INTRODUCTION

True revolutions are rare. Rather, transformative change is often the result of evolutionary processes. Unfortunately, there is no guarantee that a system will evolve in positive directions. Constructive social evolution requires a complex set of selection mechanisms, feedback loops and built in learning processes. In the absence of an appropriate supportive framework, it is just as likely that a system will stagnate, fracture, disintegrate or grow in maladaptive ways. This essay takes up the challenge to imagine the health care
"system" in the next quarter century as it relates to issues of quality and ethics and to further explore its implications for law and policy.

Part I outlines the starting premise that there is, in fact, no functioning health care "system" in America. It is at best a broken system, but may be so lacking in intra-system rationality and coherence as to constitute a non-system or an anti-system. Health care in America costs too much, excludes too many and provides insufficient guarantees of safety and quality. The endemic problem of medical errors and patient safety illustrates the high degree of intra-system irrationality and calls for a re-imagining of quality that incorporates notions of learning. Persistent health inequalities and racial disparities in health highlight extreme inter-system irrationalities and the failure of biomedical understandings of health to properly interface with notions of public health and the social and economic determinants of health. This crisis calls for a re-imagining of health care ethics that expressly incorporates notions of justice.

Part II attempts to better understand the forces that drive the American biomedical industrial complex in an effort to diagnose its systemic failures from an evolutionary perspective. Part III engages in the imaginative exercise of visualizing what health care might look like in a world where quality is associated with learning, ethics is associated with justice and the health care system is consciously approached from an evolutionary perspective.

I. The Health Care (Non)System is Broken

The starting point of analysis in health law must be that if you are looking for the health care system, there is simply no "there" there. Merriam-Webster's online dictionary defines a system as "a regularly interacting or interdependent group of items forming a unified whole" or "a group of interacting bodies under the influence of related forces <a gravitational system>" or "an assemblage of substances that is in or tends to equilibrium <a thermodynamic system.>"1 Health care is

1 System Definition, MERRIAM-WEBSTER ONLINE DICTIONARY, http://www.merriam-webster.com/dictionary/system (last visited Mar. 18,
so lacking in intra-system rationality or coherence that it fails to satisfy the basic characteristics of a unified system.² Moreover, if one imagines how the health care “system” interacts with other systems from a general equilibrium perspective, such as the food system, the job system, the education system, the environmental system and the housing system, one finds a comparable story of inter-system irrationality. Biomedical understandings of health stand in isolation from the broader social and economic determinants of health. The biomedical health care system does not even interface effectively with the public health “system,” such that there is one. These failures are so well established that they need only be briefly outlined here.

A. General Indictment of Health Care: Cost, Quality and Access

The iron triangle of cost, quality and access provides a standard means of evaluating health system performance. Boldly stated, the American system fails with regard to each measure. It costs too much. We get too little and we exclude too many. The Commonwealth Fund has produced a number of comparative studies of Organization for Economic Cooperation and Development (OECD) countries in terms of health care costs and outcomes:

Health care spending in the U.S. in 2008 towered over the comparison countries, both per capita and as a percentage of gross domestic product (GDP). . . . With regard to quality, U.S. performance on a limited set of measures was

² Peter J. Hammer, Arrow’s Analysis of Social Institutions: Entering the Marketplace with Giving Hands?, in UNCERTAIN TIMES: KENNETH ARROW AND THE CHANGING ECONOMICS OF HEALTH CARE 215, 226-27 (Peter J. Hammer et al. ed., 2003) (“What is more important (and arguably what has been missing in U.S. health policy) is a commitment to intra-system rationality . . . . Some of the most important challenges facing U.S. health care policy makers involves the need to impose greater rationality on patterns of clinical practice and processes of technological innovation.”).
variable. Five-year survival rates for patients with three types of cancer were relatively high; the U.S. ranked near the middle on in-hospital, case-specific mortality for three conditions within 30 days of admission. The U.S. also had among the highest rates of hospital admissions for five chronic conditions and the greatest number of lower-extremity amputations due to diabetes. These findings suggest that the U.S. health system is not delivering superior results despite being more expensive, indicating opportunities for cross-national learning to improve health system performance.³

These numbers do not even begin adequately to account for the millions of people who cannot gain access to the health care system. There are more than 50 million uninsured people in the United States. This is the same as the “combined population of Oklahoma, Connecticut, Iowa, Mississippi, Kansas, Kentucky, Arkansas, Utah, Oregon, Nevada, New Mexico, West Virginia, Nebraska, Idaho, Maine, New Hampshire, Hawaii, Rhode Island, Montana, Delaware, North Dakota, South Dakota, Alaska, Vermont and Wyoming.”⁴ It also points to a troubling reality with the Affordable Care Act (ACA). With a broken system that costs too much already for the too few it serves, a health reform strategy that simply increases access without making structural, systemic reforms will not be sustainable.

The international data are particularly important because they permit aggregate comparisons of the entire health system’s performance. As a system, we deserve a failing grade. No system spends a greater percentage of available GNP on biomedical notions of health care. Our performance


is at best mediocre. At the same time, an unacceptable percentage of Americans stand on the outside of the system looking in. Just as unfortunate, the system unintentionally harms many of those that it seeks to serve.

B. Symbolic Indictment: Medical Errors and Racial Disparities

We can go beyond the general indictment and examine two issues that provide deeper insights into systemic failures. These are important substantive issues on their own, but they also have symbolic significance. The first is the endemic problem of medical errors, which highlights issues of intra-system irrationality. The second concerns racial disparities in health. These categorical health inequities provide a vivid illustration of inter-system irrationalities in health care.

1. Medical Errors

For more than a decade, the problem of medical errors and patient safety has been at the forefront of health policy. The 1999 IOM Report *To Err is Human* reported countless injuries and perhaps nearly 100,000 deaths taking place each year as a result of preventable errors. The ensuing decade has witnessed countless public and private initiatives to improve patient safety. Nevertheless, few would claim that we have made sufficient progress.
Why have we failed to make better progress on this front? It is easy to frame patient safety and medical errors as issues of quality. These issues, however, provide a window into the way the health care system works or fails to work as a cohesive whole.\(^7\) Medical errors highlight the dimensions of intra-system irrationality: the fractured nature of the hospital as a health care firm; the hyper-specialization of physician expertise; and the failure to devise effective means of coordination and communication. In addition, medical errors illustrate the lack of the capacity for the existing system to learn and adapt.

Medical care is becoming increasingly complex. As complexity increases, so does the need to manage resources and information. Coordination and cooperation become essential. What is needed in this environment is obvious. The “regularly interacting or interdependent group of items” constituting how health care is organized and financed need to form “a unified whole.”\(^8\) Yet, this is precisely what is so often lacking. Its absence, unfortunately, is the cause of countless hospital infections, prescription mishaps and delayed or mis-diagnoses. The lack of system-ness is similarly a major cause of our failure to effectively manage many chronic conditions.\(^9\) Effective systems, however, do not

\(^{7}\) INST. OF MEDICINE, TO ERR IS HUMAN, supra note 5 at 3 (“The decentralized and fragmented nature of the health care delivery system (some would say ‘nonsystem’) also contributes to unsafe conditions for patients, and serves as an impediment to efforts to improve safety.”). Indeed the Crossing the Quality Chasm report is organized almost entirely around approaching quality and health reform from the perspective of complex adaptive systems. INST. OF MEDICINE, CROSSING THE QUALITY CHASM, supra note 5 at 63-67, 309-22.

\(^{8}\) See MERRIAM-WEBSTER, supra note 1, for the definition of system.

\(^{9}\) The promotion of “medical homes” is an effort to impose greater systemic cooperation in the treatment of chronic conditions in a system lacking in such cohesiveness. The Henry J. Kaiser Family Foundation, Focus on Health Reform: Medicaid’s New “Health Home” Option (Jan 2011), available at http://www.kff.org/medicaid/upload/ 8136.pdf (“Many Medicaid beneficiaries suffer from multiple or severe chronic conditions

medical errors cause up to 98,000 deaths in hospitals each year, roughly 15 percent of hospital patients are still being harmed during their stays. Poor care coordination places further strain on patients and the system, with roughly 20 percent of discharged elderly patients returning to the hospital within 30 days.”) (footnotes omitted).
arise accidentally. They require effective organizational structures, regulatory and financial infrastructures, information, incentives and professional socialization. When viewed from this framework, one can start to develop useful intuitions on how particular categories of medical errors suggest deficiencies in particular aspects of system’s integrity.

Coherence, integration and coordination are all important aspects of well-functioning systems. An evolutionary perspective of systems adds one other important consideration - the capacity for learning and adaptation. The existence of numerous medical errors highlights the lack of effective system performance. The persistence of medical errors highlights the lack of effective mechanisms for learning, feedback and adaptation. The same errors happen time and time again. Different organizational structures have different capacities for learning and adaptation. These are not simple matters. Many of the factors impeding effective system performance also forestall the capacity to learn and adapt. The incentive to learn and adapt, for example, is weakened if the reimbursement system provides greater compensation for making a mistake and treating its consequences than fixing it. It is clear, however, that in considering the future of health law in the next quarter century, the capacity for learning and the conditions that facilitate adaptation must become central parts of how we consider health care quality. Such re-imagining will necessarily take us further down the road of greater intra-system rationality. Similar lessons could be drawn from the persistence of small area variations in health practices as documented in the Dartmouth Atlas Project.10

and could potentially benefit from better coordination and management of the health and long-term services they receive, often in a disjointed or fragmented way.”).

10 Dartmouth Atlas of Health Care, DARTMOUTH ATLAS PROJECT, available at http://www.dartmouthatlas.org/ (last visited Mar. 18, 2013) (“For more than 20 years, the Dartmouth Atlas Project has documented glaring variations in how medical resources are distributed and used in the United States.”).
2. Racial Disparities

Medical care is not the only factor contributing to an individual’s and a population’s level of health. The literature on the social and economic determinants of health demonstrates how income, housing, education, nutrition and the environment influence health outcomes, often in manners more dramatic than one’s access to a physician. As a society, we must not only care about how well the health care system functions internally (intra-system rationality or a static equilibrium framework from an economic perspective), we must also care about how the health care system interacts with other sectors that affect health outcomes (inter-system rationality or a general equilibrium framework from an economic perspective). The literature on health inequalities and racial disparities in health provide insight into these issues. Health outcomes vary substantially by socioeconomic category and by racial groups, even independent of socioeconomic status. As Ralph B. Everett, President of the Joint Center for Political and Economic Studies, reminds us: “[n]ot everyone in the United States enjoys the same health opportunities. Studies show that minority Americans experience poorer than average health outcomes from cradle to the grave. They are much more likely to die as infants, have higher rates of diseases and disabilities, and have

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11 World Health Org. Comm’n of Soc. Determinants of Health, Closing the Gap in a Generation: Health Equity through Action of the Social Determinants of Health 1 (2008), available at http://whqlibdoc.who.int/publications/2008/9789241563703_eng.pdf (“The poor health of the poor, the social gradient in health within countries, and the marked health inequalities between countries are caused by the unequal distribution of power, income, goods, and services, globally and nationally, the consequent unfairness in the immediate, visible circumstances of people’s lives — their access to health care, schools, and education, their conditions of work and leisure, their homes, communities, towns, or cities and their chances of leading a flourishing life.”).

shorter life spans." One dramatic illustration of this is the health status of elderly residents in Detroit. "Detroit area residents age 60-74 are dying at a rate 48% higher than their peers in the rest of the state."

This is one of the most important civil rights issues of our day, one that will hopefully start receiving the attention it deserves in the next quarter century. Unfortunately, the health care system has an incredibly narrow biomedical understanding of the meaning of "health." Similarly, the health care system has an incredibly narrow biomedical understanding of "ethics." There needs to be a re-imagining of health care ethics in a manner where the problems of racial disparities in health are viewed first and foremost as ethical concerns. This will require a new medical ethics that expressly incorporates notions of justice.

Racial disparities in health serve a deeper symbolic function and provide a window into the extreme inter-system irrationality of American health care. If one adopted a general equilibrium perspective and was only concerned about maximizing health outcomes, in equilibrium, the marginal increase in health for every dollar spent in every sector would be the same. Assuming we had the metrics to operationalize this "dollar test," how would the health payoff of an extra dollar devoted to the biomedical sector compare with the health payoff of that same dollar devoted to public health, or education, or housing, or food support? If one were to focus on investments in preventative care, at least one study suggests a greater than five-to-one return on investment over a five year period. As health care is

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15 While this article focuses on the socio-economic determinants of health and the need for greater inter-system rationality, serious issues of race and racial inequalities also exist inside the health care system.

16 Trust for America's Health. PREVENTION FOR A HEALTHIER AMERICA: INVESTMENTS IN DISEASE PREVENTION YIELD SIGNIFICANT SAVINGS, STRONGER
trending to consume nearly twenty percent of GNP, if we were only concerned about health, we could achieve better health outcomes by reallocating health dollars outside of the health sector.

Not only is there deep intra-system irrationality in health care, there is deep inter-system irrationality in health care. The negative effects of this inter-system irrationality fall disproportionately on under-represented minority groups and the poor. As we re-imagine health care in the next quarter century, we need to imagine means to improve the distribution of resources between traditional biomedical and other health-related sectors. We also need to imagine how to better address underlying racial disparities in health. Both of these efforts will require a new health ethics better attuned with notions of social justice.

II. WHAT DRIVES THE BIOMEDICAL INDUSTRIAL COMPLEX?

To imagine the next quarter century, it is necessary to have an idea of where we are now, how we got here and the dynamic processes driving the system. We are starting from the intuition of health care as a dysfunctional system lacking in intra- and inter-system rationality, but we need to better understand the interdependent public, private and professional infrastructures that seek to regulate and control the health care system, as well as the internal forces that drive it. To state that a system is dysfunctional is not to say that it lacks power, intensity or drive. It need only be recalled that the essence of cancer is the unregulated growth of cells to appreciate the potential power of dysfunctionality.

A. The Balkans of American Health Care

The dysfunction of health care has its own geography. Balkanization is the antithesis of integration, coherence and synthesis. To Balkanize is "to break up (as a region or group) into smaller and often hostile units."17 Health law and policy


17 Balkanize Definition, MERRIAM-WEBSTER ONLINE DICTIONARY,
In the Balkans of American health care. On the front end, health care finance is divided between public payment and private payment. Public payment is further divided between Medicare and Medicaid. Medicare is further divided into Parts A, B, C and D. Private payment is divided between large-group insurance policies, small-group policies and the absence of payment (the uninsured). On the back end, the Balkanization of health finance can be seen in terms of the diverse patients (and therefore payment systems) who may show up in any given physician’s waiting room. The dozens of patients seen each day could each pay for a comparable set of services in a completely different manner.

The regulation of health care is Balkanized through a complex array of state and federal, judicial common law, administrative, statutory and quasi-public professional self-regulatory processes. Through traditional state police powers, states control the licensing of health professionals and institutions (to the extent that they do not loosely sub-delegate that responsibility to the professions themselves or to professional organizations). States also largely control the regulation of health insurance, unless those regulations affect self-insured employer plans and are therefore subject to federal ERISA preemption and almost no regulation at all. By default, the complex rules governing ERISA have been ceded to the shifting opinions of the federal courts.

The source of federal constitutional authority to act in health care has become a more controversial and momentous question than anyone might have ever anticipated. Medicare and Medicaid are an outgrowth of the spending power, but also prove that substantial strings come attached to the receipt of federal funds. For example, Medicare and Medicaid have their own standards for participating organizations and efforts to ensure quality, that run in parallel to state regulations and state common law malpractice suits. Furthermore, outdated and ill-suited forms of Medicare

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reimbursement necessitate Byzantine rules governing self-referrals, kickbacks and false claims, along with tremendous efforts to combat fraud and abuse. A real but often hidden cost of these rules is the extent to which laws fighting fraud and abuse in public payment systems have constrained the evolution of organizational forms and limited economic innovation on the private side of the health care system. The fractured Balkans of American health care also includes robust private markets for physician services, hospitals, pharmaceuticals and medical devices. But, sadly, private competition in dysfunctional systems will often (efficiently) produce dysfunctional results.

What are the implications of a Balkanized anti-system on private organizational forms and economic forces? I have written elsewhere about the puzzle that the traditional non-profit hospital structure presents from the perspective of Coase's theory of the firm.\(^1\) Rather than coming under common ownership and control, the human (physician), physical (hospital) and financial (insurance) capital associated with the financing and delivery of health care services has traditionally been broken up and divided into separate economic parts. In essence, the basic units of payment and production became, themselves, mini-Balkans. The incentives (good and bad) of this fractured structure can be contrasted with the incentives of a more integrated unit of production where human, physical and financial capital are under unified ownership and control, such as the Kaiser health system or the Henry Ford health system. One can theoretically take an even greater step towards systemic coherence by imagining the integrated unit as a form of mutual insurance, where ownership and control was vested in the insured themselves.\(^2\) The same economic function can be operationalized in many different organizational forms, but specific organizational forms matter because organizational

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20 One further step could envision the same structure unified under public ownership and control in a single payer system where individual preferences were exercised by votes rather than dollars.
structure governs individual incentives. Differently organized units will have radically different sets of interests and objectives. A corollary lesson is the more divided and Balkanized the system, the more difficult it can be to ensure that all costs and benefits are effectively internalized in any faction’s decision making.

What are the implications of a Balkanized anti-system on the evolution of organizational forms? Well-functioning private markets can create strong incentives for dynamic efficiency and the evolution of organizational forms and contracting practices that improve welfare. That said, predictions are dangerous. Early in my career, based on the Coasian logic suggested above, I predicted the evolution of managed care into increasingly tighter forms. This did not happen. Instead, we have observed patterns of herding and cycling on the private side of the market moving towards and then away from tighter forms of integration. The paradox is partially resolved when one appreciates the many ways that the Balkans of American health care can impede normal evolutionary processes. The absolute din of conflicting payment plans reflected in the physician’s waiting rooms drowns out the ability of any one set of financial incentives, even Medicare’s, to drive organizational forms. The Medicare rules governing self-referrals and fraud and abuse are designed to remedy defects in Medicare’s own payment system, but have the unintended side effect of constraining evolutionary paths on the private side of the market. As a result, private evolutionary potential is not realized. One can view current efforts to establish Accountable Care Organizations, (ACOs) as a romantic hope and a prayer to obtain the end results of rational adaptation and evolutionary processes, without the underlying infrastructure necessary to enable its creation. If one cannot transcend the negative forces of Balkanization, the aspirations of ACOs will not be realized. Ironically, if one could transcend the constraints of the Balkans, ACOs would not be necessary.

In the absence of rational adaptation, one should expect various forms of maladaptation. If one wants to understand

21 Medical Antitrust Reform, supra note 19 at 118.
22 Balkanization of American Health Care, supra note 18 at 485-88.
what is really driving the biomedical industrial complex, one needs to come to terms with two underappreciated phenomena. The first concerns how health insurance is radically different from most other forms of insurance. Indeed, health insurance is not insurance at all, it has been transformed into a vehicle of health finance. John Nyman develops this argument in his article, *The Value of Insurance: The Access Motive*. Traditional insurance serves the function of (1) pooling like risks and (2) shifting risk. Individuals use insurance, in essence, to transfer money from healthy states of the world to unhealthy states. They will continue to buy insurance to transfer such money until the marginal rates of substitution are equalized in all possible states of the world. Insurance in this traditional framework is subject to the initial budget constraint of the individual insured. Traditional insurance cannot create a greater expected value in an insured state than exists in the original state. Contrast this with how health insurance works for those lucky enough to be able to access the system. Nyman argues that people use health insurance to buy "access" to care they could not otherwise afford. He provides an example of an individual earning $50,000 who needs a $300,000 liver transplant that exceeds their income, assets and ability to finance care through traditional commercial means. Health insurance becomes a vehicle to collectively finance health care, not a vehicle of pooling or shifting risk. This has radical implications for the potential economic metastasizing of the biomedical industry.

The largest driver of health care cost is technology. At the complex interplay between insurance and technology, Sherry Glied, has coined the term "dynamic moral hazard." There

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25 *Id.* at 150.

26 *Id.* at 144.

27 *Id.* at 150.

are strong access incentives from health insurance, without comparable mechanisms for internalizing the costs of decisions in individual decision makers. Consequently, at the front end, insurance creates incentives for additional research and development. At the back end, insurance contains few active means of technology assessment and, in fact, significantly speeds the diffusion and use of new technology, creating additional profit and incentives for future R&D - dynamic moral hazard. All the while, insurance contains few individual incentives for cost control. Indeed, in a perverse form of bootstrapping self-blackmail, given the rising costs of health care technology, individuals continue to buy insurance to gain accessing to the future technology that they otherwise would be unable to afford.

**B. The Political Economy of Health Care**

In some respects, the Balkans of American health care presents a misleading image. In the actual Balkans, the sharp rugged mountains, valleys and coastlines are concrete geographic realities. In the Balkans of American health care, these barriers, divisions and obstacles are our own path-dependent creations. What are the forces that enable the co-creation of such structures and how might they change? One can picture the health care system being jointly shaped by (1) political, (2) market and (3) professional processes.
The simultaneous interplay of market, political and professional processes co-create the health care system. Markets and politics present complementary processes for aggregating social preferences and allocating resources. From this perspective, they serve more similar functions than most people realize. Health care becomes particularly complicated given the important role of specialized knowledge (physician expertise), the inherently decentralized manner in which health care must be dispensed and the corresponding role of professionalism.

An important lesson from institutional economics is that the same social function can be performed through many different public, private and hybrid organizational forms. Given this fact, how does one choose between competing forms? Here, economic sociology is more helpful in addressing these questions than more popular forms of public choice theory. One needs to engage in a power analysis. Actors will rationally manipulate market, political and professional processes to obtain their desired objectives. Antitrust law has sensitized us to the ways in which private market power can be exercised to detrimental ends in the private domain. As such, markets have the potential to yield socially desired objectives or to be coopted for private ends. Similar observations can be made of political processes. There is an inherent capacity for political processes to be used to pursue desired social objectives, but there is also the capacity to be coopted for private ends. This would suggest the need for potentially greater scrutiny of the substantive results of political processes. It should be remembered that monopolies, at one point, were dispensed by the crown.

Comparable issues are raised today in the field of economic development. Despite the biases of neoclassical economics, well-functioning markets cannot exist without

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30 Id. at 229.

31 See id. at 238-39 (discussing the complexities of the health care market).
appropriately robust public infrastructures. Development is a simultaneous process of state-building and market-building.\textsuperscript{32} In this process, the market must be protected against the inclinations of a predatory state and institutional constraints must exist to limit the capacity of political processes to expropriate private resources. At the same time, public processes must be protected against cooption by private economic interests.\textsuperscript{33} Stated differently, comparable institutional constraints must exist to ensure that public action is in fact in the public interest. Ironically, pursuant to the “state action” doctrine, American antitrust law largely assumes that state action is in the public interest.\textsuperscript{34} This is not a concession that antitrust law in developing countries can necessarily make, where the predatory inclinations of the state are sometimes more transparent. The assumption that state action is necessarily in the public interest is also of questionable historical validity as applied to American medical markets, where state laws, driven at the behest of the medical profession, substantially inhibited the growth of pre-paid health plans and the evolution of better functioning health care markets.\textsuperscript{35} Indeed, the robustness of present market forces is in large part the result of the unintended consequences of federal ERISA preemption.\textsuperscript{36} Back to our triangle in Figure One, federal ERISA preemption limited the ability of medical professionalism to coopt state political processes to restrict the growth of medical markets and managed care in the 1980s and 1990s.

The shape of the health care system has been and continues to be the contested product of complicated interplays between market, political and professional processes, the dynamics of which needs to be the subject of more careful study and examination.

\textsuperscript{32} See generally Daron Acemoglu & James Robinson, Why Nations Fail: The Origins of Power, Prosperity, and Poverty (2012) (contrasting politically and economically inclusive institutions that are conducive to economic growth with politically and economically exclusive institutions that restrict economic growth).

\textsuperscript{33} The Architecture of Health Care Markets, supra note 29 at 261-62.

\textsuperscript{34} Id. at 259.

\textsuperscript{35} Id. at 249.

\textsuperscript{36} Id.
C. The Conundrum of Asymmetric Information

While the forces shaping the health care system are difficult to model and largely under-determined, there are aspects of health care that do make it different from other sectors. As acknowledged by Kenneth Arrow as far back as 1963, one key aspect is the role of asymmetric information.\(^{37}\) Asymmetry of information (uncertainty) in health care is real and helps shape the contours of the industry.\(^{38}\) Physicians have specialized knowledge that patients lack. Patients face fundamental uncertainties about what treatments to choose and the efficacy of the treatments they select. There is no guarantee that the treatment provided will be effective and there is no market to insure against the risk of failed treatment (non-marketability)\(^{39}\). Some types of uncertainties are endemic and irresolvable. Moreover, when one adopts an evolutionary perspective, yet a new type of uncertainty must be recognized. Given the rapid changes in the health care environment, there are additional asymmetries in the capacity to understand and interpret the nature of change itself.

It is possible to make some generalizations about the differential effects of asymmetric information for the market, political and professional processes shaping the health care system. Significant asymmetries of information tend to disempower market processes, as well as political processes. This is significant. Simply transferring a problem laden with uncertainty and asymmetric information from the market realm to the political realm does not necessarily make it easier to address, as acknowledged by Mark Pauly's non-transformation theorem.\(^{40}\) To paraphrase crassly, an ignorant consumer is also an ignorant voter. The


\(^{38}\) *Id.* at 946.

\(^{39}\) *Id.* at 945, 951-52.

\(^{40}\) Mark V. Pauly, *Is Health Care Different?*, in COMPETITION IN THE HEALTH CARE SECTOR: PAST, PRESENT, AND FUTURE (Warren Greenberg, ed., 1978) 11, 24 ("The mere transfer of the locus of choice from the market to the political process does not transform consumers into better judges of quality, nor does it necessarily improve the decisions made.").
asymmetries do not get resolved simply by changing the forum. Analysis must go deeper to assess the relative abilities of the competing fora to manage and address the underlying uncertainty. This fact leads to the next generalization. Asymmetries of information tend to empower parties that can claim legitimacy in interpretation and understanding. Historically, this has been the role of the learned professions and a central thesis of Paul Starr's analysis of the rise of physicians in controlling both markets and politics for most of the twentieth century.41

What might these lessons mean for the future of health care? The endemic nature of asymmetries of information must be examined in combination with the inherently decentralized nature of health care production and consumption. Information is intrinsically difficult to translate into a commodity that can be traded on the open market (non-marketability).42 Interestingly, the education and licensing of doctors and the historic branding of the profession served as an effective means of bundling and selling information in the form of the individual licensed physician, making the information a marketable commodity. The individual physician as the central unit of production, however, has had its own limits and inefficiencies. As illustrated by the colorful maps of the Dartmouth Atlas's small area variations, physician-based units of production are not very effective units for scientific learning or the dissemination of best practices. As information systems progress and comparative effectiveness research proceeds, there need to be new and better ways to bundle information that will make the individual physician's role less central. As the unit of health care production moves from an individual-based unit to a health-system-based unit, information will be bundled, branded and sold at the systems level. This is consistent with broader trends that have persistently de-privileged the individual doctor in the production process.43

42 Arrow, supra note 38 at 946.
43 See Peter J. Hammer, How Doctors Became Distributors: A
These informational transformations could lay the basis for a complete restructuring of the way health care is organized and delivered (a different solution to Arrow’s conundrum of the non-marketability of information).

The same transformations have political implications as well. As individual physicians lose their role as the authoritative interpreters of medical information, they also lose the political power and legitimacy that being the arbiters of asymmetric information entailed. This, in turn, will lead to further shifts in the market, political and professional processes collectively defining the shape of the health care system.

D. The Limited Role Law Plays in Shaping Health Care

What role does health law play in shaping the health care system? The role of health law and health lawyers is fairly limited. To begin with, law is constrained by the domain of the issuing regulating authority. There is a simple mantra that to be effective, the scope of the regulatory unit must map onto the scope of the regulatory problem. Given the breadth of the health care system and the Balkanized nature of federal, state and local authorities, the nature of the health care problem often eludes the scope of any given public entity’s ability address the issue. The contested debate over the constitutionality of the Affordable Care Act tragically underscores that reality. Matching the nature of the regulatory units and the regulatory problems could certainly be done better than it is today, but it will always remain a unique challenge in the United States.

Those that teach health law understand a related frustration. Health law tends to lag the industry, not lead it. The law we teach our students often feels like it is twenty years out of date. I realize that some practitioners will find


44 See generally Nat’l Fed’n of Indep. Bus. v. Sebelius, 132 S.Ct. 2566 (2012) (rejecting the claim that the Affordable Care Act could be based on federal commerce clause authority, but finding the act to be a legitimate exercise of the federal government’s taxing authority).
these statements controversial, but the existing tort system does very little to substantially improve patient safety or reduce errors. The tools employed for quality regulation, licensing, accreditation and malpractice, are ad hoc, incomplete and of limited effectiveness. Similarly, the theoretical notions underlying traditional approaches to quality are first generational and fairly primitive in light of contemporary advances in health services research. Fortunately, the Affordable Care Act makes a number of advancements in this regard.45

The health care industry is changing much more rapidly than the legal environment, which raises interesting questions about the comparative adaptive ability of legal, economic and political processes. Why does law tend to lag and not lead? Has health law itself been sufficiently nimble and adaptive in a changing economic environment? Lawyers and law professors must accept some level of humility. Law is often not intended to be innovative. Moreover, law is often structured to protect existing power systems. From this perspective, health law tends to descriptively track the superstructure of the biomedical complex itself. It is not on the vanguard of change. Moreover, law and lawyers are often called into service to help shore up the weakest and most dysfunctional parts of the system. If one could subject the health care system to a legal equivalent of a magnetic resonance image (MRI), areas of high density or concentration of law would often signal likely pathologies. Again the rules governing self-referrals and fraud and abuse come to mind. This dense concentration of laws, rules and regulations is intended to remedy dysfuctionalities embedded in the payment system itself. If the system of reimbursement were redesigned in a more rational manner, while one would still need a set of legal rules to police opportunistic and strategic behavior, the density of that set of rules on our imaginary MRI would be much lighter. In practice, this means that one will typically observe changes in the evolving structures first and see changes in the legal regime second.

45 See discussion infra notes 53-56.
III. RE-IMAGINING HEALTH CARE QUALITY AND ETHICS

The task of imagining the next quarter century of health care law is different from trying to predict what the next quarter century of health care law will look like. The task of re-imagining is different still. It calls for deeper creative skills and the visualization of paths open but not yet taken. The difficulty is that we reside in a dysfunctional system. The best and most accurate prediction, given existing power structures and trajectories, suggests that the future will be some maladapted version of the dysfunctional present. Standard acts of imagination will likely fall victim to the same problem, if the act of imagining is rooted within the confines of existing systems. An act of re-imagining focuses on the same problem but seeks to creatively address concerns from a perspective that transcends existing structures. To be practical, however, it must also be grounded in evolutionary considerations that credibly link the re-imagined world with the one we find today.

A. Re-Imagining: Health Care Quality = Learning

How can we re-imagine health care quality? The problem of medical errors was used earlier to symbolically highlight problems from inside the health care system. The visualization exercise is to ask: What would patient safety look like in a system designed to foster greater intra-system rationality? A consideration for greater intra-system rationality calls for a greater awareness of and sensitivity to the many ways that elements of the health care system are interconnected. We are trained to see separate parts as separate parts. The structure of the system is often designed to highlight differences and not connections. Artificial

46 This is not just fanciful musing. Serious people are beginning to give serious attention to the cognitive and social processes necessary to engender systemic transformations. See, e.g., PETER SENGE, ET AL., PRESENCE: AN EXPLORATION OF PROFOUND CHANGE IN PEOPLE, ORGANIZATIONS, AND SOCIETY (2005) (providing a meditation on the cognitive, personal and social processes that are conducive to transformational change). For an application to health care see Id. at 154-57.
barriers in terms of corporate structures, legal status and reimbursement policies are imposed to further increase the divides. When the need for greater system thinking does arise, the answer is to form a new committee or, better yet, to establish a separate department to address the systemic deficiency.

The patient safety movement is significant, in part, because the very logic of the movement forces participants in the process to view health care as a system and to engage in deeper systems thinking. This has significant transformative possibilities. At the heart of the environmental movement lay a new awareness of the ecosystem as not just a system, but a complex adaptive system. This awareness highlighted issues of interconnectivity, new understandings of multiple and joint causation, as well as the significance of inflection points and feedback mechanisms. This awareness helped transform environmental law and environmental policy. The patient safety movement has similar radical potential.

Unfortunately, after highlighting the issue of medical errors and calling for systemic analyses and approaches, the patient safety movement has failed to meet its real potential. Part of the problem is structural. While actors can try to change policies within those parts of the Balkans they actually influence and control (the Coasian-fractured hospital systems in which they operate), they face greater challenges obtaining necessary and complementary changes in other domains, such as reforms in reimbursement policy, medical school training and state malpractice laws that are also part of the systemic problem.

In a complex, interrelated system, changes in one subsystem are often insufficient to trigger the meta-level changes that are sought and can sometimes produce unintended negative consequences. In the Balkans of American health care, it is often difficult, costly and impolitic to implement the system-wide reforms necessary to advance positive evolutionary change, even when the bases for such change are well developed and well understood in one fractured part of the system. This suggests a related problem. The systems thinking characteristic of the patient safety movement is largely cabined to its own domain.
Unlike the fundamental understanding of ecosystems in environmental policy, systems-thinking does not yet pervade the health care sector.

To date, there are also shortcomings within the patient safety movement itself. While it understands the importance of learning and building learning into systems to remedy medical errors, it has yet to effectively operationalize learning processes at individual and organizational levels. It interesting to note how the focus on medical errors in the IOM’s report To Err is Human led to a greater appreciation of quality more broadly and the significance of complex adaptive systems in health care writ large in Crossing the Quality Chasm.47 Awareness of greater systems thinking led to a greater appreciation for the role of learning. Citing the work of Peter Senge, the IOM argued that “moving toward the health system of the 21st century will require that health care organizations successfully address the challenge of becoming learning organizations.”48 Learning, in turn, requires data and information. “A critical feature of learning organizations is the ability to be aware of their own ‘behavior.’ In organizational terms, this means having data that allow the organization to track what has happened and what needs to happen—in other words, to assess its performance and use that information to improve.”49 Learning and awareness can form the catalyst for growth, adaptation and change. However, the challenges to creating effective learning organizations are great. Few organizations inside or outside health care are effective in institutionalizing processes of progressive adaptation.

As such, this part of the patient safety agenda remains unfulfilled. What is needed is creative re-imagining. What would patient safety look like in a system designed to foster intra-system rationality? What are implications for health law? What changes would be necessary to facilitate this process? What pictures would you draw to highlight new

47 Inst. of Medicine, Crossing the Quality Chasm, supra note 5 at 63-67.
48 Id. at 135 (referencing Peter M Senge, The Fifth Discipline: The Art and Practice of the Learning Organization (1990)).
49 Id. at 136.
pathways and interconnections? What are the logical implications for the rest of the health care system? How could these changes be implemented in a manner that progressed the agenda as part of a natural, ongoing evolutionary process?

It is clear that greater “systems thinking” must be part of the answer. There is good news in this regard. The health systems thinking reflected in Crossing the Quality Chasm does not stand in isolation. Under the rubric of health systems development, there is a growing literature that examines “health systems” as a cohesive unit. This particular literature originated from the challenges facing developing countries, particularly as it relates to balancing the objectives of vertically oriented global health initiatives, such as the Global Fund to Fights Aids, Tuberculosis and Malaria, and the local objective of health systems development. Nevertheless, the international call to create a new science of health system development has direct implications for the systems orientation necessary to transforming the Balkans of American health care and to implement a sustainable quality improvement agenda.

There are other promising developments on the domestic front in the progressive quality components of the Affordable Care Act (ACA). A number of these provisions expressly focus on quality as a learning problem. Parts of the ACA are

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52 See, ACA Provisions with Implications for a Learning Health System, INSTITUTE OF MEDICINE OF THE NATIONAL ACADEMIES, http://iom.edu/~media/Files/Activity%20Files/Quality/VSRT/summary%20of%20
devoted to the production of new knowledge through comparative effectiveness research. In addition, the ACA plugs into a growing infrastructure to work the quality agenda, such as the Center for Quality Improvement & Patient Safety. This work seeks to be appropriately sensitive to cultural and organizational considerations. The creation of knowledge alone is not enough. Knowledge must be used in practice and underlying patterns of behavior must be changed. As the patient safety movement has learned, sensitivity to the issue in isolation is not enough. The entire health care system must be oriented to the new objectives, particularly the incentives embedded in reimbursement.

Positive change is not limited to the ACA. The 2009 Stimulus Package contained numerous provisions to improve information systems and electronic records. While the program is far from perfect, it is a significant step in the right direction. Asymmetries in information were identified earlier as the most significant challenge to rationally organizing the health care system through either market or political processes. Successful efforts to better manage available information flows in health care could prove a more lasting and more effective reform than the collective provisions of the ACA. That said, we have still not developed proper understandings on how that information can best be packaged and used by either patients or health care providers. It all comes back to the need to re-imagine health care quality around the theme of learning and adaptation, but building learning organizations is easier in theory than in

ACA%20impact%20on%20the%20learning%20healthcare%20system.pdf (last visited Mar. 19, 2013) (working background document developed by Leigh Stuckhardt of the IOM Roundtable on Value & Science-Driven Health Care that has not been subject to the review processes of The National Academies).


How can we re-imagine health care ethics? The problem of racial disparities in health was used earlier to symbolically highlight concerns between the health care system and other health-related sectors of the economy. These disparities highlight the significance of the socioeconomic determinants of health and the need for greater inter-system rationality. An appreciation of inter-system rationality calls for a greater sensitivity to the many ways that elements of the health care system are interconnected with other sectors, such as housing, education, food security, transportation and employment. Again, we are trained to see separate parts as separate parts. In truth, health is generated from the interaction of numerous forces, of which the biomedical components are just a small part.

Unfortunately, there is no movement inside the biomedical industrial complex pushing the issue of racial disparities that is comparable to the patient safety movement. Even if one looked at the entire resources devoted to public health, let alone the fraction seriously devoted to racial disparities, it constitutes a drop in the bucket compared to the resources that flow through private health care system. The re-imaginative work here is more daunting than that of quality/safety, where most actors are already ostensibly dedicated to the same cause. Re-imagining health care ethics will take more energy and educational awareness. The key insight is the need to establish a new understanding within the existing bioethics framework that openly focuses on notions of justice.

One can start with the visualization exercise: What would racial inequalities look like in a system designed to foster inter-system rationality? What pictures can you draw to facilitate better understanding of the socioeconomic determinates of health? What are the deeper lessons of the racial disparities in health? What do they teach about issues of injustice in health care and in the rest of society? What enabling environment is necessary to address these concerns
and what would be needed to enable the enabling environment? What are implications for health law? What new understandings would be necessary? What changes would be needed to existing doctrines?

Again, the path forward requires a greater understanding of how complex systems work and how they interact. There are interesting advancements in understanding the mechanics of structural racism that parallel research on health system development. The Kirwan Institute has published work examining structural racism from the perspective of complex adaptive systems.\(^5\)\(^6\) The intersection of these research agendas can be the starting point of developing the tools and methodologies necessary to create greater inter-system rationality in health care and take effective actions to address health inequalities and racial disparities in health.

Traditional understandings of medical ethics are too narrow and need to be expanded. Bioethics typically address the individual, in their personal and not their social context (assuming that the individual is lucky enough to gain access to the biomedical industrial complex at all). Moreover, while issues of access and justice are discussed in the health law literature; they are seldom framed expressly as ethical concerns. We need new understandings of ethics that embrace notions of social justice and advocate expressly for an ethics of inclusion. It is striking how sterile and detached existing ethical and professional discourses can become.

One illustration concerns scope of practice laws. What is "ethical" quickly gets wrapped up in professional rules and state licensing laws. Historically, many of these practices had the dual effects of restricting access to certain types of providers and increasing costs.\(^5\)\(^7\) Sometimes this was done for legitimate technical considerations, sometimes it was done to enhance the profitability of the favored group.

What is the appropriate re-imagined ethical frame? In a

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\(^6\) Peter J. Hammer, *Medical Code Blue or Blue Light Special: Where is the Market for Indigent Care?* 6 J. L. IN SOCIETY 82, 95 (2005).
world where we are unwilling to commit to principles of universal access, limiting the scope of practice necessarily increases the price of health care and decreases access to service.\textsuperscript{58} This has a disproportionate impact on the poor, which include disproportionate numbers of minority groups. Those that advocate for expanding scope of practice laws or consciously making available sets of lower cost options for traditionally excluded groups run the risk of being labeled “unethical.” At the same time, the existence of 50 million uninsured persons largely excluded from any meaningful health services may broadly be thought of in ethical terms, but not specifically conceived of as an issue of bioethics.

There are reasons to be hopeful with the passage of the ACA. The ACA expands the scope of coverage for many presently uninsured and provides them access to the traditional health care system.\textsuperscript{59} The ACA also aggressively pushes traditional scope of practice laws to permit new combinations of health care workers to provide services.\textsuperscript{60} This should benefit under-served communities. In addition, the ACA makes a dedicated effort to start collecting and analyzing data on racial disparities in health care and establishes a new administrative infrastructure for future policy action.\textsuperscript{61}

To begin to address the underlying causes of racial disparities in health, however, we have to move substantially beyond the notion of simply increasing access to the biomedical industrial complex. We need to imagine new conceptualizations of health. Traditional public health

\textsuperscript{58} Id. at 95-96.

\textsuperscript{59} States that choose to do so may categorically extend Medicaid benefits to those under 1.33\% of the federal poverty level. Various forms of subsidies to purchase individual and small group policies will be given to those with incomes less than four-times the federal poverty level that purchase their insurance through newly created health exchanges.

\textsuperscript{60} The Future of Nursing: Focus on Scope of Practice, INSTITUTE OF MEDICINE (Oct. 2010), http://www.iom.edu/~media/Files/Report%20Files/2010/The-Future-of-Nursing/Nursing%20Scope%20of%20Practice%202010%20Brief.pdf.

\textsuperscript{61} Dennis P. Andrulis et al., Patient Protection and Affordable Care Act of 2010: Advancing Health Equality for Racially andEthnically Diverse Populations, 3-5 (July 2010) (Joint Center for Political and Economic Studies).
models are a good starting point and serve as a bridge between the biomedical model and the socioeconomic determinants of health. Sadly, the ties between health care and public health are historically weak and frayed; another illustration of the Balkanization of health care. Before public health can become a bridge, public health institutions must themselves be strengthened. Again there is reason to be hopeful. While still mired too deeply in the biomedical model, the ACA signals a stronger commitment to public health and preventative care than past reform efforts. These, however, are just small steps forward. Much more needs to build from this foundation.

On the other side of the bridge, there must be deeper notions of community-based health and recognition of the need to strengthening communities themselves. Many underserved communities are in increasingly abandoned urban areas with frayed public infrastructures and weakened civil society institutions. Meeting the varied health needs of these communities will require strengthening the communities themselves and empowering them to be meaningful partners in forging their own futures. Again, we can find inspiration from abroad. Many global health initiatives in developing countries also work in challenging circumstances where public, market and civil society institutions are weak or non-existent. In this setting, new doctrines of “Community System Strengthening” have been developed that can be an inspiration to future American efforts to connect the health care systems to the social determinants of health through public health institutions and Community System Strengthening.

There is another frame that can help visualize the process. In Figure One, the dynamics of health care was portrayed as a triangle with political, market and professional processes

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63 Hammer & Burill, supra note 52 at 627-31 (detailing the Global Fund’s approach to Community System Strengthening); see also, GLOBAL FUND, COMMUNITY SYSTEMS STRENGTHENING FRAMEWORK (May 2010) (same), available at www.who.int/entity/tb/dots/comm_hss.pdf.
shaping the health care system. In some respects, Community System Strengthening seeks to wrest control of health away from the elusive domain of the professionals and return it to a more traditional model of State-Market-Civil Society, where professional associations are simply one of many civil society actors. Health must become everybody’s business.

I am a pragmatist, not an idealist. For these re-imagining exercises to be meaningful there must be a defensible pathway plausibly connecting the imagined possible state with the dysfunctional state of affairs observed today. The template necessary to effectively engage the socioeconomic determents of health to address racial health disparities through Community System Strengthening is similar to the template needed to better address chronic illnesses like diabetes and asthma. The locus of treatment for many chronic illnesses must be moved out of the biomedical industrial complex and re-situated in the community. Effective universal cost control for health care will require these types of community-based health interventions and a better understanding of health determinants that would prevent the precipitation of medical episodes. The heightened recognition of this connection, in addition to the justice-based ethics discussed above, can create a credible pathway for future actions on health inequalities and racial disparities in health in our re-imagined world of quality and ethics for the next quarter century.

IV. CONCLUSION

Twenty-five years ago, few could have completely envisioned the range of health law and policy issues we face today. The same will be true twenty-five years from now. That said, creatively re-imagining our approaches to patient safety and to racial disparities will not only address two of the most pressing policy issues we face today, it could also hold the key to systemic transformation. Patient safety cannot be improved without an appreciation for organizational learning and intra-system rationality. Racial disparities necessitate a focus on an ethics of justice and inter-system rationality.
Both agendas will have to transcend the geography of the Balkans and will run head long into the political, market and professional forces that define and defend the biomedical industrial complex. At the same time, even the defenders of the system must acknowledge the dysfunctional and unsustainable state of affairs. What makes the re-imagining exercises in this essay more than fanciful is the desperate need for improving the system itself. From this perspective, progress on patient safety and racial disparities can be instruments triggering cascading evolutionary changes improving the functioning of the entire system. Changes in complex adaptive systems are not restricted to discrete, isolated domains, especially when the changes themselves are conceptualized and implemented in a manner that seeks greater intra-system and inter-system rationality.

While intra- and inter-system rationality have been discussed as distinct principles, it should be clear that these objectives are themselves interrelated. The ultimate imaginative task will be to increasingly merge the agendas of intra- and inter-system rationality in an unfolding evolutionary scenario. The path forward for the next quarter century of health law is clear. For the meaningful evolution of the health care system to take place, “quality must equal learning” and “ethics must equal justice.”