



The Future of Medical Practice: Creating Options for Practicing Physicians to Control Their Professional Destiny

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About The Physicians Foundation

The Physicians Foundation is a nonprofit 501(c)(3) organization that seeks to advance the work of practicing physicians and improve the delivery of healthcare to their patients. As the U.S. healthcare system continues to evolve, The Physicians Foundation is steadfast in its determination to strengthen the physician-patient relationship and assist physicians in sustaining their medical practices in a difficult practice environment.

The Foundation participates in the national healthcare discussion by providing the practicing physicians' perspective on the many issues facing them today. This includes identifying how healthcare reform and the Patient Protection and Affordable Care Act impacts physicians and what needs to be re-assessed or changed in order to achieve the following goals:

- To provide physicians with the leadership skills necessary to drive healthcare excellence
- To offer physicians resources to succeed in today's challenging healthcare environment
- To better understand evolving practice trends to help physicians continue to deliver quality care to their patients
- To meet the current and future needs of all patients by assessing the supply of physicians

The Physicians Foundation pursues its mission through a variety of activities including grantmaking, research, white papers and policy studies. The Foundation provides grants to nonprofit organizations, universities, healthcare systems and medical society foundations that support its objectives and since 2005, has awarded numerous multi-year grants totaling more than \$28 million.

The Physicians Foundation also examines critical issues affecting the current and future healthcare system by periodically surveying physicians and patients, and studying the impact on them of government healthcare policies. The Foundation believes that as America evaluates significant changes in healthcare, the perspectives of practicing physicians and their patients must be well-understood and addressed.

For more information, please visit: www.physiciansfoundation.org

Executive Summary

The purpose of this report is to delineate the current state of medical practice and forecast possible future strategies for ensuring vital and responsive physician services in the United States.

Major Findings

The practice of medicine was damaged by the recession, but the reports of the demise of private medical practice are, to paraphrase Mark Twain, exaggerated. Overhead costs for physician practices increased markedly over the past five years as the number of physician office visits has fallen. Physician morale has fallen both because of these economic pressures and because of the failure of health system reform to address how to improve professional practice. However, physician costs have been supplanted by hospital and health insurance premium costs as the driving force in U.S. health cost inflation.

Much of the turmoil in the physician market over the past five years has as its root cause the impending retirement of the large baby-boom cohort of practicing physicians. More than 230,000 U.S. physicians older than 55 have seen their retirement plans disrupted by the recession. The continuation of an economic and stock market recovery could lead to a sharp withdrawal of older physicians from medical practice, perhaps as many as 80,000 to 100,000, in the next five years.

This withdrawal will coincide with 36 million baby boomers entering the Medicare program and perhaps 30 million more Americans receiving new health coverage from health system reform, creating a catastrophic physician access problem. The Association of American Medical Colleges (AAMC) has predicted that despite a 20% expansion in medical school class size, the United States faces a physician shortage of up to 160,000 by 2025.

The employment of physicians by hospitals sharply increased in the past eight years; the impetus appears to be physicians seeking income security, as much as overt hospital strategy. In 2010, full- and part-time hospital employment of physicians represented a little more than 15% of all practicing physicians. That same year, hospitals' economic losses per physician averaged \$212,000, potentially threatening hospitals' financial positions and bond ratings. Hospitals have neither the economic resources nor management capacity to absorb a much larger portion of the practicing physician community.

Even with the expansion of hospital employment, physician care remains highly fragmented. Even in competitive urban markets, more than 40% of physicians still practice in groups of fewer than five. While there do not appear to be compelling economies of scale in physician practice, larger practices have strategic advantages in improving service, upgrading and leveraging information technology (IT), and managing

health care costs. Group practice membership, regardless of sponsorship, grew by 17% from 2003 to 2010, and appears poised to continue growing.

New practice models — from the solo “micropractice” to the patient-centered medical home to direct-pay practice — hold promise both for diversifying physicians’ service offerings and for improving physician productivity. Moreover, digital technologies that enable real-time claims management and payment, automate dictation and coding, and improve physicians’ communication with each other and with patients could lower overhead costs and enable more efficient practice. Medical practice innovation holds the key to private practice being a viable alternative to salaried employment for the next generation of physicians.

Both Medicare and commercial insurers likely will increasingly delegate both risk- and cost-management responsibility to physician groups and independent practice associations (IPAs) in coming years. This is due partly to the increasing concentration of hospital markets and partly to the recognition that improving physician decision making holds the key to successful cost containment.

Promising physician-owned and directed risk-management models — from IPAs to special needs plans targeted at the chronically ill to physician-sponsored health plans — can serve as organizational templates for this expansion. Physicians’ willingness to organize to manage population health risk will be essential to regaining control over their professional lives. The alternative is to continue to have their clinical decisions micromanaged by health plans and Medicare.

Policy Recommendations

The Affordable Care Act of 2010 virtually ignored the task of renovating and strengthening medical practice. Its main focus seemed to be on reforming and expanding health insurance coverage and searching for substitutes for physician management of patients. Numerous policy changes are needed for physicians to be active participants in a reformed health care system.

The most important policy change needed is a dramatic increase in Medicare’s valuation of the physician’s exercise of professional judgment, both in diagnosis and management of clinical problems. The report proposes a 30% upward valuation in fees for evaluation and management, as well as for diagnostic decisions, under the Medicare program, in addition to the modest increase provided in the Affordable Care Act. This increase would not be confined to primary care physicians, but would extend to diagnostic decision makers such as cardiologists, radiologists, and pathologists.

It is also recommended that Medicare eliminate the “site of service” differential that enables hospitals to charge more for physician services provided in a hospital setting than in a private practice. Also recommended are reductions in hospital payments for outpatient imaging and surgical services vs. the same services provided in lower-cost, private settings.

A federal Commission for Administrative Simplification in Medicine (CASM) should be created to evaluate and reduce where possible physicians' reporting requirements, both for claims payment and quality improvement that do not return either savings or measureable reductions in patient risk relative to the documentation costs imposed on physicians and other clinicians.

Physicians accepting debt reduction would agree to be paid somewhat lower fees from the Medicare program in exchange for debt relief. Federal assistance should be available for physicians or physician/hospital organizations to create new provider-sponsored health plans or IPAs to compete in an increasingly concentrated health insurance marketplace.

State hospital associations should join state medical societies and business groups to advocate for meaningful tort reform. Further, malpractice "safe harbors" should be created for physicians who donate their time to community, public health, or nonprofit health enterprises and for physicians who become meaningful users of clinical information technology.

Introduction

Physicians and their relationships with their patients constitute the animating principle of the U.S. health care system. Physician care is an enormous enterprise in the United States, with more than \$515 billion (Martin, et al., 2012) in 2010 representing the work product of more than 750,000 practicing physicians. By itself, the U.S. physician community generates a little less than a third of the economic activity of the entire Canadian economy (OECD, 2011). It is undoubtedly the most respected and successful professional activity in U.S. history.

Yet, today, the American physician community is in turmoil. Despite the supposed cushioning effect of health insurance, physicians were hurt by the recession that began in 2007. Physician office visits have fallen by more than 10% since the beginning of the recession, while practice overhead costs have risen sharply (IMS Health, 2011). Like most Americans, physicians saw their retirement balances devastated by the stock market crash in 2008; more than half of physicians were forced to alter their retirement plans (Jackson Coker, 2011).

Despite the fact that the Affordable Care Act intended to expand health insurance coverage to 30 million Americans who presently are uninsured, health care reform has actually deepened physicians' concerns about the future of their profession. Despite the fact that the American Medical Association (AMA) actively supported reform, more than two-thirds of physicians had negative views of the law (Merritt Hawkins, 2011). As of this writing, Congress continues dithering about the prospect that Medicare may cut physician payments by 30% to conform to the Balanced Budget Act's Sustainable Growth Rate (SGR) formula. They might well be hammering on the fuse of a bomb.

The ability of physicians to work less or retire is directly tied both to the state of the economy and to their individual economic circumstances. A sustained economic recovery, and concomitant increases in physicians' retirement balances, will lead both to a sharp reduction in physician effort and acceleration of the retirement of physicians from active practice. The retirements will not be confined only to physicians in their 60s. Significant percentages of physicians in their late 40s or early 50s are likely to retire, as well.

This reduction in physician effort will coincide with the enrollment of 36 million baby boomers in the Medicare program in the next decade and the addition of 30 million Americans younger than 65 to private coverage from health care reform. By 2025, the Association of American Medical Colleges (AAMC) forecast a shortage of 130,000 physicians by 2025. Recent reanalysis by AAMC put the more likely shortage at closer to 160,000 (Dill and Salsberg, 2008). The overused metaphor "train wreck" applies with special force to the impending physician access problem.

Regardless of the impetus, physicians old and young have been turning toward the hospital as an employer of first or last resort. Tens of thousands of physicians have become hospital employees in the past decade. Many physicians believe that private

medical practice is doomed and that in the future, medical practice will be clinic-based, lodged in hospitals or integrated delivery systems (IDSs) that pay physicians on salary.

Despite remarkable technological advances in medicine, the organization of physician practice — whether institutional or private practice based — has changed remarkably little in the past 50 years. Medical practice as an institution urgently needs modernization and renovation if it is to have a noninstitutional component. The fact that physician care remains highly fragmented has made it difficult for innovation in technology and practice organization to diffuse broadly or rapidly.

This white paper does not prejudge how physicians will organize or for whom they will choose to work; rather, it seeks to broaden their options and create a framework for them to exert more influence over the policy and market decisions that affect their patients.

I. What Is Happening to Medical Practice?

Paradoxically, while physicians remain at the center of the American health care system and generate 80% of all health care spending through their orders, many physicians feel powerless to change the conditions that limit their professional effectiveness. In a dialog on the future of medical practice sponsored by the online physician community Sermo, one practitioner said:

Private practice is doomed. I see very few that are successful anymore. The practices in my community that still exist are getting subsidies from the hospital (loan repayment guarantees, recruiting assistance), are supported by the feds (FQHC), or are engaged in what [one participant] so aptly describes as “corrupt practices.” There are a couple of ethical, honest practices that are still trying to serve the public but every time I see the docs in that practice they have bigger bags under their eyes and they look more and more tired and depressed. . . . No young doc wants to take any business responsibility or ownership position in a private practice anymore.

Sermo, Feb. 7, 2012

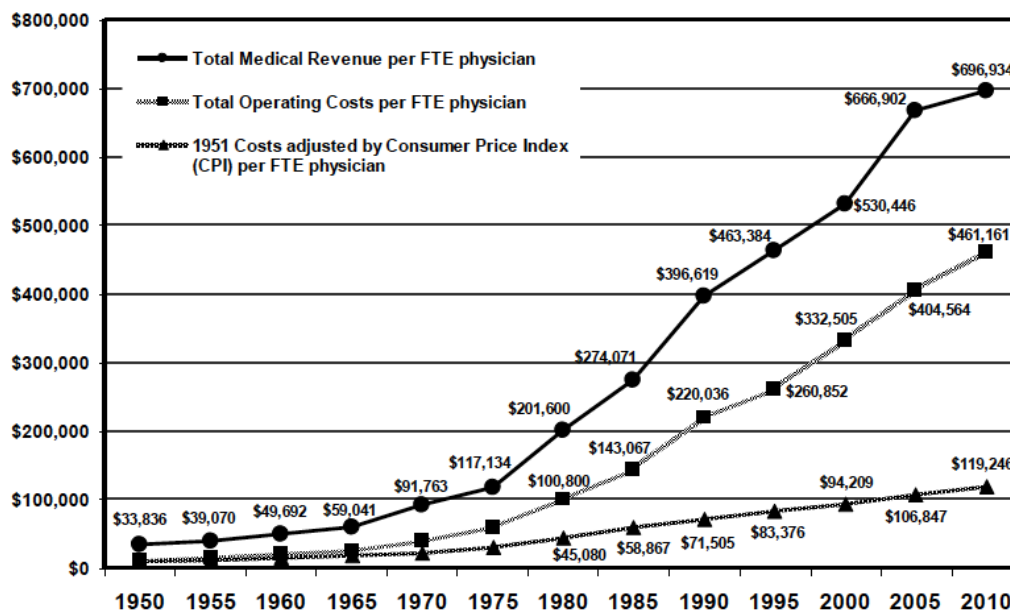
One physician in Texas Medical Association interviews said about his practice: “It’s a ‘bad’ business model. If you told someone, you can be in a company, but here are the ground rules: your income will be controlled, but your expenses will adjust with the market, you’d say, that’s not a really good business to be in.”

The problem is considerably deeper than the fact that physicians’ incomes are “controlled.” With misguided precision, medical practice is over-determined and micromanaged by a payment system obsessed with “core measures” and riven with mistrust of physicians’ professional judgment and competence. This mistrust has led directly to an absurdly complex health care payment system and an increasing administrative burden for practicing physicians.

Despite declining office visit volumes, physician practices added 141,000 new employees (nurses, medical secretaries, office and administrative support personnel, and managers) from December 2007 through August 2011 (Altarum, 2011). The long-term trend, according to MGMA, has been a steady rise in practice overhead costs in the past 50 years, more than four times the rate of inflation (Figure 1.1).

American physicians spent half again as many hours a week dealing with billing as their Canadian colleagues, but their office staffs spent more than *eight times* as many hours (20.6 per week per physician!) (Morra, 2011). A recent detailed analysis of the billing and claims management process in a large medical group estimated that total billing expenses per full-time equivalent (FTE) physician were \$85,276 and rising (Sakowski, et al., 2009).

Figure 1.1
KEY OPERATING INDICATORS
MULTISPECIALTY PRACTICES: 1951-2010

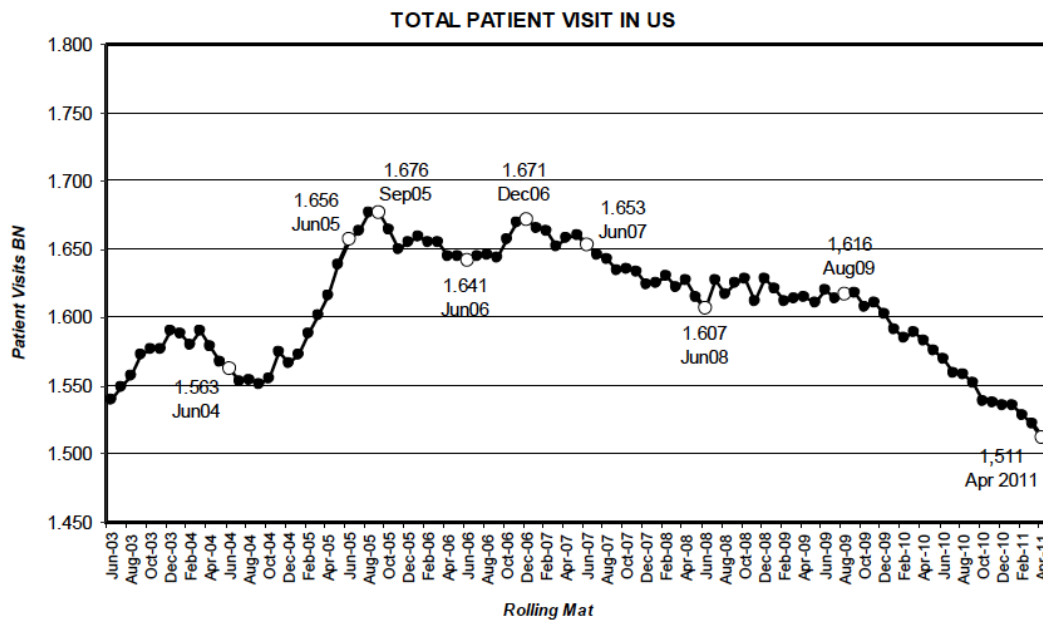


Source: MGMA Cost Survey Reports

These additional overhead costs have compounded the economic damage done to physicians by the recent economic downturn. According to IMS Health, physician office visit volume has fallen by more than 10% since 2006, despite 0.8% to 1% per year population growth, with the steepest drop reported after the recession “ended” in 2010 (Figure 1.2).

According to the Centers for Medicare & Medicaid Services (CMS), physician services spending in 2010 increased only 1.8% in the United States, less than 40% of the rate of hospital spending growth (Martin, 2012). By comparison, the net societal cost of private health insurance rose by 8.4% in 2010. Overall, as can be seen in Figure 1.3, physician and clinical services spending lagged significantly behind overall growth in U.S. health care spending over the past few years. The core health cost problem in the United States today is not physician care, but hospital costs, particularly outpatient services, and the cost of health insurance premiums.

Figure 1.2
PHYSICIAN OFFICE VISIT TREND

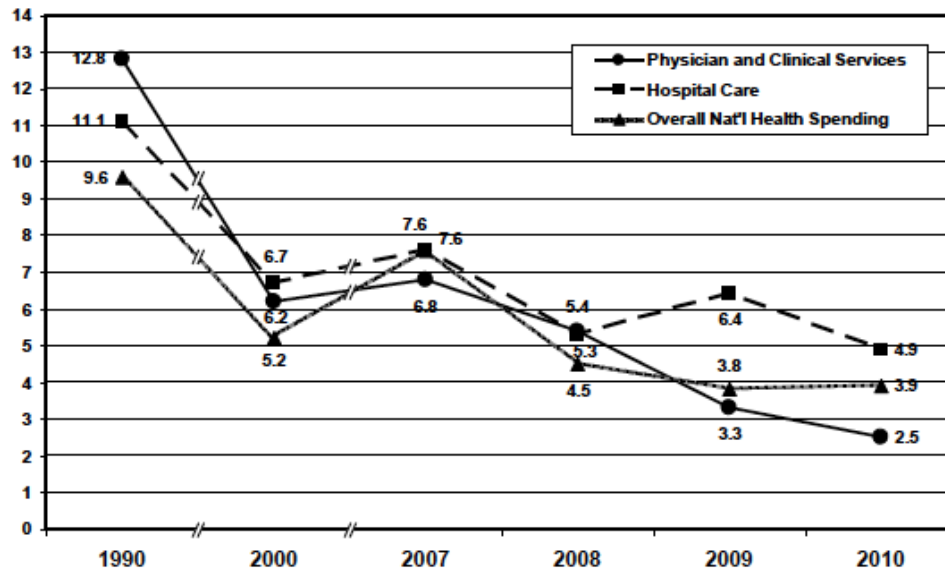


Source: IMS Health, National Disease and Therapeutic Index, Apr 2011

One need not have an MBA to recognize the implications of these two trends: declining utilization and markedly higher support costs mean not only lower physician incomes but also less professional freedom. Some of the economic consequences of this trend have been buried in the income statements of the large hospitals that employ physicians, but they are plainly visible to most independently practicing physicians.

Among the almost 500 participants in the online poll accompanying our dialog about the future of medical practice, half reported their take-home pay had decreased modestly or significantly in the past three years, while only 18% said their take-home pay had experienced “modest growth.” (Sermo Online poll, February 2012).

Figure 1.3
U.S. HEALTH SPENDING GROWTH
(Sector Trends 1990-2010) % Change YTY



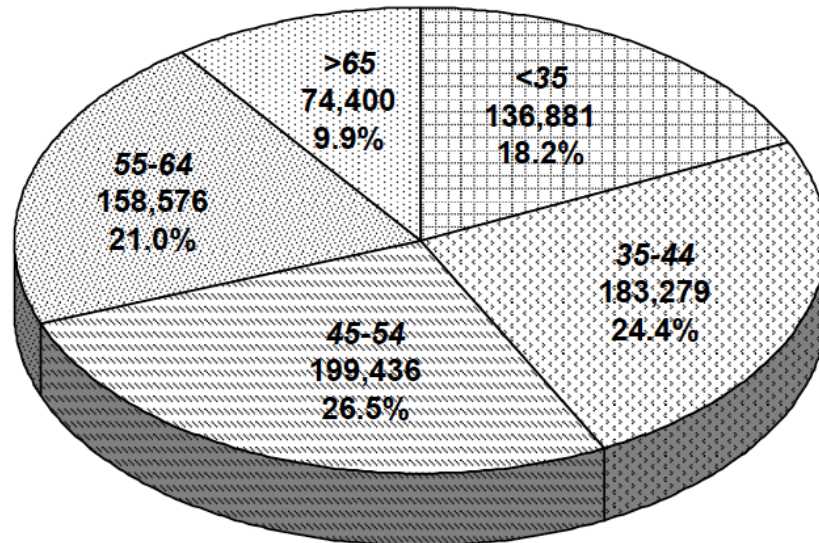
Source: CMS, Office of Actuary, 2011

The Changing of the Guard: Baby-Boom Physicians Prepare for Retirement

The increasing logistical burden of medical practice and declining practice volumes are compounded by a third, more subtle factor: the fact that the large baby-boom cohort of physicians is nearing retirement (See Fig 1.4). The looming retirement of baby-boom physicians (and their near-elders) has interacted with the recession in several meaningful ways. Older physicians facing declining practice incomes stopped hiring younger associates, leaving hospitals and others to pick up the slack.

Narrowing practice cash flow also made established physicians reluctant to provide salary guarantees to young associates that might mean further declines in income for partners. The ability of older physicians to “cash out” their equity to younger physicians has disappeared as young physicians are burdened with educational debt and cannot assume yet more debt to buy out physician practice equity. Many physician practices have lost their market value as independent businesses.

Figure 1.4
U.S. PRACTICING PHYSICIANS BY AGE
2010



Source: American Medical Association, Physician Characteristics and Distribution in the US

Additionally, older physicians have sought and found practice alternatives that enable them to work more regular hours. In the past decade, there has been an explosive increase in the use of hospitalists — salaried physicians whose exclusive responsibility is to manage hospital inpatient care. According to the American Hospital Association (AHA), the number of hospitalists in the United States tripled from 2003 to 2010, to almost 34,000 thousand, and the percentage of hospitals with more than 100 beds that employ or contract with hospitalists rose from 55% to 91% over the same time period. (AHA, 2011). While some hospitalists are hospital employees, many more are part of independent physician groups or employees of hospitalist companies, such as Cogent or IPC-The Hospitalist Company, that contract with hospitals to provide hospitalist coverage.

In a very brief period of time, the use of hospitalists has become ubiquitous. This movement to hospitalist coverage was not, in many cases, initiated by hospital management. Rather, community physicians expressed a desire for hospitals to provide coverage for their hospitalized patients to obviate the need for them to make rounds on those patients, thereby reducing their working hours to in-office time.

The growth in hospital medicine created job opportunities with regular, predictable working hours not only for many older internists, but also for many younger physicians who are completing training. This trend has markedly diminished the pool of potential

replacements for private practitioners in internal medicine, complicating the task of renewing this important component of the private practice community.

In addition, community-based specialists such as general surgeons, cardiologists, and orthopedic surgeons have withdrawn from hospitals' on-call lists for after-hours or weekend coverage for the emergency department and for surgical coverage, or have demanded that hospitals pay them to cover call. As a result, some hospitals have elected to hire specialty physicians on staff to cover call. This has been a major factor in increasing employment by hospitals of cardiologists, orthopedic and general surgeons, and other practitioners of 24/7 medicine.

Private practicing cardiologists and other imaging-intensive specialists have increasingly sought the shelter of hospital employment to offset the sharply declining practice incomes resulting from the sharp reductions in Medicare's imaging technical payments included in the Deficit Reduction Act of 2005 (Hillman and Goldsmith, 2011). In an astonishingly short period of time, cardiology has "rejoined" the hospital as a predominately hospital-based practice.

The Hospital Employment Conundrum

These changes in the practice environment have given rise to a large segment of the physician community that no longer hospitalizes patients, but rather manages them exclusively in ambulatory settings (imaging, surgery, chemotherapy, etc.). A 2006 analysis of Medicare billing records found that 38% of physicians never submitted bills for hospital-related codes over a two-year period (Fisher, 2007). In an increasing number of places, there are now two non-overlapping physician communities: physicians who never visit the hospital and physicians who never leave it, as is the case in most of Europe.

Hospital employment of physicians has undoubtedly risen rapidly in the past eight years. However, data on the extent and economic effect of hospital employment of physicians are scarce, of highly variable quality, and difficult to evaluate. A widely cited analysis (Kocher and Sahni, 2011) suggesting that hospitals own more than half of the nation's physician practices wildly overestimated the actual prevalence.

A detailed analysis of MGMA membership in 2010 found hospitals employed roughly 28% of the 212,000 physicians practicing in MGMA member groups — somewhat fewer than 60,000 physicians (Fabrizio, 2012). While the number of physicians practicing in hospital-owned groups has roughly doubled since 2003, those physicians represent barely 8% of more than 750,000 practicing physicians in the United States. (Physicians individually employed by hospitals or physicians in hospital-owned groups not affiliated with MGMA are not counted in this MGMA data).

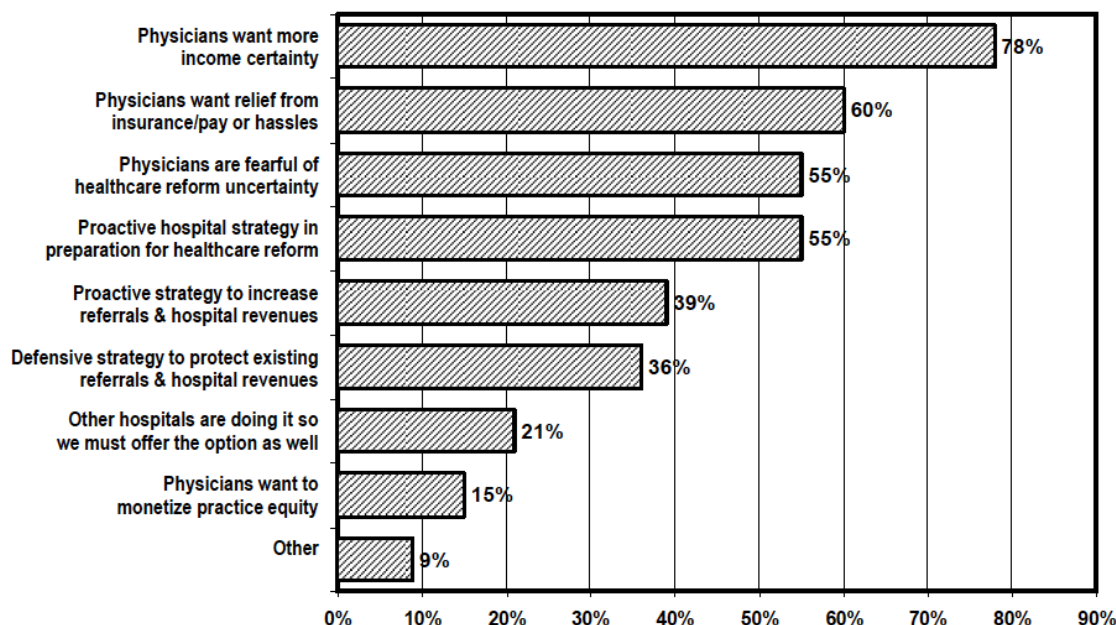
Another 27.3% of MGMA group physicians (almost 58,000) practice in various other nonphysician-owned groups such as HMOs, medical school faculty practice plans, and the like. While hospitals' share of group practice physicians has increased dramatically,

it still falls far short of a majority of physicians practicing in a group, which is, in turn, less than 30% of all practicing physicians.

Two recent surveys with a broader sampling base have placed the percentage of physicians employed by hospitals in the mid-teens. In a large survey in 2008 by the Center for Studying Health System Change, about 13% of physicians reported that they were hospital employees (Boukus, et al., 2009). A more recent AHA survey reported that about 15% of physicians were full or part time hospital employees as of 2010. Of this number, a little more than 91,000 thousand (12.2% of the nation's practicing physicians) were reported to be full-time employees (Elliott, 2012).

Hospital employment of physicians varies markedly by state and region, as well as by specialty. Maine is widely cited as one state with widespread hospital employment of physicians. In 2008, Maine hospitals employed approximately three-quarters of the state's primary care physicians and about half of all the state's physicians (Michaud, 2012). In nearby Vermont, about half of its primary care physicians are hospital employees (Harrington, 2012). Conversely, a recent statewide survey by the Texas Medical Association of their 45,000 members found less than 7% were employed by hospitals (TMA, 2011).

Figure 1.5
HOSPITALS' PHYSICIAN STRATEGY ISSUES



Source: Citi Investment Research and Analysis (n=80)

Physicians' search for economic shelter and income certainty may be the main driver of the hospital employment trend. Though some analysts have argued that hospitals have increased physician employment for strategic reasons (e.g., to increase their market share, pressure private health plans for higher rates, or position for new payment models like the accountable care organizations [ACOs]), a recent CitiGroup survey of nonprofit hospitals suggests that the most influential driver has been tactical adaptation by hospitals to their physician community's desire for income security (Figure 1.5).

Recent History of Hospital Employment of Physicians

During the 1990s, in anticipation of the Clinton health care reforms, hospitals embarked on an expansion of physician employment. This expansion anticipated a key aspect of reform that would have channeled health care payment from private health plans to integrated provider networks. At a minimum, many hospital managements felt they needed a closed-panel network of primary care physicians to function under this model. Hospitals in many communities also faced active competition from investor-owned physician practice management (PPM) firms such as Phycor and MedPartners that were purchasing large multispecialty physician groups.

This hospital excursion into physician employment was an economic disaster. After the Clinton reforms failed to materialize and health plans opted for open-ended, PPO-type products, hospitals were left with an expensive cadre of employed physicians and no additional revenue to offset the losses they were experiencing from their owned practices. The physician PPMs imploded in the late 1990s, vaporizing roughly \$12 billion in market capitalization (Burns, Goldsmith, and Muller, 2011).

At its peak in the late 1990s, according to the Advisory Board, hospitals were losing an average of \$83,000 per primary care physician per year (not counting their "ancillary service" revenues or revenues from hospital admissions). These practice losses coincided with and contributed to a sharp erosion in hospital operating earnings. The acquisitions also deeply aggravated relationships with the community physicians whose practices were not acquired and against whom the hospital was now in active competition.

Analyzing the source of the hospitals' physician practice losses, MGMA found that practice expenses for hospital-operated physician groups were actually 8% lower than those of non-hospital MGMA member groups. However, physician productivity in hospital employment was far lower. Net collected revenues for hospital-owned practices were more than \$100,000 per FTE physician lower than revenues for physician-owned practices and an impressive 35% lower than better performing practices — a result of dismal billing and collection practices and markedly lower physician productivity (Advisory Board, 1999).

Many hospitals aggressively divested physician practices in the late 1990s and into the early 2000s, sometimes writing off nine-figure operating losses. . In some cases, hospital practice losses and turmoil with independent practitioners led to senior management

resignations or firings. Efforts to terminate money-losing physician contracts or shut down practice sites often ended in a flurry of lawsuits and, in a notable instance - that of Medallia in Seattle, in unionization by the affected physicians. Unionization was not an effective remedy for physicians in this case. In the Medallia episode, the sponsoring Catholic health systems simply walked away from the group and disbanded many of their care sites.

Meet the New Boss; Same as the Old Boss

However, despite these problems, according to AHA, hospital employment still accounted for more than 10% of total U.S. practicing physicians at the nadir in 2002 (AHA, 2012). Hospitals appear to be reliving recent history with the new wave of physician employment. A recent MGMA analysis of physician group performance found abysmal performance of hospital-owned groups. The median practice loss for hospital-employed physicians in MGMA member groups in 2010 increased to almost \$190,000 per FTE physician per year, and the mean loss rose to \$212,000 (not counting the facility fee hospitals are permitted to charge Medicare for “provider-based” physician care or their ancillary services revenues) (Gans, 2012).

The higher losses may be attributed in part to specialty mix; this new crop of employed physicians is heavy with high-earning, procedure-oriented specialists such as cardiologists.

Figure 1.6
HOSPITAL OWNED MEDICAL GROUP
PERFORMANCE
Hospital vs. Non-Hospital Multi-Specialty Groups (2010)

	Best Non-Hospital MS Groups	Rest of Non-Hospital MS Groups	Best Hospital / IDN MS Groups	Rest of Hospital / IDN MS Groups
Overhead %	58.3	60.0	56.8	83.4
Gross Charges Per FTE MD	\$1,372,247	\$1,069,530	\$995,303	\$755,855
Physician RVUs Per FTE MD	13,096	12,809	9,714	9,117
Total MD Revenue After Operating Cost Per FTE MD	\$351,082	\$280,439	\$261,865	\$69,881

Source: MGMA, 2011

Though the best- performing multispecialty groups owned by hospitals or IDN owned multi-specialty groups had comparable percentages of overhead costs (57%) to those of their non-hospital brethren, the norm for hospital- and Integrated Delivery Network (IDN)-owned practices was a lethal 80%. Relative value units (RVUs) per FTE physician were 19% lower in the hospital/IDS practices, and total medical revenue after operating expense was 70% lower per FTE physician! (MGMA, 2012). (Note: Fig 1.6 MD Revenues after Operating Cost per FTE physician- the bottom line -did not deduct the physician's salary cost. It is this deduction that results in the large operating losses discussed above).

The revenue and clinical effort shortfalls in hospital owned practices shown in Fig.1.6 may be due to a larger percentage of young physicians still building their practices or a ruinous “adverse selection” problem on behalf of the hospital and IDS-owned groups (that is, selecting these least productive physicians from the broader physician community) or both.

Hospitals' Physician Employment Strategies May Not Be Sustainable

Hospitals' physician employment strategies are leading directly to deteriorating hospital financial performance, threatening their bond ratings. In its 2012 ratings outlook for nonprofit hospitals, the bond ratings agency Moody's Investors Service commented:

The short term negative credit impact of ramping up physician employment can be significant because the main benefits of the strategy might only emerge over a longer period, while the costs are effectively immediate, possibly causing material stress on operations in 2012 and 2013. There are often high initial costs involved with new physician employment — salary guarantees, physician integration, or even practice acquisition.

Moody's Investors Service, 2012

The largest troubled physician “integration” strategy has been that of the Carilion Clinic of Roanoke, Va., with about 600 employed physicians. Carilion achieved national notoriety when the *Wall Street Journal* reported on the antitrust implications of the merger that created the system (Carreyrou, 2008). Beginning in 2006, the Carilion Health System told the Roanoke medical community that they had to become Carilion Clinic employees to continue practicing at their hospitals. The creation of the Carilion Clinic was followed by a \$235 million reduction in the system's assets (caused in part by the 2008 stock market crash), several years of significant operating losses, a debt rating downgrade in 2009, turnaround management firm engagements, and the firing in early 2011 of the clinic's senior management. (Jones, 2010)

More recently, Texas Health Resources (THR), a \$3 billion Dallas-Fort Worth hospital system, saw its bond-rating outlook revised to a negative status by Moody's Investors Service, partly due to losses of nearly \$5 million a month on a large medical group called Medical Edge that THR acquired in 2010 (Moody's Investors Service, 2011). Currently, losses related to physician “integration” of \$3 million to \$5 million per month are not

unusual in multihospital systems throughout the country. When hospital operating performance deteriorates, bond-rating downgrades ensue. As a result, hospitals' cost of capital rises, and hospital boards take notice.

Hospitals generate revenue gains by employing physicians who previously split admissions or imaging referrals with other hospitals. They may generate additional revenue by compelling newly acquired physicians to rely exclusively on the hospital outpatient imaging and surgical facilities. However, acquiring physicians who presently use the hospital exclusively does not generate meaningful new income to offset practice losses. Without revenue to balance out the losses associated with physician "integration," bond-rating agencies will compel hospital managements and governing bodies to reassess the strategy.

Past hospital experience with physician employment strongly suggests that the current surge in hospital employment of physicians may not be sustainable. Any major deterioration of hospital operating profits, such as from Medicare "deficit reduction" initiatives or reduced patient activity, will put the strategy at risk, resulting in a repeated cycle of divestitures and downsizing of hospital practices. For every hospital or system that views physician employment as a gateway to some form of "accountable care" strategy, four more likely are simply serving as involuntary "midwives" of a very expensive generational transition in their medical practice community.

In many rural communities, the employment trend may not be reversible because of a weak economy or the lack of private practice opportunities. And, many hospital systems with deep pockets may elect to tolerate and eventually trim their losses to preserve a large employed-physician presence. Indeed, some survivors of the 1990s' practice aggregation frenzy own large, stable multispecialty groups (e.g., InterMountain Health Care in Utah, and Advocate Health Care in suburban Chicago).

In many other communities, however, hospital managements will face pressure from their boards and bond investors to narrow the practice losses, either by renegotiating excessive physician income guarantees, securing sharp increases in physician productivity, or divesting the practices and returning some or all employed physicians to independent practice. If sustainable earnings gains or tangible patient benefits do not appear after a few years, the hospital industry will find it difficult to justify the widening economic losses.

Another, subtler implication of this trend exists: hospitals have a powerful interest in helping facilitate a sustainable nonhospital physician practice sector. While this is (seriously) complicated in communities where medical staffs overlap, many hospital executives I have talked to, particularly in the investor owned sector, do not wish to assume their physicians' operating risk, but would rather work collaboratively with independent physicians to assume and manage delegated risk and/or improve clinical performance.

Whether as an exit strategy from large-scale physician employment or as alternative, hospital leaders in many communities might support, warily or enthusiastically, the emergence of new physician structures that are aligned through values, and that perhaps share risk, but not direct ownership, with their systems.

Health Insurers Get Into the Game

Shedding their historical reluctance to own provider assets, a number of large health insurers have entered the physician market in the past two years, actively acquiring physician group practices, IPAs, occupational health providers, and urgent care centers (Terry, 2012). In one notable instance, Highmark, the Blue Cross plan for Western Pennsylvania, acquired a large, deeply troubled hospital system, the West Penn Allegheny Health System, to rescue it from bankruptcy and preserve access for its subscribers. This acquisition anticipated Highmark's inability to contract with the University of Pittsburgh Health System, which fields a competing health plan.

Of the large commercial insurers, the most aggressive physician strategies may be found at Humana (as usual) and the \$18 billion Optum subsidiary of UnitedHealth Group. In 2010, Humana acquired Concentra, a national chain of worksite health and urgent care providers and continued to grow it by acquisition through 2011. Humana also acquired Senior Bridge, which specializes in care coordination and management for the Medicare population.

More quietly, OptumHealth, through its Collaborative Care program, has acquired risk-bearing physician groups, some with wraparound IPAs, and claimed by the end of 2011 to control more than 800,000 lives in a half-dozen highly competitive markets in Texas, Florida, and California (Stapleton, 2011).

In late 2011, WellPoint acquired Los Angeles-based CareMore, a successful special needs plan/Medicare Advantage provider with a network of 26 primary care clinic sites (Li, 2011). CareMore comprises a large multisite internal medicine practice and a Medicare Advantage health plan covering 50,000 patients. It was acquired for a reported \$800 million.

These health insurer strategies appear to differ markedly from one another. In no case, however, was the goal to acquire physician practices per se. It is unlikely that any of these firms have discovered a magic solution to profitability in physician practices that they can apply to their acquired practices. In no cases were individual physician practices targeted.

Humana's strategy appears to be to offer a fuller range of services than merely health benefits to its corporate customers, including workplace health and urgent care. For OptumHealth, the focus appears to be on acquiring risk-bearing physician groups, a strategy modeled on the "delegated risk" capitation model pioneered by HealthCare Partners in Los Angeles (see below).

OptumHealth's strategy is emphatically not "vertical integration." United lacks enough health plan customers in any of Optum's physician markets to make its practices profitable exclusively from "internal" patients. Rather, the strategy depends on broad acceptance of Optum's physician organizations by UnitedHealth Group's health insurance competitors. The strategy appears to be controversial even inside some regional divisions of United, which has not been a uniform and enthusiastic adherent of a delegated risk contracting model. PacifiCare, which was acquired by UnitedHealthcare in 2005, was a pioneer of the delegated risk contracting approach.

In the WellPoint case, the CareMore acquisition appears highly focused on a specific segment of the Medicare Advantage population. CareMore is a so-called special needs plan (SNP), which uses care coordination and various other strategies to improve the health and lower the cost of caring for the high-risk portion of the Medicare population (Main and Slywotzky, 2011). The CareMore acquisition anticipates the movement of a significant number of Medicare's sickest patients, the so-called dual eligibles (who are too poor to pay Medicare's Part B premiums), into managed care. Presently, only about one in nine of these patients are in managed care plans (McDonald, 2011).

However, the music playing in the background in all these acquisitions is the pervasive concern among health insurers that hospital practice acquisitions might dramatically reduce their network contracting options. Hospitals with already highly concentrated market power for hospital services could corner the physician market and expose the plans to extortionate rate increase requests both for hospital and physician services.

These concerns were exacerbated by a belief that hospitals and IDNs would use their participation in the Medicare's Shared Savings Program (aka ACO part of Medicare established by the Affordable Care Act) to compel health insurers to share both risk and profit with them. These concerns about unchecked hospital market power could open the door to broader collaboration between insurers and risk-bearing physician entities, about which much more is said below.

II. Fixing the Broken Business Model: Innovation Matters!

Over the past fifty years, while the environment of care has changed dramatically. . . the clinical office has been remarkably stable in structure and function. The physical layout, the exam room, the scheduling system and visits as the mechanism of care are all virtually unchanged.

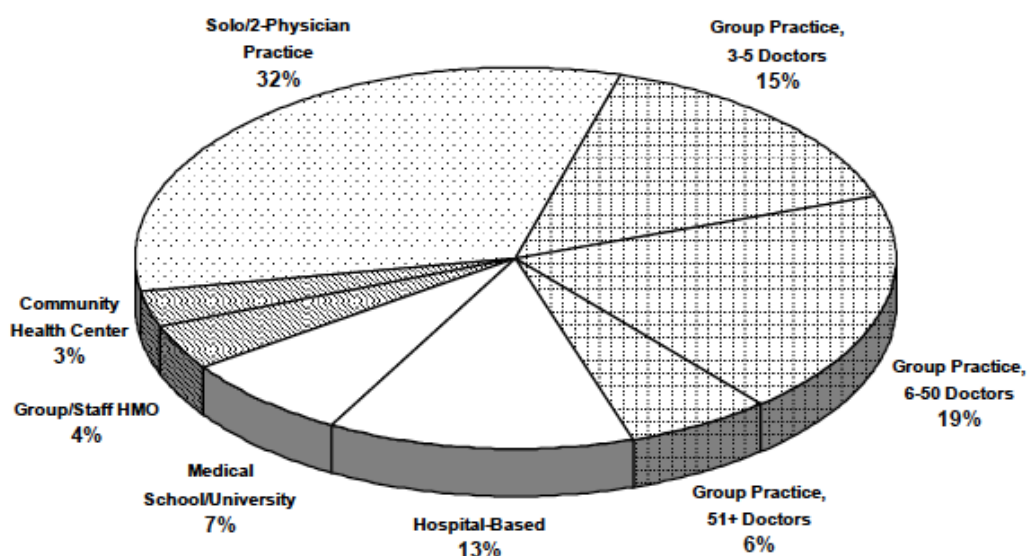
Dr. Charles Kilo, *Health Affairs*, 2010

At least in consumer electronics, prices are steady but bang for the same buck has improved. Show that in medicine or any other field. That is why people change iPhones every two years but skip an annual visit to your office.

Sermo comment thread, Feb. 9, 2012

The economic fundamentals of medical practice are not moving in a favorable direction for most practicing physicians. Physicians seem trapped in payment arrangements that hinder them from passing on rising operating costs. While there are nodes of experimentation with new practice models and supporting technologies, the resulting innovations have not been adopted widely or rapidly.

Figure 2.1
U.S. PHYSICIANS BY PRACTICE TYPE
2008



Source: Center for Studying Health System Change. 2008 Health Tracking Study Physician Survey. Sept. 2009.

The fragmentation of practice settings has made it difficult for innovations that might reduce cost or improve practice efficiency to diffuse rapidly. Despite the reality that physician practice is consolidating, according to the Center for Studying Health System Change Tracking Study, as late as 2008, 47% of physicians were still practicing in groups of five or fewer and 32% were in solo or partnership practices. The hospital practice acquisition boom has reduced this number somewhat, but not significantly. In metropolitan statistical areas with 1 million or more in population, 41% of physicians still practiced in groups of fewer than five in 2011, and only one-third practiced in groups of more than 20 physicians, regardless of sponsorship (McKinsey, 2012).

Does Size Matter in Physician Practice?

While hospital managements seem to believe there is an economic advantage in aggregating ownership of physician practices, the widening economic losses they are experiencing suggest that consolidation has not, by itself, been a successful business strategy. The average hospital group size is almost 90, according to MGMA (Fabrizio, 2012). Many hospitals continue operating their physician practices as individual practices in their former locations (Advisory Board, 2011).

Compelling scale economies are not apparent in physician practice. A recent economic analysis by Douglas Hough of Johns Hopkins and David Gans of MGMA found scale economies in physician practice to be elusive. For all surveyed practices (n=1647), using 2008 cost data, physician productivity (as measured by gross physician revenues per FTE) actually declined as groups grew in size from one to eight, and then rose only modestly in groups of more than eight. For primary care specialties like family practice, the negative returns to scale continued until the group size reached 25 (average family practice group size is six physicians), after which modest incremental revenue growth was seen (Hough, Gans, et.al., 2010).

Unfortunately, growth in group size beyond the point of diminishing returns also brings both greater administrative complexity and cost and greater capital expense requirements (IT, tenant improvements to office space, and diagnostic technology). It takes tremendous discipline to control these variable expenses in a way that generates revenue returns for scale. Larger multispecialty groups struggle with the “hospital” disease — management layers, sclerotic decision-making cycles, and administrative productivity issues.

The Hough and Gans analysis did find exceptions: orthopedics and anesthesia benefited from scale, principally because of the potential for subspecialization and, in orthopedics, access to imaging and physical therapy revenues. Returns from scale in orthopedics grew more rapidly than for other groups after the practice size reached nine physicians. Cardiology was expected to display similar gains from scale, particularly because of the ability to generate ancillary service revenue, but these were not confirmed by the analysis. Note that this survey was conducted at the beginning of a meltdown in technical payment rates for imaging services used by these physicians. A 2011 analysis might look less favorable for all the imaging-dependent subspecialties.

The authors concluded that most physician groups in their large sample had not achieved a size sufficient to realize an efficient revenue yield per FTE, suggesting some opportunities for consolidation to an efficient size. The journey to this size, however, may not yield additional revenue gain. For primary care physicians, however, achieving group sizes in the mid-20s may be required to benefit from scale economies. Whether these scale economies actually lead to higher physician compensation — the money question — was left to a follow-up study.

The study did not address the market power hypothesis that has catalyzed formation of market-spanning single-specialty groups in many communities (e.g., one single specialty group for an entire medium- or large-sized community). These single-specialty groups have worked to become “unavoidable” in health plan contracting and may have positioned themselves to harvest out “monopoly rents” in their health plan negotiations, regardless of the effect on their scale on business operations and service mix. No studies are available yet to confirm any possible “market power” effects on physician income. With this possible exception, it is unclear whether merely aggregating physician practices into larger groups, by itself, will help physicians increase their income or improve their efficiency.

Good Management Matters More!

Well-managed medical practices do, however, significantly outperform their less well-managed peers (Figure 2.2). Among all multispecialty groups, the best-performing groups had overhead costs that were 7.5 points lower than those of the rest of their peers (57.3% vs. 64.8%). The best performers out-earned the rest of their peers by 26% (gross revenues per FTE physician) and outworked their peers by almost 31% (RVUs per FTE physician) (MGMA, 2012). Some “outlier” multispecialty groups had overhead cost percentages in the low 40s and some of the highest net revenues after operating expense per FTE in their entire peer group, indicating that even among the best performers, there were significant performance and, apparently, earnings gradients (Gans, 2012).

Figure 2.2
MEDICAL GROUP PERFORMANCE-
BEST PRACTICES
Primary Care And Multi-specialty Groups (2010)

	Best Performing MS Groups	Rest of MS Groups	Best Performing Primary Care Single Specialty Groups	Rest of Primary Care Single Specialty Groups
Overhead %	57.3	64.8	54.3	70.9
Gross Charges Per FTE MD	\$1,342,324	\$1,063,961	\$954,932	\$668,114
Physician RVUs Per FTE MD	7,584	6,102	6,409	5,184
Total MD Revenue After OP Costs Per FTE MD	\$351,894	\$226,701	\$274,282	\$104,904

Source: MGMA, 2011

For primary care single-specialty groups, the performance differences between the best and the rest were even sharper — 54% overhead for the best performers vs. almost 71% for the rest of their peer group — and RVUs per FTE physician were 24% higher! For single surgical specialty groups, the overhead differential was more than 12 points for the best performers, which generated almost a million dollars more revenue per person.

Management practices that mattered for the high-performing groups included flexible staffing for support staff (a common best practice shared with investor-owned hospitals); cross-training staff for increased flexibility of utilization, intelligent deployment of midlevel health professionals; a flexible patient schedule for the primary care practices (including open access for same-day appointments); far more rigorous tracking of accounts receivable (including aggressive day-of-care collections of estimated copays); and aggressive follow-up with health insurers and patients owing balances on their bills. The best performing practices also found additional revenues by subletting unused space to complementary practices (e.g., orthopedics groups colocating physical therapists onsite) and by cost-sensitive procurement of supplies and electronic health records (EHRs).

These management practices are not rocket science, and to an extent, size does matter here (e.g., having staffs large enough to cross-train staff in better collection and billing practices and to develop team-based intake and call management). In other words, aggregating small practices into larger ones is not enough. If there were more groups

large enough to take advantage of the potential for administrative improvements *and* effective physician and management leadership, improving all groups' performance to the achievable levels shown by these best performers would yield substantial additional net income for physician group members.

Exploiting Technology

In my 2003 book, *Digital Medicine: Implications for Healthcare Leaders*, I discussed the transformative potential of information technology, particularly EHRs, to make physician practice more intelligent and responsive to patient needs. The book discussed how the EHR would integrate diverse streams of digital patient information to improve physician decision making. Eventually, the EHR would move beyond its documentation functions to help clinicians manage populations of patients, as well as archive medical knowledge (Goldsmith, 2003).

Indeed, some physician organizations have realized this potential. Geisinger Clinic's path-breaking service "warranty" program ProvenCare™ was critically enabled by its EHR platform, EpicCare™, particularly the ambulatory patient record element, as was its successful medical home pilot, ProvenCare Navigator. The Geisinger ambulatory electronic record was the framework that enabled protocol-driven management of patients, as well as the tight feedback loops to assure that those protocols translated into improved patient health. Geisinger was, however, in year eight of its EpicCare implementation, with a couple hundred million dollars invested, when it began the ProvenCare project.

Dr. Charles Kilo describes the IT platform for his Portland, Ore.-based GreenFields Health, an Institute for Health Improvement-inspired primary care practice experiment (roughly nine physicians), thusly:

GreenField Health's clinical information system contains the following components: 1) EHR, 2) practice management systems, 3) customized encounter forms, 4) disease registries, 5) secure messaging (email) and connectivity, 6) secure Internet portal for patients, 7) online clinical information, 8) practice decision support, 9) patient decision support, 10) electronic diagnostic technology, 11) scanning, 12) network faxing, 13) interfaces with laboratory, radiology and hospital systems, 14) medical group intranet, 15) patient e-newsletter and 16) telecommunications systems.

These products reside on a network that includes an operating system, high-speed Internet access, voice recognition software, secure remote access, backup systems, anti-spam and anti-virus software, word processing, spreadsheet, general ledger and accounting software and more.

(Kilo, 2005)

The core EHR and practice management functionality came from MedicalLogic (now a part of GE's Centricity suite), developed by one of Kilo's patients, Dr. Mark Leavitt, with cross-platform interfaces developed by a Portland-based IT firm, Kryptic. Remarkably, the suite was maintained by a single IT staff person. With this platform, 80% of GreenFields' patient contacts were phone or email based, and the mix of patient contact time shifted to perhaps 50-50 between in-person visits and electronic/ phone communication. For a more detailed description of what GreenFields did, see Kilo and

Leavitt's book *Medical Practice Transformation With Information Technology* (Kilo and Leavitt, 2005).

My personal physician Dr. Jeff Davis had a more typical experience with clinical IT. He and his five colleagues at Charlottesville's Internal Medicine Associates signed personal notes for \$250,000 and purchased a tablet-based EHR with touch-screen interfaces in 2007. After a painful, two-year conversion process, they were able to reduce their medical records/office support staffing from 4.5 to 2 FTE employees and make do with one fewer nurse.

The practice benefited from richer coding made possible by the improved documentation and analytic routines imbedded in its software and saw a resultant 5% to 10% increase in its financial performance. But this came at a price: an increase in documentation time from their practice day and a reduction in the number of patients they could see. While they would not go back to using paper records, their return on investment appeared to be in the low- to mid-single digits (Davis, 2012).

While it is tempting to blame the vendors, the real fault may lie in the nation's unique payment system and those who "run" it. Documentation requirements seem to have proliferated like kudzu in the peak of a humid summer. Each new federal initiative (e.g., Medicare value-based purchasing, the Physician Quality Reporting System (PQRS), Hospital Compare, meaningful use, the recently postponed ICD-10 conversion, and the Medicare Shared Savings Program or ACO) brings a fresh layer of complexity that translates into increased documentation time and reduced clinical productivity. While it is too soon to tell if any of these initiatives will actually have the desired effects in improving clinical outcomes, it is possible that the "War on Medical Errors" may be headed in the direction of the "War on Cancer" or the "War on Drugs".

Taming the Billing Dragon

For the past decade, all the buzz in clinical informatics focused on the EHR and the eventual promise that "automation" of record-keeping functions would allow clinicians to spend more time with their patients. This goal appears to be, to put it gently, elusive. However, quietly, much more progress has been made than is realized in automating the revenue cycle of the physician's business, enabling reduced clerical staffing support, higher unit payments from more accurate coding, and reduced practice overhead costs. These improvements will have concomitant effects in reducing health insurer overhead by enabling end-to-end connectivity in eligibility (a huge headache for everyone), claims management and electronic payment. The tools to virtually eliminate practitioners' accounts receivable are within realization.

For years, communication between physician offices and payers was mired in telephone, paper and fax exchanges and, for untold tens of thousands of practitioners, still is. Medical billing was the province of the physician's overworked office staff, supplemented by local mom-and-pop medical billing services. In solo practices, the

physician's spouse was frequently responsible for billing. For larger institutions like hospitals, with the advent of electronic billing systems, this evolved to the submittal of billing tapes, but the feedback for problem claims remained paper or fax based. Manual processing a single problem claim cost the payers an estimated \$50 per claim.

With the advent of long line (T1) broadband connectivity in the 1980s, electronic data interchange (EDI) and billing clearinghouses emerged, enabling at least the submittal of claims electronically. The more complex challenges of verifying eligibility and determining if someone's insurance covered a procedure or service were still a huge burden on physician office staffs, as was clearing prior authorization hurdles if the patient required hospital admission or complex diagnostic services.

Though it took the better part of a decade after the emergence of the Internet and, subsequently, broadband connectivity, suites of cloud-based revenue-cycle service solutions emerged. The most prominent and disruptive of these new offerings was athenahealth, which targeted small physician practices with an easy-to-use web claims-management interface. athena offered 24/7, end-to-end connectivity that enabled the full range of revenue-cycle applications to be managed in real time over the Internet by the physician's office staff. athena laboriously constructed a library of health plan business rules and developed sophisticated interfaces with every health insurer with which a physician did business. It outsourced coding and claims submittals overseas and accepted input in multiple forms from practices, including faxes if necessary.

Practices did not have to buy servers or software licenses or hire expensive consultants to get athena up and operating. They merely had to log onto their site, and much of the complexity came "out of the wall," aided by tutorials and seminars. In 2008, athena began offering a cloud-based EHR called anthenaNet and claims it is used by 30,000 physicians. Athena quickly encountered competition in online claims management from Availity, a rare collaboration between commercial insurer Humana and a cluster of Blue Cross plans led by Florida and the Health Care Service Corporation (Texas, Illinois, etc.), as well as large commercial firms like McKesson, that served the payer market. Still, as with EHRs, penetration of these cloud-based solutions represents a small percentage of all physician practices. There is still a lot of room for adoption and more efficient revenue capture (Goldsmith, 2008).

Other pieces of the revenue cycle are automating rapidly, as well. A start-up firm based in Washington, D.C., called CodeRyte (www.coderyte.com) has developed natural language-processing software that enables its machines to read clinical notes and assign accurate billing codes based on analysis of the physicians' records. This will become a valuable technology for office staffs and clinicians if the now-postponed ICD-10 conversion that loomed in 2013 is eventually rescheduled. Machine-driven coding obviates the need for clinicians and their office staff members to learn a complex new private language to ensure payment. CodeRyte was purchased in early 2012 by 3M Corporation.

Automated speech-to-text translation of medical dictation, a major cost for physician practices and major time waster for physicians, is rapidly converging on the fabled “once and done” functionality physician users require. Dragon Systems, a subsidiary of voice recognition giant Nuance, has seen explosive growth in its medical dictation business. Radiologists, who are among the most adaptable specialists to new technology, are nearing complete automation of their dictation, with some other specialists such as cardiologists not far behind.

A large challenge remains, however, in diffusing these helpful and cost-saving technologies into small office practices. Achieving ease of use, as shown by the athenahealth example, is the key. Again, larger groups may have at least a temporary advantage in leverage technologies that can free clinician time for more patient contact.

Innovative Practice Models

Despite more than a decade of innovation in rethinking and reorganizing physician practice at the office level, progress in scaling up the adoption of this innovation is, at best, discouragingly slow. A good example is the Idealized Design of Clinical Office Practices. The ideal medical practice (IMP) grew out of the Institute for Health Improvement’s medical practice redesign activities. Some refer to the IMP’s as “micropractices”.

The Ideal Medical Practice collaborative, funded in 2007 by The Physicians Foundation, applies Toyota’s Lean Production System principles to the physician office practice, with the goal of maximizing patient access to the physician. According to Dr. Gordon Moore, Ideal Medical Practice participants were truly solo practitioners. They had no office staff and a fixed expense “nut,” including renting an examination room from another practice in lieu of a private office, of around \$1500 a month. Total start-up expenses, including the “lean” EHR/practice management system (from Altea), amounted to \$15,000 (Moore and Wasson, 2007).

Moore’s practice was built to yield a net take-home pay of \$155,000, at roughly 12 patient visits a day, while maintaining “open access” to patients both through visits and electronic/phone communication. Despite a successful experiment, only about 80 physicians currently participate in the collaborative’s on-going activities (Moore, 2011).

At the other end of the complexity spectrum was the patient-centered medical home of Group Health of Puget Sound’s Factoria clinic site, which sought to offer a more comprehensive primary care experience. Rather than stripping the practice down to the bare essentials, as Moore did, the primary physician practice was enhanced through the strategic addition of midlevel practitioners and supporting cast to provide “medical home” service to patients. The Factoria experiment shrank the panel size from 2300 to 1800 patients per physician by adding practitioners but enhancing a delivered product (Reid, et al., 2010).

For every 10,000 patients, Group Health provided 5.6 FTE physicians, an equal number of medical assistants, 2 LPNs, 1.5 physician assistants or nurse practitioners, 1.2 RNs, and an FTE clinical pharmacist — staffing levels difficult to imagine an independent practice attempting. The Factoria clinic also increased the length of patient visits by 50%, from 20 to 30 minutes (the same average patient visit time as Moore’s micropractice). These changes added \$1.60 per member per month (PMPM) in primary visit costs and \$5.60 PMPM for specialty physician visit costs.

Because the Factoria clinic was staffed for continuous interaction with patients, actual visit volume fell 6%. The clinic experienced 80% more secure email communications (through Group Health’s excellent, decade-old Internet patient portal) and 5% more phone interactions. However, the impact on total health costs was huge: a 29% reduction in emergency department visits and 6% fewer hospitalizations (through two years). Because Group Health is effectively capitated, reducing these more expensive patient encounters reduced Group Health patient costs for expensive, hospital-based services by an impressive \$18.18 PMPM, for a net savings of almost \$11 PMPM.

The net savings in hospital costs were compelling enough for Group Health to apply the care model to the rest of their clinic sites, despite the substantially higher staffing costs. High levels of patient satisfaction may also increase member retention for younger, less costly patients — an important issue for any health plan. Unlike earlier practice redesign efforts inside Group Health, satisfaction among the health care professionals also improved, leading to reduced turnover and higher levels of physician productivity (Larson, 2012).

The Group Health example illustrates how perfectly the medical home fits inside a “global risk” financing model, which is discussed in greater detail below. It makes limited sense for physicians to copy the Group Health model, even for enhanced fees, unless one can also capture a large share of the downstream savings (e.g., reduced hospitalizations and expensive ambulatory services). Even with major increases in primary care base compensation, the medical home is a gift from the practitioner or sponsoring organization to the patient’s health insurer or the Medicare program.

These two very different practice designs have some common elements. They increased direct patient contact time for in-person visits, but also relied on far higher rates of electronic contact. They were both critically enabled by electronic records. They also resulted in far higher levels of patient and physician satisfaction. They did however take opposite approaches: rigorous cost discipline on the “ideal practice” end and a soccer-team level of staffing on the “medical home” end.

Both models represent radical thinking and redesign of the physician’s workflow and the division of clinical labor. They both deserve greater visibility; however, as the comments about the “medical home” illustrated, they need to elevate the physician’s role in the health care payment food chain.

Previous publications of The Physicians Foundation have explored the emerging direct-pay physician practice models. These include venture-backed Qliance (Merritt Hawkins, 2010) (www.qliance.com) and One Medical Group (www.onemedical.com) and bootstrap efforts such as Portland's GreenField Health (www.greenfieldhealth.com) and Southwest Florida's Epiphany Health (www.epiphanyhealth.net/). Among the common elements of these models are the provision for continuous contact with the care team through email and telephone and walk-in availability if office visits are required. Many no longer require an entrance fee or even a large annual payment but rather scale monthly payments according to income or age.

Even though patients seem delighted with the practice experience in these models, I am far from certain that direct-pay models will attract a large patient population. People still need health insurance to cover significant medical costs, and if their physicians do not contract with health insurance plans (a major part of the cost savings for physician practices), patients have to pay out of pocket.

And even though a remarkable 21% of privately insured patients (about 30 million people) are part of consumer-directed health plans (McKinsey, 2012), the modest financial cushion of the "health savings accounts" in these plans can disappear in a three-hour emergency department visit, leaving the patient's paycheck or savings as the only resource available for direct-pay physician care. Providers' largest single source of bad debts in the most recent recession is not care to the uninsured, but care to the insured who do not pay their portion of the cost.

The oldest venture-funded concierge practice, MDVIP, which both markets and supports business operations for concierge medical practices, has grown to about 500 physician users in a decade (www.MDVIP.com). Nevertheless, MDVIP was acquired by consumer products giant Procter and Gamble for a reported \$300 million in late 2010. GreenField has grown to only about 10,000 patients in a decade (about the size of a mature four-person internal medicine practice), despite an affordable (i.e., no large entry fee) financial model for patients, on-demand patient access to the practice, and enthusiastic patient reviews. Qliance, in its five years, has reached about half the size of GreenFields.

A major constraint on the growth of the direct pay model is the slow growth in consumer purchasing power, as are the conditions for physicians participating in the Medicare program. Consumers still owed almost \$13 trillion in household debt at the beginning of 2011, according to the Federal Reserve (Smith, 2011). Despite the large numbers of baby-boomers presently moving inexorably toward serious chronic illness, Medicare's present conditions of participation will limit access of this population to the direct-pay market. Even with the recent rapid growth of consumer-directed health plans, the direct-pay model, while attractive, is unlikely to save private medical practice.

Diverse practice models are needed to match the diverse needs and resource positions of consumers. The full-court press of the medical home may well fit the needs of chronically ill patients. Alternatively, the ideal medical practice might fit the needs of healthier, younger patients. Rather than bless one model, physicians should strive to

diversify their practice offerings and find market and clinical niches that those models best address. Fostering experimentation with new care models is vital to preserving the vitality of physician practice.

III. Organizing for Risk: Putting Physicians Back in Charge of Health Care Decision Making

The past 30 years have seen a steady erosion of physicians' practice autonomy as health insurers, including Medicare, have become much more invasive and aggressive in structuring physician payment. This began with prior authorization for hospital admissions and has spread to encompass the prescribing of medications and ordering of imaging services. Prior authorization consumes hundreds of thousands of person hours in physician practices, hospitals, and health insurers every year.

More insidiously, the "quality" movement in health care, whose objectives of reducing patient risk and improving clinical outcomes physicians widely share, has dramatically increased physicians' documentation time and support requirements. Each new federal initiative — Value-Based Purchasing (for hospitals), PQRS, meaningful use, the recently postponed ICD-10 conversion, the Medicare Shared Savings Program (ACO) — carries with it a new set of so-called "core measures" that require physicians and their staffs to document in their case records.

Some of these, like the Medicare Shared Savings Program, are presently voluntary, but many are mandatory, or, like meaningful use, carry income penalties for not participating. Practicing physicians have limited or no input into the selection of these measures, as they are advocated and approved by bodies such as the National Committee on Quality Assurance (NCQA) that are considerably removed from the doctor-patient relationship.

If each cost-increasing documentation requirement were accompanied by additional funding to support the documentation expense that would be one matter, but as physicians well know, their unit compensation has been falling in real terms, while the increased administrative burden drives up their overhead costs. Some of these programs, such as meaningful use, provide temporary offsetting revenues, while others do not.

Physicians need to reclaim their practice autonomy and regain control over their professional lives. To do this, paradoxically, may require some physicians selectively to abandon fee-for-service payment and assume some level of economic risk for future health costs.

Ambulatory care is the physician's principal business. As seen in the Group Health example above, more effective ambulatory care holds the key to reducing health system spending — principally by avoiding hospital use, but also by improving the health of patients. Leveraging what physicians know and can achieve by working with their patients can yield potential major savings for the health system in reduced use of expensive services such as hospital inpatient care.

Under the present payment system, however, if the physician is paid merely for his or her clinical effort, every dime of the cost savings generated by more effective and better coordinated physician care is captured and absorbed as profit by health insurers or their self-funded employer customers. By assuming some level of risk for the future cost of

caring for their patients, not only do physician groups and IPAs reap the rewards for more effective clinical care but also they might escape the costs of minute-by-minute surveillance of their practices and reduce the administrative complexity of health care payment.

Risk and Responsibility for Health Care Cost Decisions

Under a “delegated-risk” payment model, physician organizations recoup savings from more effective care (e.g., through avoidance of acute episodes and excessive testing) and pass them back to their physician panels in the form of increased compensation. Physicians are paid a monthly fee designed to cover all of their patients’ expenses in a contract year or a smaller fee to cover only their physician or other professional services PMPM.

Rather than having to obtain approval from an outside body for every dime spent each time the physician touches the patient, the contracting organization (a medical group, IPA, or physician-sponsored health plan) convenes participating physicians to organize the care to the population for which they are responsible and rigorously monitor episode or time period costs. Physicians would be able to cease billing for every visit or every procedure (and also waiting on hold for the care to be approved by a faceless nurse reading an LCD screen) and instead receive monthly or episode-specific checks for each patient who chooses to see them.

Traditionally, organized medicine has objected to the principle behind delegated risk. Many practicing physicians felt that capitated payment rewarded physicians for withholding needed care and exposed them to legal liability if complications ensued. This is why risk-bearing physicians need detailed, evidence-based clinical protocols to guide care for patients with particular clinical conditions. The goal is to not only reduce the risk of under-treatment, but also to reduce needless variation in care and cost that yields no patient benefit.

With a delegated risk model that is properly constructed and administered across a large enough patient population, physicians can tailor the care of individual patients to their circumstances without having to withhold needed care from those who require it. Risk-based payments are fitted to a group average, not to individual patients. The larger the patient group covered, the more flexibility clinicians have to meet their patients’ unique needs, yet still adhere to budget discipline. The cushioning effect of population-based rates depends crucially on the robustness and fairness of the risk-adjustment methodology used by the contracting payer.

Risk-bearing physician organizations also decide what “core measures” are really important enough to warrant the physician’s and support staff’s time in documentation and which only merely contribute to the publishing opportunities for the health services research community, markedly reducing the documentation burden for its members. It isn’t “delegated risk” if the health insurer or the Medicare program tells physicians precisely what to do and how and when to do it.

The Sorry History

The extensive (and disastrous) experience with the delegated-risk model during the 1980s and 1990s, mostly in the West and in New England, is important to note. A few large health plans, such as PacifiCare, were eager to contract globally with physician organizations, passing over annual cost risk for large populations of their patients, often to the lowest bidder. Because many physician organizations treated risk contracting as merely a way to acquire new patients, (i.e., a marketing tool), they were unprepared for the numerous possible contingencies that could drive up a group's cost and exhaust its fixed global budget (i.e., capitation rate times enrolled population).

In many risk-bearing physician groups, utilization controls were inadequate or completely nonexistent. Many simply relied on a bonus pool "funded" by withholds (e.g., discounts from fee payments) and continued paying their physicians their current fees minus the withholds. Their care was not managed at all, merely the payment. If funds were exhausted in the year, of course, the bonus pool was empty, and physicians merely received the discounted fee for their services and complained bitterly about management incompetence.

As this was before EHRs, most contracting groups had no way of tracking service costs for patients until sometimes many months after the services were rendered, when they received boxes of completely unintelligible claim printouts from their insurance "partner." Few or no clinical protocols or guidelines existed in most physician organizations to guide optimal physician decision making.

As a result, numerous physician groups incurred huge economic losses and went bankrupt. The term "capitation" acquired the odor of burned flesh in medical communities. This explains the proliferation of new terms like "global risk" or "accountable care," which essentially describe the same thing.

Figure 3.1
CONTINUUM OF RISK

Modality	Mechanism	Risk Assumed
Fee for service	Payment per visit per procedure	Malpractice, pat. satisfaction, practice expense
Disease/condition management	FFS plus medical management fee	Above plus patient adherence
Professional capitation	PMPM physician services only	Above plus diag. testing specialty visits
Global cap	PMPM all health services (minus drugs, mental health) post acute	Above plus hospitalization & adverse events
Full insurance risk	Monthly premium per enrolled life	Above plus selection risk admin + capital cost
Community cost trends (ACO)	Fee for service plus bonus vs. budgeted cost trend	Malpractice patient satisfaction admin expense

Source: MGMA, 2011

How Much Risk and for What?

Physician organizations might assume certain gradations of risk, depending on the envelope of care to be contracted for and the risk tolerance and cohesion of the medical community or organization. For example, physician groups might assume “episode” risk, as Geisinger did with its ProvenCare product. Sometimes referred to as “bundled payment,” it is, in fact, a form of insurance risk, as poorly coordinated follow-up care, hospital-acquired infections, adverse drug reactions, etc., all increase episode cost and exhaust the fixed “bundled payment,” exposing the contracting group to losses.

Geisinger’s early experiments with bundling payment for coronary artery bypass graft surgery (CABG) were successful enough that it expanded the model to more than 30 other clinical interventions. Key to managing the risk was developing professional consensus around best practices that formed the basis for a risk-managing clinical protocol. Figure 3.2 shows the agreed-upon service levels provided every Geisinger patient under the CABG ProvenCare protocol.

Figure 3.2

GEISINGER'S PROVENCARE™ CABG PROTOCOL: DELIVERING ON EVIDENCE-BASED CARE

ACC/AHA Class I Recommendations

- Pre-op antibiotics
- Pre-op carotid doppler studies
- Aspirin
- Epiaortic echocardiography to identify atherosclerotic ascending aorta
- Aggressive debridement and revascularization for deep sternal wound infections
- Perioperative beta blockers (or amiodarone) to reduce atrial fibrillation
- Statins
- Smoking cessation education and pharmacotherapy
- Cardiac rehab
- Withholding of clopidogrel for 5 days pre-op
- Left internal mammary artery as graft for the LAD artery

ACC/AHA Class II Recommendations

- Pre-operative use of a CABG operative mortality risk model
- Anticoagulation for recurrent/persistent postoperative Afib
- Anticoagulation for postoperative anteroapical MI with persistent wall motion abnormality
- Carotid endarterectomy for carotid stenosis that is symptomatic or >80%
- Intra-aortic counterpulsation for low LV ejection fraction
- Blood cardioplegia
- Delay operation for patients with recent inferior MI with significant RV involvement
- Tight peri-operative glucose control

Source: Geisinger Clinic

The Medicare program has been experimenting with this same approach to bundled payment, focusing on both bypass surgery and joint replacement, in its Acute Care Episode (ACE) Demonstration.

See https://www.cms.gov/DemoProjectsEvalRpts/downloads/ACE_web_page.pdf for a detailed program description.

A less constraining method of payment is for “condition management,” where a contracting group will assume responsibility for specific chronic illnesses such as congestive heart failure, diabetes, and mental illness. These are among numerous illnesses that are not deflected by a single clinical intervention but rather persist, often for the rest of a person’s life. The goal in condition management is to manage the specific disease risk with a combination of drugs, behavior modification, and tight coordination with a care team to keep the patient out of the hospital emergency department and to avoid hospitalization.

Most of the activity in condition management has been from so-called “disease management” firms that rely upon telephone and, in some cases, in-person contact by their nursing staff to oversee patients’ care. These firms have limited connection to the patient’s physician, but are directly accountable to the health insurer or are part of the insurer’s clinical staff. Numerous Medicare demonstrations with disease management have shown few savings and modest improvements in health status (CBO, 2012). These demonstrations beg the questions “Where is the patient’s physician?” and “Can the

patient’s physician, operating as part of a clinical team, do a better job of managing the patient’s condition?”

The tricky part is that, as physicians know well, many patients have multiple chronic conditions that interact with one another and amplify their risk. The sickest patients may have a half-dozen or more comorbid conditions. How one rates their expected costs has a great deal to do with the adequacy of an annual or monthly payment. This is why many “disease management” services are paid on a fee-for-service basis with a “medical management” fee attached and perhaps reward the contracting group for keeping the patient out of the hospital by comparing expected vs. actual hospitalization expenses.

The logical development path for the “medical home” is to organize services around the patient’s central or most troublesome chronic disease risk. For example, medical homes will evolve with a central focus around diabetes or around congestive heart failure or around mental illness with the specialists most familiar with the particular disease risk imbedded and directing the care team. Eventually, these medical homes will be positioned to accept delegated risk, if enough patients with that particular risk are in the physician panel. Examples of medical home models that take on multiple-risk chronic patients are discussed later in this section.

Under global risk, or full capitation, a physician group assumes the entire cost risk for a population of the insurer’s patients who choose to receive care from the group over a year, including their hospital costs and other services such as home care, rehabilitation, etc. Pharmaceutical costs are typically carved out and managed by pharmacy benefits management firms. The at-risk provider group receives a single capitation payment from the insurer or employer designed to cover all those costs and is free to tailor its treatment strategy to the enrolled population.

A crucial point about assuming global risk is that it is a game of large numbers. Individual physicians are in no position to assume health cost risks for their patients because their practices or the subset of them covered by an individual contract are nowhere near large enough to assume the risk of a serious illness or even a few patients with serious multifunction chronic disease. Global risk is inevitably about groups of physicians — the larger the better. Individual physicians offered risk contracts should run, not walk, to the nearest exit.

That is why achieving scale — either in practice size by aggregating large numbers of physicians (and active records) together or in contracting enterprises such as IPAs, which can spread the risk of the contract over a large population of physicians and their patients — is an essential precondition of organizing for risk. Physicians need to work together, either in a group practice or in a functioning, collegially governed professional association, or the game is not worth the candle.

Insurers might also expose physicians to risks over which they have no control. Here, in the United States, patients have the freedom under many health insurance plans to get care where they need it. Sometimes, physicians get stuck with the risk of “out-of-

network” costs when patients receive care at very high prices away from their home market or outside of the group that has agreed to give the insurer price concessions.

Insurers try to limit this risk by substantially increasing the patient share of the cost of going out of network or by refusing to cover out-of-network care at all. But even large, experienced health plans such as Kaiser have significant cost exposure when their subscribers leave the network. If this is a major economic problem for a \$48 billion colossus, small local physician organizations have no business assuming this risk.

Another significant risk is the level of illness of the subset of the insurer’s patients who choose the physician group. If the insurer’s risk-adjustment technology is inadequate, the global payments do not adequately cover the actual costs of caring for their patients, even with aggressive expense control. The art form is to set an adequate, fixed payment amount to cover basic care to most patients and provide a cushion to absorb the variability in patient needs that occur during the course of a year.

As mentioned earlier, the larger the at-risk patient population, the more “spreadable” the risk and the more flexibility there is to accommodate the variability of individual patient needs. To manage the risk of “outlier” patients with unpredictable but very high costs, most sophisticated contracting organizations balance the risk with affordable “excess limits” or “reinsurance” coverage.

Some physician organizations have gone further by sponsoring their own health plans, competing directly for patients both in the group and individual insurance markets. Geisinger Health Plan earnings from their Medicare Advantage product helped Geisinger Clinic sponsor many of the care system innovations discussed above. In a few states such as Wisconsin, physician group-sponsored health plans dominate the market. In others, such as Ohio, Pennsylvania, Utah, New Mexico, and Oregon, hospital system-sponsored plans have a significant market presence.

In sponsoring a health plan, the physician organization assumes a couple of additional risks: the administrative/management costs of operating a plan (including marketing, actuarial services, network contacting and management, regulatory compliance, and the like) and the risk that the organization will be chosen by groups or individuals whose actual medical costs exceed the premiums it charges for all these services. Premiums charged to individuals or employers must be adequate to cover costs, the central challenge for any health insurer.

Finally, in the Affordable Care Act, an even broader envelope of quasi-risk has been created. In the Medicare Shared Savings Program, providers are rewarded for reducing the rate of growth in cost for the Medicare patients “attributed” to them from the community as a whole. The popular term for the contracting entity is the “accountable care organization (ACO),” which might be a hospital and its medical staff, a physician group or an IPA, or a combination of those.

ACOs would be rewarded for holding the rate of increase in total Medicare expense for an “attributed population” below a baseline target rate. The “attributed” population is a statistical construct (e.g., Medicare beneficiaries who live in the same community assigned to the ACO because of their primary care affiliation). Because actual patients remain free to go anywhere they wish for care (including the Mayo Clinic), the ability to apply “population health management” tools to an “attributed population,” as well as the ability to create savings, is limited.

Initially, the idea of the Shared Savings Program was viewed by the policy community as a kind of “starter drug” to get providers interested in contracting directly with Medicare for the care of populations, with the idea that it would evolve into partial or full capitation. Unfortunately, the cost discipline of global risk — the fact that resources are fixed- — does not exist in most versions of the Shared Savings model. Shared savings means that the focus is on sharing a percent or two off the rate of growth in future costs, not on managing a fixed budget. That’s a little like gin and tonic without the gin. It’s the absolute resources limits in resources in delegated risk that forces providers to make choices.

An additional problem is that hospitals have dominated the formation of ACOs, in some cases threatening to exclude physicians from their ACO to force them onto salary or to alter their admitting patterns to bring their insured patients to the sponsoring hospital system. Because avoiding hospital care is the largest single potential source of savings in the ACO, hospital ACO sponsorship creates a compelling conflict of interest that may limit the model’s effectiveness. Hospitals have also used the ACO model to coerce physicians into abandoning their own cost-management models and altering their referral patterns in order to participate.

Darwin’s Test: Risk-Bearing Physician Organizations That Survived Market Competition

Not all physician organizations succumbed to the wave of poorly managed risk contracting during the 1980s and 1990s. Indeed, in markets as diverse as those in Los Angeles and Boston, powerful physician-controlled organizations rose to become dominant actors in highly competitive managed care markets. What are some of the different models of risk-bearing physician enterprises, and what can we learn from their successes?

One of the largest and most storied of these physician enterprises is Los Angeles-based HealthCare Partners. Physician owned and led, this physician group/IPA has nearly \$3 billion in revenues and about 1 million patients. It was formed in 1992 by Dr. Robert Margolis, who merged several large risk-bearing physician groups into a single organization and wrapped an IPA around it. Southern California, a chaotic, entrepreneurial healthcare marketplace with tremendous fragmentation in the care system, experienced very rapid growth in managed care enrollment in the 1990s.

Twenty years later, HealthCare Partners represents more than 8,000 physicians, not merely in Southern California, but also in Nevada and Florida. About 1200 of them are

“staff model” employees of HealthCare Partners, including, crucially, 120 hospitalists and “extensivists” who work in the most frequently used hospitals and post-acute facilities. More than three-fourths of HealthCare Partners’ revenue comes from global capitation contracts with health plans.

HealthCare Partners may be the single largest “global capitation” physician enterprise in the country (if one does not consider the massive Kaiser Permanente Medical Groups to be capitated). While competing organizations such as Monarch Healthcare have recently been purchased by large commercial insurers, HealthCare Partners actually bought out its private equity investor Summit Partners in 2011 and became completely privately held (Margolis, 2011). In May, 2012, it was announced that HealthCare Partners was being acquired by dialysis giant, DaVita, for a reported \$4.4 billion.

Partly because of successful, long-standing contractual ties to major California health insurers, HealthCare Partners has grown its covered population to 575,000 lives. Its Nevada and Florida operations add another 225,000 lives. It has 6000 employees and a separate management services organization that provides consulting and other services to its large physician panel.

Though CMS has recently designated HealthCare Partners a “Pioneer” ACO, the ACO will probably serve as a feeder for Medicare patients into its successful Medicare Advantage service line, where the organization will be more richly rewarded for its cost-management activities, and patients can be rewarded (as they are not in the ACO) with lower out-of-pocket costs and/or enhanced services.

In the San Francisco Bay area, market conditions were and are today very different. There was little entrepreneurial activity in the physician community, as well as very limited physician group practice. The Bay Area was becoming in the 1980s what it is now: a highly concentrated hospital market. Because northern California’s hospital market is dominated by two large hospital systems (Sutter and Catholic Healthcare West) and three large academic health centers (Stanford and the University of California at San Francisco and at Davis), hospital systems have been able to avoid subcontracting with IPAs and to exert tremendous market leverage over the private insurance market (Berenson, et al., 2010).

Further, the health insurance market is dominated by the giant group model Kaiser Permanente Medical Care Plan, with more than 3.2 million northern California members and more than a third of the Bay Area’s health insurance market. Blue Shield of California has another 20% or so. The remaining market is highly fragmented; however, a large IPA and several smaller ones have succeeded in representing a very large fraction of private practitioners in the San Francisco Bay Area.

Hill Physicians, at \$500 million in revenues, is based in the San Francisco East Bay. Hill’s physicians care for more than 300,000 patients. Founded in 1984 by Chief Executive Officer Steve McDermott, Hill represents more than 2500 independent physicians and roughly 1200 other health care professionals. Most of its insurance

contracts are for “professional capitation,” that is, professional services only. But like HealthCare Partners, Hill has an effective management services organization that maintains a core IT platform, manages medical claims, administers Hill’s clinical protocols, and provides consulting and support services to its huge physician partnership base.

Several other smaller, but also quite successful, IPAs exist in the Bay Area. Brown and Toland, founded in 1997, is the next largest, representing some 800 physicians predominantly on the San Francisco side of the Bay Area. A significant number of these physicians practice at California Pacific Medical Center, a teaching affiliate of the University of California. Like its East Bay peer, Brown and Toland contracts mainly on the basis of professional capitation. Also in the East Bay is the 650-physician Affinity Medical group.

With the notable exception of the huge Kaiser presence, the San Francisco Bay Area far more resembles market conditions in other parts of the country than does Los Angeles. The majority of physicians remain in small practices, while the hospital market is highly concentrated. The large, successful Bay Area IPAs have given independent physicians a great deal of leverage in dealing with health plans and have made it unnecessary for most of them to accept hospital employment. As a result, the balance of power among physicians, hospitals, and health plans is a great deal more even than in many other parts of the United States.

In another highly concentrated healthcare market, Boston, the largest single physician enterprise is both independent and physician owned. In Boston, the 800-pound gorilla is the formidable Partners Health System, created in 1994 by the merger of two formerly competing Harvard teaching hospitals, Massachusetts General Hospital and Brigham and Women’s Hospital, and the subsequent addition of six community hospitals. This vast enterprise controls some 40% of Boston’s hospital market and has sponsored an enormous employed physician group under an umbrella organization called Partners Community Healthcare Inc. (PCHI).

The largest physician organization in Massachusetts is not hospital based, however. Rather, it is a risk-bearing federation of large independent group practices called Atrius Health. At the core of Atrius is the 630-physician Harvard Vanguard Medical Associates. Harvard Vanguard was created when the former staff-model physician core of the original Harvard Community Health Plan became independent of the plan and was freed to contract with other health plans in New England. Led by Dr. Gene Lindsey, an internist, Harvard Vanguard employs 4100 people, including 1000 nonphysician health professionals. It provides care in large multidisciplinary care centers throughout metropolitan Boston that spun off from the Harvard Community Health Plan along with the physician organization.

In 2005, Harvard Vanguard allied with five other large multispecialty medical groups in the Boston metropolitan areas to form Atrius Health. Atrius cares for more than 1million patients. It represents 1000 physicians, all of whom practice in groups. Atrius maintains a

common IT platform for all its physicians (EpiCare) and contracts on behalf of this large physician base with all of New England's health plans. In 2011, Atrius expanded beyond metropolitan Boston by adding Worcester-based Fallon Clinic (now called Reliant Medical Group). Approximately 25% of Atrius' revenues are from global risk contracts with regional health plans.

Physicians in smaller communities have found ways of organizing to accept risk without changing their practice ownership structure. In 1984, physicians in Albany, N.Y., organized a nonprofit HMO, the Capital District Physicians Health Plan (CDPHP), based upon an IPA. It has grown in the ensuing 18 years to a \$1.3 billion health insurer that is the market leader in a 350,000-person market area. It has a highly diversified product offering, including a Medicare Advantage option for seniors, a high-deductible PPO style product, and an administrative services organization (ASO) product for self-insured employers.

Though not as fragmented as the San Francisco Bay Area physicians, Albany's physicians practice overwhelmingly in small or medium-size single-specialty groups. Albany physicians have nonetheless found representation and bargaining leverage in Albany's highly unionized, large-group dominated health insurance marketplace. CDPHP enrolls a significant fraction of Albany's huge state employee group. CDPHP provides Albany's physicians not only contracting leverage, but also a means to remain independent of hospital employment, which remains very limited in the region. CDPHP has also sponsored a successful medical home project involving 380 practitioners that pays them a modified primary care capitation fee.

The Bleeding Edge: Caring for the Sickest Patients

A unique approach to organizing for risk focuses on the Medicare population, whose medical problems are the traditional focus of general and subspecialty internal medicine. In the early 1990s, Dr. Sheldon Zinberg, a Los Angeles-based gastroenterologist, organized a multispecialty internal medicine practice focused exclusively on a proactive care model for Medicare patients. The practice, and eventually the health plan it spawned, was called CareMore (Main and Slywotsky, 2011).

Zinberg's practice eventually grew to 26 care sites and contracted on a full-risk basis with the Medicare program through Medicare Advantage. The core of the practice was a new type of physician — the extensivist — who focuses exclusively on care coordination for people with chronic illness. Extensivists help structure the recovery of patients from hospitalization, but, more importantly, they connect and coordinate the multiple practitioners that typically treat older patients at the same time. CareMore developed clinical protocols for aggressive management of patients with diabetes, congestive heart failure, and numerous other chronic conditions aimed at keeping them out of hospitals and emergency departments.

The results were dramatic and of the "everybody wins, except the hospital" variety: 18% lower overall costs than Medicare averages for the same patient population, a 24%

reduction in hospitalizations, a 38% lower length of stay for hospitalizations (a counter-intuitive finding given the screening out of low-intensity admissions), and, for the high-risk patients, a 56% decline in readmissions of those with congestive heart failure and a 60% reduction in amputations among diabetics. And, because CareMore contracts on a full-risk basis with Medicare, its physicians reap a significant fraction of the benefits, rather than passing those benefits back to Medicare.

The logical application of this model to the very sickest patients in a community can be found in Dr. Jeffrey Brenner's Camden, N.J., Coalition of Health Care Providers (Gawande, 2011). Brenner, a family physician, organized "swat teams" of physicians, advanced practice nurses, social workers, and others to address the "super users" — patients who seem virtually to live in hospital emergency departments and whom young physicians refer to derisively as "GOMERS" (for Get Out of My Emergency Room).

The coalition of Brenner and his colleagues became a primary care "medical home" for Camden's homeless — the 1% of Camden's patients who generated some 30% of the community's costs. The physician team leader functions as the "extensivist" cited above in addressing the missing pieces of each patient's life that sometimes result in millions of dollars a year in unnecessary health costs.

Many of the root causes of those unnecessary health costs are not medical in nature, such as homelessness, mental illness, or lack of a caregiver. Often, patients are too disorganized to enroll in Medicaid or Medicare. As a result, many are uninsured, leaving local hospitals to absorb most of their huge health care bills as uncompensated care.

As with CareMore, the results with Brenner's coalition were dramatic: its first group of patients *averaged* 62 emergency department visits a month and \$1.2 million in hospital charges a *month* (for 36 people!). Brenner's group was able to cut the emergency department visits by 40% and the hospital charges in half. While Brenner's work was supported by a foundation grant, there's no reason why hospitals inundated with uncompensated care could not hire groups similar to Brenner's on an incentive basis to manage their high-risk, uninsured "frequent fliers."

Entrepreneurs are organizing so-called "ambulatory intensive care units (ICUs)" — medical homes for high-risk patients — to contract with businesses, state Medicaid agencies, or city health departments (Milstein, 2011). A Cambridge, Mass.,-based firm called Renaissance Health, in collaboration with the Pacific Business Group on Health, organized a program similar to Brenner's but for the self-funded Boeing Corporation in Everett, Wash., to address the health costs of its highest risk employees (average chronic disease comorbidities were 3.5 per employee) (www.renhealth.net).

Renaissance was paid a medical management fee in addition to a regular fee for service and managed to generate 20% plus savings relative to a control group. The program used RN care managers supervised by a primary care MD/extensivist to organize and manage a response to the patient's health risks. Renaissance also organized a high-risk patient program in Atlantic City, N.J., called the Special Care Center, similar to Brenner's

Camden program, in collaboration with the casino workers union and a local hospital system.

The Special Care Center reduced its patients' costs about 25% when compared with a comparable casino worker population in Las Vegas. The Atlantic City program does have a special wrinkle: lay "health coaches" who work under clinical supervision to help manage the high-risk population. A major constraint for the Special Care Center was prying their well-insured (i.e., unionized) patients from the specialists who were plying them with profitable tests and therapy, often on a monthly basis. Conflict with the Atlantic City medical community occurred regularly because the program was perceived to be competing both with private practitioners and with hospital-based specialists.

These models turn the traditional medical insurance risk-avoidance paradigm on its head by seeking out those likely to generate the highest health costs. The goal is to address the root causes of their healthcare use proactively and generate savings and improvements in the person's health. They can be organized on an at-risk basis, as CareMore was, or on a fee-based system plus a medical management fee, as Renaissance was.

Another innovative model, which is not a health plan or a risk-bearing IPA but rather an innovative statewide management services organization (MSO) that originated in North Carolina's Medicaid program, is Community Care of North Carolina (CCNC). It was founded in 1991 as Carolina Access, a primary care case management demonstration project in five North Carolina counties and has grown into a community-based care management enterprise managing the health care of 1.3 million North Carolinians, including roughly three-fourths of the state's Medicaid population. CCNC, rather than private health plans, provided the infrastructure for North Carolina's transition to a Medicaid managed care program.

CCNC has organized dozens of locally controlled, nonprofit care-management enterprises that include local physicians and their hospital and public health clinics in the geographic area. Each local entity receives a special case management fee for each of the patients enrolled. It also provides local physicians a robust toolset to help them manage their patients (including risk-stratification methodologies and care-management guidelines) and processes their payments. According to Dr. Allen Dobson, one of CCNC's founders, the organization has saved the State of North Carolina more than \$1 billion and has begun contracting with large self-funded employers in the state, including SAS, Glaxo Smith Kline, and IBM (Dobson, 2012).

There exists in the US a tremendous diversity of local market conditions, as well as a distinct ecology of physician organization and culture. Physicians must decide to what extent their own values, organizational potential, and tolerance for risk will permit departure from traditional fee-for-service medical practice. Just as with the innovative forms of physician organization discussed above, one size clearly does not fit all.

The essential common ingredients of an effective risk-bearing strategy include a common IT infrastructure, tolerance of variation in the preexisting state of physician organization,

an ability to achieve consensus on what constitutes best professional practice and the discipline to enforce it for all patients for which physicians are responsible, and, most importantly, trusted leadership. Later in this report, I discuss what can be done not only to publicize these diverse success stories, but also to lower the barriers to adoption of these risk-managing organizational strategies and to speed their adoption across the United States.

This paper does not presume that adoption of a risk-managing organizational model will be the sole, or even most successful, strategic option for all practicing physicians. What these examples show in common, however, is that physicians can successfully organize across markets or regions to bear and manage clinical risk and to achieve greater control over their professional practice. The failure of federal antitrust enforcement both in the health plan and hospital markets has left the physician market the last potential source of competitive tension in the entire health system.

Physician communities differ markedly in their capacity to organize and to tolerate physician leadership. This is why leadership development in physician communities is a critical strategic need. But, there are also mundane infrastructure and capital constraints that require planning, investment, and effective management. As one health insurance executive said in a meeting long ago, “Doing a thousand little things right is the key to success in the health insurance business.”

All of these are essential for physicians to regain control over their professional destiny. The fact that physicians remain fragmented and mistrustful not only of each other but also of health insurers increases the likelihood that insurers will take the path of least resistance, contracting with hospital-sponsored ACOs, thus strengthening hospitals’ control over their healthcare markets. While there is considerable reluctance on the part of hospitals to assume this responsibility, the fact that hospital markets are already highly concentrated makes it far easier in a transactional sense for health plans and governments to turn to them as the organizing focal point for these efforts.

The clear direction of healthcare payment, public and private, is toward asking providers — hospitals and/or physicians — to assume greater responsibility for managing the cost and quality of healthcare. Many older (and younger) physicians want nothing to do with risk, but rather wish to withdraw from health insurance altogether, relying on patient direct payment. As suggested earlier, the market for direct-pay models is likely to be limited. If physicians want to regain some measure of control over their professional lives, they need to be prepared to organize to bear some greater degree of economic risk of future health costs for their patients.

Rather than being paralyzed by past failures or by a professional ideology that no longer fits present circumstances, physicians should be assured by the successes of their colleagues in diverse and highly competitive markets that they can exert greater control over their professional and economic destiny without putting their patients’ welfare at risk.

What is unique about the present moment in U.S. healthcare is the readiness of health plans, in particular, to reexamine their historical relationship with physician communities. To be sure, some of this is motivated by their concerns about the drive for hegemony by hospitals and so-called “integrated health systems” in many markets. However, health plan leaders recognize that physicians ultimately determine how and how much the health care system is used to treat patients.

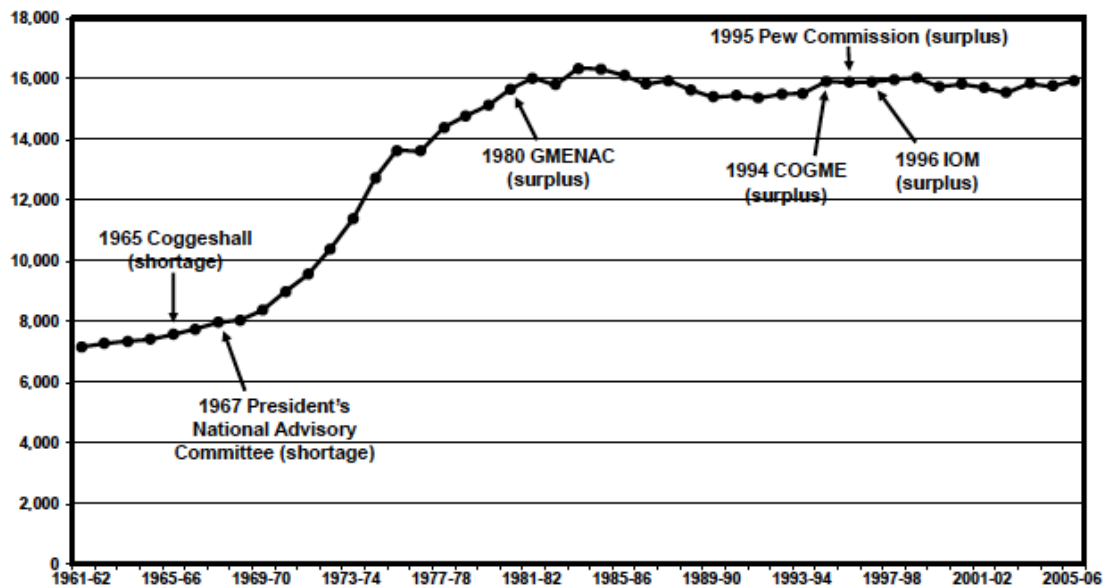
In a recent address to the Healthcare Information and Management Systems Society, new Aetna CEO Mark Bertolini said, “The end of insurance companies, the way we’ve run the business in the past, is here . . . We need to move the system from underwriting risk to managing populations. We want to have a different relationship with the providers, physicians, and hospitals we do business with . . .” (Ahier, 2012).

By developing collaborative relationships with physicians through risk-bearing physician organizations, health plans may create a framework that not only minimizes the use of expensive hospital care, but also promotes the health and well-being of their subscribers.

V. The Coming Physician Retirement Wave

The combination of the post-World War II baby boom and a significant ramping up of medical school and residency training slots during the late 1960s produced a huge cohort of practicing physicians who began entering practice in the late 1970s (Figure 4.1). These physicians have powered our healthcare system for the past 30 years. After reaching a peak of roughly 16,000 in 1980, medical school enrollments remained essentially flat for the next 25 years. The very large cohort of physicians produced by this historic expansion in capacity is nearing retirement.

Figure 4.1
MEDICAL SCHOOL GRADUATES, U.S.
1961-62 TO 2005-06



Source: AAMC Data Warehouse: Student section; Student Records System (SRS); Journal of Medical Education.

In many respects, this was a remarkable generation of practicing physicians — the most entrepreneurial generation in the history of the country. Those physicians never mastered the work/life balance challenge; their professional lives extracted a human toll in stress and fractured family and personal relationships. They remained for their entire careers intensely suspicious and mistrustful of hospitals (which makes their late-in-life capitulation to hospital employment a profound irony). And, until the 2008 stock market crash, they were planning to retire from active practice significantly earlier than their elders did.

Though the accuracy of physician retirement forecasts has often been questionable, before the crash, a significant percentage of baby-boom physicians intended to withdraw from medical practice earlier than their elders. In a 2007 Merritt Hawkins survey of the practice plans of physicians older than 50, 18% already had closed their practices to new patients, 14% intended to retire in the next three years, and another 12% planned to transition to part-time practice. In a 2006 AAMC survey, one-third of physicians older than 50 said they would retire TODAY (i.e., then) if they could afford to do so.

The 2008 stock market crash and the weak physician market conditions during the recession that followed had a profound effect on physicians' plans. The crash devastated their savings and retirement balances. The subsequent recession damaged their current income flows. These two simultaneous effects effectively trapped tens of thousands of physicians who had intended to retire in a kind of preretirement limbo, effects which have lingered for the succeeding five years.

Many of the abrupt changes in physician practice detailed early in this report — particularly the rapid movement of physicians into hospital employment — were a direct result of the response of baby-boom physicians to the recession.

Historically, physician productivity has declined gradually as physicians age. Physicians reaching age 65 work about 20% fewer hours than do their colleagues in their early 50s. In the past five years, through multiple strategies detailed above (including delegating management of their hospitalized patients to hospitalists), the huge baby-boom physician cohort has already significantly reduced their practice effort.

However, the urgency of physicians to change their professional lives seems to have increased markedly since the recession. In the 2010 Merritt Hawkins survey, only 26% of the physician respondents said they would continue practicing as they were currently doing for the next one to three years, compared with more than half of physician respondents in their 2008 survey. In the 2008 survey, 13% said they would seek a nonclinical job within health care, 7.5% said they would work locum tenens, and 10% would seek a job outside health care.

The past five years have been a period of professional limbo for many older American physicians. My interviews have suggested that this period of limbo is coming to an end. During the writing of this White Paper, the NASDAQ has reached its highest valuation in 11 years. If the stock market continues to strengthen over the next three to four years, and property values (i.e., the commercial value of physicians' office property) recover from their six-year slump, we will see a significant withdrawal of physicians from active practice. The speed and intensity of this withdrawal will relate directly to the strength of the stock market recovery and, to a lesser degree, a recovery in the value of physician-owned commercial properties.

The Physicians Foundation 2010 survey suggested that retirement is not likely to be confined to those older than 55. Indeed, 12% of physicians in their early 50s and 8% of physicians in their late 40s reported a desire to cease practice in the next one to three

years. In the online poll that accompanied the Sermo dialog on the future of medical practice, almost 25% of the total participants (n=478) expected to cease practicing in the next five years. (Worth repeating: multiple analyses have found that physicians' forecasts of their retirement plans tend not to track accurately to what they actually do. And owing to methodological limitations in the AMA's Master File surveys, it is very difficult to measure when physicians actually retire).

Many of these physicians will blame healthcare reform or the "sword of Damocles" of the Medicare SGR cuts hanging over their heads. Some physicians will walk away from hospital contract renegotiations dissatisfied with reduced salary offers or fresh "productivity enhancements" that would require them to work harder for the same amount of money. Or, hospitals may elect not to renew many of their contracts due to the magnitude of their practice losses.

The retirement of baby-boom physicians will, as mentioned earlier, coincide with the entry of a huge cohort of their baby-boom patients into the Medicare program. The number of people older than 65 in this country will double between 2000 and 2030. People of this age require twice as much physician care as do those younger than 65 (Dill and Salsberg, 2008). If the Affordable Care Act survives both Supreme Court review and the 2012 election cycle, the retirement of baby-boom physicians will also coincide with the enrollment of at least 30 million previously uninsured citizens in health coverage through health insurance exchanges and/or Medicaid.

These newly entitled individuals will attempt to find new physicians in a physician market simultaneously losing tens of thousands of mature practicing physicians, and replacing them with young physicians desiring to work 35 hours a week or less (Elliott, 2012). An almost certain consequence will be lengthening waits for appointments, particularly for primary care physician visits, and a rise in emergency department visits. Both of these phenomena were observed in the first few years after the implementation of Commonwealth Care in Massachusetts (O'Reilly, 2010).

This likelihood creates a great sense of urgency surrounding the search for more efficient methods of physician practice. Notably, two trends discussed in this paper — the still-limited movement toward direct-pay or concierge medicine and the patient-centered medical home — involve shrinking physicians' patient panels, not finding ways to accommodate more patients.

In reaction to AAMC analyses forecasting a significant shortage of practicing physicians by 2025, medical school capacity has expanded dramatically to attempt to address the looming shortfall. Entering medical school class size will have risen from 16,488 in 2002 to 20,181 in 2015, a 22% increase. This will be supplemented by a more than doubling of osteopathic class size, from 3079 to 6222 in the same period (Erikson, 2011).

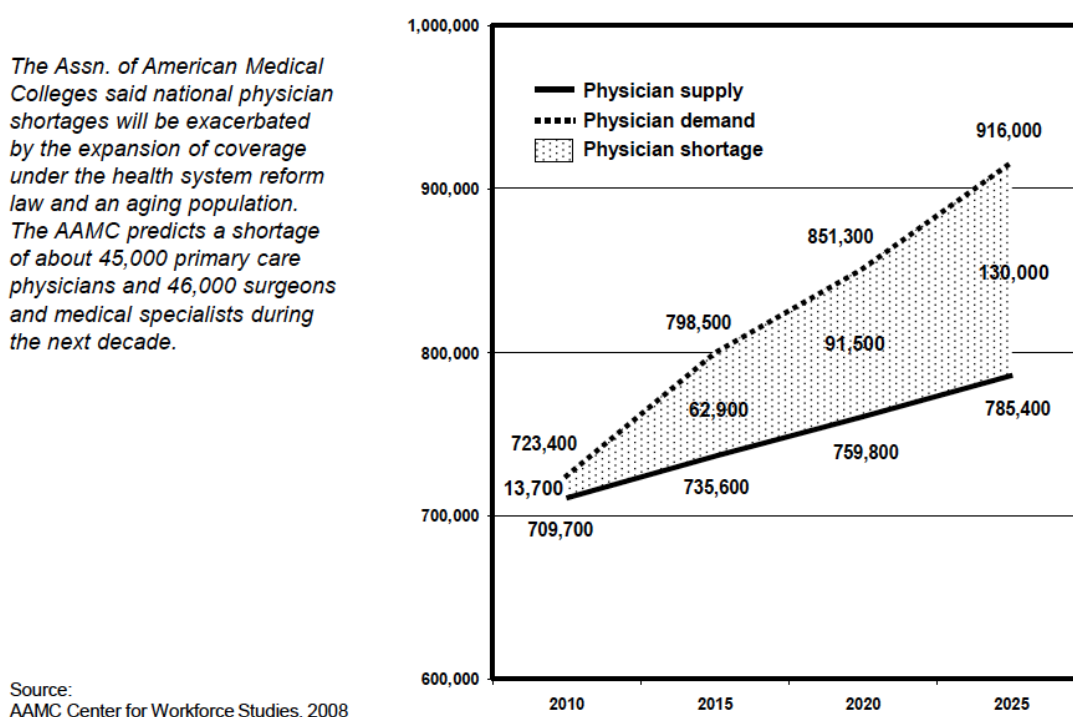
However, residency positions funded by the Medicare program were frozen in the same 1997 Balanced Budget Act that gave us the SGR caps. The effect of expanding medical school class size without increasing graduate medical education slots will be to squeeze

out foreign medical school graduates (including U.S. citizens) who have disproportionately selected primary care specialties.

Unless graduate medical education capacity is expanded in comparable proportion to the increase in medical school class size, there will be no meaningful offset to the impending retirement of baby-boom physicians; instead, a lot fewer foreign medical graduates will enter U.S. practice. Contemplated reductions in Medicare's direct or indirect medical education subsidies could nudge teaching hospitals to shrink, rather than expand, their complement of trainees.

However, given the large number of physicians entering practice who want to work 35 to 40 hours a week (AAMC survey of MDs younger than 50, 2006), the withdrawal of a large cohort of baby-boom physicians will mean a huge net reduction in physician effort in the generational transition, resulting in a massive and growing physician shortage (Figure 4.2). The fact that older physicians have worked longer hours than their ages would have suggested in the past 15 years has masked the effect of these generational differences in physician lifestyle on physician availability. (Dill and Salsberg, 2008)

Figure 4.2
PROJECTED PHYSICIAN SHORTAGE – US



The only meaningful capacity expansion contemplated by the Affordable Care Act is a rough doubling of the capacity of federally qualified health centers (FQHCs) to handle some of the more than 20 million people who would remain uninsured after ACA is

completely deployed (Katz, et al., 2011). Indeed, that is almost precisely the amount of additional capacity added to FQHCs, about 20 million new patients.

Unfortunately, because of tight physician supply conditions, FQHCs will compete furiously with hospitals and physician practices to fill the nearly 15,000 new physician positions required to meet this expansion. Because of shortages in the private marketplace, FQHCs might be surprised to find large numbers of newly enrolled Medicare patients seeking care in their centers, as well as many of the 15 to 25 million new Medicaid patients.

Indeed, the scarcity of primary care physicians might create a kind of market equilibrium, both driving up primary care compensation and spurring a search for substitutes (advanced practice nurses, etc.), in turn driving up *their* salaries. One does not experience shortages of anything in a market economy for very long before the market price of the scarce item rises. Consequently, one can anticipate conflict over the scope of practice of advanced practice nurses in the care system to heat up in the next few years. In some communities, advanced practice nurses on salary in hospitals earn more than private practicing family physicians and pediatricians. But nurse practitioners are also in scarce supply. The average age of a nurse practitioner in the US was fifty in 2008, the result of the same baby-boom intensive age distribution as we've been discussing for physicians (HRSA, 2010).

Society cannot afford to lose all of the baby-boom physician work effort. Recycling their knowledge and talent is an essential task for the society as a whole, as well as for the practitioners involved.

New Careers for “Retired” Physicians

For many baby boomers, retirement will not mean ceasing to work (Goldsmith, 2008). To a fault, many baby boomers seem lost when they are not working. Baby-boom physicians may be no different. While many physicians are disillusioned by their present mode of medical practice, repeated surveys of older physicians suggest that physicians define retirement as withdrawal from their current practice arrangements, not withdrawal from working.

The most recent AMA report on physician characteristics and distribution in the United States for 2010 found almost 120,000 “inactive” physicians older than 55 and another 28,000 in non-patient care activities (AMA, 2012). This number will rise sharply in the coming decade. If, as I believe, as many as 80,000 to 100,000 physicians withdraw from active practice in the next five years, many talented and highly trained physicians will be available to fulfill other needs in society.

Physicians contemplating exit from private medical practice or employment by a hospital or medical practice plan should have an exit assessment (e.g., financial position and personal work style) that examines their readiness to gear down. There should also be a rigorous effort to match their desired work style and setting to available opportunities,

paid or unpaid. A few nonprofit organizations, such as Vermont-based National Association of Retired Physicians (www.naorp.org), attempt to match retired physicians to volunteer opportunities. AMA's Senior Physicians Group, which claims 55,000 members, is mainly an affinity group within AMA's sections, though it recently began to focus on how to enable retired physicians to reenter practice.

For the significant number of physicians who desire a "mission-driven" as opposed to "paid" encore career opportunity, a major barrier might be the persistence of medical legal liability. Even for those desiring to work part-time, the discovery that malpractice insurance rates do not decline by half but by a lesser amount is a barrier to gearing down, unless the organization for whom they work part-time is willing to shoulder the cost.

If those who wish to volunteer discover that their malpractice liability is not meaningfully reduced (unless the sponsoring organization is willing to step up and cover them), it may be safer for practitioners at high risk (obstetricians, pediatricians, subspecialty, and general surgeons) to volunteer overseas where their risk is limited than it is to volunteer in their own communities.

Any effort to free up "mission-driven" physician effort by retired physicians in the United States must be supported by significant change in their malpractice liability exposure or the potential major opportunity to capture voluntary physician effort will be lost. Retired physicians desiring to volunteer for community or nonprofit service should be sheltered from malpractice liability, except for criminally negligent conduct.

Of course, there is also the potential for encouraging more physicians who have moved beyond medical practice into active encore careers in politics. There are presently 19 physicians in Congress (including Senators Rand Paul, John Barrasso, and Tom Coburn) and at least one state governor (John Kitzhaber of Oregon). The Texas Medical Association worked to interest physicians in running for the state legislature. A major opportunity for retired physicians is to get actively involved in politics by running for office. The huge cohort of physicians soon to retire could translate into a well-connected and motivated pool of public office holders who can advocate for meaningful reforms to benefit patients and their physicians.

V. Policy Options for Strengthening Physician Practice

The healthcare reform debate resulting in the Affordable Care Act abjectly failed to address the modernization and strengthening of physician practice. Most of the emphasis was on reforming and partially federalizing the private health insurance industry. Even the extensive statutory mandate for proposed demonstration and pilot projects for the CMS Innovation Center contained few strategies for improving the effectiveness of physician care, other than the suggested medical home projects. Many focused instead on bypassing physicians or substituting other health professionals' efforts for those of physicians or encouraging the salaried employment of physicians.

Health policy should not favor a particular physician practice modality over the other. Physicians should seek the mode of practice that best actualizes their professional values and personal goals and that provides them a collegial environment to support their patients' needs. Health policy should seek to maintain a healthy balance of influence among physicians, hospitals, and health insurers and encourage their collaboration to improve healthcare to Americans.

State and local medical societies have historically pursued policy agendas that addressed the needs of physicians in private medical practice based on fee-for-service payment. However, physicians in salaried employment, whether in hospitals or the public health system, and physicians in at-risk physician enterprises need representation and deserve to be treated fairly, just as their colleagues in traditional private medical practice do.

This section does not provide a comprehensive overview of what needs to be done to achieve a more balanced and sustainable healthcare system, in which hospitals, physicians, and health plans find a stable and mutual framework of care provision and financing. Further, a detailed analysis of the effect of the Affordable Care Act on medical practice and how it should be changed to restore balance in the healthcare system as it expands to accommodate the uninsured is beyond the scope of this report.

The following list of policy items is not comprehensive, but rather addresses the issues raised in earlier sections of this report, either as constraints on effective organization of physician practice or on the capacity of the healthcare system to adapt to the needs of an aging and financially distressed country.

Revaluing the Physician's Exercise of Professional Judgment

It is possible to make the situation of practicing physicians markedly worse quickly. A decision to implement the nearly 30% reduction in Medicare physician fees mandated by the Balanced Budget Act of 1997 would have a disastrous consequence, though perhaps a different consequence than many in the policy community have assumed.

That consequence would not be a wholesale withdrawal of physicians from participating in the Medicare program, as some physician advocates suggest. Rather, it would catalyze the mass retirement of baby-boom physicians. Many of the recent changes in physician practice discussed in this report were caused by a selective withdrawal of these physicians from practice (hospitalists, limitations on call coverage by community physicians, conversion to “concierge” practice models, and the like). As discussed above, many thousands of physicians would likely have retired in the last four years were it not for the 2008 stock market crash and real estate collapse.

My position, stated elsewhere, is that the SGR caps were a flawed policy, as they provided no feedback loops or mechanisms for the physician community to adjust its behavior in years during which Part B physician spending exceeded the caps (Goldsmith, 2012). Because Congress has not provided mechanisms for physicians to adjust their behavior and is not willing to enforce its own statutes, the appropriate solution for the SGR is for Congress to write off the more than \$300 billion cumulative budget shortfall as the equivalent of a bad mortgage, and make changes in physician payment going forward that would have an inflation- calming effect.

The most important of those changes would be a dramatic upward valuation of the physician’s use of his or her judgment to diagnose and manage illness, funded by a concomitant reduction in technical fee payments for high technology services. The Affordable Care Act halfheartedly attempted to do this by increasing the Part B payment for evaluation and management (E&M) services by 10% (but only for physicians for whom those services were 60% or more of their practices). It also temporarily raised Medicaid E&M payments to parity with Medicare (and suspended the increase before the huge Medicaid expansion contemplated by the law in 2014).

The provision of the Affordable Care Act regarding the patient-centered medical home anticipates paying more generously for services provided by the medical home, but many of those services will be provided by non-physician caregivers whose hiring will be a major practice expense. The net effect of any Medicare payment increases for medical home services may be largely washed out by the increased practice costs, not to mention the cost of the inevitable, core-measure-laden reporting requirements that will be imposed to make sure the homes are truly “patient centered.” It is not clear how many practices will be able to afford to become medical homes, leaving the rest of primary medical practices in the present untenable situation.

Medicare must revalue by at least an additional 30% E&M services provided under the Medicare program (that is, above and beyond the Affordable Care Act increase) and apply the same higher fees to the Medicaid program going forward. The restrictions on the applicability of these increases imposed by the Affordable Care Act should be suspended. Further, Medicare should upwardly revalue the exercise of clinical judgment by specialists such as cardiologists, pathologists, radiologists, and others who participate in the diagnostic process.

Many distortions in our present payment system arise from physicians attempting to recover the lost value of their professional time by leveraging payment for diagnostic and therapeutic services through, for example, technical fees for providing office-based surgery and imaging or marking up injectable or infusible drugs administered in the office. The increases in E&M payments should be funded by reducing Medicare's technical fee payments for imaging, surgery, and other complex services and by reducing the permissible marking up of injectable and infusable drugs, as well as by reducing payments for hospital outpatient imaging and surgery.

Physicians' reliance on technical fee payments and drug mark-ups to offset the declining value of their professional time has contributed materially to medical inflation by tempting physicians to find expensive solutions to patients' problems. If the physician's time in evaluation, management, and diagnosis were fairly valued, medical practice in diverse settings would be more sustainable and the cost of medical care would rise less explosively in the future.

Eliminate Medicare's "Site of Service" Differential in Physician Payment

Medicare's present physician payment system, indeed the whole of Medicare Part B, is a masterpiece of over-engineered complexity. The Resource-Based Relative Value Scale (RBRVS) methodology inside Part B attempts to relate physician payment to the complexity of the care provided, as well as the extent of physician training and support cost required to deliver their services.

For complex care like surgery and imaging, payment is split between a professional component intended to compensate physicians for the exercise of clinical judgment and a technical component that pays the cost of the "supporting cast" and technology required to perform the service. In these instances, physicians or the institutions that employ them sometimes receive a "global fee" that encompasses both the professional and technical components.

When a physician sells his or her practice to a hospital, the hospital can apply to redesignate that physician as a hospital employee and thus eligible for "provider-based" technical fees under Medicare. The net effect of these changes is to make a physician visit worth as much as 50% to 80% more as part of the hospital than if it were provided in a private practice.

This means that physicians' time is worth more to Medicare if they are employed by a hospital than if they were in private practice. The site of service differential increases Medicare program expenses and subsidizes hospitals' acquisition of independent practices. These payment policies tilt the playing field in the direction of hospital employment and away from independent practice, when Medicare payment policy should be neutral. MedPac has recently proposed eliminating the site-of-service differential for physician services, and their proposal should be vigorously supported.

As earlier mentioned, according to MGMA, hospital-affiliated medical groups currently lose about \$212,000 per employed physician, without counting the facility fees they are able to charge or the ancillary services revenue they generate for hospitals. Hospitals are attempting to offset these losses in a number of ways, including compelling physicians to switch from using less expensive freestanding surgery, laboratory, and imaging facilities to using the hospitals' more expensive outpatient services. In addition, hospitals are paying physicians on productivity (RVU)-based compensation models that increases their pay as they increase their level of activity. Hospitals also attempt to negotiate much higher payment rates from private health plans to offset the practice losses.

All these hospital strategies will mean additional costs both for the Medicare program and for private insurers, both in higher unit cost and higher utilization. Medicare's managers and policy analysts will soon realize that the movement of physicians, particularly specialists, into hospital employment has added substantial net cost to Medicare's troubled Part B.

Medicare should eliminate the facility fee for routine physician office visits and E&M services. Medicare should also reduce the payments received by hospital providers for imaging and surgical services under their outpatient prospective payment system (HOPSS) and pay a single, reasonable rate for all outpatient imaging and surgical services, regardless of where they are delivered.

Administrative Simplification

As alluded to above, a major reason for rising practice expenses has been a layering of new reporting requirements from both public and private payers in the name of increased billing accuracy and improving quality. It is difficult to argue against the need for transparency or for the need to dramatically reduce risk to patients in the care process. However, the common approach taken in recent federal policy initiatives is to rely on dozens of process measures rather than actual clinical outcomes to serve as a proxy for quality.

A recent analysis of the NCQA evaluation criteria for the patient-centered medical home found no relation between the process-oriented reporting requirements for the medical home and the health status of diabetic patients in a large sample of FQHCs (Clarke, et al., 2012). The new NCQA certification process for the medical home involves six standards, 28 elements, and 152 separate performance measures that determine if a medical home receives NCQA certification.

Similar findings were reported recently for CMS's vaunted Hospital Compare program, which posts on the Internet hospitals' comparative performance measures similar to those used in Medicare's Value Based Purchasing (VBP) program. No effect on mortality has been noted on three presumably critical quality indicators despite years of "transparency" (Ryan, et al., 2012). We can expect similar findings for the similarly structured and deeply troubled CMS Physician Compare initiative.

NCQA certification for medical homes and participation in the Medicare Shared Savings Program are voluntary. Meaningful use and physician participation in PQRS are not voluntary. Physicians will be financially penalized if they do not meet meaningful use criteria or report the PQRS core measures. Voluntary or not, there is no accountability for the steady growth in “check the box” measurement of physician performance relative to the return to society from documentation requirements imposed on physicians and their supporting cast.

The effect of all these programs, voluntary or mandatory, is to subtract precious time of the caregivers (physicians and their supporting clinical staff) from actual time spent with patients and instead plant them in front of computers to complete the data requirements. Those requirements are a major reason for the sharp jump in practice overhead costs documented above.

What is needed, urgently, is a federal Commission on Administrative Simplification in Medicine (CASM) to conduct an independent audit of each system of provider monitoring and payment reporting requirements. This commission would hire a respected independent policy analytic firm, like the Rand Corporation or Mathematica, to review the cost in documentation time of these quality programs, identify measureable potential reductions either in patient risk or in unnecessary healthcare utilization by adherence to the measures, and quantify the cost/benefit relationship. The federal Office of Management and Budget requires a similar cost-benefit analysis for new regulations before they are issued. This methodology should be applied rigorously and systematically to physician and other clinician reporting requirements.

Programs that cannot document a quantifiable return in the form of measureable societal benefit for the cost of compliance would be terminated immediately by the federal government. The panel should not look merely at the mandatory physician-reporting requirements by the federal government, but at “voluntary” programs run by NCQA and other bodies, as well. Private payers could then decide whether they wish to support these voluntary standards or not, based on empirical evidence of benefits and costs.

Improving physician productivity through new practice models and modern IT tools to support practice is not enough. A portion of the recent decline in physician productivity can be traced to the onslaught of well-meaning but poorly conceived documentation demands. Far more effective programs that specifically address controllable risks (ventilator-assisted pneumonia, central line infections, adverse drug reactions, avoidable hospital readmissions, etc.) should take their place. Transparency is vital for consumers to make good decision about where to get the best care. That the transparency needs to focus on performance indicators that really matter in affecting patients and cost, rather than on indicators we measure simply because we can.

Extensive costs are also imposed by the great variation in business rules imposed by private health plans on how they pay the claims submitted by physicians, hospitals, and other caregivers. Each insurer has its own unique set of rules, which may vary from employer group to employer group, depending on how their insurance contracts are

written. This variation is as much a cost problem for practicing physicians as is federally mandated “quality” reporting.

The well-meaning efforts to standardize electronic claims-payment transactions imposed by HIPAA’s administrative simplification provisions were a costly failure. Efforts to force convergence on data standards for claims submissions and payments in the Section 1104 Administrative Simplification provisions of the Affordable Care Act will not achieve a meaningful reduction in operating expenses for physicians, hospitals, or health plans.

The alternative approach, which is less prescriptive and expensive for health plans to administer, would be to compel health plans to publish their claims-payment business rules in a standard, machine-readable form on the Internet (but not mandate the content of those rules). Accompanying this requirement would be enforceable penalties for health plans that do not adhere to their own published rules. This provision would enable development of intelligent claims-management software that could automate claims management by physician practices, both reducing overhead costs and accelerating practice cash flow (Rishel, 2012).

Medical Education Debt Crisis

A considerable fraction of the cost of medical care originates in the cost of training young physicians. While medical schools and teaching hospitals receive approximately \$10 billion in annual subsidies through the Medicare payment system, they pass a significant amount of the cost of training onto their students. There is some logic to charging physicians a portion of this expense as their training provides them access to a lucrative and respected profession. However, young physicians are leaving their training with increasingly unmanageable personal debt, a circumstance very different from that of graduates in other international health systems to which the U.S. system is sometimes unfavorably compared.

The average indebtedness of a graduating U.S. medical student in 2011 approached \$108,000 (Figure 6.1). That debt begins for many at the undergraduate level; the premedical school component is about \$33,000 for those who have debt. Average indebtedness just from medical school alone is about \$149,000 for the 85% or so of medical students who borrow to finance their medical education. And, while not all young physicians are burdened with six-figure debt when entering practice, 47% owe more than \$150,000 and almost 24% owe more than \$200,000.

Figure 6.1
MEDICAL SCHOOL INDEBTEDNESS

Medical School Debt Categories	2007	2008	2009	2010	2011
No debt	13.7 %	15.2 %	15.1 %	16.1 %	16.1 %
\$ 1 to \$ 24,999	3.3	3.0	3.2	3.0	3.3
\$ 25,000 to \$ 49,999	5.3	4.4	4.9	5.5	5.8
\$ 50,000 to \$ 74,999	6.0	5.0	5.0	4.7	5.1
\$ 75,000 to \$ 99,999	7.9	6.6	6.1	5.6	5.5
\$100,000 to \$124,999	14.7	13.0	11.2	9.9	9.8
\$125,000 to \$149,999	11.9	9.7	9.1	9.0	7.5
\$150,000 to \$174,999	16.8	16.9	16.4	16.0	14.5
\$175,000 to \$199,999	7.8	8.9	9.7	9.2	8.8
\$200,000 or more	12.6	17.5	19.1	21.1	23.6
	100.0	100.0	100.0	100.0	100.0

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
Average medical school debt of all students	\$113,458	\$116,804	\$118,427	\$113,701	\$108,285
Average medical school debt of indebted students	\$131,463	\$141,330	\$143,870	\$147,363	\$149,103

Source: AAMC, 2012

This debt burden has significant consequences. The most significant of these consequences is to bias in the selection process toward salaried employment, which enables physicians to repay their debts without assuming the risk of operating a practice, as well as to differentially burden those who choose lower earning specialties such as primary care.

Recent research has suggested that future income potential and personal values have a more significant influence on specialty choice than the level of indebtedness that students carry out of their specialty training (Kahn, et al., 2006; Phillips, et al., 2010). The classic graduating resident's mantra is often paraphrased: "Hit the ROAD!" (radiology, orthopedics, anesthesia, dermatology). Thus, specialties with high per-hour compensation and definable (e.g., non-24/7) service obligations are oversubscribed. Primary care and specialties with hospital call exposure (general internal medicine, family practice, obstetrics, and general surgery) are increasingly undersubscribed and filling with physicians who trained abroad.

Continue this process through the next 15 years of baby-boom physician retirements. A replacement cadre of young physicians who want predictable hours and high per-hour compensation to pay down their debts will lead to an horrendous crisis of access to primary care services, overflowing emergency departments, and a lot of surprised and alarmed politicians. The AAMC Center for Workforce Analysis forecasts a primary care physician shortage of about 45,000 over the next decade. Overall, we expect a shortage of

almost 91,500 physicians of all specialties by 2020 (eight years away) and 130,600 physicians by 2025 (13 years away) (Figure 4.2).

The existing federal effort to alleviate physician shortages, the National Health Service Corps, is well-meaning but completely inadequate. In exchange for a physician or nurse or dentist agreeing to serve in a designated medically underserved area, the National Health Service Corps offers debt relief up to \$60,000 plus a salary for a two-year, renewable term of service. The majority of these fellowships presently go to non-physicians.

The stimulus legislation (American Recovery and Reinvestment Act [ARRA]) passed by Congress in early 2009 authorized a rough doubling of National Health Service Corps slots to about 8100 FTE, of whom only 25% are presently physicians, for two years (federal years 2009 and 2010). The Affordable Care Act of 2010 continued and modestly increased this pulse of new funding from ARRA, authorizing \$1.5 billion over the first five years of the Act (FY 2011-2016). Even at this elevated level of funding, the effect of the NHSC on the expected shortfall of primary care physicians will be of homeopathic (i.e., barely detectable) dimensions.

Presently, the ability of hospitals or investor-owned companies to offer graduating residents debt relief in exchange for employment is a major factor drawing young people toward salaried employment and away from private medical practice. After all, only a few years ago, not only were young physicians entering a partnership or group practice expected to pay off their own debts out of their after-tax income, but they were also expected to incur debt to buy out the equity of the practice's incumbent partners. Those days are long gone.

As said above but worth repeating here: There is no presumption of virtue on behalf of any physician practice setting. Young physicians ought to be free to choose where, how, and what they wish to practice; however, in the current economic environment, the huge medical school indebtedness deprives the debt-holding young physician of the ability to make a value-based choice. Their economic circumstances alone drive a significant percentage into salaried employment, and toward wealthy institutions that can afford to shoulder their debt burdens.

Several state medical societies have developed innovative programs to address this problem. In 2009, the Texas Medical Association was able to create a statewide physician debt-relief program funded by a special tax on smokeless tobacco that repaid the indebtedness (up to \$160,000) for any young physician willing to practice in the state's rural areas. This program was, unfortunately, discontinued by the Texas State Legislature in 2011. The State of North Carolina developed a community practitioner program with seed funding from the RJ Reynolds Foundation that forgave half a physicians' medical school debts, in collaboration with local hospitals, who paid the other half (Seligson, 2011).

In a federal fiscal climate dominated by deficit reduction, asking Congress to fund an additional program of physician debt relief beyond that already provided by the modest National Health Service Corps expansion might be too much. This might change in an economic recovery, however, accompanied by a perceived national physician supply emergency. The simplest approach would be to levy a federal tax on trans fats used in food that generates additional revenues to be used to offset physicians' medical school indebtedness subject to service conditions. Funding flows from a federal program of medical school debt relief could be offset by requiring those who received federal help to accept lower Medicare payments for a portion or all of their medical practice careers (trading off debt relief for lower lifetime incomes).

If such a physician debt-relief program helped struggling critical access hospitals or community health centers recruit physicians, there might be broader policy justification than aiding professionals who are perceived to be relatively privileged. These public health and community-based organizations could be expected to join medical societies in advocating for physician debt relief.

Bach and Kocher recently proposed a non-tax-based alternative. In their proposal, medical schools would no longer charge tuition, but rather discontinue paying stipends for residents in high-earning specialties (on the theory that residents could fund their graduate medical education costs out of their higher practice incomes). They estimated the cost of eliminating medical school tuition at about \$2.5 billion a year, without federal subsidies (Bach and Kocher, 2011). But their proposals would presumably mean massive changes in medical school/teaching hospital revenue flows. The above, tax-based method offset by changing Medicare payment schedules is a preferable alternative.

Medical Liability Reforms: Strategic Change Plus Two Specific Priorities

State and national medical societies have waged a decades-long struggle to end the open-ended "lottery" system of medical tort liability that burdens our society in excessive costs for defensive medicine. Some states have succeeded in implementing sensible reforms, while others continue to struggle. National tort liability reform was not meaningfully addressed in the Affordable Care Act, a major lost opportunity. Because hospitals can alleviate their salaried practitioners of the need to purchase malpractice insurance, the current tort liability system is an additional factor that biases physicians toward abandoning private practice.

It is beyond the scope of this paper to address comprehensively the solution to the physicians' tort liability problem. However, because more than 120,000 physicians are now employed by hospitals, those hospitals have a powerful vested interest in supporting either state or federal tort reform. State hospital associations and medical societies now have a common agenda of enacting meaningful tort reform. Though relations between these societies have not been close, on this one issue, they may form a potentially powerful coalition, particularly if combined with state chambers of commerce representing private employers.

Two important changes need to be considered to address the concerns listed above. One is that shelter needs to be provided from tort liability for those physicians opting to volunteer their services in public or nonprofit settings here in the United States. To continue to burden them with malpractice insurance or to shift those costs to the agencies for which they volunteer is to assure that a significant amount of retired physicians' efforts will be channeled overseas. Physicians who volunteer their time should do so free of the need to purchase medical liability insurance and should be liable only for criminally negligent conduct.

Another specific opportunity is to tie meaningful use of clinical information technology, a major priority both of ARRA and the Affordable Care Act, to a safe harbor from malpractice premiums. Stimulus and health care reform legislation relied upon financial incentives of limited duration to encourage physicians to adopt and use EHRs. So far, only 41,000 physicians, less than 5% of the practicing physicians in the United States, have become meaningful users of EHRs. It would have been a far more effective strategy to mandate a 30% or better reduction in their malpractice premiums to reflect the reality that they are practicing safer medicine by becoming meaningful users. State societies should move aggressively with their state legislatures to carve out this shelter, so that when the limited financial rewards run out, physicians who adopted EHRs can achieve lower practice overhead by continuing to use them.

Federal Support for Physician- and Hospital-Sponsored Health Plans and IPAs

In Section 1322 of Affordable Care Act, nearly \$6 billion was allocated to support a new generation of nonprofit, consumer cooperative style health plans modeled on Group Health of Puget Sound (one of the handful of surviving plans of this type). After a period of uncertainty, three dozen new plans will be funded by these ACA provisions (which have been reduced by deficit control measures) (Meyer, 2012). How many CO-OP health plans actually become commercially viable remain to be seen, but more power to them. More health plans choices benefit consumers.

Yet, health plan markets in the United States remain highly concentrated. Recent analyses found that in half of the major U.S. states, two commercial insurers control 70% or better of the market, reducing choices and likely increasing employer costs (AMA, 2011). Recommended above is that physicians organize to assume and manage risk. This risk assumption can take the form of physician groups or IPAs contracting with health plans on a global risk or professional risk basis. The number of health plans, however, needs to expand dramatically for physicians to regain influence in highly concentrated provider markets increasingly dominated by hospital cartels.

Moreover, while the Affordable Care Act CO-OP health plan provisions do not formally preclude physician organizations from participating, they raise governance and management hurdles that many multispecialty physician groups and IPAs may not choose to meet. Thus, new federal legislation should be enacted to fund providers' (not merely physicians but physicians and hospitals together) formation of new nonprofit plans or

IPAs that give physicians direct risk-management responsibility and that enable them to offer new health plan choices in highly competitive markets.

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