

Healer or Dealer: Is Entrepreneurialism Ruining Our Diagnostic Imaging Commons?

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Citation

A Alexander. *Healer or Dealer: Is Entrepreneurialism Ruining Our Diagnostic Imaging Commons?*. The Internet Journal of Law, Healthcare and Ethics. 2008 Volume 6 Number 2.

Abstract

Recent political and economic events say our broken health care system lacks a quick fix. Our health care costs are climbing with our expenditures for physician services and diagnostic imaging services leading all other health care sectors. In 2004, Congress began legislating cost controls to reduce the federal outgo for diagnostic imaging services. Some complain such controls will hurt our health care economy, and they may even hinder physician-entrepreneurs who develop new service-lines which expand our access to diagnostic imaging services that potentially improve our quality of care. Others worry these activities possess a dark side that our existing codes and laws cannot control. Some commentators want more federal and state regulations to reduce a real or perceived overutilization of diagnostic imaging services. If diagnostic imaging and its services are valuable resources, then perhaps we should view them as a commons. This article explores the concept of diagnostic imaging as a commons and whether physicians, including entrepreneurs, who provide diagnostic imaging services are running it amuck. Keywords: Commons; Diagnostic Imaging; Entrepreneur; Overutilization

I. INTRODUCTION.

Everyone knows our health care system is broken and no quick fixes are in sight. Many blame our current health care woes on our rising costs for administration, medical errors rates, medical liability insurance rates, and under- and uninsured individuals.^{1,2} Most policymakers focus on these issues, but some policymakers are now adding expenditures for and overutilization of diagnostic imaging services to their list of culprits.^{3,4,5,6} In fact, current trends suggest physicians are purchasing newer, more complex diagnostic imaging systems as if they are running a de facto diagnostic imaging arms race.⁷ Not only are physicians shifting their services, including those related to diagnostic imaging, from the more traditional hospital setting to their offices, but also they are creating new service-lines. Some commentators see these activities and trends as positive signs, because they represent a form of entrepreneurship, where diagnostic imaging providers are merely responding to consumer pressures for more cutting-edge technologies and health care services. Others believe physicians are providing more services, especially diagnostic imaging services, simply to boost their sagging incomes and offset their losses from ongoing cuts in reimbursement.^{3,4,5,8,9}

If these activities and trends constitute entrepreneurship, then are they threatening our health care resources, especially our

diagnostic imaging resources? After all, historians usually portray entrepreneurs as innovators who develop new products and service-lines that promote economic growth. We should not be surprised that our health care system attracts our best and brightest minds who may also possess an entrepreneurial spirit.^{3,9} Although entrepreneurs may bring good to all, some worry entrepreneurial activities in health care have a dark side, because they corrupt moral and ethical principles inherent in the practice of medicine.^{3,4,5,9} Like it or not, all entrepreneurs, including physicians, must acquire capital and resources to drive their innovative ideas and generate profits.⁹ Most, if not all physicians, whether they qualify as entrepreneurs or not, are entitled to receive payments for their work so long as they comply with the existing federal and state laws covering reimbursement and medical practice. Reality is most physician-entrepreneurs may not perceive any conflict of interests with their delivery of these services, because they are responding to patient-consumer demands.^{3,5,9} The crux of the problem may not reside in any illegality of their services or their monetary gains from reimbursement, but rather it may reside with their inability to recognize and avoid the problems their greed, economic disruptions, and conflict of interests may cause for the rest of us.³ Perhaps, we should view our health care system and its services as resources, where our resource

utilization problems mirror those of farmers utilizing a commons.^{10, 11, 12, 13, 14, 15, 16}

II. DEFINING THE COMMONS.

In the Tragedy of the Commons, Garrett Hardin uses his metaphor of farmers overgrazing their commons to illustrate how resources may be mismanaged to ruin everyone.¹⁰ The tragedy begins with farmers realizing over time that they receive a full, positive return from their use of their commons as a general resource only by adding more cows. Each of them experiences a partial negative return from their unbridled use as their cows become leaner and skinnier from overgrazing of grass. So, they quickly begin adding more cows to maximize their gains while offsetting their negative effects. They continue adding more cows until they successfully exhaust their commons to ruin everyone. The tragedy occurs not from “[an] . . . unhappiness, but from the solemnity of the remorseless working of things.” His metaphor says we may view our natural resources as an infinite supply, but we can so mismanage and overutilize them that we exhaust them beyond recovery. His metaphor also reminds us that some resource problems cannot be solved by technology alone. Preservation of our existing resources may require or rely on our prudent management and temperance of their use.

Our health care system and its services may also function as a commons, where we view them as infinite resources, when they are actually finite.^{11, 12, 13, 14, 15} Clearly, our fee-for-service payment schemes encourage and reward physicians for delivering services.^{12, 14, 15, 16, 17} Their fees are contingent on the number of services they perform, and so the more they do, the more they get in return. Unfortunately, such practices may be overutilizing our health care system and its services to the point of exhaustion. Some policymakers are now looking for strategies to control our expenditures on all physician services, especially those related to diagnostic imaging.¹⁷ Reality is any strategy we choose to conserve our health care resources, including diagnostic imaging, may well depend on getting all parties to work collectively to manage their commons.

II. A. QUALIFYING DIAGNOSTIC IMAGING AS A COMMONS.

The metaphor of a “commons” may apply to diagnostic imaging because it represents an important part of our health care economy.^{1, 4, 13, 17} The physicians and physician-entrepreneurs (farmers) provide diagnostic imaging services (cows) for reimbursement.^{11, 13} Diagnostic imaging services

are performed by a variety of different physicians who may include a imaging-based specialist such as a diagnostic radiologist or a nonimaging-based specialist who may be a cardiologist, urologist, neurologist, ophthalmologist, obstetrician, gynecologist or any other physician who may wish to offer diagnostic imaging services.^{18, 19, 20, 21, 22} All participants have almost complete access to and control of their market and utilize our health care resources.^{12, 14, 20, 21, 22} Consumers (cow buyers) may be anyone (patients, health plans, or employers) who purchase imaging services for a price. The diagnostic imaging commons also serves as an ideal environment for physicians who may wish to be entrepreneurs because diagnostic imaging is a technology driven market that offers physician-entrepreneurs access to venture capital and lucrative returns on their investments.^{3, 4, 5, 23} It represents a multi-billion dollar industry globally, and the diagnostic imaging sector continues to grow yearly in the United States.²⁴ The Tragedy may come when these providers perform so many services that they exhaust their resources to produce them.¹⁷

In fact, all diagnostic imaging services are increasing, especially those produced with advanced imaging modalities, such as ultrasound (US), computed tomography (CT), and magnetic resonance imaging (MRI). A 2005 review of the preceding decade revealed that the total number of units or scanners produced and sold steadily increased along with the volume of services rendered.²⁵ During this same period, delivery of services shifted from the imaging-based to non-imaging-based professions and location of delivery changed from hospital-based general service lines to the specialty-based ambulatory centers and private offices.^{5, 7} These changes support the perception that non-imaging-based specialists are marketing their services more aggressively and adopting marketing strategies that favor direct-to-patient-consumer tactics.^{4, 5, 6} Not only are imaging-based specialists worried about overutilization, but also they are concerned about the lack proper accreditation, training, billing transparency, and sufficient safety protections that may affect patient-consumers.²² Some policymakers say these practices are so pernicious that only governmental regulation can stop overutilization, and improve the quality within existing practices.²⁷ If these trends and practices continue unabated, then we may likely see more, not less pressure on the diagnostic imaging commons.

II. B. UNDERSTANDING THE ECONOMICS OF

THE DIAGNOSTIC IMAGING COMMONS.

Current trends in Medicare spending for diagnostic imaging services show physicians are utilizing our diagnostic imaging commons at a steadily increasing rate.²⁸ From 2001 to 2006, Medicare saw a 3.6% growth in the volume of imaging studies compared to a slightly less than 4.1% growth for all other services combined. In fact, studies of utilization over the past three decades show increasing expansion in all diagnostic imaging services charged to Medicare.^{29, 30, 31, 32, 33, 34} Couple the upward trends in spending for diagnostic imaging services with the costs for Part D prescription drug benefits, and our government faces an ever increasing bill for its health care services.³⁵ Not only are our national expenditures for Medicare going up, but also our costs for Medicaid may consume nearly 1.2 trillion dollars over the next 5 years and take an ever increasing share of GDP.³⁶ If left unchecked, our federal government may become the largest purchaser of health care, accounting for almost a third of our total spending for this commodity.³⁷

Our private sector is also experiencing similar pressures from demand for and utilization of diagnostic imaging services.^{18, 20, 21} Overall, our private sector will likely see its expenditures for health care rise until 2017 when they begin to decline.^{36, 37} Health care costs are making employer-based coverage one of the most sought after job perks by employees.³⁸ Employers blame our aging population, increasing utilization of health care services, and increasing reliance on medical technologies for their escalating costs. Both our employers and national leaders now view all cost drivers within our health care system, including those related to diagnostic imaging services, as a threat to their pro-growth economic policies.^{3, 4, 28, 39} If our recent economic misfortunes are harbingers of our future, then we may face some hard political or economic choices.

II. C. UNDERSTANDING THE COSTS OF COMMONS OVERUSE.

If our national outgo for health care remains unaltered, our political leaders may face what some health economists call unsustainable or unaffordable growth within our health care sector. Growth within the health care sector becomes unsustainable or unaffordable when our expenditures begin siphoning off valuable capital, goods, and services that normally go to other important sectors of our economy, such as defense, education, social security, manufacturing, and technology.⁴⁰ Although some say we are there, others believe we could devote ever increasing portions of our aggregate GDP to meet our future costs.⁴⁰ Then it becomes a political

question rather than an economic one, because our politicians must choose from a menu of political options to preserve our economy.

Some particularly unattractive choices may include decreasing benefits or coverage for beneficiaries in our public programs; raising more public revenues through payroll, personal, or corporate taxes; or forcing patients, as consumers and voters, to pay more out-of-pocket. Such shifts may also lead to higher costs for health care and losses in workforce productivity which may produce microeconomic stresses. Employers may respond by transferring ever increasing portions of their health insurance costs to their employees. Overtime, many employees may find themselves with little or no coverage.^{40, 41} Many of them will likely be forced to make some unhappy choices, such as seeking public assistance or going without care. These events may lead to a disgruntled electorate that combines with our recession and increasing imbalance in our international accounts to create more political unrest. If this occurs, then our political leaders may have a perfect political storm brewing.³⁹

III. AVOIDING THE PERFECT ECONOMIC OR POLITICAL STORM.

Our political leaders may be unable to avoid these politically and economically unattractive options because of the complexity of our system. Some policymakers are focusing on ways to reduce our cost by decreasing the volume and outgo for physician services, especially those related to diagnostic imaging services. Finding solutions may be problematic, because they may misapply solutions to problems they cannot adequately access or understand.^{42, 43} For example, some claim the rise in diagnostic imaging services is merely an issue of inappropriate use created by a lack of knowledge or training.^{20, 21} Others say that physicians are simply responding to patient-consumer expectations.^{3, 6, 7} Still others point to medical malpractice fears as driving physicians to use imaging services as a way to avoid frivolous litigation.^{13, 20} Mispricing or reimbursement schedules may also encourage physicians to perform diagnostic imaging services over less lucrative evaluative services, such as patient histories and physical exams.²⁸ Mispricing may push diagnostic imaging physicians and entrepreneurs to create or adopt new service-lines that enable them to perform diagnostic imaging services quickly and more profitably. Such services are more efficiently done than the traditional, more labor intensive evaluative and management services, which allow them to do more for

greater profits.²⁸ Thus, diagnostic imaging physicians and entrepreneurs may behave as farmers in *The Tragedy*, where they maximize their returns by performing more diagnostic imaging services. Moreover, our current system does not give diagnostic imaging physicians or entrepreneurs an opportunity to know whether any reductions will be matched by their competition or go to other sectors of our economy. The bottom line is all parties may feel the pressure to provide more services, and some commentators now believe that our current ethical codes and laws at federal and state levels help maintain the status quo.^{4, 5, 6,}

IV. UNDERSTANDING OUR EXISTING ETHICAL AND LEGAL CHECKS MAY BE INADEQUATE.

Ethically, many physician-entrepreneurs who perform diagnostic imaging services may not perceive any conflict of interest between their actions and the interests of their patients as consumers.^{5, 7, 44} If they do, then they will arise when diagnostic imaging entrepreneurs fail to align their interests with those of their patient-consumers.⁴⁵ The AMA Council on Ethics and Judicial Affairs affirms in provision E-8.03 that physicians should not place their own financial interests ahead of the welfare of their patients and their monetary interests are a secondary goal.⁴⁶ Moreover, the language of E-8.032 appears to condone legally permissible contractual relationships that permit physicians to acquire ownership interests in facilities, products, or equipment.^{47, 48} Although these Codes may conflict with some self-referral activities related to diagnostic imaging services, it seems a mere matter of opinion as to who is, or is not, putting their interests over the interests of their patient-consumers.^{6, 20} Reality is ethical physicians should always act in the best interests of their patient-consumers and avoid doing harm to them.⁶ Many of the physicians, including entrepreneurs, providing these services believe they are acting ethically because they are fostering patient autonomy by increasing access and improving the delivery care through more choices. Regardless of the underlying ethical concerns, some commentators simply blame our federal and state laws governing self-referral for failing to control any misuses or abuses.^{4, 30, 44, 47}

Any deficiencies we may have in our current ethical codes may be further exacerbated by our federal and state laws regulating self-referral. Self-referral occurs when physicians holding an ownership interest or an equity interest in a facility or its equipment uses them to perform services on their own patients as consumers.^{20, 21, 22} This form of physician driven self-referral may be complicated by direct-

to-consumer marketing or patient-directed referrals for diagnostic imaging studies for screening of diseases or viewing for entertainment.⁴⁹ Although these studies require a prescription from a physician before performance, many of them are initiated by the patient-consumer without ever seeing a physician. Certainly, we have federal and state laws barring many of these practices including the well known referral prohibition and the lesser known billing prohibition.^{45, 46, 50, 51, 52, 53} The referral prohibition prevents physicians from referring patients to a health facility for designated services, which includes imaging services, covered by Medicare if either the referring physician or a family member holds an ownership interest. The billing prohibition, on the other hand, addresses presentment of a bill for designated Medicare services to a payor, person, or entity for payment. Failure to comply with either of these prohibitions subjects the offender to both criminal and civil sanctions as well as debarment from future participation.

Opponents of self-referral blame our current political and legal systems for encouraging our physicians to overutilize all services, including diagnostic imaging services.^{21, 22, 46, 50, 51} Although violators may face severe sanctions for their actions, many commentators believe our laws and regulation are too poorly drafted to adequately check most abuses. Moreover, at least 30 exceptions, or loopholes as some disparagingly call them, exist which allow the qualifying party to avoid sanctions.^{51, 52} Both the in-office ancillary services and the physician services exceptions afford safe harbor protections to those performing services or referring individuals to physicians within the same group for services. Because physicians can use these protections to avoid sanctions, some claim our laws encourage overutilization of services, especially diagnostic imaging services.^{21, 22, 46, 50, 51} If this is the case, then we may have few options to effectively check continued growth or utilization of these services.

We can also appreciate why so many nonimaging-based physicians wish to maintain the status quo given that they have invested substantial sums of their money to acquire diagnostic imaging equipment and establish diagnostic imaging centers.^{6, 54} Coupling the economic reality with the uncertainties of our current ethical codes and laws, parties may have no basis or reason to agree on what, if any, self-interests or self-referrals are problematic. Perhaps, events at a meeting of the Texas Medical Association (TMA) held in 2008 underscore the inherent difficulties in getting a consensus among physicians who perform diagnostic imaging services on the issues surrounding self-interests and

self-referrals. During a meeting of the House of Delegates, delegates representing the Texas Radiology Society (TRS) asked delegates of the TMA to support their proposal requiring mandatory reporting to a third party of physician interests in an imaging facility.⁵⁵ The TRS delegates wanted facilities to disclose referrals and to declare whether the referring physician did or did not own an interest in the facility. They believed such ownership interests may be driving up our health care costs because they encourage more utilization. Even so, delegates representing the nonimaging-based specialists in neurology, orthopedic surgery, cardiology, and anesthesiology promptly countered with their own recommendation to reject the pro-reporting recommendation. For them, the true issue was appropriateness of these studies and quality of care rather than an issue of ownership interests or disclosure.⁵⁵

Their opposition to the proposal from TRS may seem confusing when we consider that laws in at least seven states require disclosure of ownership or leasing of imaging equipment and facilities by referring physicians.⁵⁶ Their opposition may also be delaying the inevitable since congressional leaders are currently signaling their move toward requiring disclosure.¹⁷ It makes perfect sense, however, when we realize their quality argument relies on monitoring or review that under our current system is unlikely to occur unless the physician is a Medicare provider who performs studies within a hospital.^{17, 57} Reality is the majority of studies performed by nonimaging-based specialist take place in a private office, not hospitals. Thus, nonimaging-based advocates of this position are unlikely to come under any scrutiny or quality review.⁵¹ So we should not be surprised that nonimaging-based delegates opposed adopting the TRS recommendation,⁵⁵ notwithstanding an existing AMA recommends that all physicians disclose any ownership or equity interests that poses a potential conflict of interest.^{46, 48} If the recent Texas experience reflects the likely outcome of such debates in other states in the future, then we are likely to see efforts directed toward maintaining the status quo and more business as usual. It means our commons is subject to more relentless, remorseless working of things to the ruin of everyone.

V. PRESERVING OUR DIAGNOSTIC IMAGING COMMONS.

Are our diagnostic imaging entrepreneurs at a tipping point where they may choose to curb their behavior and preserve their commons? Probably not, even though most physicians believe we are beyond the tipping point for collapse of our

health care system.^{58, 59} More likely than not, our diagnostic imaging entrepreneurs will continue to act as good farmers so long as they do not perceive any reigns or fences on their commons.^{12, 60} After all, our current practices, ethical codes, and laws are not sufficient to promote accountability. Almost everyone believes more accountability within our health care system will lead to cost reductions. Unfortunately, our policymakers have few policy options that will function as reigns or fences to control utilization and costs, especially within the diagnostic imaging commons.⁶⁰ Most options rely on some form of legislative fix that changes fee structures, increases accreditation and licensure requirements, modifies medical malpractice laws, reallocates the health care workforce, or utilizes technologies such as health information technology (HIT).^{20, 21, 28, 47, 48, 61, 62} Most, if not all, of these options require some modification in human behavior, which is likely the most difficult of these to achieve.

V. A. TRYING NEW STRATEGIES TO PRESERVE OUR DIAGNOSTIC IMAGING COMMONS.

Of these options, most want to shift our current fee-for-service structure to some form of a pay-for-performance (PFP) scheme that links reimbursement to quality.⁶¹ Such schemes will require a carrot-stick approach to make payments for services contingent on the health care provider tracking and meeting a designated set of quality indicators. Most schemes will use a bonus payment, or at least the possibility of keeping full payment, to get compliance while noncompliance will result in reductions in reimbursement. Hence, payment will be decoupled for services rendered and linked to quality. Quality may also be used to reduce volume and payments through a greater reliance on accreditation and licensure schemes.^{20, 21}

As with PFP schemes, reliance on accreditation and licensure schemes is an attractive option because it uses existing professional standards to restrict access of professionals to the market.⁶³ This potentially reduces the number of individuals able to perform services, which results in an overall reduction in volume of services rendered. Restrictions in access based on quality may have added value if it improves quality by reducing the number of errors related to poor training, suboptimal performance, and inadequate equipment. Unfortunately, their success or failure may hinge on gaining cooperation from multiple, independent accrediting organizations and licensing bodies, which may not be possible. Moreover, success may require some measure of tort reform to curb the use of diagnostic

imaging to ward off litigation.

Although fear of litigation may drive utilization and costs, existing studies of tort reform do not support the notion that litigation fears actually alter practice.^{20, 21, 64, 65, 66} Even so, tort reform could prove useful if it improves quality by reducing the culture of silence that frequently surrounds medical errors and hinders improvements in care. If it does, then it might drive down our health care costs if savings from rate reductions pass through to patients as consumers. Unfortunately, such transfers of savings to patient-consumers are unlikely to occur, since most physicians and diagnostic imaging entrepreneurs believe their reimbursement levels are due a boost. So, any savings or changes in behavior will likely make no impact on the status quo, because they will behave as farmers on a commons without borders. They will have no assurance that any savings they achieve will actually reduce our health care costs or go to other sectors of our economy.¹² So, they will continue performing more diagnostic imaging services for more reimbursement until someone creates fences or barriers to restrain them.^{11,13, 60}

V. B. Trying Old Strategies to Preserve Our Diagnostic Imaging Commons.

Considering the complexity and pitfalls of their options, our policymakers are revisiting policies promoting primary care. Increasing the number of primary care physicians (PCPs) would serve to increase access and quality while reducing the number of specialists.^{28, 57, 66} Theoretically, the reduction in specialists would in turn lead to a reduction in the volume of studies, which reduces costs. Of course, MedPAC supports this idea claiming that Medicare beneficiaries are encountering difficulties finding new primary care providers.^{28, 66} Their position is bolstered by recent press reports on forecasts projecting shortages in primary care providers. Moreover, these reports claim that our primary care residency programs are unable to attract the top graduates from our medical schools. They can not compete with the lucrative specialties, such as diagnostic radiology, ophthalmology, anesthesiology, and dermatology, for the best and brightest medical school graduates.⁶⁷ Reality is most primary care services are evaluative services that are more labor intensive and cannot be performed as quickly as diagnostic imaging studies.^{28, 57, 66} Almost everyone not performing diagnostic imaging services loves this idea, but it may be one that repeats workforce missteps of our past.

Such policies sound eerily similar to those we tried in mid

70s and again in the 90s when health care costs were going up.⁶⁸ Although shifting payments to PCPs seems attractive to everyone, we should question its wisdom based on a March, 2008 MedPAC report that acknowledges only 10 % of the Medicare beneficiaries responding to the survey had trouble finding a new physician.²⁸ Moreover, of the 10% or 200 patients of the 2000 beneficiaries who responded, nearly 70% reported no problems with finding a physician who would treat them. Based on these numbers, we should ask why our policymakers want to increase the number of PCPs and their reimbursement rates if the majority of participants may not be experiencing access problems. More importantly, we must also question whether such policies will only lead to more workforce shortages in the future.⁶⁸ What is clear is our policymakers are looking to change the number of physicians who provide services, especially diagnostic imaging services, because they know the status quo is untenable.

V. C. EMPLOYING THE “TECHNOLOGY PARADOX”.

Perhaps our most important, albeit expensive, option is to create a national health information technology (HIT) network.^{59, 69} Obviously, medical technology only has value if its benefits exceed our costs and it improves our health outcomes.⁷⁰ Unfortunately, our current system only tracks and measures our medical spending on technology rather than measuring our health outcomes derived from our technology. Without this outcome data, our policymakers lack a true picture of the benefits and cost savings we receive from our medical technologies, especially those in diagnostic imaging and HIT.^{69, 70} Some believe that our adoption of a fully interoperable national HIT system will enable us to follow our health outcomes, eliminate our wasteful practices, and lower our health care costs through gains in efficiency.^{71, 72}

Although it seems paradoxical to our commons metaphor, it may be the structural change our current health care system needs to help lower our costs. Adoption of fully interoperable HIT network may create the framework for an exchange of information between participants, especially physicians and their patients-consumers, which will foster the transparency we need for accountability to preserve our health care commons including the diagnostic imaging commons.⁷³ Such a framework may enable physicians and consumers to make more informed decisions and provide the accountability necessary to help control costs and improve quality. Conversely, any efficiency gains our policymakers

may achieve with HIT, or any other technology, may actually work against them by making physicians better producers.

Greater adoption and use of HIT by all physicians, including those performing diagnostic imaging, may simply drive up costs, because HIT enables them to more efficiently track and up-code their work.^{61, 71, 72} Not only may they more effectively track their work, but also they may be able to more effectively target patient-consumers for more studies while raising their performance levels.^{71, 72} If costs go up, then our policymakers may be forced to make greater downward adjustments in its reimbursement rates.²⁸ Further reductions would then encourage physician entrepreneurs to do more diagnostic imaging studies rather than less to offset their losses.¹² Such a scenario might serve to reinforce the Tragedy of the Commons where farmers having general access to a commons allow their cows to freely use and overgraze it.

Because diagnostic imaging physicians and entrepreneurs receive payment for services they deliver, they will see no relationship between their behavior and its impact on the behavior of their colleagues. As farmers on an open commons who lack a sense of community, they will simply provide more services even though they may be getting less return on each service they provide.¹² Following the aggregate data on diagnostic imaging utilization rates may actually destroy the very sense of community it is intended to create.¹² Even if our patient-consumers become more efficient shoppers in a transparent system, they may not realize any benefits or reductions because each member may lack a sense of individual responsibility to the community to control its costs.^{12, 72} Thus, greater efficiencies and better tracking throughout our system may not necessarily translate into cost reductions we seek.

VI. CONCLUDING REMARKS ON OUR COMMONS.

No one questions whether our current health care system is broken and we must act now to fix it. Our policymakers must act now to avoid economically or politically unsustainable rates of growth within our health care sector before they overwhelm our economy. Reining in our overutilization of diagnostic imaging services may help, but our current policy and practices, codes of ethics, and laws make total control of our outgo for health care unlikely. If we are going to achieve meaningful and lasting cost reductions, then we must adopt the concept of the commons

for our health care system and its ancillary services, including diagnostic imaging services. We must see our diagnostic imaging commons and its services as a finite set of resources which may be a commons within the greater commons of our health care system. Our best chance for controlling our rising costs and preserving our diagnostic imaging commons may come when all diagnostic imaging physicians achieve a sense of community and stewardship for their commons. Until then, policymakers may be forced to adopt health information technology along with credentialing and accreditation requirements that will serve as reigns or fences until they recognize their responsibilities. Otherwise, we may all experience the Tragedy of the Commons as a remorseless working of events that puts our health care system and its diagnostic imaging commons at risk for ruin.

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