIVATE PHYSICIAN PRACTICE: A WHITE PAPER EXAMINING THE EFFECTS OF THE PATIENT PROTECTION AND AFFORDABLE CARE ACT ON PHYSICIAN PRACTICES IN THE UNITED STATES 46 (2010). The types of organizations physicians are joining vary but include integrated delivery systems, multispecialty group practices, and accountable care organizations. Many physicians are also becoming employees of hospitals. See SUZANNE M. KIRCHOFF, CONG. RESEARCH SERV., R42880, PHYSICIAN PRACTICES: BACKGROUND, ORGANIZATION, AND MARKET CONSOLIDATION (2013) (describing the types of organizations with which physicians affiliate and the increase in hospital employment among physicians).

7. See Theodore W. Ruger, *Can a Patient-Centered Ethos Be Other-Regarding? Ought It Be?*, 45 WAKE FOREST L. REV. 1513, 1516 (2010) (stating that although medical care is provided in a complex delivery system, medical decisions remain devolved to the level of the individual doctor and patient).
8. See *infra* notes 40–44 and accompanying text (discussing recent shifts in how Medicare and other payors pay for health care).

ethics narrowly emphasize physicians' individual competence levels, their personal values, and potential conflicts of interest. For example, although courts have adopted concepts of institutional liability for poor-quality care, malpractice cases based on alleged physician error generally treat physicians as isolated actors who are individually responsible for their patient-care decisions.<sup>9</sup> Similarly, with respect to whether certain financial arrangements may adversely impact the quality of patient care, many commentators focus on financial incentives operating at the level of the individual physician, minimizing the risk of financial incentives tied to a group's or organization's performance.<sup>10</sup> Various laws governing financial

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9. See *infra* Part IV.C.1 (noting that even with various forms of institutional liability, the focus in many malpractice cases remains on the conduct of the individual physician).
  10. For example, in commenting on health maintenance organization (HMO) physician-incentive plans, the General Accounting Office (GAO; now called the Government Accountability Office) concluded that "incentive plans that base the amount of payment on the cost performance of individual physicians have a relatively higher potential to adversely affect quality of care than do plans based on group cost performance." U.S. GEN. ACCT. OFFICE, GAO/HRD-89-29, MEDICARE: PHYSICIAN INCENTIVE PAYMENTS BY PREPAID HEALTH PLANS COULD LOWER QUALITY OF CARE 25 (1988). Others similarly have questioned whether incentives for individual physicians "apply undue pressure to conserve resources and may lead to inadequate medical care for patients," with the American Medical Association (AMA) Council on Ethical and Judicial Affairs recommending incentives based on group performance rather than individual incentives. Stephen A. Magnus, *Physicians' Financial Incentives in Five Dimensions: A Conceptual Framework for HMO Managers*, 24 HEALTH CARE MGMT. REV. 57, 65 (1999). Relying on classic economic theory, commentators have argued that financial incentives tied to the group's performance, rather than the individual physician's performance, have little effect on a physician because of the weak link between the individual physician's clinical decisions and any financial benefit the physician derives from the group-based payment. As explained by the GAO, "[t]he more physicians and the more patients whose treatment costs determine the size of the available incentive funds, the more remote individual treatment decisions become from the amount of payment received and the less likely reduction of quality will occur." U.S. GEN. ACCT. OFFICE, *supra* note 10, at 25; see also Stephen R. Latham, *Regulation of Managed Care Incentive Payments to Physicians*, 22 AM. J.L. & MED. 399, 410 (1996) ("The fact that risk is spread over more encounters [with group-based financial incentives] also means that incentives applied to the behavior of intermediary groups, such as hospital-physician joint ventures or physician practice groups, should be less intense than incentive plans that apply directly to the clinical choices of individual physicians.").

arrangements in the health care sector reflect this focus on the individual physician's financial incentives.<sup>11</sup>

An approach to physician behavior that narrowly focuses on the individual physician, however, overlooks the fact that physicians often are members of dynamic organizations that profoundly influence physicians' professional judgments. While I do not mean to advance an argument for abandoning or weakening regulation of individual physicians and their financial incentives, a model of physician behavior that incorporates the impact of organizational culture reveals the inadequacies of focusing too much on individual physicians and too little on HCOs.<sup>12</sup> Of particular concern are HCOs with organizational cultures that bias physicians' treatment decisions in ways that result in poor-quality or inefficient care or the withholding of necessary care. Scholars and policymakers concerned about the cost and quality of patient care and the fairness of health-rationing decisions must give greater attention to how best to promote HCOs with virtuous organizational cultures.

Part I discusses the trend of physicians moving away from solo and small group practices and affiliating with large HCOs. Understanding how this shift impacts physicians' professional judgments requires a general understanding of how physicians make clinical decisions. Part II addresses this issue, explaining that, when faced with medical uncertainty or difficult value trade-offs, physicians' professional judgments are guided by cognitive frameworks, or schemas, that organize their knowledge, assumptions, and values.

Drawing on the work of sociologists, psychologists, and economists, Part III then argues that HCOs' organizational cultures profoundly influence physicians' clinical decisions by shaping

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11. For example, although referrals between physicians in the same group practice enhance the group's income, the Stark law, 42 U.S.C. § 1395nn (2012), exempts from the general prohibition on physician self-referrals referrals between physicians in the same group practice unless the referring physician is compensated in a manner that takes into account the volume and value of such referrals. *See id.* § 1395nn(a) (2006 & Supp. V 2011) (general prohibition against physician self-referrals); *id.* § 1395nn(b)(2) (in-office ancillary services exception); *id.* § 1395nn(h)(4)(A) (defining "group practice"). The Stark law similarly exempts from the general prohibition on physician self-referrals distributions of an organization's profits and productivity bonuses paid to a physician as long as they do not relate to the volume or value of the physician's referrals. *Id.* § 1395nn(h)(4)(B)(i).
  12. *See* Ann Barry Flood & Mary L. Fennell, *Through the Lenses of Organizational Sociology: The Role of Organizational Theory and Research in Conceptualizing and Examining Our Health Care System*, 35 J. HEALTH & SOC. BEHAV. 154, 163 (1995) (stating that models of health care need to be expanded to fit the complexities of the health care system, including the noneconomic factors involved, "so that we can understand the inadequacies of financial-based policies").

physicians' cognitive schemas. Specifically, Part III.A demonstrates the effect a physician's organizational peers have on the physician's professional judgment, particularly in conditions of clinical uncertainty. Part III.B then describes how a physician's identification with an HCO engenders both loyalty to the organization and internalization of the organization's norms and values. Part III.C concludes with a discussion of how a physician's self-interest—as shaped by the HCO—subconsciously biases clinical judgments by causing the physician to apply self-serving cognitive schemas. The cumulative effect of this dynamic is to produce among an HCO's physicians a shared practice style that reflects commonality in values and philosophies.

Finally, Part IV examines the implications of the link between physicians' patient-care decisions and HCOs' organizational culture for health law, policy, and ethics. First, Part IV.A argues that the field of health ethics should give greater attention to HCOs' organizational ethics and reexamine existing professional ethical principles that reflect a paradigm of the independent physician. Part IV.B then considers whether regulators should mandate that HCOs adopt certain internal structures or arrangements believed to promote more virtuous organizational cultures. Part IV.C concludes with a discussion of various legal and policy reforms that would impose greater accountability on HCOs for the cost and quality of patient care.

## I. THE RISE OF THE HEALTH CARE ORGANIZATION

For much of the twentieth century, the health care system was dominated by independent physicians practicing as solo practitioners or in small groups.<sup>13</sup> Free from corporate or bureaucratic controls, physicians enjoyed high levels of professional autonomy and maintained primary authority over the provision of medical care.<sup>14</sup> This system of “professional dominance” was reinforced by a payment system that reimbursed health providers on a fee-for-service basis, paying providers a separate payment for each unit of service they provided without regard to its quality or cost-effectiveness.<sup>15</sup> The past

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13. See Thomas G. Rundall et al., *A Theory of Physician-Hospital Integration: Contending Institutional and Market Logics in the Health Care Field*, 45 J. HEALTH & SOC. BEHAV. 102, 104 (2004) (noting that for most of the past century, physicians organized themselves into solo practices or small groups).

14. See *id.* at 103 (stating that the traditional form of organizing physician services “maintain[ed] physicians' autonomy from organizational controls and authority over medical care decisions”).

15. See Mantel, *supra* note 2, at 1403–04 (explaining fee-for-service reimbursement).

few decades, however, have seen a steady decline in solo and small group physician practices and the emergence of new delivery models centered on large organizations.<sup>16</sup> Implementation of health care reform has only accelerated this trend.<sup>17</sup>

Frustrated with the rising cost of health care, in the 1980s employers, insurers, and policymakers began demanding that the health care sector achieve greater efficiencies in the provision of care.<sup>18</sup> So began the era of managed care, as private sector payors and government health programs changed how they contract with and reimburse physicians and other health care providers.<sup>19</sup> Employers and private insurers fostered greater competition among physicians and hospitals by contracting with a limited number of providers, leading many physicians and hospitals to agree to discounted reimbursement rates.<sup>20</sup> In addition, both private and public payors moved away from

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16. See MERRITT HAWKINS, *supra* note 6, at 4 (stating that the independent, private physician practice model will be largely replaced by models of care built around larger organizations, including accountable care organizations, large independent physician groups, and large aligned groups); see also Isaacs et al., *supra* note 6, at 655–56 (noting that the percentage of physicians who own their own practices has been declining at a rate of approximately two percent for the past twenty-five years and that the percentage of physicians in small practices—practices with ten or fewer physicians—decreased by nearly fifteen percent between 1996 and 2004).
  17. See MARY WITT ET AL., CAL. HEALTHCARE FOUND., *PHYSICIAN-HOSPITAL INTEGRATION IN THE ERA OF HEALTH REFORM* 15 (2010) (“Health care reform . . . has accelerated the trend toward integration . . .”); Clayton Harbeck, *Hospital-Physician Alignment: The 1990s Versus Now*, HEALTHCARE FIN. MGMT., Apr. 2011, at 48, 50 (stating that health care reform has accelerated the trend of collaborations between health systems and physicians, including organizations employing physicians).
  18. See Thomas Bodenheimer & Kip Sullivan, *How Large Employers Are Shaping the Health Care Marketplace*, 338 HEALTH POL’Y REP. 1003, 1003 (1998) (stating that in the late 1980s employers “began to rebel” against rising health care premiums); Mark Hall, *Institutional Control of Physician Behavior: Legal Barriers to Health Care Cost Containment*, 137 U. PA. L. REV. 431, 435–38 (1988) (discussing government initiatives to address rising health care costs); Glen P. Mays et al., *Managed Care Rebound? Recent Changes in Health Plans’ Cost Containment Strategies*, HEALTH AFF. (WEB EXCLUSIVE) W4-427, W4-427 (Aug. 11, 2004), <http://content.healthaffairs.org/content/early/2004/08/11/hlthaff.w4.427.short> (noting that during the early 1990s, rising health care spending led employers to prompt health plans to contain costs).
  19. See Rundall et al., *supra* note 13, at 103 (discussing changes since the early 1980s in the way public and private health plans contract with and compensate health care providers).
  20. See *id.* at 105 (stating that “public and private health plans began to selectively contract with hospitals and physicians in order to use

traditional fee-for-service payment to new methods of reimbursement that gave providers financial incentives to reduce costs, such as capitation and prospective payment.

Physicians, hospitals, and other providers responded to these changes by entering into various types of collaborative arrangements. Under these new delivery models, physicians no longer operated separately from one another but to varying degrees jointly managed patient care, often in collaboration with hospitals.<sup>21</sup> For example, physicians formed larger physician groups; joined independent practice associations (IPAs)<sup>22</sup> and physician-hospital organizations (PHOs);<sup>23</sup> and became employees of hospitals, hospital-owned medical groups, and integrated delivery systems.<sup>24</sup>

While the types of HCOs physicians affiliated with varied greatly, they all shared a common purpose—positioning physicians and other health care providers to succeed in a world of managed care.<sup>25</sup> The

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competitive forces to drive down health care prices” and that new methods of payment forced providers to find new ways to reduce costs); For a definition of capitation, see *supra* note 2. Prospective payment refers to paying hospitals a fixed payment for a hospital admission based on a patient’s diagnosis, regardless of how many services were provided to the patient. See MERRITT HAWKINS, *supra* note 6, at 9 (explaining Medicare’s prospective payment system).

21. See Rundall et al., *supra* note 13, at 105 (explaining that integration generally “refers to activities and mechanisms used to achieve unity of effort across different specialized areas”).
22. An IPA is a network of physicians that collectively contract with HMOs and managed care plans. IPA physicians maintain a high degree of independence in that they continue to own and manage their own practices, with the IPA’s primary function being to negotiate and administer managed care contracts for its physicians. See WITT ET AL., *supra* note 17, at 15 (defining IPA).
23. A PHO is a joint venture between a hospital or hospital system and physicians to jointly contract with managed care organizations, with the PHO distributing to physicians and hospitals funds received under these contracts and providing administrative, management, and marketing support. More recently, PHOs have tied their reimbursement of physicians to the physicians’ performance on various quality indicators. See Bhagwan Satiani & Patrick Vaccaro, *A Critical Appraisal of Physician-Hospital Integration Models*, 51 J. VASCULAR SURGERY 1046, 1049 (2010) (defining PHO).
24. See Gloria J. Bazzoli et al., *Two Decades of Organizational Change in Health Care: What Have We Learned?*, 61 MED. CARE RES. & REV. 247, 248 (2004) (describing the different types of arrangements physicians entered into in response to managed care).
25. See Keith D. Moore & Dean C. Coddington, *Multiple Paths to Integrated Health Care*, HEALTHCARE FIN. MGMT., Dec. 2009, at 47, 54 (stating that integration efforts in the late 1980s and 1990s, particularly those involving hospitals, “[were] pursued with a single point of focus—positioning for manage care contracting”).

health care industry believed these collaborations offered two major benefits. First, it was believed that these ventures gave providers a vehicle for realizing the efficiencies and improved patient outcomes demanded by payors.<sup>26</sup> For example, these larger organizations allowed for administrative and operational efficiencies due to economies of scale.<sup>27</sup> They also had the resources, capital, and infrastructure to support acquiring health information systems, improving the coordination of patient care across providers, and developing clinical guidelines and protocols.<sup>28</sup> Second, these new organizations' larger size and market share gave their members greater bargaining power in their negotiations with managed care plans. Physicians and other providers who formed HCOs thereby obtained more favorable contract terms and payment rates than they could have negotiated on their own.<sup>29</sup>

Despite the promise of these new delivery models, their results were decidedly mixed.<sup>30</sup> Lacking experience in medical management, many HCOs failed to achieve the degree of clinical integration—the coordination of patient care across the organization—that experts believe is necessary for greater efficiencies and improved patient

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26. See Bazzoli et al., *supra* note 24, at 248 (discussing how during the 1980s and 1990s hospitals and physicians reorganized themselves “with the stated purposes of improving efficiency, financial performance, long-term survival, community accountability, and patient outcomes,” with their arrangements providing a platform for integration and collaboration).
27. See WITT ET AL., *supra* note 17, at 8 (stating that in the 1990s physicians formed large group practices and IPAs in order to achieve economies of scale).
28. See generally Rundall et al., *supra* note 13, at 105 (stating that partnerships such as those between hospitals and physicians gave physicians access to the managerial infrastructure that would support better management of patients); Howard S. Zuckerman et al., *Physicians and Organizations: Strange Bedfellows or a Marriage Made in Heaven?*, 14 FRONTIERS HEALTH SERVS. MGMT. 3, 12–13 (1998) (describing how large organizations such as integrated delivery systems could achieve economies of scale and enhance quality of care by providing a coordinated system of care and “crucial resources such as capital and information systems”).
29. See MERRITT HAWKINS, *supra* note 6, at 8 (describing these earlier moves toward integration as “aimed largely at gaining bargaining power”); Steven W. Floyd et al., *Institutional Forces in the Acceptance of Managed Care Practices by Physicians*, 30 HEALTH CARE MGMT. REV. 237, 242 (2005) (stating that the trend toward forming larger groups was for the purpose of achieving the economic benefits of increased market power and “the ability to obtain more favorable contract terms”).
30. See Bazzoli et al., *supra* note 24, at 248 (“If one were to select at random a set of health organizations and assess their success at restructuring, one would observe mixed results.”).

outcomes.<sup>31</sup> Few large physician groups, for example, adopted adequate utilization controls designed to lower costs and coordinate care, such as clinical protocols or guidelines.<sup>32</sup> Moreover, with health information technology still in its infancy, HCOs often lacked the data necessary to track service costs or develop clinical protocols and guidelines.<sup>33</sup> Many HCOs also failed to successfully integrate

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31. See generally STEPHEN M. SHORTELL ET AL., *REMAKING HEALTH CARE IN AMERICA: THE EVOLUTION OF ORGANIZED DELIVERY SYSTEMS*, 129 (2d ed. 2000) (describing the results of a 1996 study finding low levels of clinical integration, and explaining that clinical integration is “the most important element” in achieving cost-effective care); GOLDSMITH, *supra* note 2, at 35 (discussing the failures of physician organizations to effectively manage patient care). Clinical integration refers to greater coordination of patient care across people, functions, activities, and sites over time in order to enhance the quality and efficiency of patient care. See SHORTELL ET AL., *supra*, at 129 (defining clinical integration). Common activities of clinical integration include “utilization management programs, scheduling and registration systems, information systems that can track utilization by patient and provider, development of care standards, continuous quality improvement programs, clinical service lines, case management systems, population-based community health models, disease and demand management systems, common patient identifiers, and disease registries.” Lawton Robert Burns & Ralph W. Muller, *Hospital-Physician Collaboration: Landscape of Economic Integration and Impact of Clinical Integration*, 86 *MILBANK Q.* 375, 380–82 (2008).

Rather than promote clinical integration, most HCOs focused their efforts on building the organization and promoting economic integration through the alignment of physicians’ financial interests with the organization’s goals. See SHORTELL ET AL., *supra*, at 129 (discussing that health systems in the 1990s focused their attention and energy on “putting the pieces of the system together, building a functional infrastructure, and negotiating relationships with physicians”); Stephen M. Shortell & Rodney K. McCurdy, *Integrated Health Systems, in ENGINEERING THE SYSTEM OF HEALTHCARE DELIVERY* 369, 371 (W.B. Rouse and D.A. Cortese eds. 2010) (“The failure of most [integrated delivery systems] to provide greater value over the past 15 years has been due to their over-emphasis on achieving functional and economic integration to the neglect of the clinical integration process.”); Satiani & Vaccaro, *supra* note 23, at 1050 (stating that these new organizations “failed to fulfill their potential because the main driver was to create a structure rather than to develop objectives or the desired outcome of integration”).

32. See GOLDSMITH, *supra* note 2, at 35 (stating that “in many risk-bearing physician groups, utilization controls were inadequate or completely nonexistent,” few or no clinical protocols or guidelines existed, and the organizations merely managed payment).

33. See *id.* (explaining that prior to the development of electronic health records, organizations “had no way of tracking services costs for patients” in a timely manner and that “[fe]w or no clinical protocols or guidelines existed in most physician organizations to guide optimal physician decision making”); WITT ET AL., *supra* note 17, at 13 (one

physicians into their organization, with physicians often viewing themselves as separate from the HCO and as having divergent interests, values, and goals.<sup>34</sup>

While some HCOs realized their potential, for most the goals of greater efficiencies and quality improvements proved elusive.<sup>35</sup> As a result, many HCOs experienced economic distress,<sup>36</sup> with hospitals in particular suffering significant financial losses.<sup>37</sup> The late 1990s thus brought a decline in these multi-provider partnerships, with many HCOs disbanding and numerous hospitals dissolving their arrangements with employed physicians.<sup>38</sup>

Even though these early partnerships saw many failures, a convergence of factors has brought renewed interest in integration.<sup>39</sup>

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reason for the financial losses suffered by hospitals that entered into arrangements with physicians was the lack of access to timely data).

34. See Sara A. Kreindler et al., *Interpretations of Integration in Early Accountable Care Organizations*, 90 MILBANK Q. 457, 458 (2012) (stating that the push toward vertically integrated systems in the 1990s “did not create the desired social-psychological change: Despite being nominally part of the same organization, physicians and hospitals continued to see themselves as separate groups with divergent interests, values, and worldviews”); see also Burns & Muller, *supra* note 31, at 393 (discussing research from the 1990s which found that “membership in PHOs and IPAs had little effect on physicians’ identification or commitment” to integrated delivery networks).
35. See Kreindler et al., *supra* note 34, at 459 (“While some integrated systems have achieved exceptional performance, many others have faltered . . .”).
36. See, e.g., Lawton R. Burns et al., *History of Physician-Hospital Collaboration: Obstacles and Opportunities*, in PARTNERS IN HEALTH: HOW PHYSICIANS AND HOSPITALS CAN BE ACCOUNTABLE TOGETHER 18, 30 (Francis J. Crosson & Laura A. Tollen eds., 2010) (noting that many integrated delivery systems suffered economic stress, including one major bankruptcy); GOLDSMITH, *supra* note 2, at 35 (“[N]umerous physician groups incurred huge economic losses and went bankrupt.”).
37. See GOLDSMITH, *supra* note 2, at 16 (“[The] hospital excursion into physician employment was an economic disaster.”).
38. See *id.* (“Many hospitals aggressively divested physician practices in the late 1990s and into the early 2000s.”); MERRITT HAWKINS, *supra* note 6, at 8 (“When demand for managed care ebbed in the late 1990s, many of these partnerships disbanded . . .”); Burns & Muller, *supra* note 31, at 383 (“The number of these models peaked in 1996 and since then has steadily declined . . .”); Satiani & Vaccaro, *supra* note 23, at 1049 (“[H]ospitals began to divest themselves of their employed primary care practices in an attempt to minimize further financial losses.”).
39. See WITT ET AL., *supra* note 17, at 2 (noting that “[b]y early 2010, integration was again on the upswing in response to” new payment methodologies that require physicians and hospitals to better coordinate care and align their financial incentives); Moore & Coddington, *supra*

Most importantly, payors impatient with rising health care costs and variable quality of care are again exploring alternatives to fee-for-service, such as tying payments to patient outcomes and overall costs.<sup>40</sup> In addition, the rising financial costs and administrative burdens of operating an independent, private practice are pushing many physicians out of private practice and into HCOs.

Although the renewed drive toward integration started with changes in how private payors reimburse health care providers, health care reform has accelerated this trend by fundamentally altering Medicare's payment policies. In particular, Medicare's new Shared Savings Program calls for providers to form integrated entities known as accountable care organizations (ACOs), with an ACO's provider-members held jointly accountable for the cost and quality of care provided to the ACO's patients.<sup>41</sup> Medicare's new bundled payments program similarly incentivizes providers to work together. Providers participating in the bundled payment program receive a single payment for an episode of care that then is allocated among all providers treating a patient. This in turn encourages a patient's providers to work together to avoid high costs that could exhaust the fixed payment.<sup>42</sup> The Affordable Care Act also shifts the Medicare program away from its past practice of paying physicians and hospitals solely based on the volume of services provided to patients, without regard to the quality of care. For example, Medicare's

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note 25, at 47 ("A convergence of factors is creating a renewed interest in integrated health care.").

40. See Jeroen Trybou et al., *The Ties That Bind: An Integrative Framework of Physician-Hospital Alignment*, 11 BMC HEALTH SERVS. RES. 3 (2011) (commenting that payors are implementing "a broad array of public and private-sector initiatives" that hold providers financially accountable for the cost of care and promote improved quality of care).
41. See Mantel, *supra* note 2, at 1410–12 (describing the ACO model and Medicare's Shared Savings Program). The Shared Savings Program has generated tremendous activity in the health care sector, with many physicians and hospitals forming, or contemplating forming, ACOs. See GARY D. AHLQUIST ET AL., BOOZ & CO., ACCOUNTABLE CARE ORGANIZATIONS: THE NEW PLAYER IN THE HEALTH-REFORM LANDSCAPE 2 (2011) (noting the "swelling wave of ACO activity in the U.S. healthcare market," and reporting that "virtually every" major private health insurer is either "involved in, planning, or seriously considering ACOs," and that seventy-four percent of hospital chief executives state that "their organizations will be part of an ACO within the next five years").
42. See Burns et al., *supra* note 36 ("Bundled payments likely require providers to coordinate care . . ."); GOLDSMITH, *supra* note 2, at 38 (explaining that bundled payments are a form of insurance risk, as poorly coordinated care can result in higher costs that exhaust the fixed bundled payment, exposing the contracting group to losses).

hospital value-based purchasing program ties hospitals' reimbursement rates to patient outcomes, a change that will require hospitals to work more closely with their physicians in order to improve the quality of hospital care.<sup>43</sup> Future Medicare adjustments to physician payments based on patient outcomes similarly will encourage physicians to look for assistance in raising the quality of care they provide to patients.<sup>44</sup>

Many in the health care industry believe that success under these various payment reforms requires physicians to collaborate with one another and with hospitals.<sup>45</sup> As previously noted, HCOs are more likely than independent physicians to achieve the efficiencies and improved patient outcomes demanded by payors. Moreover, in contrast to earlier HCOs, today's HCOs are placing greater emphasis on clinical integration as the key to achieving these objectives,<sup>46</sup> a trend supported by recent improvements in health information technology.<sup>47</sup> The HCOs of today thus offer greater opportunities for

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43. See Burns et al., *supra* note 36, at 38 (commenting that pay-for-performance models, or value-based purchasing, which “reward hospitals for improvements, may [also] require physicians to collaborate”); WITT ET AL., *supra* note 17, at 5 (stating that various payment methodologies under health care reform “require increased collaboration and financial integration between physicians and hospitals”). Another Medicare payment program that ties payments to quality of care is the new Medicare Hospital Readmissions Reductions Program, which reduces payments to hospitals for certain avoidable readmissions. See WITT ET AL., *supra* note 17, at 20 (discussing Medicare’s new hospital readmission payment rules).
44. See Jordan Rau, *Medicare Speeds Up Pay Plan*, WASH. POST, July 22, 2013, at A15 (quoting Kavita Patel and explaining that smaller physician groups will have difficulty adjusting to Medicare’s value-based program, while larger physician groups have figured out how to do so); see generally Burns & Muller, *supra* note 31, at 383 (describing how pay-for-performance models that compensate physicians for care improvements require physicians to collaborate with hospitals); Moore & Coddington, *supra* note 25, at 53 (stating that being part of large, integrated systems gives physicians the opportunity to practice higher quality care than those in solo or small group practice).
45. See Burns et al., *supra* note 36, at 37 (stating that new payment methodologies “will require hospitals and physicians to work together”).
46. See John H. Duffy, *A Push For Clinical Integration*, TRUSTEE, July–Aug. 2011, at 30, 30 (commenting that while in the past clinical integration was rarely achieved, major organizations have recently made investments to increase clinical integration); Keith D. Terry, *Clinical Integration Sets the Stage for Positive Change*, HEALTH MGMT. TECH., Sept. 2012, at 16, 16 (“[M]any healthcare organizations are racing to embrace clinical integration strategies.”).
47. Advancements in health information technology support greater clinical integration by allowing today’s HCOs to collect quality data, develop clinical guidelines and protocols, implement quality improvement

improved care at lower costs relative to earlier HCOs.<sup>48</sup> In addition, the assumption of financial risk for the aggregate cost of caring for a group of patients “is a game of large numbers”—as providers must spread this risk across a large patient population in order to protect themselves from the possibility of a few patients requiring costly care.<sup>49</sup> Aligning with large organizations, therefore, is essential for any physician assuming financial risk under these new payment models.<sup>50</sup> Not surprising, then, physicians are showing a renewed interest in participating in integrated delivery models.<sup>51</sup>

In addition to payment reforms, the changing economics of private practice also is prompting physicians to join HCOs.<sup>52</sup> Solo and small group physicians face stagnant or declining reimbursement rates,<sup>53</sup> in part because they lack bargaining leverage with private payors given their small size.<sup>54</sup> Independent practices also face rising overhead costs and administrative burdens.<sup>55</sup> For example, by 2015,

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initiatives, and enhance care coordination. *See* Mantel, *supra* note 2, at 1416; *see also* MERRITT HAWKINS, *supra* note 6, at 20 (explaining the benefits of electronic health records and how relative to the 1980s and 1990s providers can now use technology to measure quality).

48. *See* Moore & Coddington, *supra* note 25, at 53 (noting that physicians have concluded that affiliating with HCOs affords them “the opportunity to practice higher quality, more cost-effective medicine than [does a] solo practice or small [group]”).
49. GOLDSMITH, *supra* note 2, at 38 (arguing that providers who assume financial risk must ensure that the risk is spread over a large patient population).
50. *See id.* (explaining that aggregating large numbers of physicians “is an essential precondition of organizing for risk”).
51. *See supra* note 6 (reporting on the shift away from solo and small group practices to HCOs).
52. *See* Moore & Coddington, *supra* note 25, at 49 (identifying the changing economics of private practice as a factor driving the movement toward integration).
53. *See* MERRITT HAWKINS, *supra* note 6, at 14 (stating that reimbursement cuts, alongside other challenges, “have pushed [physician] practices to the breaking point”); Burns & Muller, *supra* note 31, at 391 (reporting that physicians’ reimbursement is declining); Michael Zeis, *Physician Alignment: Integration Over Independence*, HEALTHLEADERS MEDIA: INTELLIGENCE, Sept. 2012, at 1, 9 (stating that independent physicians “worry about [their] declining reimbursements”).
54. *See* Isaacs et al., *supra* note 6, at 656 (explaining that independent physicians’ incomes have declined because they are disadvantaged in contract negotiations).
55. *See* GOLDSMITH, *supra* note 2, at 9 (stating that physician practice overhead costs have steadily risen in the past fifty years, rising at a rate four times the rate of inflation).

physicians must either incorporate into their practices meaningful use of electronic health records or accept the penalty of lower reimbursement rates under Medicare.<sup>56</sup> Physicians also face increased documentation and data-reporting requirements stemming from the previously discussed payment reforms and Medicare's various quality reporting obligations.<sup>57</sup> Meeting these requirements requires a substantial investment in technology and staff, as well as the physician's time. Many solo and small group practices, however, lack the capital or willingness to undertake these burdens.<sup>58</sup>

HCOs offer physicians an attractive alternative to the demands and burdens of private practice. With their superior resources, HCOs can provide the capital, technology, and staff needed to support today's practice of medicine, freeing physicians to focus their energies on treating patients and allowing them to find a better work-life balance.<sup>59</sup> Consequently, physicians increasingly are willing to give up the autonomy of independent practice in order to reap the benefits of affiliating with an HCO.

While certainly not all physicians have moved in the direction of joining HCOs, the trend is clear—the health care system is quickly shifting away from one dominated by independent, private physicians to various models of integration.<sup>60</sup> These fundamental changes in the

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56. 42 U.S.C. § 1395w-4(a)(7)(A) (2006 & Supp. V 2011).

57. See GOLDSMITH, *supra* note 2, at 33 (noting that the quality movement in health care and Medicare's new payment reforms require physicians and their staffs to document their case records, leading to increased documentation time and supporting requirements).

58. See JACKSON HEALTHCARE, *A TOUGH TIME FOR PHYSICIANS: 2012 MEDICAL PRACTICE & ATTITUDE REPORT 5* (2012) (stating that physicians leaving private practice cite the following reasons for their doing so: declining reimbursement, capitation, and unprofitable practice; business complexities and hassles; and overhead and high cost of doing business); Isaacs et al., *supra* note 6, at 656 (stating that the economic stresses of independent practice "has led a growing number of physicians to give up independent practice").

59. See WITT ET AL., *supra* note 17, at 3 ("As physicians increasingly seek . . . shelter from the demands and declining economies of private practice, the attractiveness of group practice or direct employment grows."); Satiani & Vaccaro, *supra* note 23, at 1051 (stating that physicians are considering joining HCOs for greater economic security, peace of mind, and better work-life balance).

60. See Michelle Hogan, *Come Together: In Environment of Increasing Consolidation, Nephrologist Founds Independent Practice Association*, *NEPHROLOGY TIMES*, Feb. 2001, at 7, 8 ("While the options for partnering with other medical providers come in all shapes and sizes, . . . in this day and age, some level of collaboration is unavoidable."); Moore & Coddington, *supra* note 25, at 54 ("[M]ost care providers appear headed in the same general direction (i.e., toward greater integration and closer coordination) . . .").

organization and delivery of health care raise important questions regarding the impact of HCO organizational culture on physicians' clinical decision making and, ultimately, on health care costs, quality, and rationing.

## II. PHYSICIAN DECISION MAKING

To understand the influence of HCO organizational culture on the quality, modality, and cost of patient care, one must first understand how physicians make clinical decisions. Ideally the practice of medicine would involve a careful, systematic evaluation of a patient's symptoms and conditions, with science providing a clear pathway toward diagnosis and treatment. The reality, though, often looks very different. As aptly described by Dr. David Eddy, "Uncertainty, biases, errors, and difference of opinions, motives, and values weaken every link in the chain that connects a patient's actual condition to the selection of a diagnostic test or treatment."<sup>61</sup> The absence of clear answers as to the correct diagnosis and course of treatment means physicians instead must rely on their professional intuition.<sup>62</sup> This Part explains that these judgments are guided by physicians' cognitive frameworks, or schemas, that organize their knowledge, assumptions, and values. Part III then describes how an HCO's organizational culture may impact physicians' schemas and, ultimately, their clinical decisions.

### *A. Uncertainty and Ambiguity in Medicine*

A physician-patient encounter begins with a patient presenting various complaints, signs, or symptoms.<sup>63</sup> On the basis of these initial observations, the physician then must develop a diagnostic strategy and select a course of therapeutic treatment.<sup>64</sup> Because diagnostic tests may expose patients to risk<sup>65</sup> and involve time and expense,

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61. David M. Eddy, *Variation in Physician Practice: The Role of Uncertainty*, 3 HEALTH AFF. 74, 75 (1984).
  62. See Floyd et al., *supra* note 29, at 238 ("[T]he delivery of health care relies significantly on the exercise of the physician's expert professional judgement [sic].").
  63. See Eddy, *supra* note 61, at 75 ("[A] large part of medicine is practiced on people who do not have obvious illnesses, but rather have signs, symptoms, or findings that may or may not represent an illness that should be treated.").
  64. See Cheryl B. Travis et al., *Judgment Heuristics and Medical Decisions*, 13 PATIENT EDUC. & COUNSELING 211, 212 (1989) (identifying the three components of medical decision making as encompassing the "recognition and reporting of signs and symptoms, diagnostic strategy, and selection of treatment options").
  65. See Thomas Schlich, *Risk and Medical Innovation: A Historical Perspective*, in THE RISKS OF MEDICAL INNOVATION 1, 1 (Thomas

physicians cannot order every conceivable test that may confirm or rule out a diagnosis. Similarly, once they make a diagnosis, physicians must select among available treatments. In choosing among alternative diagnostic tests and treatment therapies, a physician's choice depends in part on her predictions—the probability a patient has a particular condition, the probability that a diagnostic procedure will yield useful information,<sup>66</sup> the probability that a patient will benefit from a therapeutic intervention, or the probability that a procedure will lead to complications or death.<sup>67</sup> Unfortunately, physicians frequently lack the necessary information to make such predictions.

A major source of uncertainty in medicine is the lack of authoritative evidence and guidelines on the appropriate course of treatment.<sup>68</sup> Ideally, researchers would rigorously test the effectiveness of available diagnostic tests and treatment therapies, yielding the information clinicians need to make informed decisions regarding a medical intervention's utility and risks. Various obstacles, however, prevent doing so.<sup>69</sup> Consequently, the domain in which authoritative

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Schlich & Ulrich Tröhler eds. 2006) (noting that diagnostic measures, as well as therapeutic and preventive measures, expose patients to potential harm “through anticipated and unanticipated negative consequences”). For example, a CT scan of the brain exposes a patient to a radiation dose that is the equivalent of 15–300 chest X-rays. See *When to Say ‘Whoa!’ to Your Doctor: Common Tests and Treatments You Probably Don’t Need*, CONSUMER REP., June 2012, at 12, 13 (discussing the risks associated with common diagnostic tests).

66. See Travis et al., *supra* note 64, at 213 (“Decisions to request diagnostic tests or expert consultation . . . are made on the basis of hypotheses regarding a probable diagnosis.”).
67. See generally Neal V. Dawson & Hal R. Arkes, *Systematic Errors in Medical Decision Making: Judgment Limitations*, 2 J. GEN. INTERN. MED. 183, 183 (1987) (“Daily medical practice depends heavily on the physician’s use of basic cognitive skills such as estimating probabilities of future outcomes . . .”).
68. See Amitabh Chandra et al., *Who Ordered That? The Economics of Treatment Choices in Medical Care*, in 2 HANDBOOK OF HEALTH ECONOMICS 397, 402 (Mark V. Pauly et al. eds., 2012) (“In many clinical situations, there are no authoritative guidelines or consensus treatment recommendations.”)
69. First, rigorous evaluation of a medical intervention’s effectiveness often is extremely expensive and sometimes raises serious ethical issues. See Jan R. Blustein & Theodore Marmor, *Cutting Waste by Making Rules: Promises, Pitfalls, and Realistic Prospects*, 140 U. PA. L. REV. 1543, 1549 (1992) (describing some of the problems with clinical trials). In addition, a comprehensive evaluation of a particular medical intervention may require years of observation, leaving many new technologies inadequately researched prior to their adoption by clinicians. See Katherine H. Hall, *Reviewing Intuitive Decision-Making*

evidence guides clinicians' professional judgments is quite small, with less than half of medical decisions supported by adequate evidence regarding an intervention's effectiveness.<sup>70</sup> Lacking this information, physicians frequently cannot judge an intervention's probable outcomes.<sup>71</sup> The availability of dozens of procedures for diagnosing or treating a condition only further complicates a physician's task.<sup>72</sup> The practice of medicine thus fairly can be characterized as one where

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*and Uncertainty: The Implications for Medical Education*, 36 MED. EDUC. 216, 216-17 (2002) ("Many new technologies have not been adequately researched as to the best ways they can be utilised."). Equally troubling, few studies track a treatment's long-term impact on a patient's health. See Barbara J. Evans, *Seven Pillars of a New Evidentiary Paradigm: The Food, Drug, and Cosmetic Act Enters the Genomic Era*, 85 NOTRE DAME L. REV. 419, 446-47 (2010) (noting that few clinical trials are of sufficient duration to allow for the detection of an intervention's long-term effects on health). Moreover, when evidence of effectiveness does exist, sometimes studies point in different directions, with clinicians facing the challenge of sorting through conflicting or inconsistent results. See Eddy, *supra* note 61, at 81 (explaining that clinicians are frequently left with a mixture of evidence, and that "evidence from different sources can easily go in different directions, [making it] virtually impossible for anyone to sort things out in his or her head"). Finally, even where clinical trials establish the benefits of a particular medical intervention, questions often remain regarding its utility relative to other options. See Clement J. McDonald, *Medical Heuristics: The Silent Adjudicators of Clinical Practice*, 124 ANN. INTERN. MED. 56, 56 (1996) (discussing open issues regarding drug therapies); see also C. David Naylor, *Grey Zones of Clinical Practice: Some Limits to Evidence-Based Medicine*, 345 LANCET 840, 840 (1995) (noting the incomplete or contradictory information about the benefits of competing clinical options).

70. See CONG. BUDGET OFFICE, RESEARCH ON THE COMPARATIVE EFFECTIVENESS OF MEDICAL TREATMENTS: ISSUES AND OPTIONS OR AN EXPANDED FEDERAL ROLE 9 (2007); see also Brenda Sirovich et al., *Discretionary Decision Making by Primary Care Physicians and the Cost of U.S. Health Care*, 27 HEALTH AFF. 813, 814 (2008) (discussing a review by BMJ's *Clinical Evidence* finding that more than half of treatments for a variety of conditions fall into the gray zone of medicine).
71. See Dawson & Arkes, *supra* note 67, at 183 (stating that daily medical practice depends heavily on physicians estimating probabilities of future outcomes, a task severely compromised by gaps in clinical evidence).
72. See Eddy, *supra* note 61, at 78 (explaining that the task of selecting a procedure is complicated by the fact that "there are dozens of procedures that can be ordered, in any combination, at any time"); Naylor, *supra* note 69, at 840 ("Another difficulty arises from the Malthusian growth of uncertainty when multiple technologies are combined into clinical strategies.").

clinicians regularly confront ambiguous choices regarding how best to manage their patients' care.<sup>73</sup>

A second source of uncertainty in medicine stems from variation among patients. Even when clinicians possess information on a treatment's overall clinical effectiveness, the information only reveals average benefits and risks. Statistical projections based on large population averages, however, may hide significant variation among patients, as disparity in patient conditions and characteristics can cause a given intervention to affect patients differently.<sup>74</sup> In addition, many clinical studies limit participation to only those patients meeting certain characteristics,<sup>75</sup> raising questions about the generalizability of a study's findings to those patient populations excluded from the study.<sup>76</sup> As a result, a procedure or treatment's potential clinical benefits and risks for an individual patient often remain uncertain.<sup>77</sup>

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73. See Robert Town et al., *Assessing the Influence of Incentives on Physicians and Medical Groups*, 61 MED. CARE RES. & REV. 80S, 91S (Supp. 2004) (“[P]hysicians are commonly confronted with ambiguous choices and feedback about both the illness and the treatment modality.”).

74. See Henry J. Aaron, *Waste, We Know You Are Out There*, 359 NEW ENG. J. MED. 1865, 1866 (2008) (“A given intervention typically affects individual patients differently.”); Mantel, *supra* note 2, at 1420 (discussing the limitations of clinical evidence given the variation in how a medical intervention affects particular patients).

75. For example, an analysis of acute myocardial infarction medications found that the majority of studies excluded persons over a certain age. See Jerry H. Gurwitz et al., *The Exclusion of the Elderly and Women from Clinical Trials in Acute Myocardial Infarction*, 268 JAMA 1417, 1417–20 (1992) (finding that a majority of studies—over sixty percent—had age-based subject exclusions—some as low as age sixty-five—with the presence of age exclusions increasing over time). Clinical studies frequently exclude patients on the basis of age and other factors out of concern that these patients' higher prevalence of comorbid conditions will increase the risk of side effects or other complications, resulting in poor outcomes not attributable to the studied medical intervention. This in turn could result in data that show a dilution of the beneficial effect of the drug studied, or raise the cost of a study by requiring a larger number of subjects. See *id.* at 1420–21 (discussing the reasons for excluding the elderly from clinical drug studies); McDonald, *supra* note 69, at 56 (noting that rarely are scientific studies large enough to determine how variation in patient factors may alter the benefits or risks of a therapy).

76. See Gurwitz et al., *supra* note 75, at 1420 (explaining that the exclusion of elderly patients from clinical trials of drugs used to treat acute myocardial infarction severely limits the ability to generalize study findings to elderly patients).

77. See *id.* at 1421 (“[A] priori exclusion of the elderly [from clinical drug trials] prevents collection of the very data clinicians and researchers need to make informed decisions when treating this important

Ambiguity in medical decision making also stems from the inherent value choices in health care. Medical procedures frequently involve trade-offs between potential health benefits and risks. A medical intervention may yield useful diagnostic information, cure or ameliorate a disease, or increase a patient's life expectancy, but it also may expose a patient to pain, anxiety, or risks such as complications or death.<sup>78</sup> In addition, concerns about the rising cost of health care raise the additional question of whether a particular treatment represents a worthwhile use of society's health care resources.<sup>79</sup> All medical decisions, then, involve making trade-offs "[a]nd making tradeoffs involves values."<sup>80</sup>

Science cannot identify how best to balance the competing value choices underlying various medical decisions. Physicians instead must be guided by their own personal values (and those of their patients) when deciding the appropriate course of treatment. And because physicians vary as to how they value different outcomes, physicians make different trade-offs.<sup>81</sup> For example, a physician who believes it is important to pursue every possible chance for survival, no matter how

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population."); Timothy Stoltzfus Jost, *The American Difference in Health Care Costs: Is There a Problem? Is Medical Necessity the Solution?*, 43 ST. LOUIS U. L.J. 1, 15 ("Given the infinite variability of patients and conditions, it is often quite difficult to know with any precision how useful any test or procedure will be ex ante."); Mantel, *supra* note 2, at 1420 ("[A] treatment's potential clinical benefits for an individual patient often remain uncertain, with some care that, on average, is of no, or merely marginal, benefit potentially benefitting some patients.").

78. See Eddy, *supra* note 61, at 82 ("The basic problem is that any procedure has multiple outcomes, some good and some bad."); Peter Juhn et al., *Balancing Modern Medical Benefits and Risks*, 26 HEALTH AFF. 647, 647 (2007) ("Therapeutic interventions can stop or slow the progression of serious diseases, prevent illnesses, or improve the quality of life for a patient . . . . [But] they can also present distinct and, at times, serious health risks."). For example, chemotherapy may allow a patient to live longer, but it may decrease the patient's quality of life. See Sidney T. Bogardus et al., *Perils, Pitfalls, and Possibilities in Talking About Medical Risk*, 281 JAMA 1037, 1038 (1999) ("[C]hemotherapy might allow a person to live longer with an otherwise incurable cancer. This added life expectancy might be a benefit to some people but for others, the extra time spent in discomfort would be a risk.").
79. See generally E. Haavi Morreim, *Medicine Meets Resource Limits: Restructuring the Legal Standard of Care*, 59 U. PITT. L. REV. 1, 26 (1997) (noting that medical decision making involves value choices, including "decisions about how much money is appropriate to spend" in an effort to achieve health-related goals).
80. Eddy, *supra* note 61, at 82.
81. See generally *id.* (noting variation in how people value a medical procedure's different outcomes).

remote, may recommend that a patient undergo an unproven, experimental cancer therapy. In contrast, those placing higher value on competing concerns, such as patient comfort or efficient use of health care resources, may advise against such treatment.<sup>82</sup>

A final source of uncertainty in clinical decision making arises from the complexity and breadth of information physicians must sort through in arriving at a diagnosis and plan of treatment. As explained by one commentator, “The final decision about how to manage a patient requires synthesizing all of the information about a disease, the patient, signs and symptoms, the effectiveness of dozens of tests and treatments; outcomes, and values.”<sup>83</sup> Unfortunately, physicians rarely have the luxury of engaging in a comprehensive evaluation of a clinical problem.<sup>84</sup> Rather than investigate all competing hypotheses generated by a patient’s symptoms, they instead focus on a limited set of possible diagnoses.<sup>85</sup> Similarly, rather than conduct an exhaustive review of all the clinical evidence, physicians may settle on a diagnosis when they conclude there is “enough evidence to bring closure to the diagnostic process.”<sup>86</sup> This lack of deep clinical analysis further introduces uncertainty into medical decision making, as physicians often make decisions based on an imprecise and incomplete assessment of the clinical problem.<sup>87</sup>

The lack of scientific information on the optimal approach to diagnosis and treatment, the need to make difficult value trade-offs, and the challenges of processing complex and conflicting information

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82. See, e.g., Morreim, *supra* note 79, at 18–19 (discussing the value trade-offs of ABMT for treating breast cancer).
83. Eddy, *supra* note 61, at 83.
84. See Hall, *supra* note 18, at 480 (noting that doctors often do not incorporate careful, systematic evaluations into their clinical decision making).
85. See Bernard Charlin et al., *Scripts and Medical Diagnostic Knowledge: Theory and Applications for Clinical Reasoning Instruction and Research*, 75 ACAD. MED. 182, 184 (2000) (stating that physicians consider the set of hypotheses representing the initial possibility he or she feels need to be pursued); see also David M. Eddy & Charles H. Clanton, *The Art of Diagnosis: Solving the Clinicopathological Exercise*, 306 NEW ENG. J. MED. 1263, 1266 (1982) (explaining that if a physician believes a diagnosis is more likely than another possible diagnosis, the later may be dropped from further consideration).
86. Charlin et al., *supra* note 85, at 185; see also Jerome P. Kassirer, *Sounding Board: Our Stubborn Quest for Diagnostic Certainty*, 320 NEW ENG. J. MED. 1489, 1489 (1989) (stating that the physician’s task “is not to attain certainty, but rather to reduce the level of diagnostic uncertainty enough to make optimal therapeutic decisions”).
87. See Kassirer, *supra* note 86, at 1489 (“Absolute certainty in diagnosis is unattainable, no matter how much information [physicians] gather, how many observations we make, or how many tests we perform.”).

means physicians regularly confront uncertain and ambiguous choices.<sup>88</sup> Yet they must make clinical decisions despite lacking clear answers. As described in Part II.B, the manner in which a physician responds to this uncertainty and ambiguity is largely a function of intuitive expertise that shapes how she construes a clinical matter and the decision rules she applies.<sup>89</sup>

*B. The Role of Cognitive Schemas in Clinical Decision Making*

The field of cognitive psychology has shown that our judgments and decisions rarely result from conscious, deductive reasoning based on a systematic approach to the evidence.<sup>90</sup> Our mental processing instead reflects the application of cognitive frameworks, or schemas, that organize our knowledge and beliefs about a situation.<sup>91</sup> In the health care context, schemas provide the “personal decision rules” that physicians use to make clinical decisions, particularly in conditions of uncertainty.<sup>92</sup>

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88. See Town et al., *supra* note 73, at 91S (stating that ambiguities are an inevitable part of patient management, especially as “[t]here is often a lack of scientific information about the optimal approach to the diagnosis and treatment of many diseases, and physicians are commonly confronted with ambiguous choices and feedback about both the illness and the treatment modality”).
89. See Hall, *supra* note 69, at 216 (“It is known that intuitive expertise requires a well organised store of networks and rules which allow efficient access and retrieval of information. These ‘personal decision rules’ are used by clinicians, particularly in conditions of uncertainty . . . .”); Town et al., *supra* note 73, at 91S (“A physician’s response to ambiguity will be a function of how he or she construes a situation and the rules available to respond to the situation.”).
90. See generally DANIEL KAHNEMAN, THINKING FAST AND SLOW (2011) (providing a comprehensive discussion of how cognitive processing is primarily influenced by automatic, subconscious thought rather than conscious reasoning).
91. See JAMES L. BOWDITCH, ANTHONY F. BUONO & MARCUS M. STEWART, A PRIMER ON ORGANIZATIONAL BEHAVIOR, 45 (7th ed. 2008) (“People often use schemas, cognitive frameworks that systematize our ‘knowledge’ about . . . other people, situations, objects, and . . . phenomena.”); Mark P. Higgins & Mary P. Tully, *Hospital Doctors and Their Schemas About Appropriate Prescribing*, 39 MED. EDUC. 184, 185 (2005) (defining schemas as “ordered patterns of mental representations that encapsulate all our knowledge regarding specific objects, concepts or events”).
92. Hall, *supra* note 69, at 216 (stating that schemas are “personal decision rules” used by physicians, particularly in conditions of uncertainty).

## 1. Cognitive Schemas

Schemas are the mental processes triggered by a particular situation.<sup>93</sup> Derived from our past experiences, societal roles, and personal morals,<sup>94</sup> schemas organize the rules, assumptions, and values we apply to a given situation.<sup>95</sup> In doing so, they provide cognitive shortcuts that operate outside of conscious awareness,<sup>96</sup> eliminating the need for careful, systematic reasoning.<sup>97</sup> Schemas thus can be understood as the intuitions that shape our judgments and actions.

In organizing our knowledge and values in a systematic way, schemas help us navigate a situation. First, schemas guide the search for, acquisition of, and processing of information. Schemas dictate what information an individual retrieves from memory<sup>98</sup> and direct which elements of a situation are attended to and which are ignored.<sup>99</sup>

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93. See John A. Bargh & Tanya L. Chartrand, *The Unbearable Automaticity of Being*, 54 AM. PSYCHOLOGIST 462, 462 (1999) (explaining that individuals' mental processes are put into motion by features of the situation facing the individual); Linda K. Treviño et al., *Behavioral Ethics in Organizations: A Review*, 32 J. MGMT. 951, 961 (2006) (stating that a situation triggers a script—a type of schema—that shapes the individual's formation of judgment and intention to act).
94. See BOWDITCH, BUONO & STEWART, *supra* note 91, at 45 (“[S]chemas can reflect ourselves, . . . the roles we play, and events we experience.”); Stanley G. Harris, *Organizational Culture and Individual Sensemaking: A Schema-Based Perspective*, 5 ORG. SCI. 309, 310 (1994) (stating that schemas are “from one’s experiences about how the world operates”).
95. See Higgins & Tully, *supra* note 91, at 185 (defining schemas).
96. See Bargh & Chartrand, *supra* note 93, at 462 (1999) (“[M]ost of a person’s everyday life is determined not by their conscious intentions and deliberate choices but by mental processes that are put into motion by features of the environment and that operate outside of conscious awareness and guidance.”); Dennis A. Gioia & Peter P. Poole, *Scripts in Organizational Behavior*, 9 ACAD. MGMT. REV. 449, 450, 454 (1984) (stating that schemas “have been shown to be basic elements of cognitive processing,” and that people are “not purely rational information processors”).
97. See Hall, *supra* note 18, at 480 (explaining that heuristics, a type of schema, are “decisionmaking shortcuts [that] eliminate the need to reason from first principles and elemental facts in every case”); Hall, *supra* note 69, at 216 (describing intuition—or schemas—as “cognitive ‘short-circuiting’”).
98. See Charlin et al., *supra* note 85, at 183 (“[T]o give meaning to a new situation in our environment, we use prior knowledge that contains information about the characteristics and features of the situation . . . .”); Harris, *supra* note 94, at 310 (identifying one function of schemas as “direct[ing] information . . . retrieval from memory”).
99. See Higgins & Tully, *supra* note 91, at 185 (“A schema can be viewed as a coded expectation about any aspect of an individual’s life, which

In addition, schemas help make sense of these elements by describing the relationships between them<sup>100</sup> and by shaping an individual's expectations about the situation.<sup>101</sup> Schemas thus guide the knowledge an individual applies to a situation, as well as her perception and analysis of people and events.<sup>102</sup>

Second, schemas guide an individual's behavioral response to a situation. When a situation calls for action, a type of schema known as a script is triggered.<sup>103</sup> As the term suggests, scripts facilitate action by incorporating knowledge of event sequences and specifying appropriate behavior.<sup>104</sup> They therefore play an essential role in translating thought into action, influencing goal setting, planning, and execution.<sup>105</sup>

Schemas thus reduce the cognitive complexity of decision making by providing simplified representations of people, events, or situations and by formulating action in the face of uncertainty.<sup>106</sup> In essence,

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dictates which characteristics of a given event are attended to, which are stored for the future, and which are rejected as irrelevant.”).

100. See Kimberly D. Elsbach et al., *Identifying Situated Cognition in Organizations*, 16 *ORG. SCI.* 422, 422 (2005) (“Schemas both constitute and structure knowledge by identifying those elements of a situation that are salient, and by describing the causal relations between them.”).
101. See Peter P. Poole et al., *Organizational Script Development Through Interactive Accommodation*, 15 *GROUP & ORG. STUD.* 212, 213 (1990) (explaining that schemas “can be viewed as cognitive models that provide structured expectations about people, situations, and events”); Charlin et al., *supra* note 85, at 183 (stating that schemas, such as scripts, contain “information about the relationships that link [a situation’s] characteristics and features”).
102. See Harris, *supra* note 94, at 310 (stating that schemas “guide perception, memory, and inference”); Poole et al., *supra* note 101, at 213 (explaining that the selected schema governs “the interpretation an individual gives to a situation”).
103. See Poole et al., *supra* note 101, at 213 (“When behavior or action is a concern, a type of schema known as a script is called into play.”).
104. See Gioia & Poole, *supra* note 96, at 449 (“A script is a schematic knowledge structure held in memory that specifies behavior or event sequences that are appropriate for specific situations.”); Poole et al., *supra* note 101, at 213–14 (explaining that scripts “aid[] in comprehension, coordination, and task accomplishment” by reflecting “knowledge of behavior, action, and event sequences”).
105. See Harris, *supra* note 94, at 310 (stating that schemas “facilitate anticipations of the future, goal setting, planning and goal execution”).
106. See Elsbach et al., *supra* note 100, at 422 (“[Schemas] serve as simplified representations of knowledge, and, as such, as a means for simplifying cognition . . . .”); see also Gioia & Poole, *supra* note 96, at 454 (stating that schemas such as scripts “are heuristic knowledge structures that aid in reducing the cognitive complexity of decision making”); Higgins & Tully, *supra* note 91, at 185 (“Schema theorists argue that each

schemas serve as mental maps that enable individuals to quickly orient themselves to and navigate a situation.<sup>107</sup> In doing so, they promote more efficient decision making by reducing the need to devote intensive thought and logic to each and every situation.<sup>108</sup> Schemas are especially important in facilitating decision making in conditions of uncertainty because they fill gaps in the available information and provide a template for action.<sup>109</sup> Not surprisingly, then, the schemas utilized by health professions significantly impact their clinical decisions, particularly when the medical science provides no clear answer.

## 2. Physicians' Use of Cognitive Schemas

When confronted with uncertainty and ambiguous clinical choices, a physician's response is a function of her personal cognitive schemas.<sup>110</sup> Beginning with the diagnostic process, schemas allow a clinician to efficiently perceive the relevant elements of the patient's situation, generate hypotheses as to the causes of the patient's complaints, and strategically gather additional data for making a diagnosis.<sup>111</sup> Prior to ordering diagnostic tests or initiating therapeutic treatments, physicians first must have "a rough idea about what is occurring."<sup>112</sup> This begins with schemas focusing the physician's attention on certain attributes of the patient's situation—specific patient symptoms, details from the patient's medical history, and

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individual constructs a system of schemas and subschemas that are connected in a way that enables that individual to deal effectively with their world.”).

107. See Harris, *supra* note 94, at 310 (“Schemas serve as mental maps which enable individuals to traverse and orient themselves within their experiential terrain.”).
108. See Gioia & Poole, *supra* note 96, at 453 (explaining that schemas such as scripts reduce the need to devote “equally intensive thought to all actions,” with some situations requiring “little or no conscious processing”); Harris, *supra* note 94, at 310 (schemas are “used by individuals to encode and represent incoming information efficiently”).
109. See Harris, *supra* note 94, at 310 (stating that schemas “guide filling gaps in the information available” and “provide templates for problem solving”); see also Elsbach et al., *supra* note 100, at 422 (stating that, in providing representations of knowledge, schemas “[simplify] cognition in conditions of incomplete information”).
110. See Eisenberg, *supra* note 5, at 1019 (“[U]ncertain clinical situations will force physicians to rely on judgment, habit, and personal practice style in deciding how to treat patients.”).
111. See Charlin et al., *supra* note 85, at 186 (explaining that scripts provide “a mental model of the situation, which allows the clinician to efficiently generate hypotheses and strategically gather data”).
112. *Id.* at 183.

features of the patient's environment.<sup>113</sup> In doing so, the clinician quickly develops a representation of the situation that in turn "activates networks of knowledge," or schemas, that both describe the possible relationship between key observations and generate hypotheses regarding the patient's condition.<sup>114</sup> Schemas also direct the course of action a physician takes to validate a hypothesis, such as what further inquiries to make of the patient or which diagnostic tests to order.<sup>115</sup>

Schemas also help the clinician navigate the clinical uncertainty that surrounds the diagnostic process. Ideally, a particular diagnosis will explain all of a patient's symptoms and signs. In practice, however, a patient's symptoms and signs often do not perfectly match the hypothesized diagnosis.<sup>116</sup> The physician then must decide whether clinical observations that cannot be explained by a diagnosis are simply atypical features or discordant facts requiring consideration of alternative hypotheses.<sup>117</sup> A physician's cognitive schemas guide this evaluation.<sup>118</sup> Similarly, because physicians cannot order every

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113. *See id.* at 182–83 (describing how a physician's scripts "give meaning to a new situation" and "direct[] the selection . . . of information"); *see also* Eddy & Clanton, *supra* note 85, at 1265 (explaining that physicians apply heuristic devices that lead them to focus on certain findings, temporarily ignoring other findings).

114. *See* Charlin et al., *supra* note 85, at 184 (explaining that physicians quickly build "a representation of the situation that initiates the direction and scope of the reasoning process;" that "within moments hypotheses pop into the physician's mind as possible explanations for the patient's problem;" that these hypotheses, "which are usually a product of the clinician's past experiences and knowledge, appear quickly; and that their activation is an 'unconscious act of memory association'"); *see also* Eddy & Clanton, *supra* note 85, at 1265 (stating that the application of a heuristic device leads the physician to focus on a limited number of findings, or pivots, which then generate a realm of possible diagnoses).

115. *See* Charlin et al., *supra* note 85, at 182–85 (describing the application of scripts to the diagnostic process).

116. *See id.* at 186 ("[P]atient clinical features never perfectly match the attributes of an illness scripts [sic] . . .").

117. *See* Eddy & Clanton, *supra* note 85, at 1266 (explaining that a preliminary clinical diagnosis may not explain some findings and quoting a discussant's comment that prior to accepting the diagnosis, the physician must ask whether there are "atypical features or discordant facts" and determine whether other diagnoses should be considered).

118. *See* Charlin et al., *supra* note 85, at 186 (explaining that "scripts work in such a way that a physician makes a 'reasoned decision' about why some expectations are violated" and that, in script processing for assessment of a fit, physicians must determine whether there are reasonable explanations for these departures).

conceivable test that may confirm or rule out a diagnosis,<sup>119</sup> they must determine when they have sufficient evidence to support a working diagnosis and when to seek additional confirming evidence or explore alternative hypotheses. Schemas again guide this determination.<sup>120</sup>

In addition to directing the diagnostic process, schemas also guide a physician's choice and implementation of a patient's treatment plan. As previously noted, schemas reflect a physician's knowledge about a disease and thus shape a physician's predictions about a patient's prognosis or the efficacy of various therapeutic interventions.<sup>121</sup> Importantly, schemas reflect the scientific assumptions given primacy by a physician, which in turn impact her patient management decisions.

To illustrate the influence of a physician's underlying assumptions on her professional judgment, consider the treatment of patients who exhibit only mild or even no symptoms of their disease. When patients with a disease exhibit no or mild symptoms, there may be uncertainty as to whether to treat the disease with aggressive medical interventions, such as surgery, or instead pursue a strategy of "watchful waiting."<sup>122</sup> If the physician recommends surgery or other risky procedures, she may do so on the assumption that the patient's condition will worsen over time, and thus the patient will require the

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119. See *supra* note 68 and accompanying text.

120. See generally Charlin et al., *supra* note 85, at 185 (discussing the impact of scripts on the diagnostic process and the fact that physicians often base their diagnoses on less-than-complete evidence, "assum[ing] that other values[—that is, other signs, symptoms, or attributes associated with a condition—]are present [without] specifically check[ing] them").

121. See *id.* at 183 (after arriving at a diagnosis, a clinician "can use related knowledge to take actions, such as providing a prognosis . . . or instituting a treatment").

122. See, e.g., Raphael Rosenhek, *Watchful Waiting for Severe Mitral Regurgitation*, 23 SEMINARS THORACIC & CARDIOVASCULAR SURGERY 203, 206 (2011) ("There is an ongoing debate as to whether asymptomatic patients with severe mitral regurgitation should be operated [on] in the absence of symptoms."); A.R. Brady et al., *Long-Term Outcomes of Immediate Repair Compared with Surveillance of Small Abdominal Aortic Aneurysms*, 346 NEW ENG. J. MED. 1445 (2002) (finding "no long-term difference in mean survival between early-surgery and surveillance groups"); see also *Study: Watchful Waiting, Not Surgery, Sometimes Best for Abdominal Aortic Aneurysms*, HEART DISEASE WKLY., June 23, 2002, at 13, available at <http://www.newsrx.com/newsletters/Heart-Disease-Weekly/2002-06-23/20020623333142W.html> (quoting a researcher from the 2002 *New England Journal of Medicine* as stating, "There has been uncertainty in the medical community about which patients with abdominal aortic aneurysms are likely to benefit from elective surgery.").

procedure eventually.<sup>123</sup> The physician also may assume that a later-performed procedure would prove more risky due to factors such as the patient's increased age or advancement of the disease.<sup>124</sup> In contrast, physicians favoring watchful waiting may believe that patients should not be exposed to the risks associated with a procedure unless absolutely necessary<sup>125</sup> or that the passage of time may bring technological breakthroughs that reduce the procedure's risks or increase the chance of a favorable outcome.<sup>126</sup>

Differences in physicians' underlying beliefs may also account for variation in physicians' drug-prescribing practices. For example, physicians favoring newer drugs over older drugs may assume that newer is usually better.<sup>127</sup> Other physicians, however, may follow the rule "never use a new drug when an old drug will do" because they believe new drugs may pose unknown dangers to patients.<sup>128</sup> As these examples illustrate, variation in physicians' practices often can be attributed to differences in the assumptions incorporated into physicians' schemas.

Schemas also impact how physicians resolve the ambiguity arising from the value trade-offs inherent in most medical decisions. A physician's schema guides the physician toward specific clinical alternatives by elevating certain values while minimizing others. For example, a schema may lead a physician to focus on whether a treatment will extend a patient's life, ignoring or minimizing other concerns such as pain and disability, risks of health complications, and financial costs.<sup>129</sup> Similarly, physicians' reliance on simplifying

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123. See McDonald, *supra* note 69, at 60 (discussing the assumptions underpinning arguments for elective surgery).
124. See *id.*; see also Alice Goodman, *Follicular Lymphoma: Is Watchful Waiting Still a Treatment Option in Era of New and Improved Therapy?*, ONCOLOGY NEWS INT'L, Mar. 2010, at 20, 20. (stating that "one argument for starting therapy immediately [for the treatment of follicular lymphoma is the concern] "that delaying therapy will lead to problems such as irreversible organ damage, resistant disease, transformation, and less robust response to delayed therapy").
125. See *id.* (stating that an advantage of waiting before initiating certain therapies may "include delaying acute and late adverse effects of therapy").
126. See McDonald, *supra* note 69, at 61 (discussing considerations on the side of watchful waiting rather than recommending elective surgery).
127. See *id.* at 59 (discussing the reasons that new drugs often quickly become the preferred drugs in their class).
128. See *id.* at 59–60 (highlighting the concerns justifying the rule "never use a new drug when an old drug will do").
129. See Eddy, *supra* note 61, at 82 (discussing value trade-offs in medical decision making).

maxims, known as heuristics,<sup>130</sup> directs them toward choices that promote certain values over others.<sup>131</sup> As Dr. Eddy explains:

Anyone uncomfortable dealing with probabilities can use the heuristic, “If there is any chance of (the disease), the (procedure) should be performed.” If one cannot estimate the number of people to be saved, one can use the heuristic, “If but one patient is saved, the effort is worthwhile.” If one cannot contemplate alternative uses of resources that might deliver a greater benefit to a population, there is the heuristic, “Costs should not be considered in decisions about individual patients.”<sup>132</sup>

Schemas accordingly play a central role in the balance physicians strike among the competing considerations arising in the patient-care setting.

As the preceding discussion shows, schemas guide physicians’ professional judgments, enabling them to make choices in the face of uncertainty and ambiguity. In the absence of clear clinical guidelines, patient-care decisions are largely determined by the schemas directing a physician’s cognitive processing. For this reason, it is of fundamental importance that we understand the influences shaping physicians’ schemas. Part III explores one such influence—an HCO’s organizational culture.

### III. THE IMPACT OF ORGANIZATIONAL CULTURE ON PHYSICIANS’ CLINICAL DECISION MAKING

As discussed in Part II, physicians’ clinical decisions are guided by their cognitive schemas, which reflect a physician’s values and beliefs. Because physicians generally are afforded significant autonomy when making clinical decisions,<sup>133</sup> it may be that their schemas are shaped largely by their training and the norms of the medical professional generally.<sup>134</sup> The insights of organizational sociologists,

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130. Heuristics are rules or guidelines that are applied for the purpose of simplifying complex tasks and decisions. *See* Hall, *supra* note 69, at 219 (defining heuristics).

131. *See* Travis et al., *supra* note 64, at 212 (stating that “heuristics . . . influence . . . preferences among alternatives” and impact “selection of treatment options”).

132. Eddy, *supra* note 61, at 85; *see also* Hall, *supra* note 69, at 219 (describing similar medical mottos that simplify physicians’ decision making).

133. *See* Town et al., *supra* note 73, at 87S (noting that “physicians practice with much autonomy”); Floyd et al., *supra* note 29, at 239 (noting that the complexity of medicine and its reliance on professional intuition “requires clinical autonomy”).

134. Health professionals’ education and training involve a rigorous socialization process, with clinicians generally internalizing the dominant

however, teach us that people do not make decisions in a vacuum but are influenced by situational variables, including organizational culture.<sup>135</sup>

An organization's culture manifests itself both formally and informally. At the more visible level are an organization's formal structures, processes, and espoused values.<sup>136</sup> These include the organization's financial-incentive structures, methods of performance assessment, mission statement, and ethical guidelines.<sup>137</sup> Of greater influence, however, is an organization's informal culture, that is, the "taken for granted beliefs, perceptions, thoughts and feelings."<sup>138</sup> Together, an organization's formal and informal culture significantly influence its employees' decisions, perhaps even more than the professional norms and personal values an employee brings to the workplace.<sup>139</sup>

Applying organizational theories to health care leads to the conclusion that physicians embedded within HCOs are part of an organizational dynamic that powerfully influences the physicians' clinical judgments.<sup>140</sup> Specifically, HCOs' organizational cultures

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beliefs and norms of their profession. *See* Town et al., *supra* note 73, at 85S ("Medical education includes one of the most intense socialization processes of any profession, and the products of these programs bring strong professional values to the practice setting.").

135. *See generally* Lynne L. Dallas, *Corporate Ethics in the Health Care Marketplace*, 3 SEATTLE J. FOR SOC. JUS. 213, 215 (2004) (explaining that "most people's behavior is affected by situational variables").

136. *See* EDGAR H. SCHEIN, *THE CORPORATE CULTURE SURVIVAL GUIDE* 21–27 (new & rev. ed. 2009) (describing the three levels of organizational culture).

137. *See id.* at 39–40 exhib.3.1; *see also* BOWDITCH, BUONO & STEWART, *supra* note 91, at 327, 329 (explaining that a firm's shared values include "guidelines as to acceptable behaviors" and "formal statements of organizational philosophy, creeds, and charters"); Huw T. O. Davies, et al., *Organisational Culture and Quality of Health Care*, 9 QUALITY IN HEALTH CARE 111, 114 (2000) (stating culture artifacts of the medical profession include methods of performance assessment).

138. *See* SCHEIN, *supra* note 136, 21 fig.2.1 (defining an organization's informal culture as its underlying assumptions); *see also* Davies, *supra* note 137 (explaining that assumptions "are the basic 'taken for granted' views of the world and how one can understand and intervene in it").

139. *See* BOWDITCH, BUONO & STEWART, *supra* note 91, at 4 ("As studies have found, a company's culture and values often have a greater influence on work-related decisions than the personal values of its employees.").

140. *See* Timothy J. Hoff, *The Physician as Worker: What It Means and Why Now?*, HEALTH CARE MGMT. REV., Fall 2001, at 53, 63 (noting that when physicians come to practice alongside others, we might expect them "to cultivate new mental models within which physicians enact their clinical roles"); *cf.* Henry J. Silverman, *Organization Ethics in the Healthcare Organization: Proactively Managing the Ethical Climate to*

profoundly influence both how physicians perceive patients' situations and the thought patterns, attitudes, and values physicians apply when making clinical decisions.

Although the empirical research on this issue is limited, several studies suggest that physicians conform to the norms of the organizations where they practice. For example, studies have found that for physicians who admit patients to two or more hospitals, their patients' stays in a particular hospital are similar in length when compared to the usual practice at that hospital.<sup>141</sup> In other words, a physician adapts her practices to the norm of the hospital where the patient is admitted, admitting her patients for longer periods of time in the hospital with the longer average length of stay and discharging her patients sooner from the hospital with the shorter average length of stay, even after controlling for differences in patient characteristics. Such studies support the hypothesis that the organizational setting has a significant impact on physicians' cognitive schemas; otherwise, one would expect a physician to have a consistent practice style across hospital settings.<sup>142</sup>

This Part sets forth a theory for how an HCO's organizational culture shapes its affiliated physicians' cognitive schemas and, ultimately, their clinical decisions. Although various structural aspects of an HCO impact physician's patient-care decisions,<sup>143</sup> this Article

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*Ensure Organizational Integrity*, 12 HEC F. 202, 204–05 (2000) (arguing that because of the influence of the contextual aspects of healthcare institutions on physicians' behavior, the "moral dimensions of patient care need to be conceptualized as being largely influenced by organizational dynamics").

141. See Judith D. de Jong et al., *Variation in Hospital Length of Stay: Do Physicians Adapt Their Length of Stay Decisions to What is Usual in the Hospital Where They Work?*, 41 HEALTH SERVS. RES. 374 (2006) (comparing lengths of stay for U.S. physicians admitting patients to two or more hospitals); Gert P. Westert et al., *Variation in Duration of Hospital Stay Between Hospitals and Between Doctors Within Hospitals*, 37 SOC. SCI. MED. 833 (1993) (similar study looking at Dutch physicians).
142. See de Jong et al., *supra* note 141, at 388 (arguing that their findings of variation in lengths of stay across hospitals for the same physician support the hypothesis that organizational circumstances have a profound influence on clinical decisions).
143. Organizational structural aspects that may impact or constrain physicians' patient-care decisions include the availability of resources and specialists, the extent to which providers make use of health information technology, and work flow processes. For example, a limited supply of hospitals beds may lead physicians to treat patients outside the hospital setting, while limited access to specialists may lead primary care physicians to treat patients themselves rather than refer patients to specialists for more intensive, technology-driven treatments. See generally Mary Rorty, *Introduction to Organization Issues in Clinical Ethics*, in DEVELOPING ORGANIZATION ETHICS IN HEALTHCARE: A

focuses on the beliefs, norms, and values as reflected in an HCO's organizational culture. Part III.A discusses the influence exerted by a physician's organizational peers, particularly in conditions of uncertainty. Part III.B then explains how a physician's organizational identification with an HCO may lead her to incorporate the HCO's norms, values, and goals into her schemas. Finally, Part III.C draws on the theory of motivated cognition to explain how a physician's self-interest, as affected by the HCO, subconsciously biases her clinical judgments.

*A. The Influence of Organizational Peers*

Research shows that within the group setting, leaders, role models, and other peers exert strong influence over individuals' norms, values, attitudes, and behavior.<sup>144</sup> This process generally occurs unconsciously, with individuals largely unaware of the impact of their peers on their thinking.<sup>145</sup> Physicians are no different, with commentators long observing the sway physicians hold over one another.<sup>146</sup> For physicians affiliated with HCOs, then, their clinical

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CASE-BASED APPROACH TO POLICY, PRACTICE, AND COMPLIANCE 49, 51 (Ann E. Mills et al. eds., 2001) (stating that physicians "ma[k]e accommodations for organizational strictures" such as "the range of available . . . treatments" and "restrictions on access to specialists").

144. See Michael W. Grojean et al., *Leaders, Values, and Organizational Climate: Examining Leadership Strategies for Establishing an Organizational Climate Regarding Ethics*, 55 J. BUS. ETHICS 223, 224 (2004) (explaining how organizational leaders influence other organizational members' perceptions and norms); Lynne L. Dallas, *A Preliminary Inquiry into the Responsibility of Corporations and Their Officers and Directors for Corporate Climate: The Psychology of Enron's Demise*, 35 RUTGERS L. J. 1, 21 22 (2003) (commenting that the beliefs and values of others within an organization are often better predictors of an individual's behavior than the beliefs the individual brought to the organization).
145. See MARY DOUGLAS, *HOW INSTITUTIONS THINK* 13 (1986) ("The individual within the collective is never, or hardly ever, conscious of the prevailing thought style which almost always exerts an absolutely compulsive force upon his thinking . . . ." (quoting LUDWIK FLECK, *GENESIS AND DEVELOPMENT OF A SCIENTIFIC FACT* 41 (Thaddeus J. Trenn & Robert K. Merton eds., Fred Bradley & Thaddeus J. Trenn trans., University of Chicago Press 1979) (1935)); Milton C. Regan, Jr., *Moral Intuitions and Organizational Culture*, 51 ST. LOUIS U. L.J. 941, 959 (2007) (stating that the process of looking to peers, especially in situations of ambiguity, is a "process of unconscious influence").
146. See, e.g., Catherine Borbas, et al., *The Role of Clinical Opinion Leaders in Guideline Implementation and Quality Improvement*, 118 CHEST 24S, 26S (Supp. 2000) (noting that interpersonal relationships among physicians is the most important fact in determining physicians' adoption of medical innovations and refinements of medical practice, with local, informal medical opinion being of particular importance);

decisions likely will reflect the practice style and philosophy of their HCO colleagues.

1. Physicians' Modeling of Their Peers

Peers exert their greatest influence on an individual's cognitive schemas in situations of uncertainty.<sup>147</sup> Situations of uncertainty cause unease because individuals can never be sure that their decisions represent the best or right choice. Modeling one's peers, however, can minimize this discomfort, as "safety in numbers" provides reassurance that the correct decision has been made.<sup>148</sup> Conforming to one's peers also permits individuals to delude themselves into believing that an ambiguous situation is not in fact ambiguous, further providing a false sense of security.<sup>149</sup>

Because physicians commonly confront uncertainty when making clinical decisions, not surprisingly they take safety in following the example of their peers.<sup>150</sup> For example, if a physician's peers generally treat a disease aggressively, the physician can take comfort in following her peer's aggressive approach. Similarly, if her peers believe newer drugs generally are superior to older drugs, a physician also likely will favor the newer drugs.

When faced with uncertainty, individuals also may look to their peers for guidance because it is efficient to do so. As explained by Professors Thomas Jones and Lori Verstegen Ryan,

[L]earning would be both slow and risky if individuals learned only by direct experience; their own experiences would not be extensive enough to allow learning at a significant pace and

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Rita Mano-Negrin & Brian Mittman, *Theorizing the Social Within Physician Decision Making*, 15 J. MGMT. MED. 259, 261 (2001) (discussing the importance of peer influences on physician behavior).

147. See Mano-Negrin & Mittman, *supra* note 147, at 261 ("Peer influence is greatest in situations characterized by high levels of uncertainty, where objective, unambiguous information is not readily available.").
148. See Eddy, *supra* note 61, at 85–86 ("[In the face of great uncertainty], the safest and most comfortable position is to do what others are doing. The applicable maxim is 'safety in numbers.'"); cf. Samia A. Hurst et al., *How Physicians Face Ethical Difficulties: A Qualitative Analysis*, 31 J. MED. ETHICS 7 (2005) (stating that when individuals face difficult ethical issues, they look for assistance in part "[t]o obtain reassurance that the correct decision was being made").
149. Cf. Hall, *supra* note 69, at 218 (stating that conforming to one's peers provides physicians with a false sense of certainty, as it "allows a (mostly unconscious) escape from having to face up to uncertainty, as well as engendering a (conscious or unconscious) feeling of security").
150. See Eddy, *supra* note 61, at 86 (commenting that physicians take "safety in numbers" and do what others are doing).

their mistakes could result in hazardous situations. Much social learning, therefore, takes place through modeling.<sup>151</sup>

Imitating others also economizes decision making by allowing individuals to avoid the time and effort of acquiring information and comparing alternatives.<sup>152</sup>

Extending this theory to the clinical setting would suggest that physicians have a strong propensity to imitate their peers or role models for reasons of efficiency. Given the high stakes and complexity involved in medical decision making, learning through direct experience is both slow and risky.<sup>153</sup> In addition, few physicians have the time to determine the efficacy of various procedures through careful research and experiment. For example, in deciding whether to prescribe a new drug over an older drug, a physician may model the prescribing practices of peers or trusted role models in order to take advantage of others' clinical experience with or research on the drugs. Modeling other physicians thus allows physicians to learn while avoiding potentially hazardous learning trials or time-consuming research and experiments.

Physicians also may model their peers for other utilitarian reasons—namely to secure monetary and nonmonetary rewards. Most individuals desire to enhance their financial status and thus are

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151. Thomas M. Jones & Lori Versteegen Ryan, *The Effect of Organizational Forces on Individual Morality: Judgment, Moral Approbation, and Behavior*, 8 BUS. ETHICS Q. 431, 436 (1998); see also Ralph Hertwig & Stefan M. Herzog, *Fast and Frugal Heuristics: Tools of Social Rationality*, 27 SOC. COGNITION 661, 686 (2009) (“Social learning in the form of imitation (or, relatedly, advice giving) allows individuals to learn . . . without engaging in potentially hazardous learning trials . . .”).
152. See GERD GIGERENZER, RATIONALITY FOR MORTALS: HOW PEOPLE COPE WITH UNCERTAINTY 30 (2008) (noting that imitation may be “ecologically rational” when “it is hard or time-consuming to figure out whether a choice is good or bad”); Mark Pingle, *Imitation Versus Rationality: An Experimental Perspective on Decision Making*, 24 J. SOCIO-ECON. 281, 281 (1995) (“Rather than comparing alternatives before making a choice, decision makers often simply imitate the choices made by others. Imitation may be advantageous when comparing alternatives is relatively costly.”).
153. Cf. Mary A. Burke et al., *Physician Social Networks and Geographical Variation in Medical Care* 2 (Ctr. on Soc. Econ. & Dynamics, Working Paper No. 33, 2003), available at [http://www.brookings.edu/~media/research/files/reports/2003/7/healthcare%20burke/07healthcare\\_burke.pdf](http://www.brookings.edu/~media/research/files/reports/2003/7/healthcare%20burke/07healthcare_burke.pdf) (“The correct diagnosis and treatment for a patient can be complicated, and there may be an opportunity to take advantage of the experience of others.”). Physicians also may conform to the practice norms of those around them to protect themselves against claims of malpractice; such norms often are the prevailing legal standard of care. See *id.*

motivated by pecuniary rewards such as higher wages and bonuses.<sup>154</sup> Individuals also care about nonmonetary rewards like prestige and professional advancement.<sup>155</sup> They therefore pay close attention to the rewards and esteem bestowed on others, modeling their behavior after organizational leaders and role models in the hopes of securing for themselves monetary and professional rewards.<sup>156</sup>

A final reason for peers' influence stems from individuals' powerful need for meaningful social relationships. The fundamental motive to belong or fit in causes individuals to desire others' approval, as approval is a prerequisite for maintaining interpersonal bonds.<sup>157</sup> Consequently, individuals generally conform their attitude and behavior to the group's norms in order to ensure the continuation of the social relationships that come with group membership.<sup>158</sup>

This theory would predict that physicians adopt the practice styles and philosophies of their group peers in order to secure their approval, or at least to avoid their disapproval. In fact, physicians are known to value their colleagues' esteem and will avoid clinical decisions that may evoke criticism from peers.<sup>159</sup> For example, in a survey of cardiologists, not only did twenty-seven percent of

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154. See Aaron Ahuvia, *If Money Doesn't Make Us Happy, Why Do We Act As If It Does?*, 29 J. ECON. PSYCHOL. 491, 499 (2008) (discussing the desire for money and the positive feelings that come from receiving money).
155. See Harvey S. James, Jr., *Reinforcing Ethical Decision Making Through Organizational Structure*, 28 J. BUS. ETHICS 43, 46-47 (2000) ("Non-monetary incentives consist of promotions [and] public recognition . . .").
156. See Jones & Ryan, *supra* note 151, at 436-37 ("Individuals learn by observing behavior in others and favoring that which has functional value—i.e., that which has been rewarded. They are motivated to model their behavior on this favored behavior because they hope to secure similar rewards.").
157. See Roy F. Baumeister & Mark R. Leary, *The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation*, 117 PSYCHOL. BULL. 497, 498 (1995) (stating that the need for approval is "undoubtedly linked to the fact that approval is a prerequisite for forming and maintaining social bonds").
158. See BOWDITCH, BUONO & STEWART, *supra* note 91, at 155 (stating "that the desire to be accepted by the group can make individuals susceptible to conformity effects," with individuals "experien[ing] strong pressure to change their attitudes and behaviors to conform to the group's norm(s) or operative standard(s)"); Regan, *supra* note 145, at 959 (explaining that the unconscious influence of others stems from the need to belong, which makes people sensitive to what others think and feel).
159. See Town et al., *supra* note 73, at 93S (commenting that peer approval, as well as other nonfinancial considerations, may have a strong impact on a physician's behavior); Eddy, *supra* note 61, at 86 ("A physician who follows the practices of his or her colleagues is safe from criticism . . .").

respondents report ordering a cardiac catheterization if a colleague in the same situation would do so, but some physicians acknowledged having ordered potentially unnecessary cardiac catheterizations in order to meet peer expectations.<sup>160</sup>

## 2. Looking to Peers Within the HCO

The discussion in Part III.A.1 suggests that a physician's cognitive schemas are significantly influenced by her peers within her HCO. Physicians, however, belong to a number of groups, perhaps the most important being the medical profession. Having been socialized to abide by the norms of the profession throughout their medical education and training, physicians take great pride in fulfilling these norms and suffer guilt and shame when violating the profession's norms.<sup>161</sup> Similarly, physicians care deeply about their standing in the profession.<sup>162</sup> In situations of uncertainty, then, they may look to their peers within the profession rather than modeling their peers within their HCO. This raises the question of whether a physician's cognitive schemas primarily reflect the influence of her peers within her HCO or the medical profession generally.

As physicians increasingly provide care under the auspices of larger, more integrated organizations, they are likely to identify more strongly with their organizational peers, rather than the profession as a whole. First, individuals primarily model or imitate what they see, and what they see most often is what others around them are doing.<sup>163</sup> As HCOs move toward tighter clinical integration, this increasingly will bring physicians into closer proximity to one another and

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160. See Frances Lee Lucas et al., *Variation in Cardiologists' Propensity to Test and Treat: Is It Associated with Regional Variation in Utilization?*, 3 CIRCULATION: CARDIOVASCULAR QUALITY & OUTCOMES 253, 253 (2010) (reporting results of survey of cardiologists).
161. Gail B. Agrawal, *Resuscitating Professionalism: Self-Regulation in the Medical Marketplace*, 66 MO. L. REV. 341, 391 (2001); see also Town et al., *supra* note 73, at 85S ("Medical education includes one of the most intense socialization processes of any profession, and the products of these programs bring strong professional values to the practice setting.").
162. See William M. Sage, *Reputation, Malpractice Liability, and Medical Error*, in ACCOUNTABILITY: PATIENT SAFETY AND POLICY REFORM 159, 164 (Virginia A. Sharpe ed., 2004) (discussing why physicians consider reputation important); Agrawal, *supra* note 161, at 392 (noting the importance of professional reputation to physicians).
163. See Albert Bandura, *Social Cognitive Theory*, in 2 ENCYCLOPEDIA OF INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY 729, 729 (Steven G. Rogelberg ed., 2007) ("Much human learning relies on the models in one's immediate environment."); Albert Bandura, *Observational Learning*, in 8 INTERNATIONAL ENCYCLOPEDIA OF COMMUNICATION 3359, 3360 (Wolfgang Donsbach ed., 2008) ("Some of the observational learning is based on the models in the environment one inhabits.").

facilitate a teamwork approach to patient care.<sup>164</sup> We therefore would expect physicians affiliated with HCOs—particularly HCOs that emphasize clinical integration—to primarily model their HCO colleagues.

Second, as noted in Part III.A.1, individuals conform to group norms in order to maintain and strengthen their social relationships with other group members.<sup>165</sup> This conformity effect may be particularly strong in the workplace setting, as the social relationships formed among work colleagues are often highly valued given the significant time colleagues spend with one another.<sup>166</sup> Indeed, the influence of peers in the workplace strengthens when workplace interactions are of greater frequency and intensity.<sup>167</sup> Thus, given the frequent collaborations among HCO physicians, physicians affiliated with HCOs will likely look to their organizational peers for guidance rather than the profession generally.<sup>168</sup>

Several studies support the theory that a physician's peers within the HCO exert greater influence over the physician's schemas than the profession generally. For example, one study found that surgeons adopt new procedures more quickly when a peer at the same hospital

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164. *Cf.* Burns & Muller, *supra* note 31, at 386 (“Structures that foster ‘shoulder-to-shoulder’ practice are thought to increase communication, information transfer, learning, and consultation among physicians.”).

165. *See supra* notes 158–59 and accompanying text.

166. *See* Evan M. Berman, et al., *Workplace Relations: Friendship Patterns and Consequences (According to Managers)*, 62 PUB. ADMIN. REV. 217, 219 (2002) (explaining that workplaces facilitate the development of friendships because of “proximity . . . shared experiences,” and “mutual respect or need”); Patricia M. Sias & Daniel J. Cahill, *From Coworkers to Friends: The Development of Peer Friendships in the Workplace*, 62 W. J. COMM. 273, 273–74 (1998) (commenting on the “importance of peer relationships” in the workplace, “which provide an individual instrumental and emotional support” and can have a significant impact on an individual’s life as coworkers become friends).

167. *See* Jacob Eisenberg, *Group Cohesiveness*, in 1 ENCYCLOPEDIA OF SOCIAL PSYCHOLOGY 386, 387 (Roy F. Baumeister & Kathleen D. Vohs, eds., 2007) (noting that groups where “members interact more with each other” tend to be more cohesive); Dana-Nicoleta Lascu & George Zinkhan, *Consumer Conformity: Review and Applications for Marketing Theory and Practice*, J. MARKETING THEORY & PRAC., Summer 1999, at 1, 5 (“[T]he amount of interaction between group members may affect the level of conformity.”); *cf.* Treviño et al., *supra* note 93, at 966 (noting that the “frequency and intensity of interaction of peers” in the workplace strengthens their influence on an individual’s ethical behavior).

168. *Cf.* Eisenberg, *supra* note 5, at 1018 (stating that peers likely have a stronger impact in more “formally organized practices, such as health maintenance organizations (HMOs),” and more “formally organized hospitals” such as teaching hospitals).

is an early adopter of the procedure.<sup>169</sup> Studies looking at physician prescribing practices likewise show the influence of other physicians within the immediate work environment: the likelihood of a physician prescribing a new drug increases as a physician's workplace colleagues increasingly prescribe the drug.<sup>170</sup>

*B. Physicians' Organizational Identification with HCOs*

As noted in Part III.A, individuals have a powerful need for meaningful social relationships. According to social identity theory, this leads individuals to not only desire others' approval but also to identify with a group or organization to which they belong.<sup>171</sup> This psychological identification with the organization can cause an individual to feel loyalty to and investment in the organization, "induc[ing] individuals to take the group's perspective and to experience the group's goals and interests as their own."<sup>172</sup> In addition, this identification with the organization frequently leads individuals to internalize the group's values, norms, attitudes, and behavior.<sup>173</sup> Having internalized the group's standards and beliefs,

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169. Jose J. Escarce, *Externalities in Hospitals and Physician Adoption of a New Surgical Technology: An Exploratory Analysis*, 15 J. HEALTH ECON. 715, 729 (1996).

170. See Shu-Jou Lin et al., *Colleague Interactions and New Drug Prescribing Behavior: The Case of the Initial Prescription of Antidepressants in Taiwanese Medical Centers*, 73 SOC. SCI. & MED. 1208 (2011) (confirming the findings of prior studies, namely that the likelihood of a physician adopting a new drug is influenced by the adoption ratio for the drug among the physician's colleagues).

171. See Blake E. Ashforth & Fred Mael, *Social Identity Theory and the Organization*, 14 ACAD. MGMT. REV. 20, 21 (1989) ("According to [social identity theory], the self-concept is comprised of a personal identity encompassing idiosyncratic characteristics (e.g., bodily attributes, abilities, psychological traits, interests) and a social identity encompassing salient group classifications. Social identification . . . is the perception of oneness with or belongingness to some human aggregate."); Michael A. Hogg et al., *A Tale of Two Theories: A Critical Comparison of Identity Theory with Social Identity Theory*, 58 SOC. PSYCHOL. Q. 255, 259 (1995) ("The basic idea [of social identity theory] is that a social category (e.g., nationality, political affiliation, sports team) into which one falls, and to which one feels one belongs, provides a definition of who one is in terms of the defining characteristics of the category—a self-definition that is a part of the self-concept.").

172. Daan van Knippenberg, *Work Motivation and Performance: A Social Identity Perspective*, 49 APPLIED PSYCHOL. 357, 360 (2000).

173. See Ashforth & Mael, *supra* note 171, at 26 ("[Group identification] may engender internalization of, and adherence to, group values and norms and homogeneity in attitudes and behavior."); Michael Riketta, *Organizational Identification: A Meta-Analysis*, 66 J. VOCATIONAL BEHAV. 358, 361 (2005) (explaining that each member of an

individuals experience enhanced self-respect when they conform to group expectations and feel guilt and shame when they fail to do so.<sup>174</sup>

As physicians move from solo and small group practices to HCOs, we might anticipate that they similarly will internalize the values, norms, and goals of their respective HCOs into their cognitive schemas. Whether they in fact do so, however, depends on both the intensity of a physician's identification with an HCO and whether she identifies more strongly with the HCO or the medical profession generally.

Membership in an organization does not automatically translate into a commitment to and internalization of the organization's goals, norms, and values. Rather, those individuals who identify strongly with a group are more receptive to the influence of others in the group and show greater adherence to group norms than those with a weaker sense of group identification.<sup>175</sup> Moreover, when individuals

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organization “link[s] his or her organizational membership to his or her self-concept [in several ways, including by] . . . internalizing organizational values”).

174. See Simon Taggar & Heather MacDonald, *Social Norms and Conformity*, in *ENCYCLOPEDIA OF INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY*, *supra* note 163, at 738, 739 (explaining that individuals who “have truly and wholly accepted the beliefs, values and attitudes” of the group conform “because the norm is seen as right,” and not because of external forces such as rewards or punishments).
175. See David R. Hekman et al., *Effects of Organizational and Professional Identification on the Relationship Between Administrators' Social Influence and Professional Employees' Adoption of New Work Behavior*, 94 *J. APPLIED PSYCHOL.* 1325, 1325–26 (2009) (stating that research has found that “a person's identification with a group increases the person's receptivity to social influence from other group members and decreases the person's receptivity to social influence from non-group members,” and that “organizational identification increases members' adherence to group norms”). For example, a study of professional employees found that those who identified strongly with their organization were more receptive to the influence of administrators seeking changes in employee behavior. In contrast, those that identified weakly with the organization were less receptive to administrators' influence. See *id.* (summarizing the results of a study on the impact of organizational identification and professional identification). In the health care context, studies looking at physician groups found that practice culture had a larger effect on physician decision making in those physician groups where physicians reported a stronger sense of belonging. See Rebecca Shackelton et al., *Does the Culture of a Medical Practice Affect the Clinical Management of Diabetes by Primary Care Providers?*, 14 *J. HEALTH SERVS. RES. & POL'Y* 96, 100 (2009) (reporting the findings of study on practice culture and physician decision making for diabetes); see also Lisa Marceau et al., *The Relative Contribution of Patient, Provider, and Organizational Influences to the Appropriate Diagnosis and Management of Diabetes Mellitus*, 17 *J. EVALUATION CLINICAL PRAC.* 1122, 1126 (2011) (reporting the

belong to multiple groups, the cognitive schemas associated with the group that the individual identifies most strongly with tend to be more salient than the schemas associated with other groups.<sup>176</sup> Physicians who identify strongly with their respective HCOs and less so with the medical profession are therefore more likely to apply cognitive schemas that reflect their respective HCOs' values, norms, and goals; in contrast, those with more tenuous connections to their respective HCOs or stronger professional identifications are less likely to do so.<sup>177</sup>

While the degree to which physicians identify with an HCO likely varies widely, several recent trends may promote stronger ties between HCOs and their affiliated physicians. First, research suggests that the growing interdependence between physicians and HCOs will strengthen physicians' organizational identification.<sup>178</sup> As described in

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findings of a second similar study). Similarly, another study found that physicians who identified more strongly with their health care system were more likely to engage in cooperative behaviors and organizational citizenship. See Janet M. Dukerich et al., *Beauty is in the Eye of the Beholder: The Impact of Organizational Identification, Identity, and Image on the Cooperative Behaviors of Physicians*, 47 ADMIN. SCI. Q. 507, 521 (2002) (reporting the results of a study on organizational identification).

176. See Hogg, *supra* note 171, at 258 (explaining that “the more strongly committed an individual is to [a group] identity . . . the higher the level of identity salience” in comparison with other identities); Sheldon Stryker & Peter J. Burke, *The Past, Present, and Future of an Identity Theory*, 63 SOC. PSYCH. Q. 284, 289 (2000) (“If the competing or conflicting identities reflect greatly different commitments and consequently differ greatly in salience, the identity based on greater commitment and higher salience will be reflected . . . in the operative identity standard and perceived self-meanings.”).
177. Cf. Hekman et al., *supra* note 175, at 1329–30 (finding that administrators' social influences were greater for those professional employees, including physicians, with high levels of organizational identification and low levels of professional identification and lowest for professional employees with low levels of organizational identification and high levels of professional identification).
178. See Jeffrey A. Alexander et al., *The Ties That Bind: Interorganizational Linkages and Physician-System Alignment*, 39 MED. CARE I-30, I-40 (Supp. I 2001) [hereinafter Alexander et al., *The Ties That Bind*] (finding that physicians who had stronger operational linkages with a health system had stronger loyalty to the system and more citizenship behaviors); Jeffrey A. Alexander et al., *Risk Assumption and Physician Alignment with Health Care Organizations*, 39 MED. CARE I-46 (Supp. I 2001) [hereinafter Alexander et al., *Risk Assumption*] (finding that physicians with a higher proportion of their revenue from managed care exhibited higher levels of alignment with their health systems while those physicians bearing financial risk at the individual level had weaker alignment with their health systems, presumably because shared risk at

Part I, physicians increasingly rely on HCOs to provide the capital, technology, and staff needed to meet the burdens of practicing medicine.<sup>179</sup> HCOs also can help physicians achieve the quality improvements and efficiencies demanded by recent payment reforms.<sup>180</sup> In addition, changes in health care reimbursement that impose financial risk at the organizational level tie a physician's individual finances to the HCO's success. This in turn fosters a sense of "shared fate" among the HCO's physicians and the HCO.<sup>181</sup> Finally, several studies have found that the rising trend of salaried employment among HCO physicians also strengthens physicians' interdependence, and thus identification, with their respective HCOs.<sup>182</sup>

Second, today's HCOs are emphasizing greater clinical integration. Health experts consider clinical integration a prerequisite to success under the new payment models that hold providers accountable for the quality and cost of care.<sup>183</sup> By definition, clinical integration requires frequent collaborations among an HCO's providers.<sup>184</sup> In addition, physicians in clinically integrated HCOs are likely to have invested considerable time and energy into improving the quality, efficiency, and coordination of patient care provided by the HCO, such as by helping to develop clinical protocols and "best practices."<sup>185</sup> Greater clinical integration thus promotes stronger organizational identification among an HCO's physicians.

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the organizational level and managed care increase the interdependence between health systems and their affiliated physicians).

179. See *supra* notes 39–60 and accompanying text.

180. See *supra* note 26 and accompanying text.

181. See Alexander et al., *Risk Assumption*, *supra* note 178, at I-56.

182. See Burns & Muller, *supra* note 31, at 401 (stating that studies of physicians' hospital employment found that salaries, along with stipends, "raised most measures of hospital loyalty, commitment, retention, trust in the hospital administration, and citizenship behavior"); Lawton R. Burns et al., *Physician Commitment to Organized Delivery Systems*, 39 MED. CARE I-9, I-9 to I-10 (Supp. I 2001) (reporting the results of a study finding that physicians who received a salary or stipend had higher levels of organizational commitment relative to other physicians, although noting that the differences were not large); Dukerich et al., *supra* note 175, at 520–21 (finding that salaried physicians within large health care systems indicated stronger organizational identification and thus a greater willingness to engage in organizational citizenship behaviors).

183. See *supra* note 40 and accompanying text.

184. See *supra* note 21 (defining clinical integration).

185. Cf. Alexander et al., *The Ties That Bind*, *supra* note 178, at I-40 (stating that physicians with sizeable managed care practices have stronger identification with their health system, in part, because they

Finally, today's HCOs often shy away from the centralized, bureaucratic controls that characterized many earlier HCOs. Because physicians highly value their professional autonomy, many physicians respond negatively to administrative and other formal controls.<sup>186</sup> In fact, the centralized control that characterized early HCOs actually resulted in *decreased* organizational identification among HCO physicians.<sup>187</sup> Having learned from the failures of past HCOs, today's HCOs are more respectful of physicians' desires for professional autonomy. Rather than imposing bureaucratic controls on physicians that require them to adopt certain practices, many of today's HCOs promote physician engagement through collaboration and consensus building.<sup>188</sup> For example, today's HCOs frequently place physicians in key leadership positions and employ a collaborative decision-making process when making strategic or operational decisions.<sup>189</sup>

Only time will tell whether physicians affiliated with HCOs come to strongly identify with the organization. Nevertheless, there are reasons to believe that physicians will in fact do so, gradually incorporating into their cognitive schemas the norms, values, and goals of their respective HCOs.

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are "likely to have invested considerable time, money and energy into improving or streamlining their interactions with the system").

186. *See id.* at I-31 (stating that "physicians may react negatively to formal governance and administrative ties that potentially inhibit their professional autonomy" and that "violations of these cultural norms may actually decrease physicians' feelings of identity and alignment with [health systems]").
187. *See id.* at I-40 (finding that centralized control by a health system over group management and strategic decisions lowered physicians' organizational citizenship and behavioral commitment).
188. *See, e.g.,* Kreindler et al., *supra* note 34, at 470–76 (profiling Tucson Medical Center's ACO, where participants emphasized physician engagement through intensive relationship building and collaboration rather than control, and Norton Healthcare, which focused on building consensus and team collaboration).
189. *See* Harbeck, *supra* note 17, at 50 ("Governance models should include employed physicians on boards, in executive leadership roles, and on committees focused on improving quality and reducing costs."); Edward A. Kazemek, *Physician Collaboration: Is Money the Only Answer?*, HEALTHCARE EXEC., July–Aug. 2006, at 54, 54–55 (noting that hospitals that have successfully formed hospital-physician collaborations involved physicians in decisions that affect them and created meaningful leadership roles for physicians); Kathleen D. Sanford, *Shared Governance: One Way to Engage Employed Physicians*, HEALTHCARE FIN. MGMT., Sept. 2012, at 44, 44 (noting that healthcare systems such as hospitals "are restructuring their management teams to include more physicians").

*C. The Impact of an Organization on a Physician's Self-Interest and Cognitive Processes*

Classical economic models of individual decision making have long emphasized the importance of self-interest, conceiving of individuals as rational, goal-driven decision makers who seek to maximize their own welfare.<sup>190</sup> While the work of cognitive psychologists challenges economists' conceptualization of individuals as purposeful, rational actors, psychological research nevertheless confirms that self-interest is indeed an important influence on an individual's decision-making process.<sup>191</sup> Research on cognitive thinking has found that we are biased to "see what [we] want to see," and what we want to see is that the "fair" or "logical" decision is one that also promotes our self-interest.<sup>192</sup> Accordingly, HCOs further influence their affiliated physicians' clinical decisions by shaping their self-interests.

1. Cognitive Motivation, Self-Interest, and the Organization

While many factors shape cognitive thought, the individual's self-interest—her wishes, desires, and preferences—plays a key role. When people have a vested interest in the outcome of their thinking and reasoning, they have an unconscious tendency to form initial judgments that suit their desired ends or goals.<sup>193</sup> Because these

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190. See Robert Cooter & Melvin A. Eisenberg, *Fairness, Character, and Efficiency in Firms*, 149 U. PA. L. REV. 1717, 1724 (2001) (explaining that economic theory rests on the premise that people are motivated by "a narrow self that is interested only in wealth, power, pleasure, and prestige"); Thomas L. Greaney, *Economic Regulation of Physicians: A Behavioral Economics Perspective*, 53 ST. LOUIS U. L.J. 1189, 1194 (2009) (explaining that "[o]ne of the pivotal underlying assumptions of economics is Rational Choice Theory," which assumes that actors "seek to maximize their expected utility"). While earlier theories defined self-interest narrowly as centering on pecuniary rewards, contemporary economists have expanded the concept to include anything of value to an individual, including gaining others' approval and upholding one's moral values. See Cooter & Eisenberg, *supra* at 1723–24 (distinguishing narrow self-interest from broad self-interest); Russell Cropanzano et al., *Self-Interest: Defining and Understanding a Human Motive*, 26 J. ORGANIZATIONAL BEHAV. 985, 986 (2005) (explaining that while classical economics defined self-interest as a concern with pecuniary payoffs, many contemporary economists would not limit human motives to such a narrow definition of self-interest).

191. See *infra* Part III.C.1.

192. See Donald C. Langevoort, *Organized Illusions: A Behavioral Theory of Why Corporations Mislead Stock Market Investors (and Cause Other Social Harms)*, 146 U. PA. L. REV. 101, 144 (1997) (stating that, when there is enough ambiguity to permit it, people see what is in their self-interest).

193. See Dan M. Kahan, *The Supreme Court 2010 Term: Foreword: Neutral Principles, Motivated Cognition, and Some Problems for Constitutional Law*, 125 HARV. L. REV. 1, 19 (2011) (describing "the unconscious

automatic impressions are “first on the scene,” they play a dominant part in individuals’ subsequent thinking.<sup>194</sup> More conscious, systematic deliberations generally perform a secondary role, serving to rationalize or justify individuals’ initial judgments.<sup>195</sup> In other words, the motivation to arrive at a conclusion consistent with one’s self-interest enhances the use of cognitive schemas—memories, beliefs, and rules—likely to produce the desired conclusion.<sup>196</sup> Psychologists refer to this dynamic as cognitive motivation.<sup>197</sup>

Organizations motivate individuals’ cognitions by shaping their self-interests in numerous ways. Most obviously, organizations provide

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tendency of individuals to process information in a manner that suits some end or goal”). For example, studies have found that individuals have faster reaction times when generating and endorsing memories and beliefs consistent with conclusions that promote an individual’s self-interest or desired ends. See Ziva Kunda, *The Case for Motivated Reasoning*, 108 PSYCHOL. BULL. 480, 484 (1990) (summarizing studies on biased-memory search).

194. See Don A. Moore & George Loewenstein, *Self-Interest, Automaticity, and the Psychology of Conflict of Interest*, 17 SOC. JUST. RES. 189, 193 (2004) (“Automatic processes tend to dominate, in part because they tend to be ‘first on the scene,’ with controlled processes acting as an override.”); Regan, *supra* note 145, at 954 (“[Intuitions] represent an immediate judgment about a situation . . .”).
195. See KAHNEMAN, *supra* note 90, at 105 (explaining that deliberative processes merely endorse individuals’ initial impressions by providing justifications for them); Regan, *supra* note 145, at 959–60 (“[W]e typically engage in moral reasoning after our judgments have been formed, and . . . we engage in that exercise in order to justify, rather than arrive at, those judgments.”). This does not mean deliberative reasoning cannot override our initial impressions—it can—but doing so requires mobilizing substantial mental focus, something individuals do infrequently, particularly when their mental capacity is otherwise taxed by the complexity of the situation or performing other tasks. See KAHNEMAN, *supra* note 90, at 81 (describing the “laziness” of System 2 deliberative cognitive processes); Moore & Loewenstein, *supra* note 194, at 193 (stating that although “[c]ontrolled processes can override automatic processes,” studies have found “that when mental capacity is constrained because people are under cognitive load, it is harder for them to engage in reflection and correction of automatic judgments”).
196. See Kunda, *supra* note 193, at 480 (“[T]he motivation to arrive at particular conclusions enhances use of those [cognitive schemas] that are considered most likely to yield the desired conclusion.”).
197. See William M. P. Klein & Matthew M. Monin, *Motivated Cognition*, in 2 ENCYCLOPEDIA OF SOCIAL PSYCHOLOGY, *supra* note 168, at 593, 593 (“Motivated cognition refers to the influence of motives on various types of thought processes such as memory, information processing, reasoning, judgment, and decision making.”); Kahan, *supra* note 193, at 19 (“What’s meant when an extrinsic goal is said to *motivate* cognition is that it directs mental operations . . .”).

monetary and nonmonetary rewards to their employees, including wages, bonuses, promotions, and prestige.<sup>198</sup> Not surprisingly, much research shows that these rewards serve as powerful motivators, with individuals inclined toward those actions that offer the greatest profit, opportunities for advancement, or prestige.<sup>199</sup>

Organizations, however, also provide employees important social rewards. As discussed in Parts III.A and III.B, individuals have a fundamental need to form meaningful social relationships, which in turn leads them to desire the approval of others within the organization.<sup>200</sup> Relatedly, an individual often develops an identification with an organization, which leads to feelings of loyalty to the organization and the internalization of the organization's values and norms.<sup>201</sup> An individual's self-interest therefore includes not only the monetary and nonmonetary rewards an organization offers to its members but also the social rewards of organizational membership and the interests of the organization itself. When an individual makes decisions in the organizational setting, these various organizational rewards and interests motivate the individual's cognitive reasoning.<sup>202</sup> First, the individual generates intuitive judgments or heuristics consistent with their desire to obtain organizational rewards or promote the organization's interests or values.<sup>203</sup> Second, the individual is biased to process and analyze information in a manner that rationalizes positions congenial to her self-interest as shaped by the organization.<sup>204</sup>

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198. See James, *supra* note 156, at 46–48 (describing organizational reward systems).

199. See Cropanzano et al., *supra* note 191, at 986 (“Research suggests that individual profit can be a powerful motivator and, other things being equal, the greater the potential profit (loss) the stronger its motivational properties.”); *supra* notes 155–56 and accompanying text.

200. See *supra* notes 158–59 and accompanying text.

201. See *supra* notes 172–73 and accompanying text.

202. Cf. Kahan, *supra* note 193, at 20–21 (stating that the desire to affirm one's membership in a group can reflect a range of goals and needs).

203. See *id.* at 21 (stating that cognitive processes protective of group identity “might take the form of rapid, heuristic-driven, even visceral judgments or perceptions”). For a more general discussion of so-called defense-motivated heuristics, see Serena Chen et al., *Motivated Heuristic and Systematic Processing*, 10 PSYCHOL. INQUIRY 44, 45 (1999) (explaining that the desire to form judgments congruent with one's self-interest leads to selective use of heuristics, with “[h]euristics that have judgmental implications congenial to perceivers' existing beliefs . . . especially likely to be used”).

204. See Kahan, *supra* note 193, at 21 (“[F]ar from being immune from identity-protective cognition, individuals who display a greater disposition to use reflective and deliberative (so-called System 2) forms of reasoning . . . can be expected to be even more adept at using

## 2. HCO Physicians' Motivated Cognition

The theory of motivated cognition predicts that a physician's self-interest, as shaped by her HCO, significantly influences her patient-care decisions. That is, the motivation to reach a clinical conclusion that promotes the physician's self-interest may trigger cognitive schemas that lead to the desired conclusion. A physician's self-interest thus affects how she perceives a patient's situation, her generation and testing of clinical hypotheses, and the attitudes and values she applies, particularly in situations of ambiguity. This Part presents various illustrations of this dynamic.

Cognitive motivation theory indicates that physicians' self-interests may affect their initial perceptions and intuitions about a patient's situation. For instance, if an HCO provides bonuses to physicians who reduce the rate of hospital admissions among their patients, physicians benefit financially when they conclude that a patient's condition does not warrant inpatient care. Cognitively motivated to reach this conclusion, a physician may unconsciously form initial perceptions and hypotheses about the patient's condition that support treating the patient outside the hospital setting.

Motivated cognition similarly may affect a physician's subsequent testing of her initial hypothesis about a patient's condition. Substantial evidence demonstrates that individuals' deliberative cognitive processes are subject to a confirmation bias. In other words, the schemas accessed by individuals bias them to seek evidence confirming their initial hypotheses and may even blind them to contrary evidence.<sup>205</sup> Studies confirm that physicians are not immune to the confirmation bias and that they frequently focus their efforts on finding clinical evidence confirming their hypotheses rather than seeking disconfirming evidence.<sup>206</sup> The theory of cognitive motivation

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technical information and complex analysis to bolster group-congenial beliefs.”). For a more general discussion of how self-interest subconsciously biases individuals' cognitive processing on information, see Chen et al., *supra* note 203, at 45 (explaining that the desire to form judgments congruent with one's self-interest leads to biased scrutiny, with “[i]nformation that is congruent with one's existing beliefs . . . judged more favorably than incongruent information”).

205. See Harris, *supra* note 94, at 311 (explaining that the confirmation bias can “blind individuals to features of the world that threaten the validity of those schemas” supporting their hypothesis).

206. See Pat Croskerry, *Achieving Quality in Clinical Decision Making: Cognitive Strategies and Detection of Bias*, 9 ACAD. EMERG. MED. 1184, 1189 (2002) (contending that a confirmation bias may lead physicians “to look for confirming evidence to support the hypothesis, rather than look for disconfirming evidence to refute it”); Hall, *supra* note 69, at 221 (“Doctors search harder for evidence that confirms a decision than disconfirmatory information . . .”).

suggests that physicians' confirmation biases may be particularly strong when confirming a hypothesis that promotes their self-interests.

Relatedly, motivated cognition may influence the extent to which a physician seeks evidence confirming a preliminary diagnosis. Rather than fully verifying a preliminary diagnosis, physicians at times prematurely accept a diagnosis on the basis of limited confirmatory evidence.<sup>207</sup> The theory of cognitive motivation predicts that this "search satisficing" bias is heightened when a physician benefits from quickly reaching a diagnosis, such as when the HCO rewards the physician for limiting the number of diagnostics tests she orders.

Motivated cognition also may distort physicians' treatment of clinical observations that do not perfectly match their hypothesized diagnoses, a common occurrence in medicine. When an individual confronts information that conflicts with his or her desired conclusion, the confirmation bias may cause the individual to either dismiss such information as an aberration or recast it so as to be consistent with the individual's schema.<sup>208</sup> In the medical context, the desire to confirm a diagnosis has been found to cause physicians to overemphasize confirmatory data as compared to disconfirmatory data, to not explore discrepancies between the data and their hypotheses, or to find grounds for either rejecting discrepancies or concluding that they are not in fact disconfirmatory evidence.<sup>209</sup> In other words, physicians subconsciously motivated to confirm a particular diagnosis may be biased to treat aberrations as simply atypical features rather than as evidence that requires consideration of alternative hypotheses.

Similarly, motivated cognition may affect physicians' evaluations of clinical studies and other scientific evidence. When individuals have a personal interest in a specific conclusion, they generally give more weight to supporting evidence and question the validity of disconfirming evidence.<sup>210</sup> For example, studies of biased evaluation of

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207. See Croskerry, *supra* note 206, at 1195 (describing the effects of the premature-closure bias and search-satisficing bias on clinical decision making).

208. See Harris, *supra* note 94, at 311 (explaining how schemas influence the processing of disconfirming information); Moore & Loewenstein, *supra* note 195, at 193 ("Research on confirmatory information processing shows that people assimilate new information through the perceptual lens of their existing beliefs, in many cases bending facts to fit beliefs rather than vice versa."); KAHNEMAN, *supra* note 90, at 85–88 (describing how the confirmation bias impacts perceptions and thought processes).

209. See Hall, *supra* note 69, at 221 (explaining the ways in which physicians address, or fail to address, disconfirmatory data).

210. See KAHNEMAN, *supra* note 90, at 103 (discussing the effect of bias on individuals' evaluations of relevant information); Moore & Loewenstein, *supra* note 195, at 193 ("[I]nformation inconsistent with automatic

scientific research found that individuals generally trust evidence that supports their desired conclusion and disbelieve contrary evidence.<sup>211</sup> Of particular interest, when evaluating scientific research, individuals maintain the illusion of objectivity by accessing beliefs and inferential rules, or cognitive schemas, that support their defenses of the favorable scientific research and their criticisms of the disconfirming studies.<sup>212</sup>

These findings suggest that physicians may view clinical studies through biased lenses. For example, if an HCO rewards its physicians for lowering costs, physicians financially benefit when they prescribe less expensive therapies over their more costly alternatives. To justify doing so, physicians may give more weight to studies finding little or no difference between the less and more costly therapies or may be dismissive of clinical studies finding that the costly therapy is more effective.

Motivated cognition also may influence which subset of beliefs, assumptions, and values guide physicians' clinical choices, particularly in conditions of uncertainty.<sup>213</sup> Studies have found that self-interest triggers cognitive schemas that incorporate those beliefs that lead to decisions consistent with the individual's self-interest.<sup>214</sup> Individuals also find more convincing those arguments supporting their desired conclusion as compared to countervailing arguments.<sup>215</sup>

These cognitive biases may lead physicians to rely on scientific assumptions or heuristics that support their desired clinical decisions.

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judgments tends to be subject to an additional level of scrutiny and is therefore less likely to be accepted as true.”).

211. See Kunda, *supra* note 193, at 489–90 (describing the results of studies on the biased evaluation of scientific research).
212. For example, individuals dismissed the disconfirmatory research for reasons such as insufficient sample size, nonrandom sample selection, or the absence of control groups. In contrast, individuals were less critical of the research methods employed in studies confirming their initial beliefs. See *id.*; see also Klein & Monin, *supra* note 198, at 594 (“[People] are relatively more likely to trust small samples of information consistent with desired expectations (even when they know that small samples can be unreliable) and are more critical of messages threatening desired beliefs.”).
213. See Kunda, *supra* note 194, at 483 (concluding that research suggests that people access different beliefs under the influence of different goals).
214. See *id.* at 484, 493–94 (proposing that individuals do not access all relevant knowledge when biased; instead their motivations make certain beliefs more salient).
215. See Jason Dana & George Loewenstein, *A Social Science Perspective on Gifts to Physicians from Industry*, 290 JAMA 252, 253 (2003) (stating that results from studies “showed a strong tendency to view arguments supporting an individual’s own position as more convincing than those supporting the other position”).

For example, when an HCO rewards a physician based on productivity, the physician benefits from adopting an aggressive approach to patient management. Cognitively motivated to treat patients' conditions aggressively, the physician may invoke heuristics that support doing so—for example, "If there is any chance of alleviating the patient's condition or extending her life, the procedure should be performed." Likewise, the physician may find compelling those scientific assumptions favoring aggressive treatment, such as the belief that the patient's condition will worsen over time.

Finally, motivated cognition may influence how physicians weigh others' clinical opinions. Research has found that the motivation to affirm one's commitment to an organization affects an individual's cognitive reasoning.<sup>216</sup> For example, individuals impute greater knowledge and trustworthiness to their organizational peers and thus give more credence to their views and behaviors as compared to those of extraorganizational individuals.<sup>217</sup> Accordingly, the theory of cognitive motivation suggests that physicians who identify strongly with their HCO will find the views of their organizational peers more persuasive than contrary opinions.<sup>218</sup> For example, if a physician's organizational peers believe newer drugs are generally superior to older drugs, the physician will be motivated to agree with this viewpoint.

In sum, physicians' clinical judgments may be subconsciously biased by their self-interests, as shaped by their respective HCOs' organizational cultures. This is not to imply that physicians' clinical decisions always reflect their self-interests. Because physicians attempt to be rational and follow their professional ethics, their capacity for making self-serving clinical decisions is constrained by the

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216. See Klein & Monin, *supra* note 198, at 594 ("The motive to belong, exemplified by people's interest in relationships and group memberships, might also influence various types of cognitive processes . . ."); Baumeister & Leary, *supra* note 158, at 504 ("Group memberships . . . appear to exert important influences on cognitive patterns."); Kahan, *supra* note 193, at 20 (explaining that affirming one's membership in an important reference group can unconsciously influence cognition, generating a species of motivated reasoning known as identity-protective cognition).

217. See Hekman et al., *supra* note 176, at 1326 ("Social identification [with a group] leads one to see non-group members as less trustworthy, to evaluate them less positively, and to view them as dissimilar."); Kahan, *supra* note 193, at 20 (discussing ways in which group identity biases cognitive reasoning).

218. Cf. Judith D. de Jong et al., *Mutual Influences of General Practitioners in Partnerships*, 57 SOC. SCI. & MED. 1515, 1516 (2003) (stating that physicians working in group partnerships that have developed strategies for dealing with clinical uncertainty are often skeptical "towards scientific evidence and more sensitive to peer influences").

plausibility of the justifications for such decisions.<sup>219</sup> For this reason, when the clinical evidence and standards of care are unambiguous, physicians' medical decisions are consistent with the evidence and prevailing standards of care.<sup>220</sup> But when faced with clinical ambiguity, physicians who genuinely desire to remain objective and committed to their patients' welfare may unwittingly use self-serving cognitive schemas.<sup>221</sup> Moreover, because an HCO's organizational culture shapes the self-interest of its affiliated physicians, the HCO indirectly influences those physicians' clinical decisions.

As this Part has shown, a physician embedded in an HCO gradually adapts to the HCO's "way of doing things." Being part of an HCO thus fundamentally influences physicians' patient-care decisions, particularly in conditions of uncertainty. Because this process largely occurs outside a physician's conscious awareness, many scholars, policymakers, and even health professionals fail to appreciate the significance of an HCO's organizational culture. Instead they focus their attention on the individual physician. Conceptualizing patient care as provided at the level of the individual physician, however, is a serious mistake because it fails to recognize the link between an HCO's organizational culture and its affiliated physicians' clinical decisions. With more and more physicians shifting from solo and small group practice to HCOs, it is imperative that we abandon the myth of the independent physician and recognize that patient care increasingly is a product of an organizational system.

#### IV. THE IMPORTANCE OF HCO ORGANIZATIONAL CULTURE: IMPLICATIONS FOR HEALTH LAW, POLICY, AND ETHICS

Part III showed that there is a compelling theoretical basis for concluding that the culture of HCOs greatly influences the treatment

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219. See Kunda, *supra* note 193, at 480, 483 (explaining that because "people . . . attempt to be rational and to construct a justification of their desired conclusion that would persuade a dispassionate observer," individuals' abilities to arrive at the desired conclusions "is constrained by their ability to construct seemingly reasonable justifications for these conclusions").

220. See John E. Wennberg, *Dealing with Medical Practice Variations: A Proposal for Action*, 3 HEALTH AFF. 6, 9 (1984) (explaining that there is less variation among physicians' clinical decisions when there exists widespread consensus as to the proper course of treatment because "clinical judgments are constrained by a consensus").

221. See Dana & Loewenstein, *supra* note 215, at 253 ("[I]ndividuals are unable to remain objective, even when they are motivated to be impartial, demonstrating that self-serving bias is unintentional."); Kahan, *supra* note 193, at 20 (motivated cognition causes a person "who genuinely desires to make a fair or accurate judgment" to unwittingly "make a determination that favors some personal interest").

decisions of their affiliated physicians. Yet many health laws, policies, and ethical guidelines focus on the individual physician, seeking to minimize individual physician's financial conflicts or holding individual physicians accountable for inferior care.<sup>222</sup> A model of physician behavior that incorporates the impact of organizational culture, however, reveals the inadequacies of focusing narrowly on individual physicians.<sup>223</sup> Those involved in health law, policy, and ethics must therefore give greater attention to the organization.

Because HCOs are heterogeneous organizations, differences in their organizational cultures may lead to differences in physician behavior and, ultimately, differences in the quality, modality, and cost of care provided to patients.<sup>224</sup> Of particular concern are organizational cultures that bias physicians' clinical decision making in ways that lead to the provision of inexpert or inefficient care or the withholding of necessary care. The challenge for health scholars and policymakers, then, is to determine how best to promote more virtuous organizational cultures that minimize these risks while respecting community standards of compassion and fairness. This Part seeks to begin the conversation on this important issue.

#### *A. HCOs' Organizational Ethics*

As discussed in Part I, primary responsibility for patient care traditionally fell to individual physicians. Organizations such as hospitals were relegated to the secondary role of supporting physicians' treatment of their patients. Ethical issues related to patient care thus were matters for the medical profession and not organizations.<sup>225</sup> As a result, medical ethics came to reflect the guiding

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222. See *supra* note 11; *infra* note 272 and accompanying text.

223. See Flood & Fennell, *supra* note 12, at 163 (stating that health care models need to be expanded to fit the complexities of the health care system, including the noneconomic factors involved, "so that we can understand the inadequacies of financial-based policies").

224. Cf. Town et al., *supra* note 73, at 89S ("Physicians practice in heterogeneous organizations, which offer differing financial and nonfinancial incentives that may differentially impact physician behavior.").

225. See Susan M. Wolf, *Health Care Reform and the Future of Physician Ethics*, 24 HASTINGS CTR. REP. 28, 29 (1994) (stating that in the past the focus of ethics was on the individual physician). At the time, organizational ethics was limited to business and corporate matters, such as purchasing decisions and policies related to care for the poor. See Gerard Magill & Lawrence Prybil, *Stewardship and Integrity in Health Care: A Role for Organizational Ethics*, 50 J. BUS. ETHICS 225, 227 (2004) (discussing the bifurcation of biomedical ethics related to patient care and organizational ethics related to business and corporate matters).

principle of the medical profession, the Hippocratic oath.<sup>226</sup> Medical ethics therefore embraced a patient-centered approach that gave primacy to patient welfare over societal concerns, such as efficiency and costs.<sup>227</sup>

When the 1980s and 1990s ushered in an era of physicians affiliating with HCOs, health ethics broadened beyond its earlier professional focus to encompass the organization.<sup>228</sup> Nevertheless, the organization-based ethical principles that emerged continued the patient-centered focus of the medical profession's ethics.<sup>229</sup> Organizational ethics thus primarily focused on case-centered issues arising in the care of individual patients, such as termination of treatment, patient autonomy, informed consent, patient confidentiality, and human subjects research.<sup>230</sup>

As argued in Part III, the values, attitudes, and beliefs that guide physicians' clinical decision making increasingly will reflect not only a physician's personal philosophy but also the organizational culture of her HCO. Organizational ethics therefore should broaden its focus beyond case-centered, patient-care issues and address how to promote organizational cultures that inspire appropriate clinical decisions by the organization's physicians.<sup>231</sup> In other words, organizational ethics

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226. See Hall, *supra* note 18, at 435 (commenting that prior to the arrival of managed care, medical treatment was dominated by the Hippocratic ideal).

227. See Rorty, *supra* note 143, at 49 ("Contemporary clinical ethics has focused almost exclusively on the individual patient and his personal autonomy, not on the larger community."); Morreim, *supra* note 79, at 9–10 (stating that the system of affluent insurance leads to "cost is no object" values among physicians as part of a moral commitment to patients). An insurance system that was highly deferential to physicians' treatment decisions and reimbursed them their reasonable costs reinforced these principles. See generally Morreim, *supra* note 79, at 9–10 (stating that "the era of affluent insurance" promoted values that focused on providing patients any potentially beneficial care regardless of cost).

228. See Carrie Zoubul, *Healthcare Institutional Ethics: Broader Than Clinical Ethics*, in HEALTH CARE ETHICS: CRITICAL ISSUES FOR THE 21ST CENTURY 237, 237 (Eileen E. Morrison ed., 2d ed. 2009) (noting that at the end of the twentieth century, many HCOs began to focus on ethical issues).

229. See *id.* at 237–39 (discussing organizational ethics programs).

230. See *id.* More recently, HCOs have expanded their focus to include compliance with legal and regulatory requirements. See David E. Guinn, *Corporate Compliance and Integrity Programs: The Uneasy Alliance Between Law and Ethics*, 12 HEC F. 292, 292, 295 (2000) (stating that "corporate compliance programs in health care have exploded upon the scene" and that such programs are aimed at "preventing, detecting, and reporting" violations of the law by the organization and its employees or agents).

231. See Magill & Prybil, *supra* note 226, at 227 (arguing that an organizational ethics strategy should seek "to foster a virtuous

should be reconceptualized as a “more *global* vision of the elements of organizational life that affect patient care,”<sup>232</sup> with greater attention given “to the mission and values of the organization and how they are implemented in daily practice and long-term planning.”<sup>233</sup>

Health ethicists also should provide more guidance to HCOs on the content of their mission and guiding values. Although a comprehensive discussion of the core values of HCOs is beyond the scope of this Article, clearly a central mission of all HCOs is healing patients. As such, they are subject to the same ethical expectations guiding health professionals—a commitment to a patient’s best interests.<sup>234</sup> However, with payment reforms imposing on HCOs greater responsibility for both the aggregate cost of treating and overall well-being of patient populations, HCOs also have a moral obligation to make prudent use of health care resources.<sup>235</sup> In addition, because HCOs must ensure their financial solvency, efficiency considerations are of paramount importance to them, with for-profit organizations having the further commitment of maximizing shareholder wealth.<sup>236</sup> Because these core values will at times come into conflict,<sup>237</sup> health ethicists must assist HCOs in developing an ethical framework for appropriately balancing these values.

Health ethicists similarly should provide guidance to HCOs on how best to develop an ethics infrastructure for ensuring that the HCO’s values and priorities are incorporated into the daily life of the

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organization whose ethical principles inspire appropriate decision-making and moral behavior among all its personnel”).

232. Rorty, *supra* note 143, at 53 (emphasis added).

233. Donna T. Chen & Ann E. Mills, *Addressing Ethical Commitments When Professionals Partner with Organizations*, 39 MCGEORGE L. REV. 719, 728 (2008).

234. See Rorty, *supra* note 143, at 52 (“Insofar as organizations also are ethical agents, and instrumentalities of the society for health care, they are subject to many of the ethical expectations that the society has of individual providers . . .”).

235. See Magill & Prybil, *supra* note 225, at 228 (stating that HCOs’ organizational ethics must integrate stewardship virtues that respect the resources entrusted to it by the community). See generally Laurence B. McCullough, *A Basic Concept in the Clinical Ethics of Managed Care: Physicians and Institutions as Economically Disciplined Moral Co-Fiduciaries of Populations of Patients*, 24 J. MED. & PHIL. 77, 93 (1999) (commenting on health care institutions’ moral fiduciary responsibilities for the well-being of their patients).

236. See Chen & Mills, *supra* note 233, at 721 (“[O]ne commitment of for-profit organizations is to maximize shareholder wealth . . .”).

237. See *id.* (noting that organizations such as hospitals face conflicting commitments, presenting significant ethical challenges to the organizations).

organization.<sup>238</sup> Any such ethics program should attend to whether the HCO's formal structures, policies, and processes reflect and appropriately balance its core values.<sup>239</sup> For example, the HCO's reward system, clinical guidelines, and treatment protocols should align with its espoused values.<sup>240</sup> Similarly, the HCO's ethics program should foster an organizational culture that, at the informal level, motivates clinical decisions consistent with its core values and priorities.

Health ethicists and the medical profession also should consider whether the shift away from solo and small group physician practices to large HCOs warrants a revision of physicians' professional ethics.<sup>241</sup> Physicians affiliated with HCOs occupy "two roles—one the responsible professional whose loyalty is to the standards of the profession, the other the responsible employee whose loyalty is to the organization."<sup>242</sup> At times these two roles will conflict: the first generally requires the physician to put an individual patient's welfare above all other considerations, whereas the latter requires the physician to balance patient welfare with other organizational prerogatives, such as efficiency and cost considerations.

Resolving this conflict between the existing tenets of physicians' professional ethics and HCOs' organizational ethics will be one of the most important issues confronting health ethicists and the medical profession. Some scholars have argued that physicians' first commitment must be to their professional ethics, with physicians therefore obligated to put their patients' welfare above other HCO prerogatives.<sup>243</sup> One must query, however, whether in practice it is

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238. See Silverman, *supra* note 141, at 202 (calling for an ethics infrastructure that proactively incorporates an HCO's core values into the daily life of the organization).

239. See *id.* at 209 (advocating for "the continuous attention to the structures and processes that influence[] ethical behavior").

240. See *id.* at 211.

241. Cf. Wolf, *supra* note 225, at 28 (stating that the conflict between physicians' traditional professional ethics and managed care prerogatives means "some currently accepted tenets of medical ethics will have to be clarified, others changed, and the whole supplemented").

242. Toni Makkai & Valerie Braithwaite, *Professionalism, Organizations, and Compliance*, 18 LAW & SOC. INQUIRY 33, 36 (1993); see also EDMUND D. PELLEGRINO & DAVID C. THOMASMA, *THE VIRTUES IN MEDICAL PRACTICE* 170–71 (1993) (stating that organized medical practice puts a "physician in a position of double agency—simultaneously serving the patient, and the institutional policy").

243. See, e.g., Marcia Angell, *The Doctor as Double Agent*, 3 KENNEDY INST. ETHICS J. 279, 284–85 (1993) (arguing that even if society desires to reduce health care costs, physicians should not serve as "double agents" because their sole obligation is to care for their patients); Edmund D. Pellegrino, *Rationing Health Care: The Ethics of Medical*

realistic to expect physicians to do so given the influence, often at a subconscious level, of their organizational peers, organizational identity, and self-interest. More pragmatically, physicians' professional ethics should be reshaped to permit "greater sensitivity to values beyond those of the immediate patient seeking treatment."<sup>244</sup>

*B. HCOs' Internal Organizational Arrangements*

In recognition of the impact HCOs have on physicians' clinical decisions, greater attention should be given to the organizational causes of deficient patient care, including an organization's internal policies and arrangements. To the extent certain internal structures or arrangements are found to promote a more virtuous organizational culture, policymakers should consider whether to mandate that all HCOs adopt such structures and arrangements. Similarly, regulators may wish to prohibit HCOs from adopting organizational features associated with less-than-virtuous organizational cultures. In light of the limited research on this issue, it would be premature to recommend specific regulatory proposals related to HCOs' internal arrangements. This Part instead highlights several organizational arrangements that may warrant closer examination—mandating that HCOs adopt formal organizational ethics programs, requiring that health professionals occupy HCO leadership positions, and prohibiting for-profit HCOs.

1. Organizational Ethics Programs

Part IV.A argued that health ethicists should give greater attention to organizational ethics. Ethical guidance for organizations, however, will not foster virtuous organizational cultures if ignored by HCOs. Consequently, regulators should consider whether to mandate that HCOs adopt formal organizational ethics programs as a condition of state licensure or eligibility for government health care programs.<sup>245</sup>

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*Gatekeeping*, 2 J. CONTEMP. HEALTH L. & POL'Y 23 (1986) (arguing that society must preserve the integrity of a physician's primary responsibility to the patient's interest); Herbert M. Swick, *Toward a Normative Definition of Medical Professionalism*, 75 ACAD. MED. 612, 614 (2000) (defining medical professionalism as requiring that the physician treat a patient's legitimate interests and needs as paramount over the physician's own interests and the demands of the health system employing the physician).

244. Ruger, *supra* note 7, at 1519–20.

245. For example, HCOs must meet various "conditions of participation" in order to participate in the Medicare and Medicaid programs. For a general description of these requirements, see *Conditions for Coverage (CfCs) & Conditions of Participations (CoPs)*, CTRS. FOR MEDICARE & MEDICAID SERVS., <http://www.cms.gov/Regulations-and-Guidance/Issuance/CfCsAndCoPs/index.html> (last visited Nov. 24, 2013). Similarly, state agencies will only grant licenses to HCOs that meet the

Requiring HCOs to adopt formal organizational ethics programs would force “leaders and managers to face the fact that working through ethical conflicts and deliberating over ethical commitments should have an important structural presence.”<sup>246</sup> In addition, regulators could require that HCOs broaden their focus beyond ethical issues arising in individual, patient-care settings and consider the larger issue of promoting a virtuous organizational culture.<sup>247</sup> In particular, HCOs could be required give attention to how their formal structures and informal cultures impact physicians’ clinical decision making.

## 2. Health Professionals in Leadership Positions

While a formal organizational ethics program may be a good starting point for promoting a virtuous organizational culture, they often “are too easily displayed as window dressings that are honored only through lip service without any sincere efforts to inculcate their principles in the thinking and behavior of management and employees.”<sup>248</sup> Attention, then, should be given to other internal factors influencing an HCO’s organizational culture, including the composition of the organization’s leadership.

Experts in organizational culture have found that organizational leaders play a fundamental role in shaping an organization’s culture.<sup>249</sup> At the formal level, leaders have responsibility for articulating the organization’s mission, setting standards of conduct, and allocating organizational rewards and status.<sup>250</sup> Leaders also communicate the

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standards established by the state. *See* ANNE L. ROONEY & PAUL R. VAN OSTENBERG, LICENSURE, ACCREDITATION, AND CERTIFICATION: APPROACHES TO HEALTH SERVICES QUALITY 3 (1999) (defining licensure).

246. Chen & Mills, *supra* note 233, at 735.

247. *See generally id.* at 730 (“[T]he role of an organization ethics program is to articulate and promote the healthcare organization’s mission and values—synthesized from its professional, clinical, and business ethics commitments—through its activities.”).

248. Mark A. Hall, *A Corporate Ethic of “Care” in Health Care*, 3 SEATTLE J. FOR SOC. JUST. 417, 421 (2004).

249. *See, e.g.*, EDGAR H. SCHEIN, ORGANIZATIONAL CULTURE AND LEADERSHIP 235–58 (4th ed. 2010) (describing the ways in which leaders embed and transmit culture); Amy Klemm Verbos et al., *The Positive Ethical Organization: Enacting a Living Code of Ethics and Ethical Organizational Identity*, 76 J. BUS. ETHICS 17, 22 (2007) (“Leaders’ key role in influencing ethical practices in their organizations is well established in the business ethics literature.”).

250. *See* SCHEIN, *supra* note 249, at 237, 247–49, 256–57 (describing how leaders shape an organization’s culture—through formal statements of organizational philosophy, creeds, and charters—and how they allocate rewards and status).

organization's norms and values through less formal means, such as by what they pay attention to, the priorities they set, and their own conduct.<sup>251</sup>

Which values and norms an organizational leader chooses to emphasize is guided by the leader's own cognitive frameworks, which in turn reflect the leader's educational background and professional training.<sup>252</sup> Given the relationship between leaders' values and their backgrounds, some have suggested that physicians and other health professionals should occupy important leadership positions in HCOs. For example, several commenters on the proposed rule for the Medicare Shared Savings Program urged the Centers for Medicare and Medicaid Services (CMS) to mandate that ACOs be led by physician CEOs.<sup>253</sup> Underlying this and similar proposals is the belief that leaders who are physicians, or other health professionals, will promote a more virtuous organizational culture because health professionals are more likely to balance business considerations with concerns for patient welfare.<sup>254</sup>

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251. See *id.* at 236–43, 245–47 (describing various informal ways leaders shape organizational culture).

252. See John L. Campbell, *Why Would Corporations Behave in Socially Responsible Ways? An Institutional Theory of Corporate Social Responsibility*, 32 *ACAD. MGMT. REV.* 946, 958 (2007) (explaining that “the cognitive frames, mindsets, conceptions of control, or world views of corporate managers are important determinants of how managers run their firms,” and that “[s]cholars emphasize that managers often learn [their] mental constructs by absorbing the messages that are transmitted to them at business schools and through the professional publications they pay close attention to (e.g., the business press, trade journals)”); *cf.* Eric Van den Steen, *Organizational Beliefs and Managerial Vision*, 21 *J.L. ECON. & ORG.* 256, 258 (2005) (noting that studies show that a manager's policies are correlated with whether or not he or she attended an MBA program).

253. See Mark A. Warner, *Public Comment on RIN 0938-AQ22: Medicare Program; Medicare Shared Savings Program: Accountable Care Organizations*, 76 *Fed. Reg.* 19528-01 (proposed Apr. 7, 2011), REGULATIONS.GOV (June 3, 2011) (No. CMS-2010-0259), <http://www.regulations.gov/#!documentDetail;D=CMS-2010-0259-0801> (final rule codified at 42 C.F.R. pt. 425) (submitting comments on the proposed rule on behalf of the American Society of Anesthesiologists and stating that physician leadership of ACOs is essential to ensure ACOs are patient centered and put patients' interests first).

254. See Michael Hechter, *The Rise and Fall of Normative Control*, 33 *ACCT., ORGS. & SOC'Y* 663, 666 (2008) (arguing that a physician's behavior will differ from a businessperson's behavior because the norms of a businessperson “impels him to self-interested action (presumably, he is motivated to maximize his own profit),” whereas “the physician's role requires him to place the welfare of his patient above his own self-interest, financial or otherwise”); *cf.* Makkai & Braithwaite, *supra* note 243, at 34 (arguing that individuals with a stronger professional orientation than business orientation are less likely to violate the law).

Although CMS rejected the proposal to require that ACOs be led by physician CEOs,<sup>255</sup> the agency's final rule does require that at least seventy-five percent control of the ACO's governing body be held by representatives of the physicians, hospitals, and other health providers participating in the ACO.<sup>256</sup> CMS and supporters of this governing requirement argued that it would "ensure that ACOs remain provider-driven,"<sup>257</sup> "patient-centric,"<sup>258</sup> and "put[ ] patients' interests first."<sup>259</sup> If research supports the assumed link between an HCO's leadership and its organizational culture, regulators should consider whether to impose similar governing requirements on other HCOs.

### 3. Nonprofit Status

Some commentators have suggested that nonprofit status also may promote a more virtuous organizational culture.<sup>260</sup> Nonprofits cannot distribute earnings to owners or shareholders, but instead must use any surplus to support their operations and mission.<sup>261</sup> Consequently, the earnings of nonprofit HCOs are "a means to an

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Whether health professionals who occupy leadership positions are less business oriented and more patient focused than other health care leaders is a question deserving of further empirical study.

255. See Medicare Shared Savings Program: Accountable Care Organizations, 76 Fed. Reg. 67,802, 67,823 (Nov. 2, 2011) (codified at 42 C.F.R. pt. 425) (responding to comments and expressing the agency's "belie[f] that ACOs should have flexibility to determine their leadership and management structure").
256. 42 C.F.R. § 425.106(c)(3) (2013) (setting forth requirements related to the composition of an ACO's governing body); *id.* § 425.20 (defining the term "ACO participant").
257. Medicare Shared Savings Program, 76 Fed. Reg. at 67,819.
258. Asa C. Lockhart, *Public Comment on RIN 0938-AQ22: Medicare Program; Medicare Shared Savings Program: Accountable Care Organizations*, 76 Fed. Reg. 19528-01 (proposed Apr. 7, 2011), REGULATIONS.GOV (June 17, 2011) (No. CMS-2010-0259), <http://www.regulations.gov/#!documentDetail;D=CMS-2010-0259-0951> (final rule codified at 42 C.F.R. pt. 425) (submitting comments on the proposed rule on behalf of the Texas Medical Association).
259. *Id.* CMS also requires that the ACO governing body include a Medicare beneficiary who is a patient of the ACO. 42 C.F.R. § 425.106(c)(2) (2013). This requirement also is intended to promote a patient centered culture. See Medicare Shared Savings Program, 76 Fed. Reg. at 67,826 (explaining the rule stems from the Affordable Care Act's requirement that ACOs be patient centered).
260. See generally Hall, *supra* note 248, at 419–20 (arguing that nonprofit form may promote a culture of "caring" among HCOs).
261. See HOWARD L. OLECK & MARTHA E. STEWART, NONPROFIT CORPORATIONS, ORGANIZATIONS, AND ASSOCIATIONS 10–11 (6th ed. 1994) (defining nonprofit organizations).

end”—supporting the HCO’s health care mission—“rather than an end in itself.”<sup>262</sup> Although for-profits also may have goals beyond making money, the conventional wisdom is that these other objectives are secondary to their profit-making mission.<sup>263</sup> Nonprofit HCOs are therefore assumed to have a deeper commitment to their mission of patient care than their for-profit counterparts.<sup>264</sup>

If these assumptions are indeed correct, the organizational cultures of nonprofit and for-profit HCOs may differ in important respects. A greater commitment to their health care mission on the part of nonprofit HCOs may give rise to organizational cultures that reflect a fairer balancing of patient welfare, cost, and efficiency concerns.<sup>265</sup> In contrast, the cultures of for-profit HCOs may overemphasize efficiency and cost saving concerns,<sup>266</sup> leading the for-profit HCO’s physicians to make unwarranted compromises in patient care.

The objections to for-profit HCOs have proven controversial, with much debate over whether for-profit status actually promotes less virtuous organizational cultures and poorer patient outcomes.<sup>267</sup> Recent high-profile controversies involving for-profit health systems, however, raise questions about whether the fears expressed by critics of for-profit HCOs may be justified.<sup>268</sup> While admittedly it would be

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262. Hall, *supra* note 248, at 419.

263. *See id.* (“For-profit companies also have mission statements that seek to guide their corporate culture, but at least for publicly traded companies, we have to assume that the substantive mission is secondary to the goal of an increasing return on an equity investment.”).

264. *See id.* (suggesting that nonprofit companies “tend to stick to their mission and treat it more seriously as their main purpose for existence”).

265. *See id.* at 419–20 (suggesting that because nonprofit companies in general are more committed to their missions, nonprofit HCOs are more likely to have a culture of caring); Arnold S. Relman, *Could Physicians Take the Lead in Health Reform?*, 304 JAMA 2740, 2741 (2010) (stating that nonprofit multispecialty physician groups are “appealing because their professional values and their concern for the quality of care would outweigh commercial incentives”).

266. *See generally* ARNOLD S. RELMAN, A SECOND OPINION: RESCUING AMERICA’S HEALTH CARE 36–37 (2007) (arguing that the entrepreneurialism inherent in investor-owned health care leads to a focus on the bottom line).

267. Wolf, *supra* note 225, at 37 (stating that objections to for-profit status “are controversial, with much debate about whether the data show actual and negative effects on physician decisions”). *See generally* Jack Needleman, *The Role of Nonprofits in Health Care*, 26 J. HEALTH POL. POL’Y & L. 1113 (2001) (discussing whether tax policy should continue to promote nonprofit health care institutions).

268. For example, Health Management Associates (HMA), the fourth largest for-profit hospital chain in the country, allegedly promoted a culture

imprudent to require HCOs to be nonprofit on the basis of a few wayward for-profit HCOs, the issue merits greater attention given the recent growth in HCOs.

*C. Organizational Accountability for Patient Care*

Because the clinical decisions of HCO physicians reflect the organizational values and norms of their HCO, patient care should be viewed as a product of an organizational system. Health law and policy therefore should impose greater accountability on HCOs for the cost and quality of patient care. While recent reforms in Medicare reimbursement policies have moved in this direction,<sup>269</sup> others areas of health law and policy continue to focus on individual physicians. Part IV.C discusses two reforms that would shift the focus to HCOs: enterprise medical liability and monitoring organizational patterns of care.

1. Enterprise Medical Liability

Malpractice law traditionally focused on individual actors, holding physicians individually accountable when their treatment of a patient deviated from accepted standards of care.<sup>270</sup> Rarely did courts hold organizations liable for a physician's deficiencies. Over the past few decades, however, courts have expanded organizations' liability for malpractice under the doctrines of vicarious liability and corporate negligence.<sup>271</sup> Yet as expansive as these bases for HCO liability may

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that valued revenue generation at the expense of patient care. Specifically, the company rewarded physicians who ordered numerous diagnostic tests and frequently admitted patients to the hospital, potentially exposing patients to unnecessary risks. This reward structure allegedly influenced HMA physicians' clinical decisions, such as biasing them to find medical conditions that would justify admitting a patient to the hospital. *See 60 Minutes: The Cost of Admission* (CBS television broadcast Dec. 2, 2012) (investigating the clinical practices of Health Management Associates).

269. *See supra* notes 41–44 and accompanying text (discussing Medicare payment reforms).

270. *See, e.g., Adamski v. Tacoma Gen. Hosp.*, 579 P.2d 970, 974 (Wash. Ct. App. 1978) (explaining that for years the majority of courts treated physicians as independent actors who were not subject to control by hospitals).

271. Under the theory of respondeat superior, hospitals and other institutions are liable for the negligence of physicians who are either employees or agents of the hospital. In determining whether a nonemployee physician is an agent of the hospital or organization, some courts have moved away from the traditional “control” test to instead consider whether there is a significant relationship between the physician and the organization. *See id.* at 974–78. Under the doctrine of apparent or ostensible agency, courts will hold a hospital or organization vicariously liable for the negligent acts of a nonagent physician if the hospital holds

be, various doctrinal obstacles frequently bar injured patients from recovering from HCOs.<sup>272</sup> Many malpractice cases therefore focus solely on the conduct of individual physicians, treating physicians as isolated actors and ignoring the impact of HCOs' organizational culture on physicians' patient-care decisions.

In contrast to current malpractice law doctrine, the theory of enterprise liability shifts liability for negligence from individual actors to the enterprise.<sup>273</sup> Enterprise liability in the malpractice context would place sole legal responsibility for deficient patient care at the level of the organization rather than holding individual physicians liable.<sup>274</sup> In doing so, enterprise liability would recognize patient care as the product of organizational forces.

Although proposals for enterprise medical liability are not new, recognition of the close link between organizational culture and patient-care decisions provides a new justification for such

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itself as the provider of care and the plaintiff-patient relies on such representation or reasonably believes the physician to be an employee or agency of the organization. *See id.* at 977. Finally, hospitals and other organizations may be liable when their own negligence contributes to a physician's substandard care. For example, hospitals have been held to have a duty to grant staff privileges only to competent physicians. *See, e.g., Johnson v. Misericordia Cmty. Hosp.*, 301 N.W.2d 156 (Wis. 1981). Courts have also found a duty to supervise the care provided by physicians and other health care professionals employed or affiliated with the hospital. *See, e.g., Darling v. Charleston Cmty. Mem'l Hosp.*, 211 N.E.2d 253 (Ill. 1965), *cert. denied*, 383 U.S. 946 (1966).

272. For example, when the physician separately bills the patient, and the patient selects the physician caring for her rather than looking to the hospital to do so, courts do not consider the physician an agent of the hospital. *See, e.g., Adamski*, 579 P.2d at 975 (“[W]here the patient contacts his personal physician and is by him admitted to a hospital for treatment, and the doctor looks directly to the patient for his fees, the courts uniformly treat the physician as an independent contractor.”). In some jurisdictions hospitals and other organizations can defeat a claim under the theory of apparent agency if the organization informs the patient that the physician is an independent contractor. *See, e.g., Baptist Mem'l Hosp. Sys. v. Sampson*, 969 S.W.2d 945, 950 (Tex. 1998) (ordering summary judgment for the defendant-hospital on plaintiff's apparent agency claim when the hospital had posted signs in the emergency room notifying patients that its emergency room physicians were independent contractors and the plaintiff had signed a patient-consent form stating the same).
273. *See* Howard C. Klemme, *The Enterprise Liability Theory of Torts*, 47 U. COLO. L. REV. 153, 158 (1976) (defining enterprise liability as imposing onto an enterprise the losses to society caused by that enterprise).
274. *See* Kenneth S. Abraham & Paul C. Weiler, *Enterprise Medical Liability and the Evolution of the American Health Care System*, 108 HARV. L. REV. 381, 383 (1994) (stating that under enterprise liability the organization would bear all liability for medical malpractice).

proposals.<sup>275</sup> Specifically, enterprise liability would recognize that organizational norms and values may contribute to errors in physicians' professional judgments, such as incorrect diagnoses or selecting deficient plans of treatment. By imposing sole legal responsibility for medical errors on HCOs, enterprise liability would motivate HCOs to pay closer attention to how their organizational culture may contribute to poor medical decision making by their affiliated physicians.

## 2. Monitoring Organizational Patterns of Care

As described in Part I, various payment reforms tie an HCO's reimbursements to its performance on selected quality measures. For example, ACOs participating in the Medicare Shared Savings

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275. Proponents of enterprise medical liability previously have argued that enterprise liability offers numerous advantages over the traditional malpractice system, including a more efficient system of malpractice insurance and compensation. For example, Abraham and Weiler have argued that enterprise medical liability would result in a superior insurance system, as an organization's claims experience is more predictable and stable than an individual physician's claims experience. *Id.* at 403. Others have similarly argued that enterprises are "a superior fund for compensation and a superior risk-spreading instrument." Barry R. Furrow, *Enterprise Liability and Health Care Reform: Managing Care and Managing Risk*, 39 ST. LOUIS U. L.J. 79, 110 (1994). Proponents also argue that enterprise liability would reduce litigation costs by eliminating multiple defendants. *See* Abraham & Weiler, *supra* note 274, at 406; Furrow, *supra* at 112. Proponents of enterprise liability further claim that enterprise liability would promote better physician adherence to clinical guidelines and encourage greater cooperation between physicians and institutional providers such as hospitals. *See* E. Haavi Morreim, *Playing Doctor: Corporate Medical Practice and Medical Malpractice*, 32 U. MICH. J.L. REFORM 939, 974 (1999) (stating that because enterprise liability relieves physicians of individual liability for malpractice, they may more readily participate in cooperative decision making and be less resistant to clinical practice guidelines). Finally, proponents argue that enterprise liability would improve the quality of patient care by enhancing HCOs' incentives to reduce medical errors or mishaps, such as by implementing system-wide processes that would prevent avoidable infections or complications from adverse drug interactions. *See* Abraham & Weiler, *supra* note 274, at 408-12 (arguing that individual-based malpractice insurance dilutes the direct financial incentives to enhance the quality of care due to the absence of experience rating, whereas under enterprise liability premiums can be based on the enterprise's claims experience, and that enterprise liability gives institutions an incentive to take a systems-approach to preventing or catching errors); Gail B. Agrawal & Mark A. Hall, *What If You Could Sue Your HMO? Managed Care Liability Beyond the ERISA Shield*, 47 ST. LOUIS U. L.J. 235 (2003) (stating that by imposing vicarious liability on health care systems, enterprise liability provides an incentive to take steps to minimize the opportunity for medical errors).

Program receive an overall performance score based on their performance on various quality measures, with those ACOs receiving a higher performance score awarded a higher shared savings bonus.<sup>276</sup> Policymakers contend that holding HCOs financially accountable for their performance on various quality measures will protect patients from poor-quality care.<sup>277</sup> However, as I have discussed elsewhere, quality measures provide incomplete protection against poor-quality care given their inherent limitations, particularly for those domains of patient care characterized by uncertainty.<sup>278</sup>

To guard against inappropriate or poor-quality care, regulators also should monitor HCOs' patterns of care. Comparing HCOs' utilization rates across a range of medical interventions would allow regulators to identify those HCOs with organizational cultures that lead to inappropriate patient-care decisions. While we would expect to see some variation in patterns of care across HCOs, significant deviations from the norm may be indicative of an organizational

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276. See 42 C.F.R. § 425.502(e) (2013) (outlining the process for calculating quality performance scores for participating ACOs); *id.* § 425.604(d) (providing that an ACO's shared savings payment will vary based on its quality performance score); *id.* § 425.606(d) (same); see also Medicare Shared Savings Program: Accountable Care Organizations, 76 Fed. Reg. 69,802, 67,899–90 (codified at 42 C.F.R. pt. 425) (outlining the points to be allocated under the performance scoring system and noting that the resulting score will be used to calculate an ACO's shared savings payment).

An ACO is ineligible for the shared savings bonus if it fails to meet the minimum attainment level, that is, the thirtieth percentile, on at least one measure in each of the four domains. 42 C.F.R. § 425.502(d)(2)(iii)(B) (2013). See generally *id.* § 425.502(b)(3) (setting the minimum attainment level); *id.* § 425.502(d)(1) (establishing four domains for quality measures: "Patient/care giver experience," "Care coordination/Patient safety," "Preventative health," and "At-risk population"). Furthermore, an ACO that fails to score at or above the minimum attainment level on seventy percent of the performance measures in each domain may be subject to actions by CMS, including a warning, corrective action plan, or termination from the program. *Id.* §§ 425.216, 425.502(d)(2)(ii).

277. See ERIC C. SCHNEIDER ET AL., PAYMENT REFORM: ANALYSIS OF MODELS AND PERFORMANCE MEASUREMENT IMPLICATIONS 32, 38 (2011) (stating that a key role of performance measures in a global or shared savings payment model is to ensure that quality does not decline and that HCOs, such as ACOs, do not reduce care inappropriately as they seek to reduce the cost of treating patients); Gregory J. Pelnar & Gretchen M. Weiss, *Rule of Reason Analysis for Accountable Care Organizations*, 11 ANTITRUST SOURCE 1, 6 (2011) (stating that one purpose of quality measures is to prevent HCOs such as ACOs from undertreating patients).

278. See Mantel, *supra* note 2, at 1428–35 (concluding that quality measures provided incomplete protection against poor-quality care).

culture that promotes unnecessary care or the withholding of appropriate care. Oversight agencies can then take appropriate enforcement action against HCOs with questionable patterns of care, such as bringing an action for fraudulent claims under the False Claims Act.<sup>279</sup>

## CONCLUSION

While health care reform takes important steps toward the goal of universal access to medical care, many challenges remain. In particular, the United States must address rising health care costs and deficiencies in the quality of care. In addition, as we move toward payment models that will require providers to ration health care, we face the challenge of how best to ensure that they do so fairly. Addressing these fundamental issues requires that we understand how physicians make clinical decisions, with particular attention given to how HCOs' organizational cultures influence the cognitive frameworks that guide physicians' decision making. This Article fills this gap in our understanding by providing a theory of how an HCO's organizational culture affects its physicians' clinical judgments.

Too frequently commentators narrowly focus on the individual physician, failing to appreciate the profound impact an organization's culture has on the quality, cost, and modality of patient care. Of special concern are health organizations with cultures that bias physicians' clinical decision making in ways that result in poor-quality or inefficient care. Commentators should revisit areas of health law, policy, and ethics that address patient care, inquiring as to whether they give due consideration to the role of the organization. Particular attention should be given to identifying legal and regulatory reforms that will advance more virtuous organizational cultures. Part IV of this Article begins the discussion of this important issue.

Such reform efforts would benefit from additional conceptual and empirical work on the link between HCOs' organizational cultures and physicians' decision making. In particular, there is a need to better understand how physician behavior and patient outcomes differ in the context of varying organizational environments. For example, research identifying the cultural attributes of HCOs that most contribute to high-quality, efficient care would assist policymakers in their

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279. 31 U.S.C. § 3730(a) (2006) (requiring the Attorney General to “diligently . . . investigate a violation under section 3729” and allowing a civil action by the Attorney General if a violation is found). In recent years the United States Department of Justice and the Office of the Inspector General for the United States Department of Health and Human Services have prosecuted health care providers for poor-quality care under the False Claims Act. See Tracey E. Miller & Valerie L. Gutmann, *Changing Expectations for Board Oversight of Healthcare Quality: The Emerging Paradigm*, 2 J. HEALTH & LIFE SCI. L. 31, 55 (2009).

regulation of HCOs. Admittedly, reforming health law, policy, and ethics on the basis of the limited research on these questions is fraught with risk. Nevertheless, the growing trend of physicians entering into closer affiliations with HCOs demands that we begin doing so.